

## **KA01**

### **Family doctors with heads and hearts: a global perspective**

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'Family Doctors with heads and hearts' is the thought-provoking theme of our 2016 WONCA Europe Conference being held in Copenhagen. How do we combine our scientific knowledge with the tender, loving care that is a distinguishing feature of our work as family doctors?

This presentation will bring together the five themes of the conference (ageing populations, affordable healthcare, future consultations, diagnosis, and addressing inequalities) and examine what is happening in family medicine in Europe and around the world to address each of these major challenges for international primary health care.

Participants will receive a global perspective on why strengthening family medicine and primary health care is the most viable way to close treatment gaps and ensure that all people in all communities in all countries have access to the health care they need.

## **KA02**

### **Diagnosis: an impossible but essential task**

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With around 11,000 disease entities, diagnosis is an essential, but near impossible, task for the GP. Research in the 1970s observed that diagnostic hypotheses are made early in the consultation, then guide subsequent history and examination. This process can be further split into three stages (1) initiation of diagnostic hypotheses ('Spot' diagnosis', Self labeling; presenting complaint); (2) refinement (including rule outs; stepwise refinement; pattern fit; prediction rules); and (3) final diagnosis (including tests of treatment or time). Our drive for improved diagnosis has improved our tools, but lead to overdiagnosis including overdetection and 'incidentalomas'. In addition, changed definition of the dividing line between normal and abnormal - such as hypertension, diabetes, osteopenia, and obesity, small changes - have greatly expanded the proportion of the population with those disorders.

## **W01**

### **How to prevent overdiagnosis in general practice**

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Winding back unnecessary tests and treatments, unhelpful labels and diagnoses won't only benefit those who directly avoid harm, it can also help us create a more sustainable future' Fiona Godlee, Editor-in-Chief, BMJ Screening of asymptomatic individuals to 'prevent disease' or to improve the patients' prognosis via 'early diagnosis' is increasing in volume in general practice. One driver is the fear of hidden disease which is flourishing among physicians, patients, politicians and health administrators together with the mistaken belief that 'the earlier the better'. However, it can also be too early with the consequence of overdiagnosis. Other drivers for overdiagnosis becoming a growing problem include: more sensitive tests, widening disease definition, disease mongering, financial incentives, physicians' fear of litigation due to diagnostic delay, healthy citizens' claim for reassurance etc. Overdiagnosis is closely related to medicalization of normality and diagnosing and treating of conditions that are either self-healing or untreatable. Overdiagnosis is linked to the false conception that it is an error not to diagnose at the first modest symptom, which could be seen to indicate serious disease, but which in most cases is innocent and transitory. The first imperative of medicine is to do no harm. But overdiagnosis is harmful: both to the individual and to public health. Public health deteriorates when resources are shifted away from the patients with chronic diseases and the poor, to the well and the rich, while the individual is harmed by being labelled as sick and perceiving herself as sick. This workshop will commenced with four short presentations about how overdiagnosis is debated in primary healthcare in four different countries: Australia, Portugal, Denmark and Norway. Then participants will break into small groups to discuss their own experiences from their home countries, and then report back to suggest how to prevent overdiagnosis in general practice.

## W02

### **From diagnosis to formulation of a shared understanding: development of a new method for primary care clinicians to engage with mental health problems in the 21st century**

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**Background:** Psychiatric diagnosis is the accepted basis for categorising mental health problems. The basis for classification of mental health problems is almost entirely nosological (based on symptoms/behaviours) rather than cause or underlying neurobiology. Diagnoses are known to be applied inconsistently by psychiatrists and GPs, and have been shown to be overlapping and changeable over time. While a minority of psychologists and psychiatrists have provided a scientific rationale for abandoning psychiatric classification, primary care has been slow to develop alternatives. The aim of this workshop is to provide participants with the opportunity to contribute to the development of an alternative way of formulating a 'shared understanding' with patients about their mental health issues fit for primary care in the 21st century.

#### **Method:**

1. Introductions
2. Brief introduction of the problem of mental health diagnosis
3. Outline of a novel framework based on practice, literature review and research findings from the NIHR-funded Engager study:
  - Dimensional not categorical
  - Incorporates causal links between current emotions, thinking, behaviour and social situation
  - Incorporates original cause where possible (eg based on genetics, trauma and relationship problems)
  - Defines personal strengths and individualised goals within the framework
  - Supports development of a personalised plan for how to address patients' own goals and priorities
  - Does not include a clear and defined boundary between illness and wellness
4. Interactive group-based work using individual patients brought to the workshop by participants to test out and adapt the proposed model
5. Consensus group work to agree:
  - (a) component to the model to take forward
  - (b) components which need further testing
  - (c) additional potential components.

**Conclusion:** The workshop will support an alternative and complementary model for primary care practitioners and patients which will be written up for WONCA. It will support patients to understand their problems as interlinked, causal components rather than bewildering psychiatric classifications.

## S01

### **Management of gastroenterological symptoms and disease in primary care; state of the art 2016 - ESPCG symposium**

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Gastro-intestinal complaints are frequently presented in primary care across Europe; on average 7-10% of the consultations regard the GI tract. The underlying disease spectrum varies from transient benign GI infections disease to cancer in the gastrointestinal tract. Most frequent diagnosis in primary care are reflux- and peptic ulcer disease, irritable bowel syndrome and constipation.

Although epidemiology, presentation and facilities may vary across Europe, the optimal management of GI disease in European primary care is quit generic, with room for local adaptation according to country specific circumstances. In recent years new scientific data and guidelines have been developed, such as the new ROME criteria, Maastricht V guidelines, and guidelines for coeliac disease that all have impact on the disease management in primary care. In this symposium we present these new guidelines and evidence and integrate this in updated 'state of the art' management algorithms for gastro-intestinal disease in primary care.

Chair: Prof. dr. Bohumil Seifert

Introduction gastroenterology in primary care

Professor Roger Jones: Gastro-oesophageal reflux disease: an update

Prof. Dr. Jean Muris: Irritable bowel syndrome

Prof. Dr. Lars Agréus: Dyspepsia and peptic ulcer disease

Prof. Dr. Niek de Wit: Constipation and diarrhoea

Dr. Knut-Arne Wensaas: Coeliac disease

Concluding remarks

**S01.1**

**Introduction gastroenterology in primary care**

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Abstract not available.

## **S01.2**

### **Gastro-oesophageal reflux disease: an update**

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Gastro-oesophageal reflux disease (GORD) is a common condition with health impacts ranging from the trivial to the very serious. Symptoms of GORD have a high prevalence in the general population, and it is a diagnosis made frequently in primary care, although discussions continue about the adequacy of a making a diagnosis based on symptoms alone, and the place of investigations in making it definitively. The incidence of GORD is increasing in many countries, related to increasing rates of obesity and changes in aspects of diet and "lifestyle", and it is well-recognised as a risk factor for oesophageal cancer. Traditional models of causality and treatment, involving oesophageal acid exposure and acid suppression by drugs such as proton pump inhibitors, is now complemented by a growing awareness of other factors which need to be considered. The importance of the functional anatomy of the gastro-oesophageal junction and the concept of the "acid pouch" is now recognised, along with non-acid reflux and the irritant effect of agents such as pepsin and bile acids. Together with psychological factors, these may be of aetiological importance in patients who do not respond well to conventional therapy. The role of surgery in the management of GORD has always been controversial, although greater clarity about its place in long-term treatment is emerging. Finally, discussions continue about the appropriateness of screening for oesophageal cancer through population approaches or by case-funding in patients with long-standing GORD.

**S01.3****Irritable bowel syndrome**

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Abstract not available.

**S01.4****Dyspepsia and peptic ulcer disease**

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Abstract not available.

**S01.5**

**Constipation and diarrhoea**

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Abstract not available.

**S01.6****Coeliac disease**

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Abstract not available.

## S02.1

### Allergy education needs in primary care: results of a questionnaire

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**Background:** It is well recognized that knowledge of allergic conditions is sub-optimal in primary care resulting from a lack of education at undergraduate and postgraduate level. The Primary Care Interest Group of the European Academy of Allergy and Clinical Immunology undertook an educational needs survey to understand what primary care professionals felt their knowledge gaps to be, how they prioritized their training needs and how they would like to have them met.

**Method:** An electronic questionnaire was devised and distributed as widely as possible, mainly by personal contacts. All European Primary Care colleges listed on WONCA websites were contacted but only three or four replied of which Romania was the biggest respondent.

**Results:** 2226 people from 63 countries viewed the questionnaire: Complete data were available from 513 respondents and partial from 176. Mean age was 46.8. GPs comprised 516 of the total, of whom 116 had a special interest. Self-declared gaps in knowledge were expressed for Anaphylaxis, Exercise induced anaphylaxis, atopic and contact dermatitis, urticaria and angioedema, food and cow's milk protein allergy and drug reactions with a correspondingly self-expressed educational need.

Results also revealed, that most of respondents have access to spirometry, SIgE and skin prick test, but still make referrals for investigations, with lack of knowledge, confidence and familiarity being important issues. Low access was expressed for patch tests, FeNO, drug allergy tests and oral and bronchial provocation tests, with correspondingly higher referral to the specialist.

The most favored learning modalities were: Online guidelines (69.6%) and courses (68.8%) followed closely by workshops (68%), structured online modules (63.9%) and small local working groups (59.75%). Podcasts and webinars scored poorly with only 25% expressing these as preferred learning modes.

The preferred electronic platform was the personal computer (82.6%). Fewer than 30% did not wish to have their knowledge assessed. The favored assessment format was an online structured examination from an accredited body (62%).

**Conclusion:** A better understanding of the needs of primary care should help guide educational initiatives to meet those needs. Allergy patients could then benefit from a wider holistic approach to their care.

#### References:

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3. O. Yilmaz, I. Reislı, F. Tahan, F. Orhan, A.B. Boz, H. Yukse. Influence of education on primary care physicians' knowledge on childhood allergy as a systemic disease and the atopic march. *Allergologia et Immunopathologia*. Vol. 39. Núm. 02. March 2011 - April 2011

## **S02.2**

### **A tale of a GP with Special Interest (GPwSI) Paediatric Allergy Clinic in the community**

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**Background and Aim:** Allergy care is very variable in the UK. The 2003 Royal College of Physicians(RCP) report stated a large proportion of allergy management needs to be undertaken within primary care. We established an integrated multi-disciplinary paediatric allergy service across primary and secondary care to provide consistency in referral and management. We aimed to bring the management of allergies into primary care, informed by RCP /NICE guidelines, reduce waiting times and increase primary care education, thereby improving patient experience.

**Methods:** Our working group designed a food allergy pathway.. The CCG funded a GPwSI in Paediatric Allergy to lead the community clinic. An early recognition and management leaflet and educational events for GPs were designed. We retrospectively audited referral data for secondary care allergy, prior to commencing the GPwSI clinic. Data was obtained on waiting times and unplanned secondary care attendances for allergy-related problems, prior to their first allergy clinic.

**Results:** The data from prior to the introduction of the community clinic shows large numbers of unscheduled hospital attendances and long waiting times. A re-audit is in process.

**Conclusion:** Our integrated multi-disciplinary service for Paediatric Allergy is the first in the UK to have a GP-led community clinic. Data collection is ongoing to establish whether waiting times, unscheduled secondary care visits and patient satisfaction are improved.

### **S02.3**

#### **Managing the high risk atopic child**

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**Background:** The prevalence of allergy is on the increase globally. There is an urgent need to take a structured approach to the prevention and management of allergy, much of which could be undertaken within primary care.

**Educational aims:** To understand better the various factors which appear to increase the risk of developing allergy and strategies which are being deployed to reduce these impacts on the individual patient including primary prevention.

## **S02.4**

### **An approach to the wheezy infant in primary care**

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**Background:** Wheezy infants and children are a very common problem presenting to the primary care physician. It is sometimes not fully appreciated that there are many different causes of wheezing. The identification of the cause is likely to lead to improved management of the child.

**Educational Aims:** to explore the causes and consequences of wheezing in infancy in childhood, the evaluation of the problem and suggestions for appropriate management to reduce risks of adverse outcomes, using a structured approach to patient stratification.

## **W03**

### **The Vasco da Gama Movement General Meeting**

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**Background and Aims:** The Vasco da Gama Movement is the WONCA Europe Network for New and Future General Practitioners / Family Physicians. Established in 2004, in Copenhagen VdGM will be 12 years old. Bridging the transition between Residency and being a specialised Family Doctor, VdGM has a unique role within WONCA Europe; to engage, motivate and inspire future Family Doctors to become involved in WONCA Europe activities, to provide a safe, secure and supportive environment in which future colleagues can discover their interests and passions, and to provide the connections to other Networks and Interest Groups that allow these interests and passions to flourish and yield educational and research outcomes.

**Method:** In the VdGM General Meeting we will outline the activities of VdGM, from the underpinning structures such as the Council, to activities that take place under the umbrella of the five core pillars; namely Research, Education and Training, Exchange, Beyond Europe, and Image. Interest Group activity will also be presented including that of VdGM SIGs in Family Violence, Gender Equity, Mental Health and Rural Practice. Liaison activity between VdGM and the other Networks will also be highlighted as will our annual prizes and the VdGM Fund. In the General Meeting we will also launch the next five year Strategic Plan for VdGM.

**Conclusion:** The VdGM General Meeting will provide an insight into VdGM; from its structures and governance to the myriad of activity which takes place under the VdGM banner. We hope this will enthuse and inspire new members to become involved, not just in VdGM but in the wider WONCA family.

## **OP01.1**

### **Patient screening tools associated with prediction of depression remission at six months**

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**Background:** Depression is very common in primary care and treatment by collaborative care management has been shown to be extremely effective compared to usual care. Previous studies have demonstrated that self-reported patient screening tools can be predictive of patients who will have issues with persistent depressive symptoms at six months after treatment. This study was developed to determine which screening tools might be predictive for the patient with depression being in remission at six months.

**Methods:** in a retrospective chart review study of 2246 adult patients with depression who were treated with collaborative care management.

**Results:** Logistic regression analysis demonstrated that depression severity (as measured by the PHQ-9), negative screening for bipolar disorder (with a negative MDQ) and minimal anxiety severity (as measured by GAD-7) were consistently associated with increased likelihood of remission at six months. Clinically, a diagnosis of first episode of depression was also seen significantly more often in those patients in remission at six months. A history of being married was also noted to be strongly associated with remission at six months.

**Conclusions:** Patients diagnosed with depression and treated with collaborative care management have significant rates of remission. However, even within this group of patient, there are certain subsets of patients (those who are married, diagnosed with first episode of moderate depression, have a normal MDQ screen and no evidence of significant anxiety) who do much better clinically than others. The presentation will demonstrate the predictive probability of the combinations of self-reported patient screening tools for remission at six months. Patients who are at a high likelihood of remission at six months, may not need as intensive resource utilization as others.

## **OP01.2**

### **Use and costs of laboratory tests in primary health care in the Vantaa City, in Finland**

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**Background & Aim:** The costs for laboratory tests and imaging have increased three-fold during 1995–2011, while at the same time the total health care cost has increased two-fold. Great regional variation in the use of laboratory tests in primary health care have also been detected. The objective of this study is to describe the presence, extent and trends of variations in the use and costs of laboratory tests.

**Methods:** This retrospective study is based on the laboratory test data of the health center of Vantaa City. The city is the 4th largest county in Finland with a population of 215 000 being served by a hundred doctors in the local health centers. Changes in the use of tests in 2010, 2013 and 2015 are analyzed. The focus is on those tests that cause the highest costs.

**Results:** Between 2010 and 2013 the costs of laboratory tests increased 12 %. The highest annual laboratory cost per physician was 46000 euros, while the sum for the physician ranking at the 25th place for laboratory cost usage, was only half of this. The six common tests with the highest cost were ECG, blood cell counts, INR, tests for STDs, urine bacterial test and thyroid function test. These tests constituted for 24% of the laboratory costs. Ordering of these six common lab-tests varied greatly among physicians.

**Conclusions:** There is a great deal of variation among how primary health care physicians order laboratory tests. This possibly reflects variations in clinical practice. Detailed feedback and education on the rational use of laboratory tests may decrease this variation. Further, savings could be achieved with more optimized test utilization. In the presentation, the trends of laboratory use, costs and variations among doctors in 2010–2015 will be presented.

### OP01.3

#### **The too frequent repetition of some blood tests generates inappropriateness and increases costs**

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**Background & Aim:** in everyday practice each GP or other doctor may prescribe more than 100 blood tests. The question is whether all of these tests are always appropriate. Often the patient, for anxiety or for other reasons asks to repeat the exam more frequently than provide the rules of evidence based medicine. So we calculated how much costs the repetition of some tests used most frequently.

**Method:** we took the data base of all blood tests carried out by residents in the Local Health Authority of Empoli (240,000 inhabitants). We chose to analyze the repetition of some tests and the impact of inappropriateness if repeated too many times in one year: cholesterol, triglycerides, Prostatic Specific Antigen (PSA), fecal occult blood test (FOBT), protein electrophoresis (inappropriate if > 2 times a year) and international normalized ratio (INR) ( inappropriate > 18 times a year). We have established a cut-off normal repetition within 1 year derived from the scientific literature. We calculated the number of tests that exceeded the cut-off for each type of test and calculated by applying the standard costs, as these inappropriate requirements and repetitions generate more costs for our community.

**Results:** the 4.7% of patients make an inappropriate blood test. The greater inappropriateness of repetition occurs in FOBT 19.8% and for PSA, 10.5%.

**Conclusions:** this inappropriateness hasn't huge numbers, but it generates excessive costs for all the inhabitants of the Tuscany Region (3.8 million inhabitants) over 1 million euro per year. We will take action on doctors prescribing (85% are GP and 15% are doctors hospital specialists). We will use a special software that aids prescription (decision support software) together with the meetings of peer review that already we carry with GP.

#### **OP01.4**

#### **Predictability of CBC parameters for heavy drinking according to the facial flushing**

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**Background:** The purpose of this study is to investigate the association between immoderate drinking and CBC figures.

**Methods:** The subjects were 581 Korean adult males: 98 non-drinkers, 225 flusher, and 258 non-flusher, who had undergone a comprehensive medical evaluation at Chungnam National University Hospital between June and December of 2013. 14 grams was applied to a standard glass of alcohol intake. Criteria for immoderate drinking was applied to greater than 14 glasses and more than 8 glasses for a non-flush group with reference to the United States' guideline (NIAAA: National Institute in Alcohol Abuse and Alcoholism) and South Korean guideline, and it was applied to greater than seven glasses, and more than four glasses for a flushing group. It was to investigate whether immoderate drinking would be predictable according to increase mean corpuscular volume (MCV), decrease hemoglobin (Hb), and decrease platelet (PLT). Our investigation was to find the correlation with the increase MCV, decrease Hb, and decrease PLT as a means of predictability for immoderate drinking. The study was to examine the predictability of immoderate drinking through a combination of increase MCV, decrease Hb, or decrease PLT. If one of the three items was applicable: Group A, two of the three items were applicable: Group B.

**Results:** Predictability of group A was 23.1% in flushing drinkers and 21.7% in non-flushing drinkers for US NIAAA immoderate drinking, where as 30.8% in flushing drinkers and 30.4% in non-flushing drinkers considering Korean guideline immoderate drinking. Predictability of B group was 100% in flushing and non-flushing drinkers for both NIAAA guidelines and Korean guidelines immoderate drinking.

**Conclusions::** Above results suggest that it is desirable for physicians to use any combination of the three CBC indicators (increased MCV, decreased Hb, or decreased PLT for predicting immoderate drinking.

## OP01.5

### Clinical decision algorithm of Urinary Incontinence in primary health care

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**Background & Aim:** Urinary incontinence is a pelvic floor dysfunction defined as an involuntary loss of urine. There are several types of urinary incontinence, such as stress, urgency and mixed incontinence. This review aims to create an easy tool, adapted to primary care physicians, to assess the diagnosis and treatment of female urinary incontinence as well as the reference criteria to a specialized centre.

**Method:** A literature review was conducted, using the following databases: Pubmed, Uptodate and Emedicine. Papers were included if they were written in English and Portuguese and published in the last 10 years.

**Results:** The construction of the algorithm considers the family doctor skills and provides a systematic approach of urinary incontinence, not forgetting any important step by following the intermediary keywords. The algorithm makes reference to the type of urine loss (stress, urgency or nocturia), pelvic and gynecologic exam (including stress test) and laboratory tests (exclusion of urinary tract infection). It guides for non-pharmacological treatment (Kegel's exercises or bladder training), pharmacological treatment, treatment of comorbidities or for the need to consult a urogynecologist, either to proceed the investigation or to have surgery.

**Conclusions:** The family doctor is often the first contact with most female patients with urinary incontinence. However, if not asked, most women will not mention the problem, resulting in a late diagnosis. It is also essential to understand the impact of the disease on the quality of life, in order to guide the treatment according to the patient expectations.

This algorithm allows the family doctor to have an easy support in the management of this condition, not disregarding the importance of the prevention and screening of urinary incontinence, particularly in women with risk factors.

## OP01.6

### Validity of alcohol use disorder identification test - Korean revised version for screening alcohol use disorder according to DSM-5 Criteria

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**Background:** The Alcohol Use Disorder Identification Test (AUDIT) has been used widely to identify alcohol use disorder (AUD). This study evaluated the validity of the AUDIT-Korean Revised Version (AUDIT-KR) for screening AUD according to DSM-5 criteria.

**Methods:** This research was conducted with 443 subjects who visited the Chungnam National University Hospital for a comprehensive medical examination. We divided subjects into two groups according to DSM-5 criteria: the case group, which included AUD patients (120 men and 21 women), and the control group, which included 146 men and 156 women. Subjects in both groups completed the AUDIT-KR themselves. The appropriate cut-off values, sensitivity, specificity, and positive and negative predictive values of the AUDIT-KR were evaluated.

**Results:** The mean ( $\pm$  standard deviation) AUDIT-KR scores in the case group were 14.83 ( $\pm$  5.28) points in men and 11.24 ( $\pm$  3.68) points in women. The mean AUDIT-KR scores in the control group were 5.36 ( $\pm$  4.35) points in men and 2.01 ( $\pm$  2.73) points in women. The area under the receiver operating characteristic curve (95% CI) of the AUDIT-KR for identifying AUD was 0.884 (0.840–0.920) in men and 0.962 (0.923–0.985) in women. The optimal cut-off value of the AUDIT-KR was 10 points for men (sensitivity, 81.90%; specificity, 81.33%; positive predictive value, 77.2%; negative predictive value, 85.3%) and 5 points for women (sensitivity, 100.00%; specificity, 88.54%; positive predictive value, 52.6%; negative predictive value, 100.0%).

**Conclusion:** The AUDIT-KR has high reliability and validity for identifying AUD according to DSM-5 criteria.

## **OP02.1**

### **Familial risks of glomerulonephritis - a nationwide family study in Sweden**

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**Background:** Familial risks of glomerulonephritis (acute-, chronic and unspecified glomerulonephritis) are not studied. This study aimed to determine the familial risks of glomerulonephritis.

**Methods:** Individuals born from 1932 onwards diagnosed with glomerulonephritis (acute [n=7011], chronic [n=10242], and unspecified glomerulonephritis [n=5762]) included. The familial risk (Standardized incidence ratio=SIR) was calculated for individuals whose parents/full-siblings were diagnosed with glomerulonephritis compared to those whose parents/full-siblings were not. The procedure was repeated for spouses. Familial concordant risk (same disease in proband and exposed relative) and discordant risk (different disease in proband and exposed relative) of glomerulonephritis were determined.

**Results:** Familial concordant risks (parents/full-sibling history) were: SIR=3.57 (95% confidence interval CI, 2.77-4.53) for acute glomerulonephritis, 3.84 (95% CI, 3.37-4.36) for chronic glomerulonephritis and 3.75 (95% CI, 2.85-4.83) for unspecified glomerulonephritis. Very high familial risks were observed if two or more relatives were affected, SIR was 209.83 (95% CI, 150.51-284.87) in individuals with at least one affected parent and full-sibling. The spouse risk was moderately increased (SIR=1.53, 1.33-1.75).

**Conclusions:** Family history of glomerulonephritis is a strong predictor for glomerulonephritis, and is a potential useful tool in clinical risk assessment. Our data emphasize the contribution of familial factors (genetic and environmental) to the glomerulonephritis burden in the community.

## **OP02.2**

### **Inhalation technique assessment and inhaler device satisfaction in asthma patients**

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**Background & Aim:** Evidence shows that there is no statistical difference in clinical efficacy between inhaler devices, if used correctly. However, inhalers' efficacy is influenced by the inhalation technique, and it is suggested that it may be influenced by patients' satisfaction with their inhaler. The aim of this work was to assess the inhalation technique, the inhaler device satisfaction and asthma control in a population sample of a Primary Care Unit.

**Method:** Observational and descriptive study conducted between January and May 2015, in a Portuguese Primary Care Unit, with adult patients diagnosed with asthma and with a prescription for an inhaler in the last year. All the individuals who refused to participate or whose contact was impossible were excluded, with a final sample of 34 patients. To determine asthma control, the CARAT 10 questionnaire was used; patient satisfaction was assessed through a brief questionnaire; inhalation technique was assessed through direct observation, using a standardized check-list.

**Results:** 53% (n = 18) of the sample were females, with a mean age of 50.19 years. 53% (n=18) of the sample had their asthma controlled (CARAT > 24). Regarding satisfaction, 78% of the sample was very pleased with the inhaler. Almost a third (29%) performed inhalation incorrectly, and the most frequent mistake was "not to expire before inhalation".

**Conclusions:** Although the sample was very satisfied with the prescribed inhalers, it was found that only about a half had the disease controlled. Inhalation errors are also frequent, which might contribute to the poor control of the disease. Family Physicians - the gateway to the National Health System - must be attentive to asthma control, and should assess inhalation technique in consults frequently, in order to correct it and improve their patients' condition.

### OP02.3

#### **Facing the diagnosis of myocardial infarction: a qualitative study of Croatian patient experience**

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**Background & Aim:** Patient experience is increasingly recognized as one of the three pillars of quality in healthcare, alongside clinical effectiveness and patient safety. However, little attention has been paid to the patients' experience from the point of health care delivery view. Exploring patients experiences within a „natural“ context is recommended methodology for the identification of factors and strategies that help patients make adjustment to chronic illness. The Aim of this study was to explore the initial experience of patients facing a new diagnosis of myocardial infarction (MI).

**Method:** 30 semi-structured, individual interviews with MI patients were performed. The Grounded Theory method was used. Atlas.ti qualitative data analysis software facilitated the analysis.

**Results:** Three patterns of MI diagnosis experience were found: a close encounter with death, severe pain, and 'silent' MI. Newly diagnosed MI patients who experienced an encounter with death expected a purely biomedical approach, limited to life-saving measures, followed by the opportunity to be left alone to enjoy being alive. By contrast, patients who did not experience a life-threatening situation expected, in addition to medical care, immediate emotional support and the opportunity for their ideas, thoughts, concerns and fears to be heard, explored, and discussed. Six factors facilitated patients coping with a new diagnosis of MI: stay in hospital, completion of diagnostic tests, trust in physicians, the patient's previous expectation that he/she could have a heart attack, the patient's personality, and the need for solitude.

**Conclusions:** Physicians should be aware that different patterns of patient experience when facing MI could indicate patients' differing needs for immediate emotional support and communication. Since each patient's experience is unique and deeply embedded in the cultural context of his or her life, future research on this topic in different population groups and in different settings is needed.

## OP02.4

### Stability of the frequent exacerbator – a Danish nationwide register-based study

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**Background and Aim:** The existence of a stable frequent exacerbator phenotype constitutes the basis of most treatment guidelines in chronic obstructive pulmonary disease (COPD). We aim to investigate the stability of the frequent exacerbator within a 10-year follow-up period in a population-based study.

**Methods:** We conducted a nationwide register-based epidemiological study with a 10-year follow-up period of patients with COPD and at least one medically treated exacerbation in 2003. Exacerbations were defined as short-term treatment with oral corticosteroids or hospitalization due to COPD. First, we categorized the population as frequent, infrequent and non-exacerbators each subsequent year during the 10-years of follow-up and quantified the flow between categories. Second, we calculated the proportion of frequent and severe exacerbators in 2003 that remained in this category throughout a 3- and 5-year follow-up period.

**Results:** We identified 19,752 COPD patients with exacerbations in 2003. Thirty percent were frequent exacerbators and 50% were severe in the index year. Overall, a large proportion of exacerbators in 2003 were non-exacerbators in the following years (60% in 2004 increasing to 68% in 2012). Approximately half of those categorized as frequent exacerbators in one year were either infrequent- or non-exacerbators in the subsequent year. This pattern was stable throughout follow-up. A minority of frequent exacerbators in 2003 stayed in this category throughout a 3- and 5-year follow-up period (11% and 6%, respectively), and a substantial proportion (43%) did not have further years as frequent exacerbators. Among those hospitalized due to COPD in 2003, 47% and 42% did not experience an exacerbation requiring hospitalization throughout the 3- and 5-years of follow-up, respectively.

**Conclusions:** The concept of a stable frequent exacerbator phenotype appears inapplicable in the general population. This finding challenges current management of COPD patients in general practice.

## OP02.5

### **Ongoing statin therapy during hospitalization for acute myocardial infarction. Learnings for general practitioners and cardiologists**

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**Background and Objectives:** Patients with high cardiovascular risk should according to current guidelines receive statin drugs as primary prevention of cardiovascular events. This study aimed to determine the prevalence of AMI patients on statin treatment at hospitalization. The prevalence of statin treatment among AMI patients with known diabetes, known angina pectoris and previous AMI were studied separately. We also investigated blood lipids upon admission of patients with AMI in relation to national guidelines of recommended levels of lipids.

**Methods:** Consecutive patients ( $n = 771$ )  $\leq 80$  years of age hospitalized for AMI during the period 2005-2012 were included in the study. ECG and biomarkers according to criteria recommended by the European Society of Cardiology (ESC) were used to diagnose AMI. Blood lipids and blood pressure were taken when patients were enrolled in the study at admission. Previous myocardial infarction, angina, stroke, diabetes, smoking habits and hypertension were diagnosed by self-reports verified by medical records.

**Main Results:** More than half of the statin treated had a LDL cholesterol level below the recommended level 2.5 mmol / L. LDL cholesterol level is 1.0 mmol / L lower among statin-treated than non-statin treated. 30% of diabetics, 22% of previous myocardial infarction patients and 31% of angina patients were not on statin therapy as primary prevention when they were hospitalized for their first AMI.

**Main Conclusion:** There is a large potential for improvement of statin therapy of patients at high risk for AMI. A study why some AMI patients with known diabetes, known angina pectoris and previous AMI are not on statin treatment is needed.

## OP02.6

### Primary prevention of Luxembourgish GPs: are they a risk group amongst the mean population?

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**Background & Aim:** To our knowledge, there is no national data available regarding the general health status of general practitioners (GPs) established in the Grand Duchy of Luxembourg (GDL). This study was conducted in an attempt to roughly overview this issue by collecting and analyzing scientifically and objectively ascertainable data concerning the prevalence of primary prevention risk factors in this particular group.

**Method:** To ensure a homogenous set of guidelines and wide statistical data library, the main goals of primary prevention were targeted via literature review of the WHO guidelines. After modifiable and objectively ascertainable risk factors had been identified (Vaccination status, Physical inactivity, Alimentary habits, Arterial hypertension, Hypercholesterolemia, Hyperglycemia, Overweight and Obesity, Smoking status, Alcohol intake), collecting data concerning said risk factors and demographic data was undertaken by sending a self-administered survey to 364 GPs practicing in the GDL. The survey data was statistically compared to (preferably, if available) WHO-issued data.

**Results:** 212 answered questionnaires were collected. Statistically compared to the average Luxembourgish population, GPs tend to present less cardiovascular and oncologic risk factors like arterial hypertension, overweight and obesity, hypercholesterolemia, alcohol and smoking. There was no statistically relevant difference concerning physical inactivity and hyperglycemia. Luxembourgish GPs tend to consume the recommended 400 grams of fruits and vegetables less often than the mean Luxembourgish population. Due to lack of national data, it is difficult to conclude that GPs have better vaccination coverage than the mean Luxembourgish population; however, there is a statistically significant downward trend concerning said coverage particularly in male GPs over 50 years of age.

**Conclusion:** Luxembourgish GPs are statistically less at risk than the average Luxembourgish population of developing some non-transmittable diseases, particularly cardiovascular diseases and some types of cancer. Some efforts remain to be done regarding vaccination coverage and eating habits.

## **W04**

### **A demonstration how to manually examine a patient with arm-, shoulder- and neck-pain and a talk about the different reasons for these symptoms**

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**Background and Aim:** In General Practice we often see patients with problems from the musculoskeletal system, and we often lack the skills to examine these patients in the right way. In the Danish Society of Muskuloskeletal Medicine (DSMM) we educate doctors to master these skills. We have a number of courses in different manual treatments. DSMM is a society of 600 members who are mostly GP.

**Method:** In this presentation we will demonstrate how to examine and evaluate a patient with neck- and shoulder-pain radiating to the arm. We have chosen this example, because some patients with pain radiating to the arm will incorrectly be referred to the hospital suspecting it to be a disc herniation. It will be a practical workshop with "hands on", where the participants will examine the colleagues after theoretical and practical instructions. We expect the participants to be dressed in clothes which makes it easy to examine the upper body.

**Results:** We expect participants will achieve a knowledge and an interest in patients with problems in the musculoskeletal system and manually examine their own patients. We hope as well they will seek further education in this subject, as the workshop should be seen as an appetizer.

(No. of Participants max. 30)

### OP03.1

#### Is stress related with poor glycaemic control in patients with diabetes mellitus type 2?

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**Background and Aim:** Substantial data support the theoretical importance of stress in T2DM, yet there is little direct evidence that stress plays a clinically significant role. Our aim is to determine self-reported stress levels among type 2 diabetes mellitus (T2DM) patients and its association with hemoglobin A1c (HbA1c) in family physicians' (FP) offices in Croatia.

**Methods:** A total of 449 FPs from all Croatian regions consecutively recruited up to 20-25 subjects of both sexes from 2008 to 2010, diagnosed at least 3 year prior to study entry, aged  $\geq 40$  years, scheduled for diabetes control check-ups. The recruitment period lasted for six months. Self-reported stress was measured using Perceived Stress Scale (PSS), supplemented with HbA1c measurement.

**Results:** The study included 10,285 patients with T2DM with mean ( $\pm$ SD) age of 65.7 ( $\pm 10.05$ ) years (48.1% men). Mean HbA1c level was 7.57 ( $\pm 1.58$ )%. Majority of patients (7655 or 78.3%) reported medium level of stress, while 1432 (14.7%) and 687 (7.0%) reported low and high levels of stress, respectively. Cronbach's  $\alpha$  reliability coefficient for the stress questionnaire was 0.82, with Guttman's split-half coefficient 0.85. Principal component analysis with the extraction criterion of eigenvalues  $> 1$  revealed two principal components, together explaining 59% of the manifest items variance. Two components were defined by the positive or negative orientation of PSS items. Level of stress was significantly ( $P < 0.001$ ) associated with increased HbA1c and high level of stress were significantly associated with increased HbA1c ( $P < 0.05$ ).

**Conclusions:** In this study, medium to increased level of stress was significantly associated with the level of HbA1c. These results emphasize the importance of regular screening for stress in clinical setting. If patients' stress can be identified and helped, improvements in their overall diabetes control, as well as quality of life, are likely to follow.

Keywords: family physician, stress, type 2 diabetes

## OP03.2

### **A mobile and web-based clinical decision support and monitoring system for hypertension and diabetes in primary care: a study protocol**

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**Background & Aim:** The purpose of the study is to develop a user-friendly web and mobile-based CDSMS for HT and DM diseases scanning, diagnosis, treatment and monitoring for the use of physicians and patients in primary care and to determine the effectiveness of the system.

**Method:** Clinical decision support system (CDSS) will be based on evidence-based guidelines for HT and DM diseases. Web and mobile-based application will be developed. The remote monitoring of patient data collected with mobile applications will be provided. A database containing patient data will be created. The developed CDSMS will be tested in two stages. In the first stage, the usability, understandability and adequacy of the application will be determined. Then, necessary adjustments in the application will be made in accordance with the feedback after interviews with physicians and patients. In the second phase, the system will be validated. A randomized controlled trial will be implemented. According to the results of scanning which is done using developed CDSS, DM and/or HT diagnosed patients will be participants of trial. In the intervention group, the system recommendations on diagnosis, treatment and monitoring will be carried out as the final decision given by the physician. In the control group, physicians will treat HT and DM patients as the general routine. Patients in both groups will be monitored for 6 months. Patient data on 0th and 6th month will be compared.

**Results:** Primary outcomes are; patients receiving continuous monitoring and effective treatment will reduce the rate of possible complications, morbidity, mortality and applications to health institutions and periodic scans will be monitored electronically. Thus, prevention of possible diseases and early diagnose will be possible. Secondary outcome is rapidly evolving e-health technology in the world will be contributed using national information and technology savings.

**Conclusions:** In the fields of medical expertise providing health services to HT and DM patients, the developed system using evidence-based guidelines will be the first example.

### OP03.3

#### **The effectiveness of a cardiometabolic prevention program in general practices offering integrated care programs including a patient tailored lifestyle treatment**

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**Background & Aim:** Selective cardio-metabolic prevention programs (CMP) may be especially effective in well-organized practices. We studied the effect of a CMP program in the academic primary care practices of the Julius Health Centers (JHC) that offer integrated cardiovascular disease management including a patient-tailored lifestyle program.

**Method:** JHC participates in the INTEGRATE study, a randomized clinical trial among patients aged 40-70 years without pre-existent cardiovascular disease or risk factors. The present analysis included those who scored above the threshold in the online risk calculator. Intervention patients were informed about the score results and were advised to visit their GP for a comprehensive risk assessment and treatment. After one year we planned a follow-up visit and an online questionnaire on treatment and lifestyle factors. Control patients were not informed about the risk score results. We checked the medical records after one year follow-up and compared the outcomes using T- and chi-square tests.

**Results:** In total 4170 (2332 intervention and 1838 control) patients were invited, 31% and 26% responded. In total 162 and 105 patients scored above the threshold, respectively. Among these, 36% and 21% consulted the GP who diagnosed a new CMD risk factor among 21% vs 20% visitors of the practice, respectively; hypertension in 12% vs 12%, diabetes in 4% vs 4% and hypercholesterolemia in 11% vs 8%. After one year patients who visited the GP showed a decrease in SBP of 0,6 mmHg with a decline of 21,8 mmHg in hypertensive patients (n.s.). The percentage with a BMI <25 increased from 46% to 54% (n.s). No improvement in smoking, physical exercise, alcohol consumption was seen.

**Conclusion:** A new CMD is diagnosed in one fifth of patients visiting the practice after an online risk assessment test. Newly detected CMD risk is accurately treated by the GP but lifestyle improvements remain a challenge.

## OP03.4

### Cardiovascular fitness in young males predicts risk of idiopathic venous thromboembolism in adulthood

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**Background & Aim:** Venous thromboembolism (VTE) is the third most common cardiovascular disorders. Whether cardiovascular fitness, i.e. the result of physical activity, is associated with risk of VTE is unknown. The present nationwide study aims to determine whether cardiovascular fitness in male conscripts is a predictor of idiopathic VTE.

**Method:** A Swedish cohort of male conscripts (n=773925) born in 1954-1970 with no history of previous VTE were followed from enlistment (1972-1990) until 2010.

Data on cardiovascular fitness using a cycle ergometric test (maximum work rate in Watt=W<sub>max</sub>) at conscription were linked with national hospital register data to calculate future risk of VTE requiring in-patient care. Maximum work rate were adjusted for weight (W<sub>max</sub>/kg), which reflects maximum oxygen consumption. Using the Swedish Multi-Generation Register, we identified all full-siblings and first-cousin pair discordant for W<sub>max</sub>/kg. This co-relative design allows for adjustment for shared genetic or environmental factors. Main outcome was unprovoked first event of hospitalized VTE. Secondary cases of VTE due to cancer, fracture, trauma and surgery were excluded.

**Results:** In total 3005 (0.39%) males were affected by VTE. Cardiovascular fitness was associated with risk for VTE (Hazard ratio =HR 0.76 95% confidence interval 0.73-0.79 per standard deviation [SD] increment). Individuals with a W<sub>max</sub>/kg above two SDs had a HR of 0.58 (0.54-0.63), and those with a W<sub>max</sub>/kg below two SDs had a HR of 1.72 (1.59-1.86). The association was weaker when examining discordant full-sibling pairs (HR= 0.86 95% CI 0.79-0.94). Discordant first-cousin pairs had a HR of 0.82 (0.77-0.88).

**Conclusions:** This study shows an association with objectively tested cardiovascular fitness and risk of VTE. The effect of cardiovascular fitness remained during follow-up. Thus, good cardiovascular fitness at young age may prevent VTE in adulthood, suggesting the importance of physical activity in young people.

## OP03.5

### Cardiovascular features and comorbidity in patients diagnosed with hypercholesterolemia

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**Objective:** To describe cardiovascular risk factors and clinical characteristics of patients diagnosed with hypercholesterolemia and to determine their cardiovascular risk and comorbidity.

**Material and Method:** Cross-sectional multicenter study will be conducted at facilities of ten health centres in three of Spain's Autonomous Regions (Comunidades Autónomas). 358 adult subjects diagnosed with hypercholesterolemia and selected by consecutive sampling were evaluated. Sociodemographic variables, cardiovascular risk factors, lipid profile, cardiovascular risk (Score and Regicor), health problems (CIAP-2 classification), drug consumption and comorbidity were collected by the Charlson index.

**Results:** The mean age was 58.6 years (SD: 9.8). 50.6% were hypertensive, 23.2% smoker, 17.6% and 41.6% obese diabetic. 29.6% had metabolic syndrome. 54.5% had a cardiovascular problem. 36.6% had 3 or more health problems. 29.4% had a high or very high cardiovascular risk (Score  $\geq 5\%$ ) and 27.9% Charlson index  $\geq 3$ . Comorbidity presented a statistically significant positive correlation with respect to the score ( $r = 0.537$ ;  $p < 0.001$ ) and Regicor ( $r = 0.352$ ,  $p < 0.001$ ). By multiple linear regression, the variables associated with greater comorbidity index were: age, use of more drugs, higher score index, more diseases, present a circulatory problem, endocrine, respiratory or genital.

**Conclusions:** More than half of the patients with hypercholesterolemia present a cardiovascular problem and about one third a high or very high cardiovascular risk. More than one third had 3 or more diseases. It has been found that in addition to the variables considered in calculating the comorbidity using the Charlson index, there are others that may be related to comorbidity in hypercholesterolemic subjects such as Score index, the presence of a circulatory problem, endocrine, genital or respiratory and the number of drugs consumed or diseases that have been presented.

## OP03.6

### Diabetes type 2 in Seltjarnarnes health center, retrospective study 2003-2013

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**Background & Aim:** Diabetes type 2 is a major cause of morbidity and mortality worldwide. The incidence has increased in Iceland like other western countries over the last few decades. This disease and its micro and macro vascular complications put a high burden on our patients, their families and our society. Good management of blood glucose, bloodpressure and hyperlipidemia has been shown to significantly lower the complication rate. The aim of this study was to look at the care of diabetic type 2 patients at Seltjarnarnes health center.

**Method:** This study looked at all patients registered to Seltjarnarnes health center with a diagnosis of diabetes within the timeframe of 2003-2013. All patients with type 1 diabetes were excluded. The following was documented both years 2003 and 2013: Age, sex, blood glucose, HbA1c, cholesterol, bloodpressure, BMI, the use of pharmacotherapy and mortality during research timeframe.

**Results:** Total number of patients with type 2 diabetes were 123 in 2003 and 188 in 2013. Average age of patients were 66,5 +/- 11,9 years in 2003 and 67,6 +/- 13,8 years in 2013 (p=0,47). 52% of patients were female in 2003 but 46% in 2013. In 2003 58% of patients were on metformin and that number increased to 77% in 2013. ACEI / ARB intake increased from 55% to 66%. Average cholesterol decreased significantly from 5,5 +/-1,1 in 2003 to 4,7 +/- 1,2 in 2013 (p<0,01). Average BMI was 30,8 +/-5,6 in 2003 and 32,8 +/-5,1 (p=0,7). The average SBP was 144 +/- 21 in 2003 and 136 +/- 16 in 2013 (p=0,01). DBP was 79 +/-10 and 80 +/-10. HbA1c was 7,1% in 2003 and 7,5% in 2013 (p=0,08).

**Conclusions:** There was a significant increase in the number of patients taking metformin and ACEI/ARB from 2003 to 2013. There was a significant decrease in SBP and cholesterol in the period. There was an increase in HbA1c in the period although it was not significant.

### **S03 - Symposium**

#### **Better diagnosis and treatment of urinary tract infections in general practice**

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Urinary tract infection (UTI) is the most common bacterial infection in women and it is the second most frequent reason for antibiotic prescribing. Most women experience at least one episode of UTI during their life, and each year about 10% receive one or more courses of antibiotics for UTI. Most women with typical symptoms are treated empirically with antibiotics. However, up to half of women who present with typical symptoms of UTI do not have clinically significant bacteriuria, and evidence indicates that many women with symptoms of UTI will recover without antibiotic treatment. Studies that compared antibiotics with placebo in patients with uncomplicated UTI have found a delayed cure in the placebo group, but the majority of patients become symptom free within a week. Prescribing antibiotics to patients with self-limiting conditions contributes to antimicrobial resistance (AMR). WHO considers AMR to be one of the three most important public health problems in the world and initiatives to reduce inappropriate and superfluous prescribing are essential if we are to maintain effective treatment for future generations. Symptoms of UTI are uncomfortable and most women will want to start effective treatment as soon as possible. The challenge in general practice is how to identify those who really need antibiotics. Overtreatment could lead to adverse effects and most patients are aware that overuse of antibiotics leads to AMR. Patients do not want antibiotics unless they are necessary. Antimicrobial therapy should therefore only be initiated if treatment is expected to reduce or shorten the symptom burden or reduce the risk of complications. This symposium will focus on how general practice can improve the quality of the diagnostic process in patients with symptoms of UVI and thereby avoid overtreatment with antibiotics. The symposium will also present new evidence about alternative treatments in patients with UTI.

## W05

### Basic dermoscopy for general practitioners

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**Background and Aim:** Pigmented lesions are common consultations in Primary Care (PC) but it may be difficult to differentiate benign and malignant. Skin cancer (SC) incidence is growing, and General Practitioners (GPs) have an important role in its prevention and early diagnosis. An essential tool for screening is dermoscopy, and using it requires knowledge and training. This workshop aims to raise awareness of the importance of dermoscopy for GPs and to train and enable them to improve recognition of different patterns in order to decide better whether refer to Dermatology.

**Method:** The 75min workshop has theory part (explanation of the technique based on the latest evidence, presented by members of the Group of Dermatology of the Catalan GPs Society), and practical part. The content is:

- 1) Introduction (SC update);
- 2) Primary prevention (photoprotection);
- 3) Secondary prevention (risk groups) and pre-test,
- 4) Definition and usefulness;
- 5) Diagnosis of melanocytic and non-melanocytic lesions in two stages;
- 6) 3-Checkpoint-list screening method;
- 7) Clinical cases;
- 8) Post-test (the same clinical cases of pre-test including dermoscopic images);
- 9) Practice with different dermoscopes.

**Results:** Two tests are performed to assess knowledge acquired during the workshop. The pre-test consists of 10 clinical cases with macroscopic image and the participants must decide: whether the lesion is benign or malignant, if they would refer to dermatologist and the diagnostic approach. The post-test (at the end of the workshop) consists of the same 10 clinical cases adding dermoscopic image, here participants must determine if their decisions have changed. The expected result is an improvement in the diagnosis accuracy after the workshop.

**Conclusions:** This workshop can be helpful for GPs to implement dermoscopy in their daily practice and improve early diagnosis of SC.

## **W06**

### **Difficult to control asthma**

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The Workshop will cover:

- Diagnosis and problem identification
- Brittle asthma
- The difference between unstable, severe, and uncontrolled asthma
- Red flags in management
- Appropriate inhalers
- Management

The IPCRG (a special interest group associated with WONCA Europe) has presented internationally for a number of years including in Istanbul (2x), Lisbon, Warsaw, Prague, Vienna, Malaga, and Heraklion. The sessions have been very well received with excellent attendance. All proposed speakers are general practitioners and are well known Internationally in primary care circles, especially with reference to respiratory medicine.

## **W07**

### **Infectious diseases and family medicine in the era of migrating populations**

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**Background & Aim:** Management of infections in Family Medicine is always a challenge for the physician. Suspicion, identification, proper diagnostic tests and treatment may affect not only the patient who seeks medical help but also the community, since Family Medicine has to deal very often with communicable diseases, zoonoses, migrating populations and reemerging infectious diseases.

**Method:** in this workshop presenters from two countries that during the past years have encountered a major refugee crisis, Turkey and Greece will focus on common infectious diseases that physicians may deal in Family Medicine. The workshop will present real patient scenarios on malaria, tularemia, tuberculosis, cutaneous leishmaniasis, brucellosis and hemorrhagic fevers. The patient's histories, clinical findings, diagnostic approaches, treatment modalities and subsequent surveillance in the community will be presented step by step and a discussion with the participants in the form of decision making will take place for every case.

**Results:** Aim of the workshop is to familiarize the participants with infectious diseases that are becoming more and more common in Family Medicine and to understand the diagnostic procedures and treatment strategies available. The interaction with the presenters on the management of the patients is the major goal of the workshop. In order to become acquainted with the particular features each of the aforementioned infectious diseases the workshop will focus on the rational of approach to diagnosis and treatment as well as any potential pitfalls in the management of the affected individuals and organization of surveillance in the community that occurred in the course of each case presented.

## W08

### **The tight relationship between mental health and family violence: practice and training implications**

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**Background & Aim:** EUROPREV is organised in several working groups to define effective prevention strategies for health behaviour change, cardiovascular risk factors as well as prevention of mental health problems. After presentation of new project for CV prevention the equally strong relationship between lifestyle (e.g. alcohol use and dietary behaviour), anxiety, depression, and family violence will be highlighted.

**Method:** Case presentations will be used to illustrate relationships. The audience will be presented with several conceptual models for improving detection, assessment and counselling in situations where mental health and family violence are intertwined.

**Results:** Mental health problems need more specific attention as causes of risk behaviour and consequences of family violence. Implications for practice and training will be discussed. Practitioners are invited to apply structured care strategies to deal with these relationships when caring for individuals and families affected by family violence. While the perspective of the victim and perpetrator should be considered an effective care strategy should be defined taking into account local needs and resources.

**Conclusions:** General practice should pay more attention to identification of violent relationships when clients present with risk behaviour or mental health problems.

Consequences of violence on mental and social wellbeing and risk behaviour merit active follow up and support.

Such a holistic approach may help to decrease reoccurrence as well as the broader consequences of family violence. More research training at all levels is needed to further develop and apply specific care models dealing with these relationships.

## **W09**

### **The contribution of family medicine to global health**

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**Background & Aim:** While Family Medicine is a backbone of European health systems, globally many countries have not introduced this cadre. In this workshop we will explore the contribution and limitations of family medicine and its training curriculum as a key vehicle for delivering quality primary health care globally, and what the specialty may look like in less resourceful countries.

**Method:** This is an interactive workshop. After an initial presentation using cases from countries worldwide, participants will join a discussion about the global role of family medicine. Different organizations and methodologies currently active in stimulating Family Medicine worldwide, like WHIG, PiP and Primafamed, will be presented and examples of partnerships between Colleges of Family Medicine and Universities will be shared.

**Results:** The workshop will help participants reflect around the common assumption that family medicine is necessary for developing successful health systems, and the scope of the specialty's global responsibility. Strengths and challenges of existing activities and strategies to stimulate Family Medicine and their training curriculum will be discussed and analyzed.

**Conclusion:** Family Medicine is context-sensitive and needs to be dynamic and adaptive to the needs of populations in order to be the vehicle to provide improvements in Global Health. This workshop illustrates and contributes to how this may be achieved.

## OP04.1

### **Predictors of depressive symptoms in bereaved caregivers: a nation-wide prospective cohort study**

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**Background:** Depression in bereaved caregivers is an important health problem that leads to poor quality of life and increased health care use. The aim of this prospective study was to investigate predictors of depressive symptoms in bereaved caregivers.

**Methods:** Patients receiving drug reimbursement for terminal illness in Denmark in 2012 were mailed a questionnaire and requested to pass it on to their closest relative. Responding caregivers bereaved within six months also received a follow-up questionnaire six months after the loss. Depressive symptoms were assessed with Beck Depression Inventory-II. The following determinants were included in the analyses: pre-loss grief symptoms, pre-loss depressive symptoms, caregiver burden, preparedness for death, communication about dying, age, gender, relation and educational level.

**Results:** Participants comprised 3,635 caregivers at baseline (response 38%). At the end of the study, 2,420 caregivers were bereaved. Of these bereaved caregivers, 2,125 (88%) participated at follow-up. Severe pre-loss grief symptoms (OR=1.8 (95% CI: 1.2-2.8)), pre-loss depressive symptoms (OR=10.7 (95% CI: 7.3-15.8)), spousal relation (OR=1.8 (95% CI: 1.2-2.7)), low education (OR=1.7 (95% CI: 1.0-2.8)) and female gender (OR=1.6 (95% CI: 1.1-2.4)) were predictors of post-loss depressive symptoms.

**Conclusions:** Severe symptoms of grief and depression during caregiving along with being a spouse, low educational level and female gender may predict depression during bereavement. General practitioners and other health professionals should keep these factors in mind in the contact with caregivers during end-of-life patient trajectories as support for psychological distress during caregiving may both help caregivers during caregiving and diminish depressive symptoms during bereavement.

## OP04.2

### **Reducing health inequalities through health promotion interventions**

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**Background and Aim:** Madrid City Council has a network of Health Promotion (HP) Centers following the local “Healthy People Strategy” which includes a Health Inequalities (HI) Program.

Working with vulnerable groups requires the creation of professional synergies between health and social professionals. This collaborative approach contributes to the reduction of HI through community engagement and socio-culturally adapted interventions.

The aim of the proposed research is to describe how we work to reach vulnerable populations and engage them in health promotion activities.

**Method:** Our approach in HP is community participation through proportional universalism. We established alliances with social organizations and movements to provide joint initiatives at central and territorial level.

Intercultural mediators and social educators are key to reach these populations and to adapt materials to become meaningful to audiences.

In the interventions designed, we address health experiences, beliefs, and attitudes related to main themes with a social determinants approach.

**Results:** We have alliances and agreements with entities such as Social Services, equality agents and other municipal services.

In 2014, we have implemented 139 community projects related to the HI Program, 289 community activities, with a total of 18441 participants, 114 group-based interventions adapted to people with mental disorders or intellectual disabilities with 1472 participants, mostly in relation to sexual health, food, nutrition and physical activity.

Continued work has enforced a constructive relationship with associations and vulnerable population. Recipients now volunteer in other community activities and contact with other groups locally.

Participants report increased self-esteem and being able to think in a different way about their lifestyle, making healthier choices, and leading changes in their families as health promotion agents.

**Conclusions:** HP centers are a close and accessible health resource for vulnerable population, working towards social integration in addition to raising individual and community levels of health literacy.

### OP04.3

#### Managing patients with chronic depression in primary care

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**Background and Aim:** Patients with chronic depression are mainly treated in primary care. They represent a clinically relevant group with extensive (co)morbidity, high functional impairment and associated costs. Yet little is known about general practitioners' (GPs') management of chronically depressed patients with persisting symptoms for  $\geq 2$  years. The main objective of this study was to examine how GPs manage patients with chronic depression and how patient-related factors influence treatment decisions.

**Method:** 1000 randomly chosen German GPs were asked to complete a newly designed questionnaire. A cross-sectional study was performed through descriptive analysis.

**Results:** 220 (22%) GPs participated. 93% stated that they distinguish between treatment of patients with chronic depression and treatment of patients with first onset major depressive episode. Main differences consist in an earlier start and a longer-term prescription of antidepressants (ADs) as well as intensified monitoring and follow-up. 92% would recommend psychotherapeutic co-treatment to their chronically depressed patients. The presence of severe physical comorbidity prompts GPs to either hold back on ADs (65%) or to urgently refer to specialists (40%). Two thirds of GPs see the need for combination therapy in case of a coexisting anxiety disorder. A comorbid substance abuse leads GPs to an urgent referral (84%). Selection-bias and a non-validated questionnaire may limit the results.

**Conclusions:** Participating GPs present high awareness towards chronic depression. They report safe diagnosis and high-quality care. Patient-related factors as advanced age, severe physical comorbidity and mental comorbidity may influence treatment decisions. Further research is needed.

No financial support from a third party was received. There are no prior publications concerning our cross-sectional study.

All authors are free of competing interests.

\* Florian Wolf and Antje Freytag contributed equally

#### OP04.4

### Identifying attitudes toward patients with medically unexplained symptoms in Slovenian family medicine physicians

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**Background & Aim:** Medically unexplained symptoms (MUS) are a poorly defined clinical entity. This study aimed to identify attitudes toward patients with MUS in Slovenian family medicine physicians (FMPs).

**Method:** Qualitative and quantitative research methods were employed. Firstly, five focus groups were carried out in the period from July to September 2011. The findings were used in the quantitative part of the study applying random sampling (n = 90). FMPs were invited from all over the country to participate in the study from January to March 2012. Analysis of qualitative material was performed using ATLAS.ti 7 software, and quantitative data were statistically processed using SPSS 21.0.

**Results:** in the process of coding, we created 64 codes, categorising them into eight categories (communication, physician-patient relationship, causes for MUS, MUS patient characteristics, physician characteristics, actions taken so far, positive attitude towards patients, treatment and management proposals). in the quantitative part, we received a response from 63 (70%) of the invited FMPs, who stressed the importance of MUS prevention and treatment of MUS patients in 84.1% (n = 53) and the importance of good communication with the patient in 77.8% (n = 49), while 93.7% (n = 59) of them were of an opinion that patients with MUS leave them feeling exhausted. As potential reasons for MUS, FMPs described problems in patients' interaction with their surroundings (100%, n = 63), past and current stressful events (96.8%, n=61) and hidden psychiatric diseases (68.3%, n = 43). Quality of MUS patient care would improve with more education in the fields of basic psychotherapeutic techniques, difficult patient approach (95.2%, n = 60) and communication skills (95.2%, n = 60).

**Conclusions:** We found that Slovenian FMPs put a strong emphasis on prevention and treatment of patients with MUS and that these patients generally leave them feeling tired and frustrated.

## OP04.5

### Effect of acculturation and gender on self-rated health in immigrants from Iraq to Sweden – the MEDIM population based study

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**Background and Aim:** The largest non-European immigrant group in Sweden today immigrants from Iraq, have a high burden of obesity, depression and type 2 diabetes. Self-rated health is an estimator of quality of life and predictor of mortality. The aim of this study was to investigate self-rated health in this immigrant population compared with the native Swedish population, and identify contributing factors.

**Method:** Population based study conducted 2010 to 2012 in citizens of Malmö, Sweden, 30 to 65 years of age, born in Iraq or Sweden. All participants conducted a health examination including anthropometrics, fasting samples and questionnaires covering self rated health, socioeconomic situation, acculturation-, lifestyle- and comorbidity status.

**Results:** in total 1336 Iraqis and 674 Swedes participated, 42 and 47% females respectively. Impaired self-rated health was identified in a greater proportion of the immigrant as compared to the native population, 44.3 vs. 22.0%,  $P < 0.001$  with Iraqi females reporting the highest prevalence, 55.5%. in a multivariate logistic regression model adjusting for the confounding effect of socioeconomy and morbidity, Iraqi background and female gender remained independent risk factors for impaired self-rated health in the total study population, odds ratio (OR) 1.7, 95% CI 1.3-2.4 and OR 1.8, 1.4-2.3 respectively. Our data of a gender effect in Iraqis only was supported by an interaction between country of birth and gender,  $P = 0.024$ . Further, Iraqis not reading Swedish books/magazines had increased OR of impaired self-rated health 1.5, 1.1-2.0.

**Conclusion:** This study reports a high prevalence of impaired self-rated health in the Iraqi population in general and in Iraqi women in particular. Our data suggests that there are ethnic differences in gender effect on self-rated health and that acculturation has an impact.

## OP04.6

### **Dementia care mapping: a tool for general practitioners to improve non-verbal communication with persons with dementia in nursing homes**

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**Background and Aim:** Dementia care mapping (DCM) is a tool (T.Kitwood ) to evaluate the model of person centred care (PCC). Through short training sessions, physicians can become mappers, who can assess patients with dementia in nursing homes in order to find out about wellbeing and stress during day-time in areas, like dining room or activity room.

**Method:** The mapping consist of an observation of one or several patients in their normal surroundings. The session runs for 2 - 4 hours, with a specific encoding system (-5 to +5) for different types of activities.(feeding, leisure,etc). It allows the physician to understand some behaviors which do not need immediate medical treatment. We wanted to find out, if the non-verbal communication was better after a 6 months implementation programm of PCC in our nursing home.

**Results:** The population examined: 30 persons having lost oral expression. By a standardized classification for non-verbal communication, an external institute analyzed the results for patients were: a) acceptance of proposed actions: 71%; b) acquiescence: 17%; c) expressed wishes: 6%; d) apathy: 4 % and e) opposition: 2%.

The results from the nurse's attitude were: b) guidance of activities: 31%; b) recognition of participation: 25%; c) negotiation: 21%; d) explanation: 12%; e) basic stimulation: 11%.

**Conclusions:** Dementia care mapping is a useful tool for general practitioners to understand the unusual behavior of persons in advanced stages of dementia. Prior to this a person centred care approach is to be implemented. Through this positive attitude, the physician is less often confronted to negative attitudes of his patient and will prescribe less medication.(reduction of 9% for psychotropics).

## OP05.1

### **An RCT of a biomarker blood test in lung cancer using the EarlyCDT-Lung test in Scotland: provisional data from the 1st 10 000 patients**

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**Background & Aim:** Since the majority of lung cancer cases are detected at a late stage the prognosis remains poor at present. The National Lung Screening Trial (NLST) reported 20% reductions in lung cancer mortality in 2011, however as a primary screening modality CT is expensive and may lead to significant morbidity in individuals whose tests are false positives. The EarlyCDT-lung test detects autoantibodies to proteins in the earliest stages of the disease with a specificity of 93%.

**Method:** We are conducting an RCT in areas of Scotland within the most deprived quintile of the population whose mortality from lung cancer is high by international standards. Adults aged 50 to 75 who are at 1.2% risk over the next 2 years are eligible to participate. They should also be healthy enough to undergo curative interventions. We will undertake a comparison of the EarlyCDT-lung test and follow-up imaging at six monthly intervals for 2 years with standard clinical practice. The primary outcome is the difference, after 24 months, between the rates of patients with stage 3, 4 or unclassified lung cancer at diagnosis. Participants who develop lung cancer will be followed-up via electronic record-linkage to assess both time to diagnosis and stage of disease at diagnosis. The secondary outcomes are cost-effectiveness, and a range of psychological measurements. There is a nested qualitative study of the psychological effects test of results on participants.

**Results:** 10 280 high risk patients have been recruited to the end of December 2015 by GP mailing and self-referral other routes. 9.5% of the test group have a positive test, of these 207 have been found to have lung nodules > 8mm, 16 cancers have been detected, 12 of which are early stage and 11 abnormalities are undergoing further investigation detected to date in those who tested positive. No reliable control group data are available.

**Conclusions:** The study will determine the EarlyCDT-Lung test's clinical and cost effectiveness. It will also assess potential morbidity arising from the test and potential harms and benefits of a negative EarlyCDT-Lung test result. Early results are encouraging.

## OP05.2

### Overdiagnosis of asthma in adults in primary care

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**Background & Aim:** Asthma is a common chronic disease in Adults. According to international guidelines the diagnosis should be objectified with spirometry. In daily practice, however, the diagnosis is often based on patient history and physical examination. A previous study from our group showed that overdiagnosis of childhood asthma is common in primary care. This study aims to assess the extent of overdiagnosis of asthma in adults.

**Methods:** A retrospective analysis was carried out using routine care registration data in the Julius Health Centers (JHC), the academic primary care practices in Utrecht, The Netherlands, providing integrated multidisciplinary health care for 40.000 patients. All adults (>17 years of age) with the diagnosis asthma (ICPC code R96) were included. The diagnosis asthma was considered correct in case of recurrent dyspnea or wheezing, with reversible bronchial obstruction, objectified with lung function testing. The following data were collected from the medical files: age, sex, year of diagnosis, whether the diagnosis was established according to the guideline, number of exacerbations in the past year, use of chronic inhalation medication, type of medication and the amount of inhalation medication used.

**Results:** A total of 1522 adult patients with the diagnosis asthma were included, which is a prevalence of 6.1%. In all, 462 (29.6%) of these patients were overdiagnosed. In 51.1% (n=710) of the patients the diagnosis was confirmed according to the guidelines and 19.3% (n=300) probably have asthma but diagnosis was not confirmed according to the guidelines. A total of 831 patients (54.6%) use chronic inhalation medication but 21.3% (n=177) of them were not diagnosed properly.

**Conclusion:** One third of adults with the diagnosis asthma in primary care are overdiagnosed and a lot of these patients use chronic inhalation medication. In order to avoid overtreatment, medicalization and disease burden, a more structured diagnostic strategy is warranted.

### OP05.3

#### **Different strategies for excluding pulmonary embolism (PE) in primary care.**

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**Background and Aim:** General practitioners (GP) can safely exclude PE using the Wells rule for PE in combination with D-dimer testing. The aim of this study was to compare the failure-rate (percentage of patients with PE despite a negative strategy) and efficiency (percentage of all study patients with a negative strategy) of four diagnostic strategies: 1. The Wells rule combined with a qualitative point-of-care (POC) D-dimer test. 2. The Wells rule combined with a quantitative D-dimer test. 3. The Wells rule combined with an age-adjusted quantitative D-dimer test. 4. A simplified Wells rule combined with a quantitative D-dimer test.

**Method:** We used data from a prospective cohort study including 598 primary care patients with suspected PE. GPs from all over the Netherlands scored the Wells rule and carried out a qualitative POC test. All patients were referred to hospital for reference testing. There, the diagnostic strategy was based on current guidelines and routine care practice. We obtained quantitative D-dimer-test results as performed in hospital laboratories.

**Results:** PE was diagnosed in 73 patients (12%). All strategies were safe missing 4 (1.5%), 1 (0.4%), 2 (0.8%) and 6 PE-patients (1.7%), respectively, with a negative strategy. The efficiency of the strategies was 46%, 42%, 44% and 59% respectively.

**Conclusions:** All four strategies are safe and efficient for excluding pulmonary embolism in primary care. The fourth strategy using a simplified Wells-rule is more efficient albeit with a higher failure- rate. The choice of strategy depends on the availability of either a qualitative POC test or a quantitative D-dimer test. Moreover the GP should weigh the somewhat higher efficiency of the strategy using the qualitative test and of the strategy using the simplified Wells-rule against the higher failure-rate of both strategies.

## OP05.4

### The impact of spirometry in the Ebeltoft Health Promotion Study (EHPS)

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**Background:** It has been stressed that early detection of impaired lung function can be useful in prevention of lung diseases. It is unknown whether spirometry as an integrated part of preventive health checks including a questionnaire regarding risk factors and exposure, can be used for early detection of lung diseases.

The aim of the study is to describe exposure characteristics and spirometry parameters 15 years ahead of a diagnosis of Chronic Obstructive Pulmonary Disease (COPD\*) \*Defined by FEV1/FVC < 70 and FEV1 < 80% of predicted.

**Method:** in a cohort study of citizens of Ebeltoft municipality (n=573), aged 30-49 years at baseline, attended in 1991 and 2006 a health check and a follow-up consultation at their own general practitioner. The characteristics of the citizens are described according to sex, age, smoking history, exposure, lung symptoms and spirometry values. Register information on sociodemographic, diagnosis, redeemed medication and mortality will be obtained from the Danish National Registers.

**Results:** 44(7.6%) out of 573 citizens had COPD at the final examination. The characteristics of this group show a significant difference on baseline spirometry values. 44.7% of the COPD group reported respiratory symptoms at baseline compared to 24% in the no-COPD group. We also found an overweight of current smokers and a higher proportion using inhalation medication. Finally we found that only 4.5% of the COPD patients knew they had COPD and no more than 27.3% of the COPD patients received inhalation medication at the final examination.

**Conclusion:** Persons with COPD had a significant lower lung function at baseline than persons without COPD. Self-reported symptoms and smoking history were also more frequent in the COPD group. Further analysis on socioeconomic characteristics will be done.

## OP05.5

### **The primary care integrated ambulatory: an efficient methodology to teach medical students family practice and family medicine core values**

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**Background:** The traditional biomechanical model in medical education, based on high specialization and technology, lacks efficiency when we look for excellence in preparing future physicians. For this reason, the University Nove de Julho Medical School, in São Paulo, Brazil, has introduced the Primary Care discipline in the core curriculum. Family Medicine principles rule this academic discipline dealing with comprehensiveness, continuity of care, patient centered and dealing with family and community issues. The discipline aims to prepare future doctors for dealing with the most prevalent health problems, and teach how to coordinate care efficiently, and to use technology judiciously.

**Method:** During the internship period (the last four semesters at medical school) students run the Primary Care Integrated Ambulatory (free clinic for underserved patients).. They spend 4 hours, every week during this two-years period. Students see patients in pairs, and each group of 6 students have a faculty member supervising their work. The whole group has the opportunity of engage into the discussion of all patients, not just those they see.. This methodology brings the opportunity to combine practice (what the students see and do) with family medicine core values, bringing at the same time a patient centered approach along with evidence based medicine.

**Results:** Students are able to manage most of the common health problems and take care of patients through continuity, without referring to specialist. They see their own patients getting better, and satisfied with the care they are provided. At the same time, students learn the importance of managing cultural and spiritual issues, and also the emotions role for getting the right diagnosis and treatment.

**Conclusion:** The Primary Care Integrated Ambulatory brings satisfaction to medical students, promotes respect for family practice, because they learn how to coordinate care and practice a scientific and updated patient centered approach.

## OP05.6

### Cough, an unusual presentation of a gastrointestinal tumor

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**Background & Aim:** The symptom of cough is one of the most common symptoms that a family doctor has contact with. Although in most cases the etiology behind it is benign in others the cause of such complaint is more complex and worrisome, specially if it's a chronic symptom. The aim of paper is to present a rare etiology of chronic cough.

**Method:** We collected the clinical history directly from the patient and the laboratory results from her clinical process.

**Results:** 71 years old female, belonging to a nuclear family, in Phase VIII of Duvall's cycle, moderately functional family. Personal history of dementia. Presents to an appointment with her family doctor referring exacerbation of chronic dry cough that she has had for several years. She denied orthopnea, dyspnea, dysphagia, hemoptysis or chest pain. She also complained of anorexia but had had no weight loss. A chest x-ray was ordered revealing a right paracardiac hypotransparency. In this setting we request a chest CT with showed a mass, mediastinal origin, 12.6x11.2x11.8cm, with liquid content and walls that capture the iodine contrast, compressing the right lung, compatible with an esophageal gastrointestinal stromal tumor (GIST). The patient was referred to thoracic surgery that excised the mass. The histology confirmed the diagnosis of an esophageal GIST, stage IIIA. After the surgery the cough subsided, but due to her medical pre-condition treatment with chemotherapy was excluded.

**Conclusions:** With this case we pretend to underline the importance of a thorough approach when confronted with signs and symptoms that can be caused by various diseases with very different prognosis. Like this case, that has a poor prognosis, when the warning sign was the chronic cough. Disclosure: No conflict of interest declared.

## OP06.1

### Criteria validity of the Danish Major Depression Inventory

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**Background & Aim:** Depression is the most common mental disorder in primary care. More than 80% of all persons with depression are diagnosed by their own general practitioner (GP). Danish clinical guidelines recommend using the Major Depression Inventory (MDI) on indication of depression; this screening tool scores in both the ICD-10 and the DSM-IV diagnostic classification system. To provide the GPs with better diagnostic tools on clinical suspicion of depression, a validation of the MDI is needed. We aim to validate a web-based version by allowing patients to regularly self-report their MDI ratings through a specific Danish web site.

**Method:** On clinical suspicion of depression, GPs asked consecutive patients to complete the web-based MDI. The validation was based on a Composite International Diagnostic Interview (CIDI) by phone. We included 30 practices (50-60 GPs) and 150 patients. The CIDI is a comprehensive, fully-structured interview designed for trained interviewers for assessment of mental disorders according to ICD-10 and DSM-IV criteria. The validation procedure will include measures of test-retest reliability and homogeneity and will use methods from modern and classic test theory, Receiver Operating Curve statistics and responsiveness (sensitivity to change).

**Results:** Data collection has just been completed, and the analysis is currently in progress. Using the GP's clinical suspicion as an instrument variable for testing, we expect to find a depression prevalence of 50% or more. By completing CIDI interviews for 150 MDI-tested persons with indication of depression, we expect to find at least 75 depressed participants.

**Conclusions:** If high validity of the MDI can be confirmed, the diagnostic codes for depression may be used in future epidemiological studies.

## OP06.2

### **Family physicians taking care health care workers - is self-reported history of chickenpox a reliable marker for varicella zoster virus (VZV) immunity?**

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**Background & Aim:** Chickenpox is a highly transmissible disease. Nosocomial transmission of VZV is well recognized. Professional bodies have published different guidelines about immunization of health care personnel. US Center for Disease Control and Prevention recommended VZV IgG tests in all persons who cannot provide a written documentation of having 2 doses of varicella vaccine or verification of a history of VZV disease by a health-care provider; while professional bodies in the UK and Australia accepted a self-reported history of chickenpox an evidence of immunity.

This study aims to determine the association of a patient's history of chickenpox to VZV seropositivity.

**Method:** University students of health care related subjects were asked to report history of chickenpox. Their vaccination records were collected for review. Each of them had VZV IgG test by ELIZA. The correlation of self-reported history and VZV seropositivity was calculated

**Results:** 808 students are recruited. 50 students had written documentation of having one or more doses of chickenpox vaccine, while 31 of them were uncertain of their vaccination history. Among the 727 included subjects, 75.65% reported history of chickenpox, of which 91.09% had positive VZV IgG. The positive predictive value of a self-reported history of chickenpox to VZV seropositivity was 91.09%. The negative predictive value of a self-reported negative history of chickenpox to VZV seronegativity was 46.36%. The sensitivity of a self-reported chickenpox history to predict positive VZV IgG titer was 85.93% and specificity 76.92%.

**Conclusions:** The positive predicted value of a self-reported history of chickenpox to VZV seropositivity is reasonably high. However, if we only use that as evidence of immunity, we will miss 9% of health care workers who are susceptible to infection, with the potential of spreading the virus to patients. Further investigations are needed to determine where it is cost effective to screen all health care workers by VZV IgG, or based on the disease history alone.

### OP06.3

#### Self-reported symptoms and healthcare seeking – results from a population based survey

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**Background & Aim:** Research has revealed that the decision to consult a doctor for symptoms is based on a variety of factors. Enhanced understanding of the frequency of symptoms and factors associated with help-seeking in the general population would be helpful in order to further understand help-seeking decisions.

**Method:** The study was conducted as a Danish nationwide cohort study including a random sample of 100,000 individuals, aged > 20 years. Data was collected from a web-based questionnaire. A total of 44 different symptoms covering a wide area of different symptoms were selected based on extensive literature search. Further, items regarding characteristics of the symptom (level of interference with daily life, concerns) and contact to the GP were included.

**Results:** A total of 49,706 subjects completed the questionnaire. Prevalence estimates of symptoms reported varied from 49.4% (24,537) reporting tiredness to 0.11% (54) reporting blood in vomit. The proportion of contact to the GP with at least one symptom was 37%. For almost 2/3 of the symptoms reported, no gender differences were found concerning the proportion leading to GP contacts. The overall pattern showed a statistically significant association between increasing concerns for the symptom (OR 3.7, CI[3.6-3.9]), higher level of interference (OR 3.2, CI[3.1-3.3]), higher number of symptoms reported (symptom burden)(OR 2.3 CI[2.1-2.5]) and contacts to GP.

**Conclusions:** The prevalence of symptoms is common in the general population and a significant number of men and women do not seek help when experiencing symptoms. The decision to consult a doctor for symptoms is significantly influenced by symptom burden, level of interference and concern for the symptom. An enhanced understanding of help-seeking decisions may assist healthcare professionals in identifying patients who are at risk of postponing contact to the GP and may help improving health campaigns targeting earlier diagnosis of cancer or in general.

## OP06.4

### **The Bermuda Triangle of child and adolescent mental health**

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**Background & Aim:** Confusion about which service is most likely to offer effective interventions can mean that young people with mental health problems can become caught in the triangle of Child and Adolescent Mental Health Services (CAMHS), Paediatrics and Social Work Services. At best this can cause frustration for families and service providers, and at worst delays in service provision can be potentially damaging.

**Method:** We recently introduced a pilot rapid diagnostic service for primary care physicians (GPs) in Highland Scotland. The service involves parents, teachers and children over 10 years completing the Developmental and Well-being Assessment (DAWBA) followed by a psychiatric assessment of the data and feedback to GPs. DAWBA is an online diagnostic interview, rated by a CAMHS specialist, which is highly sensitive and specific for most child psychiatric diagnoses. GPs can then make an informed decision about which service is most appropriate, hopefully making families less likely to get caught in the triangle.

**Results:** We shall present the results from our pilot work and describe the changes we have introduced to streamline the service. Early evidence suggests that GPs very much appreciate rapid access to a diagnostic mental health assessment for children and young people. It appears that the DAWBA assessments may have helped to strengthen the role of GPs in finding the best service to help families.

**Conclusions:** Along with colleagues from Norway, Sweden and Finland we now have obtained funding from the EU Northern Periphery and Arctic Programme to support a multi-national randomised controlled trial of DAWBA. The challenges in ensuring appropriate and efficient referral to CAMHS and related services are international, and despite different service configurations in the Nordic countries, international colleagues are keen collaborators in designing this trial.

## OP06.5

### Diagnosis and management of elder abuse by family physician

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**Background & Aim:** Investigate the difficulties encountered by primary care physicians in diagnosing and handling elderly abuse.

**Method:** A survey of the practice of 266 Family physicians in France was conducted by email using a questionnaire during the fall of 2012. Statistical analysis was performed using a Chi-2 test for the comparison of two qualitative variables, and the Kruskal-Wallis test was used to compare a qualitative variable with an ordinal one.

**Results:** 77 physicians responded to the questionnaire. They are often faced with the phenomenon of mistreatment, including psychological abuse, of elderly people. They describe the diagnosis correctly but express management difficulties. These difficulties are due to lack of knowledge of the law and a lack of practical tools usable on a daily basis. These physicians call for better training regarding the law and clearer reporting procedures.

**Conclusion:** Education and training in the legislative field must be improved. This conclusion has been reached before in previous surveys in the USA and Europe since the 1970s, which leads to the question as to whether full comprehension of the magnitude of the issue exists. Perhaps the complexity of medical practice requires that an anthropological approach should be taken to identify all the facets involved.

## OP06.6

### Consultations for mental problems in general practices with and without mental health nurses

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**Background & Aim:** It seems cost-effective to provide mental health care to patient with mild mental problems in general practices instead of in specialized care, but general practitioners (GPs) often lack time or expertise. Since 2008, Dutch GPs have been collaborating with nurses with mental health expertise. Mental health nurses perform diagnostic tests and provide short term care. It is not clear yet if mental health nurses replace GP care, or if they provide additional care. The aim of this study was to investigate a possible transition of care from GPs to mental health nurses.

**Method:** in an observational study, we analyzed consultation data routinely recorded in Dutch general practices participating in NIVEL Primary Care Database (NIVEL-PCD) between 2010 and 2014. We used multilevel regression models to analyze consultations for mental problems at GPs and mental health nurses. We compared consultations for mental problems between general practices with and without mental health nurse.

**Results:** Increasing numbers of Dutch general practices collaborate with a mental health nurse; from 20% in 2010 to 83% in 2014. Increasing numbers of patients have at least one consultation for mental problems in general practice. Mental health nurses most often provide care to adult, female patients with common psychological symptoms, during on average three long consultations. GPs working in practices with a mental health nurse treat slightly more patients with mental problems than GPs without a mental health nurse (OR=1.05; 95%CI=1.02-1.08), but they use comparable numbers of consultations per patient.

**Conclusions:** Mental health nurses do not seem to replace GP care, but mainly provide additional consultations to patients with mental problems. Collaboration with a mental health nurse may increase GPs' skills to recognize mental problems. Future research should learn to what extent (early) treatment by mental health nurses prevents patients from needing specialized care.

## W10

### Measuring diabetic care: what are good indicators?

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**Background & Aim:** In the follow-up of chronic diseases parameters are measured frequently. These measurements are necessary to assess the actual clinical status of the patient and perhaps also useful to assess the quality of the daily work. Measuring these clinical parameters can show how good the daily care is but perhaps can also reveal where weaknesses might persist. Knowing the weaknesses, action for improvement can be taken. Indicators can be used to measure clinical work and to assess the quality of it, but the quality of the indicator and the techniques of the measurements significantly influence the result.

**Method:** Identification of possible quality indicators for measurement and comparison of diabetes care. After general information about the properties of specific indicators discussion in small groups about the validity of the indicators and feasibility of the measurement with these indicators will follow.

**Results:** A participant should have insight in the properties of good indicators to evaluate diabetic care. The participants should be able to look critical at data measurement and realise appropriate data management in chronic care within their own practice and (local) organisations.

**Conclusions:** Gathering reliable data about chronic conditions is very important for doctors and health managers. Good indicators are needed for a successful management. Developing a comprehensive data set to measure diabetic care in an appropriate manner needs some basic insights about indicators and measurement techniques.

## OP07.1

### **Disease course of lower respiratory tract infection with a bacterial aetiology in primary care**

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**Background and Aim:** Bacterial pathogens are assumed to cause a different illness course than non-bacterial causes of acute cough, but evidence is lacking. Insight into the illness course of bacterial lower respiratory tract infection (LRTI) that is not treated with antibiotics could help guide empirical antibiotic prescribing, support a strategy of watchful waiting, and improve patient information. We evaluated the disease course of LRTI with a bacterial aetiology in adults presenting with acute cough in primary care.

**Method:** Secondary analysis of a multi-centre European trial in which 2061 adults with acute cough ( $\leq 28$  days' duration) were recruited from primary care and randomised to amoxicillin or placebo. For this analysis only patients in the placebo group ( $n=1021$ ) were included reflecting natural course of disease. Standard microbiological and serological analysis were performed at baseline to define bacterial aetiology. All patients recorded symptoms in a diary each day for four weeks. Disease course of patients with a bacterial aetiology was compared to those without bacterial aetiology on symptom severity in days 2-4, duration of symptoms rated 'moderately bad or worse' and reconsultation.

**Results:** Of 1021 eligible patients, 187 were excluded because of missing diary results, leaving 834 patients of whom 162 (19%) had bacterial LRTI. Patients with bacterial LRTI had worse symptoms at day 2-4 after presentation (difference= 0.19, 95% CI 0.01-0.36;  $p=0.038$ ) and more often reconsulted 27% (44/162) vs. 17% (114/660) than those without bacterial LRTI (OR 1.80, 95% CI 1.20-2.71;  $p=0.005$ ). Resolution of symptoms rated 'moderately bad or worse' did not differ between patients with and without bacterial LRTI (HR 0.92, 95% CI 0.77-1.10;  $p=0.363$ ).

**Conclusions:** Patients who present in primary care with acute bacterial LRTI have a slightly worse course of disease when compared to those without an identified bacterial aetiology, but the relevance of this difference is doubtful.

## OP07.2

### **Anti vaccination movement in Indonesia: belief, knowledge and attitude**

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**Background and Aim:** in modern industrialized countries, scholarly knowledge taken from opposition to vaccination had been widely observed, ranging from the issue of vaccine side effects to religious beliefs or individual rights to refuse vaccination. in Indonesia, as industrialising country, also experienced with anti-vaccination, religious or belief issues may come into discussion, adding the reason to reject the vaccination program. The research aims to explore deeply the reasoning of the people in Indonesia, who oppose the vaccination, which include their belief, knowledge, attitude and action.

**Method:** To collect preliminary data, an online survey was performed with few close questions covering demographic background, opinion on vaccination, and willingness to participate in the qualitative study. Fourteen people were willing to participate in the qualitative study voluntary and were interviewed using grounded theory approach. We analysed the data thematically and presented both narrative and descriptively.

**Results:** From 138 participants surveyed, the reasoning for rejection to vaccination was mostly came from their own perception on scientific evidence (53.62%) followed by adherence to religious issue (46.38%). The media provides the information of their reasoning for rejecting vaccination (68.12%) while only 12.32% reflects their compliances to religious teachers for refusing vaccination. All interviewed participants believe that, along with their self-justification on scientific evidence from the media, vaccine contains porcine derived substances or other religiously forbidden materials and dangerous chemical or biological materials. for some participants non-active microbial ingredients on vaccines were also assumed, but they perceived the substances as weakening immunity and provoking disease vulnerability.

**Conclusions:** Our study indicates that scientific reasoning in opposition to vaccination withdrawn mostly from the media argumentation, which had been used to support their self justification and religious reasoning. Health promotion and multidiscipline partnership is needed to overcome this challenge.

### OP07.3

#### **Reduction in antibiotic prescribing in Swedish primary care. A retrospective study of electronic patient records**

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**Background & Aim:** To identify trends in management of infections in Swedish primary care particularly with regards to antibiotic prescribing and adherence to national guidelines.

**Method:** A descriptive study of Sweden's largest database regarding diagnose linked antibiotic prescription data, the Primary care Record of Infections in Sweden (PRIS), for the years 2008, 2010 and 2013.

**Results:** Although, the consultation rate for all infections remained around 30% each year, the total antibiotic prescribing rates decreased significantly over the years from 53.7% in 2008, and 45.5% in 2010 to 38.6% in 2013 ( $p=0.032$ ). The most common cause for antibiotic prescription was respiratory tract infections (RTIs). for most RTI diagnoses there was a decrease in prescription rate from 2008 to 2013, particularly for the age group 0-6 years. The frequency in antibiotic prescribing varied greatly between different primary healthcare centres. Phenoxymethylpenicillin (PcV) was the antibiotic most often prescribed, followed by tetracycline. Tonsillitis and acute otitis media were the two RTI-diagnoses with the highest number of prescriptions per 1000 patient years (PY). for these diagnoses an increase in adherence to national guidelines was seen, with regards to treatment frequency, choice of antibiotics and use of rapid antigen detection test.

**Conclusions:** Falling numbers of consultations and decreased antibiotic prescription rates for RTIs have reduced the antibiotic use in Swedish primary care substantially. Overprescribing of antibiotics could still be suspected due to large variability in prescribing frequency, especially for acute bronchitis and sinusitis. Continuous analysis and feedback on antibiotic prescribing is important in order to achieve a more prudent antibiotic use.

#### **OP07.4**

#### **Diabetes mellitus and latent tuberculosis infection: to screen or not to screen?**

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**Background and Aim:** Diabetes mellitus (DM) increases the risk of active tuberculosis (TB), complicates treatment, increases rates of death and recurrent TB. Given the public health implications of this causal link, there is a clear need for a systematic assessment in order to inform the decision-making process about latent tuberculosis infection (LTBI) screening in diabetic people.

**Method:** Search for articles using the MeSH terms “Diabetes Mellitus” and “Latent Tuberculosis”, published from 2006 to 2016, in English and Portuguese. The literature review took place in MEDLINE and other evidence-based databases. The Oxford 2011 Levels of Evidence scale was used to assign a level-of-evidence. Eligible articles included those which described a population of adults, with DM diagnosis. The clinical outcome measured was the increase of LTBI incidence.

**Results:** Of the 210 articles obtained, 5 matched eligibility criteria. The meta-analysis concluded that DM was associated with an increased risk of TB. One of the cohort studies showed that DM as an independent risk factor is associated with only a modest overall increased risk of TB. The other cohort study concluded that it is worthwhile to screen diabetes patients for TB. The last cohort study showed that, overall, people with DM have an increased risk of developing TB, but it accounts for a small proportion of cases in a low TB incidence setting. The guideline recommended that there should be surveillance among diabetic patients in settings with medium to high TB burden.

**Conclusion:** Evidence remains inconclusive, with some studies suggesting that TB control programs should consider interventions such as active case finding and treatment of LTBI, in diabetic patients. Others claim that the presence of DM alone (without additional risk factors) will not justify screening for LTBI. We will need further large studies, with accurate methodology, that could be translated to a clear message.

## OP07.5

### **Prediction model for proper use of antibiotics in symptomatic patients with suspected urinary tract infection in primary care: observational study**

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**Background & Aim:** Urinary Tract Infections (UTIs) are a frequent reason to prescribe antibiotics in primary care. Proper use of antibiotics (i.e. correct decision to prescribe) is decisive to curb the development of antibiotic resistance strains. Thus, we aim to develop a diagnostic score to predict proper use of antibiotics in symptomatic patients with suspected UTI in primary care.

**Method:** Prospective observational study comparing diagnostic pathways with gold standard (culture and susceptibility testing at a reference microbiological laboratory). From December 2014 to December 2015, 40 practices in the capital region in Denmark consecutively recruited symptomatic patients with suspected. On the day of the index consultation, clinical history, diagnostic work-up, treatment and other relevant decisions made during the consultation were registered. A diagnostic score will be developed using logistic regression with graphical models to investigate relationships of conditional dependence of the combination of the diagnostic pathways (history, dipsticks, microscopy, culture in practice, sensibility test in practice) with proper use of antibiotics as a dependent variable.

**Results:** 530 patients participated in the study, although preliminary results from the first 100 patients are presented as data collection has just finished, then the final results and the prediction model will be ready in June for presentation at the conference. Overall, 53% had a positive culture, while 85% were classified as having a UTI. The unadjusted diagnostic error was 6 times higher when using only the diagnostic tools (history, dipsticks and microscopy) in comparison to the use of (history, dipsticks, microscopy and culture in practice).

**Conclusions:** from the preliminary data, the combination of the disjunctive pairing of history + dipstick + microscopy + culture in practice is the best option to secure appropriate use of antibiotics in symptomatic patients with suspected Urinary Tract Infection in primary care.

## **OP07.6**

### **Lifestyle habits in patients with established cardiovascular diseases - EUROPREV III study**

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**Background & Aim:** CVD is now the leading cause of death worldwide; it is on the rise and has become a true pandemic that respects no borders. CVD is strongly connected to lifestyle, especially the use of tobacco, unhealthy diet habits, physical inactivity and psychosocial stress. European guidelines advocate that prevention for patients who have had a clinical event such as an acute coronary syndrome or stroke automatically qualify for intensive risk factor evaluation and management and should include the adoption of a healthier diet and increasing physical activity (PA). As noted, persons with established CVD are already at very high risk of further events and need prompt intervention on all risk factors. The five year CVD rate of recurrent MI, stroke or heart failure or CV death, is estimated to be about 30% for patients with known CV disease, which is about 5 times greater than the corresponding rate of healthy people.

#### **Method:**

- a. presentation of EUROPREV III Study
- b. explanation of nonpharmacological and pharmacological interventions after CVD event
- c. discussion
- d. conclusion

**Results:** The protocol of EUROPREV III Study will be presented. Conclusions: Beneficial reductions in major risk factors—in particular smoking, BP, and cholesterol—accounted for more than half of the decrease in CHD deaths, although they were counteracted by an increase in the prevalence of obesity and type 2 diabetes. The potential for prevention based on healthy lifestyles, appropriate management of classical risk factors, and selective use of cardio protective drugs is obvious.

## OP08.1

### **Which procedures are performed by primary care physicians? – A comparison of specialists in family medicine and general internal medicine**

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**Background & Aim:** in Germany primary care is mainly delivered by specialists in family medicine and general internal medicine. in order to investigate the procedural performance of family physicians (FPs) and general internists (GIs) two cross-sectional studies were performed, each with focus on one specialization. Aim of this study was to compare the participants' procedural spectrum in order to draw conclusions for future specialist training.

**Method:** A questionnaire with 89 procedures and nine sociodemographic values was sent to 1576 primary care physicians - mainly FPs - in late 2012 and to 1002 GIs delivering primary care in own practice from May to July 2015. Addresses were identified through the web sites of the Associations of Statutory Health Insurance Physicians for both studies. Participants were asked whether they performed mentioned procedures in their own practice ("yes" or "no") and how important they think it is to learn the procedure in specialty training (1 = "very important" to 4 = "not important").

Descriptive analysis for both studies was performed as well as chi squared tests for comparing GIs and FPs.

**Results:** Study's response rate in 2012 was 42 % (666/1576), 592 (38 %) FPs fulfilled inclusion criteria for analysis. in 2015, study's response rate was 30 % (302/1002), whereof 273 (27 %) GIs fulfilled inclusion criteria for analysis.

At least half of the participants performed 42 procedures (FPs) vs. 29 procedures (GIs). FPs named 55 procedures as "very important" or "important" being learned in specialty training for future primary care physicians, GIs chose 46 procedures.

Comparing both studies 56 procedures were significantly more often performed by FPs, 12 procedures by GIs.

**Conclusions:** FPs and GIs differ in their performed procedural spectrum. These differences should be considered in specialty training's curricula according to patients' needs.

## OP08.2

### Procedures, tests and medical equipment in Nordic general practice

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**Background and Aim:** All Nordic countries have well-functioning public health care systems, but the organisation of these systems vary somewhat. Detailed information about the specific features of Nordic general practice is scarce. We aim to obtain more knowledge concerning what equipment and on-site tests are available and which medical procedures are performed in primary care in the Nordic countries, and whether there are differences between the countries.

**Methods:** We used data from the international study Quality and Costs of primary Care in Europe (QUALICOPC). A total of 875 general practitioners (GPs) from the Nordic countries answered a questionnaire concerning their practices in the period 2011 to 2012. Information from 198 Norwegian, 97 Swedish, 212 Danish, 288 Finnish and 80 Icelandic GPs is included. The GPs were asked to what extent they perform a predefined selection of medical procedures, and to indicate equipment and laboratory tests available in practice from a predefined list.

**Results:** Almost all Nordic GPs had standard medical equipment such as blood pressure meters, suture sets, urine catheters and blood glucose tests. Some differences were found: In Finland, about 1/3 of GPs had gastroscopes, sigmoidoscopes and bicycle ergometers, while this equipment was very uncommon in the other Nordic countries. In Denmark, hardly any of the GPs had eye tonometers, in contrast to almost all Norwegian and Finnish GPs. Most Danish and Norwegian GPs inserted intrauterine devices, whereas this was uncommon in Sweden and Iceland.

**Conclusion:** Nordic GPs are well-equipped and perform a wide spectre of medical procedures, but there are some interesting differences. The reasons for these differences may be sought among structural factors such as the remuneration systems and access to other specialities. Varying treatment traditions may also be of importance.

### OP08.3

#### **Characteristics of transitional incidents between hospital and general practice: a survey study**

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**Background:** The primary aim of transitional care is a safe patient transition. However, errors can lead to transitional incidents. Existing literature reports on incidents in either primary or secondary care, however, little is known about the characteristics of transitional incidents. Aim of this study is to identify the characteristics of reported transitional incidents.

**Methods:** in this survey study, healthcare professionals from three hospitals and 63 general practices in two areas (a rural and urban area) in the Netherlands were asked to describe a transitional incident they had experienced in the past years, using an anonymous digital questionnaire. The incidents were categorized according to the part of the healthcare process in which the incident occurred and harm and potential frequency were classified using a frequency/severity matrix.

**Results:** From a total of 591 dispersed questionnaires, 69 transitional incidents were reported (response 12%): 35 incidents from the general practice and 34 incidents from the hospital. Most incidents concerned transfer of information from hospital to general practitioner (21%), medication (17%), referral letters by the general practitioner (12%), and discharge procedure (11%). The majority of these transitional incidents did not lead to harm (62%). However, two reported incidents resulted in major harm and one in death.

**Conclusions:** This study has described characteristics of reported transitional incidents in hospital and general practice setting in the Netherlands and has assessed both location and harm of these transitional incidents. This provides information for potential transitional patient safety improvement plans.

#### OP08.4

### Associations between organisational determinants of implementation effectiveness and spirometry utilisation in general practice

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**Background & Aim:** Measurement of lung function preferably by spirometry is essential for diagnosing chronic airflow limitation. In spite of this, under-utilisation of spirometry in the diagnosis of both asthma and COPD has been a consistent finding across countries in recent years and a substantial variation between practices exists. National guidelines targeted general practice have been developed, but the variation in spirometry utilisation indicates that substantial barriers to successful implementation remain. It is important to investigate potential explanations for this variation, and the organisational context is recognised as being of vital importance in that respect. We therefore aim to investigate associations between organisational determinants of implementation effectiveness and adherence to guidelines regarding spirometry utilisation.

**Method:** In December 2013, a national cross-sectional survey assessing organisational determinants of implementation effectiveness was distributed electronically to 3440 Danish GPs. These data were linked to data from a national register-based cohort including patients redeeming first-time prescriptions for medication targeting obstructive lung disease. Information on the patients' sociodemographic status and whether or not they had spirometry performed in relation to medication redemption was extracted from the registers. We used multilevel mixed-effects logit models to investigate associations while adjusting for relevant confounders regarding patient and practice characteristics.

**Results:** A total of 1580 GPs (46.4%) responded to the questionnaire and around 40,000 first-time users were identified and linked to a specific general practice. Analyses are ongoing and final results will be presented at the conference. However, preliminary results indicate that organisational determinants in the form of meetings and standardisations are associated with spirometry utilisation in general practice and that the effects vary between practice forms.

**Conclusion:** It appears that some of the practice variation in spirometry utilisation can be explained by specific organisational determinants. These findings have important implications for future quality improvement initiatives in general practice.

## OP08.5

### **Transitional patient safety in the Netherlands: the TIPP study**

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**Background and Aim:** Patient transitions between general practice (GP) and hospital, e.g. referral, discharge, and simultaneous care by GP and outpatient clinic, are high-risk scenarios for patient safety. The TIPP (Transitional Incident Prevention Programme) study aims to improve transitional patient safety, using context related interventions based on the results of our quantitative and qualitative exploration of transitional patient safety in the Netherlands.

**Methods:** To understand transitional patient safety, we assessed transitional incidents from: (1) existing reporting systems, (2) prospective incident reporting survey study, (3) triangulated data from patient interviews and medical records. Patients' perspectives on transitional patient safety were evaluated by survey study and patient interviews. All mentioned assessments were performed in the Netherlands in 2 urban hospitals, 1 rural hospital and 69 of their referring GP practices.

**Results:** We collected 548 transitional incidents. Most incidents concerned: inadequate handoff information from hospital to GP (26%), inadequate referral information from GP to hospital (14%), problems in communication and collaboration (14%) and redundant testing (14%). In our survey study, we found that 191 of 372 patients (51%) reported to have recently experienced a transitional incident. These mostly comprised a lack of information exchange and communication between hospital and GP after a patient's transition. The patient interviews showed extensive differences in participation and suggested the necessity of different approaches for different types of patients to improve transitional patient safety.

**Conclusion:** Our findings formed a base to improve transitional patient safety and interventions were developed together with the participating health care professionals. Examples of these interventions are: (1) providing a platform to discuss safety issues, learn from incidents, and increase knowledge about each other's work processes, (2) transitional incident analysis committees in the two participating regions, (3) patient empowerment improvement using shared medical appointments and providing patient info cards.

Results of the TIPP study are to be expected in 2017.

## OP08.6

### **Payment for medication reviews did not lead to better medical treatment in the elderly: an observational study**

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**Background & Aim:** In Västra Götalandsregionen, Sweden, the coding for medication reviews among patients  $\geq 75$  years of age is a process indicator in a detailed pay for performance scheme since 2009. It is, however, not known whether incentives linked to process indicators, such as performing medication reviews, leads to better medical treatment. Our aim was to evaluate if the medical treatment among the elderly have improved after the introduction of payment for performing medication reviews.

**Method:** We performed an observational study using register data for 2009-2013 from a regional health care register (VEGA), the Swedish Population Register and the Swedish Prescribed Drug Register. Quality of drug treatment was assessed using established indicators developed by the Swedish National Board of Health and Welfare. We compared primary care units with a high or low proportion of patients receiving coding for medication reviews.

**Results:** Measures of appropriate drug treatment in the elderly were often better in primary care units with high reporting of codes for medication reviews. However, these units performed better already before payment was introduced. Several measures of quality of drug treatment improved equally in both high and low coding primary care units. The proportion of patients receiving inappropriate drugs decreased 2009 – 2013 from 11.1 % to 9.0 % in high coding units compared to 12.0% to 9.5% in low coding units. The proportion of patients receiving ten or more drugs decreased from 11.2 % to 10.3 % in high coding units compared to 11.8% to 9.8% in low coding units.

**Conclusions:** Primary care units with a high proportion of coding for medication reviews and thus receiving high reimbursement did not improve more in measures of appropriate drug treatment than low coding primary care units.

## **W11**

### **GPs for PIDs – a workshop on how to increase the awareness of primary immunodeficiencies among General Practitioners**

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Primary immunodeficiencies (PIDs) are a broad spectrum of inherited disorders often diagnosed in childhood. However, as the symptoms may vary over time and from person to person, these diseases can therefore be difficult to diagnose, and are sometimes only recognised in adulthood.

It is very important to diagnose the PID patients early to avoid the damages untreated PIDs causes. In addition to infections and inflammation, a dysregulated immune system can sometimes lead to various autoimmune disorders. The GP therefore has an important role in recognising PIDs, since first contact will often be the GP. With an appropriate treatment, many complications can be avoided. Treatment to PIDs depends on the severity and type of PID.

The most frequent conditions are seen in 1:500 individuals, meaning that they can be found in everyday general practice.

In the workshop the immune system will be briefly reviewed. PIDs in general will be presented and discussed, as well as warning signs and initial diagnostic tests. A few clinical cases will be presented and discussed. Delegates will be prepared to meet the possible PIDs in the clinic after this session.

The final part of the workshop will be interactive, delegates are therefore encouraged to bring their cell phones, tablets or laptops.

## S04.1

### **Global clinical, economic, social and ethical implications of inappropriate medication use and polypharmacy (IMUP). An overview**

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**Background & Aim:** Though polypharmacy is a widely used term there is no universal consensus on its definition. Little is known about adverse health and economic consequences of this new phenomenon. The IMUP group symposia aim to provide up-to-date information regarding prescribing optimization and appropriate drug use in primary care setting.

**Method.** Narrative review was applied.

**Results:** Polypharmacy, polypragmnesia, polymedication, multiple drug use share similar notion of prescribing/using concomitantly several drugs but their number may vary. Some of the terms bear the negative connotation of potential health risks, harmful drug combinations or unnecessary, inappropriate or even futile drug usage. On the other hand, there is sufficient evidence that concomitant use of several drugs is efficient and beneficial in a number of medical conditions such as hypertension, diabetes, heart failure or osteoporosis. However, in multimorbid/frail elderly patients or those with limited life expectancy we are too often facing multiple drug regimen with little if any benefit. By 2050 there will be 75 million of older people with multimorbidity in Europe. This present significant challenge for primary care how to manage the complex phenomenon of multi-drug prescribing. Review of literature shows sufficient evidence that pharmacist's intervention, computerized decision-making and order entry support systems and individualized "deprescribing" are modestly but significantly effective in reducing number of drugs, inappropriate prescribing and adverse drug events. However, these approaches are yet not widely available to assist PCP in daily practice.

**Conclusions.** PCP should perform structured medication review in regular intervals in elderly patients with polypharmacy matching medical needs of an individual patient with his/her expectations and preferences and reassessing risk/benefit of prescribed drugs. Improved knowledge of geriatric pharmacology, acquaintance with the use of geriatric multidimensional tools to assess health and functional status enable PCP to improve safety and effectiveness of pharmacotherapy in complex elderly population.

## S04.2

### **Inappropriate medication use & polypharmacy (IMUP) - Introducing IGRIMUP Symposia Can we relieve family physicians' frustration facing barriers to de-prescribing?**

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**Background:** No Clinical Practice Guidelines (CPGs) exist for the very old, with co-morbidity, dementia, frailty and limited life-expectancy (VOCODFLEX). Applying all CPGs to VOCODFLEX increases adverse drug effects (ADEs), inappropriate medication use & polypharmacy (IMUP). Although ADEs has become the 5th leading cause of death and a major cause of morbidity, barriers to de-prescribing (DP) persist the main being emotional/psychological. The myth that drugs can heal everything makes most people feel disappointed if interactions with medical doctors are not translated into prescriptions. "Good doctors" are perceived as expert prescribers who wisely choose the right medication/s to treat diseases. This is heavily fuelled by diagnostic/drug companies whose main initiative is to define more people as "non-healthy", and therefore "must take medications". Family physicians (FP) may be afraid: not to follow CPGs even realizing that they have no positive benefit/risk ratio in elderly, particularly VOCODFLEX; FP may be afraid of lawsuits; of their superiors if they don't follow CPGs; of the patient/family if they "dare" stop drugs recommended by experts. FP may be frustrated having no EBM RCTs indicating, when and how to de-prescribe safely.

**Methods:** IGRIMUP\* was established in order to join forces of international health professionals to coordinate the "war against IMUP". IGRIMUP goal is to define/promote strategies to reduce IMUP, particularly DP interventions proving beneficial clinical outcomes as presented in IGRIMUP symposia/workshops at the WONCA2016 Copenhagen.

**Conclusions:** Traditional, 20th century EBM RCTs, statistics/computer solutions based on "single disease models", created rigid rules that are useless and inappropriate in VOCODFLEX subpopulations where heterogeneity is huge and life expectancy limited. New research/clinical tools are needed, researches showing improved clinical outcomes following DP, even if not traditionally RCTs, are appropriate enough for encouraging FP to de-prescribe, obviously subject to patient/family preferences and consent.

\*IGRIMUP - International Group for Reducing Inappropriate Medication Use & Polypharmacy

### S04.3

#### The role of nutrition in older adults on polypharmacy

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**Background & Aims:** Malnutrition and nutritional problems are common in older adults. Multiple chronic diseases, inflammation, cognitive and functional impairment, geriatric syndromes (including delirium, falls or chronic pain) and drug use (i.e. polypharmacy, adverse drug reactions) may play a role in the onset of malnutrition and nutritional problems. **Methods** We review and discuss the main issues related to the interaction between nutrition and drug use in the elderly.

**Results:** Drugs and nutrition are closely connected. Nutritional status may influence the pharmacokinetic and pharmaco-dynamic of many drugs. Conversely, drugs can impair nutrition by causing adverse drug reactions such as nausea and loss of appetite.

Physiological factors occurring in advanced age can affect nutritional status, including changes in secretion and action of hormones that regulate appetite, changes in gastrointestinal motility, taste loss and functional decline of multiple systems, including organs that directly affect drug disposition. Nutrients and drugs might share the same receptors for absorption, metabolism and excretion.

**Conclusions:** Limiting drug prescriptions to essential medications and periodic revaluations of drug regimens are essential to minimize drug–nutrient interactions, ultimately leading to improvement in nutritional status. Similarly, evaluation of nutritional status is a key step to improve quality of prescribing: it is crucial to identify nutritional problems which can be related to drug use and assessment of nutritional factors which may influence drug efficacy.

#### **S04.4**

##### **Pay for performance, single disease targets and polypharmacy**

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**Background & Aim:** Pay for Performance (P4P) and single disease guidelines or targets are often at odds with patient-centred medicine. In older populations current systems of P4P make polypharmacy almost inevitable, yet the consequences of this are unmeasured. Strategies for improving health outcomes must include mechanisms for detecting unintended consequences, adverse events and worsened health.

**Methods:** The literature on a single disease focus for quality and P4P is examined from an international perspective with a focus on the relationship to polypharmacy.

**Results:** Inadequacies and commercial bias in the creation of evidence make the scientific basis of P4P questionable. P4P results in an increase in measuring the measurable and has proven that physicians will do what they are paid to do. However, there is no evidence that what has been valued is the most valuable in terms of health in older patients. Using single disease guidelines in older adults may make care measurably better but meaningfully worse for the patient. It is not clear that a single disease approach. P4P and targets are best for the patient or best use of limited healthcare and primary care resources.

**Conclusions:** A fundamental question around initiatives designed to improve care centres around the distinction between variation in practice that reflects poor care and variation that represents the complex relationships among the heterogeneity of patients, patterns of suffering and effects of treatments beyond a simplistic licensed disease indication. The future challenge is to develop innovative systems that promotes/supports care, informed by the best medical science, yet provides informed options for primary care physicians and patients to choose alternatives. A rational system would provide for flexibility and responsiveness in applying evidence from partial statistical lives to complex individual lives.

## S04.5

### **Commercial influence on healthcare and its influence on polypharmacy**

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**Background & Aim:** Profit is maximised for pharmaceutical companies by having as many patients on as many medications for as long as possible. This is especially problematic for older patients with multiple comorbidities and a greater risk of adverse medication effects and interactions leading to polypharmacy and inappropriate medication use.

**Methods:** The range of methods of influence on prescribing by pharmaceutical companies and the implications for polypharmacy will be reviewed with reference to range of existing literature. (This will be based on the framework outlined in a textbook supported by the WHO and coedited by the presenter “Understanding and Responding to Pharmaceutical promotion”).

**Results:** The results will be presented from the perspective of polypharmacy and inappropriate medication use on older patients.

**Conclusions:** Commercial influence is of particular importance to consider in prescribing for older patients. Strategies to address this as well as resources, will be outlined within a framework of Quaternary Prevention (preventing the harms of too much medication).

**S05**

**European Primary Care Cardiovascular Society (EPCCS) Plenary Sessions**

**Keywords: Global issues; population health; clinical management**

**Preventing stroke in atrial fibrillation - the state of the science**

Prof Richard Hobbs, Oxford, United Kingdom

**Lifestyles in primary care: can we help behaviour changes in the real world?**

*Prof Paul Aveyard, Oxford, UK*

**Is management of lipids important and are statins as good or as bad as reported? A state of the science debate**

*Professor Richard Hobbs, Oxford, United Kingdom*

*Dr Carlos Brotons-Cuixart, Barcelona, Spain*

Disclaimer

These symposia will be organized and delivered by the European Primary Care Cardiovascular Society (EPCCS), which is a Special Interest Group (SIG) of WONCA Europe

## **S05.1**

### **Preventing stroke in atrial fibrillation - the state of the science**

*Richard Hobbs*

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Atrial fibrillation is associated with a 5 fold risk of stroke and causes more serious and disabling events. With a huge evidence base to guide how we can identify those at risk, stratify their risks of stroke with no treatment and bleeding if treated, and which treatments are most effective, we could be reducing stroke rates by a third. This session will explore the gaps between evidence and practice and highlight how primary care research has made major contributions to the evidence base.

**S05.2**

**Lifestyle interventions: is there hope of changing behaviours?**

*Paul Aveyard*

*Oxford University, Nuffield Department of Primary Care Health Sciences, Behavioural Medicine, Oxford, UK*

Abstract not available.

### **S05.3**

**Is management of lipids important and are statins as good or as bad as reported? A state of the science debate**

*Richard Hobbs*

*University of Oxford, Nuffield Department of Primary Care Health Sciences, Oxford, UK*

With dyslipidaemia contributing the largest modifiable risk to vascular disease and the extraordinary effectiveness and safety of statins in reducing this risk, why would we need to ever debate this topic? See what you think after this debate.

#### **S05.4**

#### **Is management of lipids important and are statins as good or as bad as reported?**

*Carlos Brotons-Cuixart*

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New findings of the efficacy, safety and tolerability of statins will be presented, as well as who should be treated and what are the goals according to new European guidelines.

## W12

### **Preparing for a pandemic - lessons from the past, preparing for the future**

*Jo Buchanan(1), Maureen Baker(2), Zalika Klemenc-Ketiš(3)*

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**Background and Aim:** Family doctors are at the frontline of clinical services in many countries and need to be able to respond quickly as a pandemic occurs. The last influenza pandemic provides valuable lessons on how the response should change in future. Arboviruses are endemic in parts of Europe and may have the propensity to produce a pandemic in the future. New threats such as Zika virus can emerge rapidly. The PREPARE programme is part of Europe's efforts to plan for a coordinated response to a pandemic; it focuses specifically on ensuring that appropriate research is carried out prior to a pandemic and that systems are in place to instigate useful research projects during a pandemic. WONCA Europe is a member of the PREPARE general assembly.

This workshop aims to 1) outline the role and activities of PREPARE; 2) describe the lessons learnt in one country following the last influenza pandemic; 3) enable participants to consider how to prepare their practices for a future pandemic; 4) Provide an overview of the epidemiology, diagnosis and management of arboviruses. 5] enable participants to discuss case histories of patients with possible arbovirus.

**Method:** This workshop will include presentations and the opportunity for participants to discuss the impact a pandemic would have on their practices. A specific example will be used to enable participants to deepen their understanding of the detection and management of cases caused by arboviruses.

**Results:** The expected results from this workshop include a review of past experience of dealing with a pandemic, an awareness of how to prepare at a practice level for a pandemic and an understanding of the role of research both before and during a pandemic.

**Conclusions:** This workshop will disseminate information about the work of PREPARE and deepen participants' understanding of their role in a pandemic.

**S06**

**Chronic gastrointestinal and liver infections**

*Knut-Arne Wensaas(1), Lars Agréus(2), Christos Lionis(3), Charles Helsper(4)*

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Acute infections of the gastrointestinal tract and the liver are common both in general practice and in the population not seeking health care. The initial diagnosis of an acute infection is relatively simple based on the history, symptoms and findings. Most infections are self-limiting and further investigations aimed at identifying the microorganism involved is seldom warranted.

Diagnosing chronic infections is more challenging because of the different time frame and less specific and severe symptoms. Infections will be just a part of a whole range of possible diagnoses to consider, and each individual symptom and clinical finding will have limited predictive value. Some infections will also be asymptomatic, but still active and affect the health of the patient in the future.

Recent developments in treatment options and new knowledge about the epidemiology and possible complications make it important for general practitioners (GPs) to be aware of these chronic infections.

In this symposium leading experts from primary care in Europe will give up to date presentation on four chronic infections that are important throughout Europe and the world.

Prof. Lars Agréus

**Management of *Helicobacter pylori* infection**

Prof. Christos Lionis

**Hepatitis B infection**

Dr. Charles Helsper

**Hepatitis C infection**

Dr. Knut-Arne Wensaas

**Infections with *Giardia lamblia* and other gastrointestinal parasites**

Discussion and Concluding Remarks: The focus will be on the role of GPs in management of these infections. The participants will receive up to date knowledge about the epidemiology, case finding strategies, investigations and treatment options.

**S06.1**

**Management of *Helicobacter pylori* infection**

*Lars Agréus*

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Abstract not available.

**S06.2**

**Hepatitis B infection**

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Abstract not available.

**S06.3**

**Hepatitis C infection**

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Abstract not available.

**S06.4**

**Infections with *Giardia lamblia* and other gastrointestinal parasites**

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Abstract not available.

## **W13**

### **Overdiagnosis and overtreatment – a Norwegian attempt to face the challenge. A position paper from the Norwegian College of General Practice**

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Testing of asymptomatic individuals in order to «prevent disease» or identify «early diagnosis» is increasing in volume in general practice. The fear of hidden disease is flourishing among physicians, patients, politicians and health administrators. Overdiagnosis is closely related to medicalization of the borders of normality and treatment of conditions that are either self-healing or untreatable. Overdiagnosis is linked to the false conception that it is an error not to diagnose at the first modest symptom which could be seen to indicate serious disease, but which in most cases is innocent and transitory. The first imperative of medicine is to do no harm. Overdiagnosis is harmful both to public health and to the individual. Public health deteriorates when resources are shifted away from the patients with chronic diseases and the poor to the well and the rich. The individual is harmed by being defined as sick and perceiving herself as sick. In 2001 the Norwegian College of General Practice stated the principle of «giving the most to those who have the greatest needs». This principle is just as important today. With this background, the College decided to develop a position paper on overdiagnosis and overtreatment. In this workshop the process of shaping the paper and the paper itself will be presented and discussed; including the history of the drivers of overdiagnosis in the Norwegian context, examples of overdiagnosis in (Norwegian) general practice, and finally proposals to limit overdiagnosis in the time to come.

**S07**

**Chronic obstructive respiratory disease 2016. What's new, and what isn't**

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Chronic Obstructive Pulmonary Disease (COPD) is a common respiratory problem whose prevalence and impact is increasing. It causes increasing morbidity and mortality in all countries of the world and is principally caused by exposure to smoke from cigarette smoking, or, in low and middle income countries, indoor air pollution from residential biomass fuel use. The International Primary Care Respiratory Group is a Special Interest Group (SIG). The Symposium (which will be interactive) will cover:

- Diagnosis, including the dilemma of screening.
- Vaccination in COPD– which, when and how?
- Physical activity and respiratory rehabilitation in COPD. Do we need a rehabilitation service or are we ready in primary care?
- E-cigarettes: harms and possible benefits in front of tobacco exposure
- The plethora of new drugs for COPD: how to cope and are they really new?
- Exacerbations – get in early!
- Asthma COPD Overlap Syndrome (ACOS) – is it really a new diagnosis?

The IPCRG has presented internationally for a number of years including in Istanbul (2x), Lisbon, Warsaw, Prague, Vienna, Malaga, and Heraklion. The sessions have been very well received with excellent attendance. All proposed speakers are general practitioners and are well known Internationally in primary care circles, especially with reference to respiratory medicine.

## W14

### **The potential of The Copenhagen Primary Care Laboratory (CopLab) Database. Participate in the brainstorm**

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**Background & Aims:** Routinely ordered blood tests, electrocardiograms, echocardiographs, lung functions tests and home blood pressure measurements in general practice support GPs in diagnosing and treating their patients. These analyses also document important physiological and pathophysiological relations. There is a need for research databases to explore associations between these parameters, concurrent comorbidities, and future disease outcomes.

**Method:** The Copenhagen General Practitioners' Laboratory was the main laboratory serving GPs in the Copenhagen area, covering approximately 1.2 million inhabitants up until 2015. Services included a broad range of biochemical analyses as well as several cardiac and lung function tests. All analytical results since July 1, 2000 were registered. The Copenhagen Primary Care Laboratory (CopLab) database contains all results from these analyses (e.g. 176.000.000 blood test results) from 2000 to 2015 requested by GPs. These data can be merged at a person level with the extensive Danish health registers.

**Results:** The general type of research question that can be answered by the CopLab database is whether certain laboratory values are associated with an increased risk of certain future disease outcomes, however, the way the data are obtained, the dynamic.

**Background:** population, the sheer amount of data, calls for a carefully considered analytical approach. The workshop will review the data and methodological issues behind the construction and analysis of the CopLab database as well as give examples of its use to inspire peers for collaboration.

**Conclusions:** We will invite the participants to a brain storm about how to use this vast primary care research resource to the benefit of patients in order to 1) describe the emergence of new risk factors or disease indicators, 2) describe the prevalence and incidence of disease, and 3) relate morbidity, mortality, and the use of health services to these risk factors and/or indicators.

## W15

### **Quality improvement 2.0: Online Journal Club meets the family medicine change makers' tweetchat**

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**Background:** A time-honored strategy for keeping up to date in medicine and improving critical appraisal skills is the Online Journal Club (OJC). This innovative approach gives access to achieving evidence-based-practice beyond the physical limits of attending meetings, quality circles or seminars by critically evaluating recent articles online. The Family Medicine Change Makers project was founded in 2014 in Lisbon and has since then facilitated bi-monthly tweetchats on major primary care topics engaging physicians from around the globe in sharing ideas and best practice.

#### **Goals:**

- Promote online quality circles as relevant vectors of evidence-based practice
- Develop evidence-based discussions on quality improvement (QI) at time and place of convenience
- Identify new means on how to improve quality in our practice live tweetchats or OJC.

#### **Methods:**

- Pre-workshop publicity on social media to engage potential FMChangemakers and EQUIP participants a week before the workshop in pre-reading a relevant article on QI in primary care
- 3 questions about the article will be proposed by an expert from EQUIP - Presentation about the OJC, Live Tweetchats and QI article
- Online and face to face participants will be asked to discuss the questions
- During the workshop, a FMCM member facilitates the live tweetchat on [www.twubs.com](http://www.twubs.com) (a tweetchat management hub) using the hashtag #FMChangeMakers, whilst an EQUIP moderator will facilitate the discussion live
- The tweetchat will be projected live onto a screen
- The transcript of the online chat will be published via [www.symplur.com](http://www.symplur.com) and, along with summary of the workshop discussion outcomes, will be disseminated through social media

#### **Expected Impacts:**

- Stimulate active reflection and make research results come alive in a social media setting
- Encourage utilisation of tweetchats and OJC as a means of connecting GPs around the globe and engaging them in QI.

## S09.1

### **“Praksismatch” - a recruitment campaign by the Danish society of young primary care doctors**

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#### **Aims:**

- Create a website with relevant information on GP clinics in Denmark
- Draw attention to undervalued practices in rural areas of Denmark
- Attract more doctors into the profession through easy access to inspiring information

**Background:** One of the biggest challenges for general practice the next ten years is the recruitment of new doctors. It is our belief that many young doctors settle in the major cities long before they have to choose where to finish their vocational training. Often the choice is based on convenience (i.e. geography) rather than considerations on education or an academically challenging environment. We believe that this can be changed through information.

#### **Method:**

- Focus group interviews in order to select the value-based questions
- Create a database where it is possible to search on size and type of practice, special interests, workload, educational interest and other specific information
- Create a concept inspired by internet dating sites where the junior doctor's preferences are determined through a series of value-based questions.

The answers are subsequently matched with corresponding tutor GP practices.

**Results:** The website and database will be launched in September 2016. Until then the website [www.praksismatch.dk](http://www.praksismatch.dk) can be visited for inspirational purpose only.

FYAM will do a prospective study to reveal whether it is possible to predict the perfect match between GP trainees and tutor GPs. Additionally investigate whether the database has led to an increase in the number of GP trainees and their settling in rural areas of Denmark.

**Conclusion:** We believe that the database and the concept of “matching” GP trainees and GP tutors can contribute to an increase in the number of GP trainees and an increase in the number of GP trainees settling outside the major cities.

## S09.2

### Changes in the knowledge of and attitudes towards family medicine along the degree from students ending in 2014-2015 academic year

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**Background & Aim:** The experience of students during specific courses has a significant impact on their attitudes towards specialities, nevertheless, the students' perceptions may change as realistic perceptions about the professional demands on doctors develop during medical school. The objective of this study is to determine changes in the knowledge of and attitudes towards Family Medicine (FM) between 2nd and 6th year of the degree of medical students who completed a course in Primary Care (PC) in their 2nd year.

**Methods:** Cohort study. Seventy-six students at the 6th year of the degree in 2014-2015 academic year (from a cohort of 100 who took a course in PC in 2010-2011) were asked to respond the brief CAMF, a questionnaire with 21 closed response items after completing the course in PC, and at the end of the 6th year. The students' answers were analysed and compared (Wilcoxon test for paired samples).

**Results:** The students average age was 23.4 years (SD: 0.6); 60.5% were women. We found significant differences at the end of the degree, related to 2nd year, in 8 items. There were higher level of agreement with "clinical history is a fundamental tool for the family doctor" ( $p=0.025$ ). in contrast, the level of agreement decreased with "better healthcare compared to the previous ambulatory system" ( $p<0.0001$ ), "FM as their first career choice" ( $p=0.05$ ), "good knowledge of family doctor's tasks" ( $p=0.01$ ), "FM is highly regarded within the Medical School" ( $p=0.014$ ), "low efficiency of health system directed exclusively to diagnosis and treatment" ( $p=0.023$ ), "family doctor provides healthcare both at his/her consultancy and at the patients' homes" ( $p<0.0001$ ), but also whit "family doctors manage healthcare problems of little importance" ( $p=0.015$ ).

**Conclusions:** At the end of the degree, the knowledge and interest in FM, which students showed after completing a course in PC, had decreased.

### S09.3

#### **Becoming a general practitioner in Italy: a participatory-action-research to comprehend training education model (core and hidden curriculum)**

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**Background & Aim:** In Italy, GP post-graduate training lasts 3 years and is managed by regions. Every region has its own education programme. There is no connection to Universities nor other specialty programmes. No official national curriculum nor related evaluation programme has been developed since its beginning. Our research aims to investigate training education models through trainees', coordinators' and trainers' experiences. Involving all actors of educational programme is crucial for enlightening critical points. Additional purpose is to build a network of researchers interested in GP-training learning issues.

**Method:** The study is based on a Participatory-Action-Research (PAR) approach. The research team is non-hierarchical, independent, and stable-but-open to new researchers. On the monthly educational day, the research team can share knowledge about quali-quantitative research philosophy and techniques. Research design and tools are discussed using a participative method during meetings between November 2015 and February 2016. Critical appraisal of available socio-scientific evidences is mandatory. A review of quali-quantitative available data was chosen as starting methodology. Trainees' perspectives and ideas will be investigated by interviews and focus groups, with a voluntary participation sampling process. A context analysis with a triangulation process will be applied. A national survey will be launched to gain more specific data of GP training.

**Results:** At this step, research team is ready to make a call for focus group in four regions. The drafts of focus groups and interviews are under definition. Preliminary qualitative data are expected for May to June 2016.

**Conclusions:** This is the first Italian Participatory-Action-Research analysing GP post-graduation training education model. Being an independent GP trainees/young GPs research team, makes it possible to highlight fields of interest and appropriate research tools. An achievement is the opportunity to share a collective experience. It will also be possible to study which methodologies are needed in order to build knowledge about GP training model.

#### **S09.4**

### **A World Health Organization initiative: Measurements and indicators of patient, family and community engagement and empowerment**

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**Background:** The World Health Organization (WHO) has developed a Framework on Integrated People-Centred Health Services. This is calling for reforms to reorient health services, shifting away from fragmented, vertical, supply-oriented models, towards health services that put individuals, families, carers and communities at their centre. One of the five strategic objectives of this framework is engaging and empowering people, including patients, families, members of the community and health professionals.

But how do we know if people are engaged? Are they empowered and what helps them to feel so? As stated by Dr Margaret Chan, "what is measured is what is valued". Measurements and indicators of meaningful engagement and empowerment in the contexts of quality, people-centred health services are important to both evaluate current practices, ensure mutual accountability, and to incentivize sustainable and people-centred action for change. These indicators and measures must be centred around the needs, values and preferences of patients, families and communities.

Despite the growing recognition of the importance of patient, family and community engagement in health care, consensus is lacking about how best to measure these concepts.

**Aim:** This presentation will aim to inform participants of measures and indicators of engagement and empowerment based on the perspectives of health-care users, in efforts to ensure health systems and services are responsive to their needs, values, and preferences and are improving in a way that helps people have access to quality care.

**Methods:** We will present the measures and indicators proposed from the patients' perspective gathered through qualitative interviews carried out in 2015. These will be compared with the findings of a scoping review carried out in 2016. The paper will outline key themes and identify gaps in current measurement of patient, family and community engagement and empowerment.

#### **Results and Conclusions:**

- Increased knowledge on the existing body of knowledge on the measurement of patient, family and community engagement;

Identified measurements and indicators, from patients' and health professionals' point of views, of the engagement and empowerment of people.

## S09.5

### **Information sources in health education: a cross-sectional study**

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**Background & Aim:** Literacy is a public health priority. The way people access to information has changed over time and it requires some adjustments in health systems providers to answer new challenges. The aim of this study is to describe the sources of health information of the young people.

**Methods:** We applied an online questionnaire to students of the University of Porto, Portugal, asking about the sources of information they use when they need further advice about their health. The Portuguese translation of the Health Literacy Measurement Instrument (HLS-EU-Q) was used to check the level of literacy.

**Results:** We studied 485 participants (77.5% female) with a median age of 23 years (interquartile range = 6 years). The main source of information was the internet (78.8%; 95%CI: 75.1-82.4%), followed by health professionals (66.8%; 95% CI: 62.6-71.0%) and family (40.7%; 95%CI: 36.3- 45.1%). No differences were found between genders. The family resource was more common in the younger ( $p < 0.001$ ), but no age difference was detected in the use of internet or the health professionals. A linear regression model adjusted for age and gender allowed us to conclude that the family support was associated to higher levels of literacy (Beta = 2.57; 95%CI: 1.22-3.91;  $p < 0.001$ ). The internet, the doctors and the other sources weren't significantly associated to the competence of students.

**Conclusion:** The internet is the main source of information for this population, but differences in literacy levels appear only with the family counseling. The same occurs with the medical advice. We need to rethink the quality of information available in the net and in our office, to increase its efficiency.

**Keywords:** Health literacy; Counseling; Health education; internet; Access to information

## **S09.6**

### **How can we help GPs cope better with the impact of adverse events in general practice (The Second Victim Syndrome)?**

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**Background & Aim:** Most GPs have personally experienced or know a close colleague who has experienced an adverse event at work. These adverse events may include patient safety incidents, complaints from patients or their families, legal cases, investigation by a licensing body, and any actual or perceived error or omission in clinical care. EQuIP, the Wonca Europe Network for Quality and Safety in Practice, through its Working Group on Professional Health, will host this interactive workshop on the impact of adverse healthcare events on the GP personally and on their professional practice.

**Method:** A brief presentation summarising current research on this topic will be followed by group discussions on how GPs respond to and cope with adverse events at work, how an adverse event may alter future clinical practice, and how fear of error can alter clinical behaviours. The groups will consider how GPs can be supported at individual and at system level following work related adverse events.

**Results:** Participants will have the opportunity to share knowledge and experience and to learn how other GPs are supported or not in other health systems.

**Conclusions:** EQuIP plans to gather the outputs of this workshop with the aim of creating a consensus document. This will assist in guiding the development proactive and reactive supports and resources for GPs who are traumatised by their involvement (or inferred involvement) in adverse medical incidents.

## W16

### **How do we think? Let's give a thought to our medical decision making!**

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**Background and Aim:** As family physicians, we make diagnostic and treatment decisions successively during the day. Our decisions influence our patients' lives, some critically. Despite this significant role, most of us have had no formal training in decision making, a relatively new topic, which now is taught in many medical schools. Honestly, in daily practice, do we stop and think about these decisions as often as we should? The aim of this workshop is to stop, think, reflect and explore our decision making process. Specifically, we will discuss and offer examples of some common "cognitive errors" and address strategies and tools that could be helpful in minimizing them.

**Methods:** We will start the workshop with an introductory review of current knowledge on processes that influence medical decision making, such as biases /cognitive errors. Strategies that could minimize these errors will be presented. This will be followed by small group discussions of clinical cases brought forth by participants, as well as clinical vignettes. Sharing of knowledge, experience and specific tools will be encouraged, as well as role playing. Groups will report to the rest of the workshop participants their experience and conclusions.

**Results:** Participants will gain increased awareness and knowledge regarding different factors that influence our thought processes and clinical decision making. They will learn to define and provide examples of some common cognitive errors. Finally, they will learn some strategies intended at minimizing some of these errors in daily practice.

**Conclusions:** Despite the inherent stress and workload in daily practice, physicians need to be aware of factors that may adversely affect their clinical decisions. For the safety and wellbeing of their patients, as well as for themselves, physicians must take control and reflect regularly on their decisions. Physicians should be aware of common cognitive errors and seek to minimize them.

## W17

### **Case finding and diagnostics – is mental health problems a problem in primary care?**

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Depression is one of the leading causes of disability and affects 10-15% of the population. Around 70% of all patients with depression are treated in primary care and around 75% of antidepressants are prescribed by GPs. Depression is estimated to be as much as 50% un-diagnosed, often co-occurring with other diseases. Early detection and treatment of co-occurring depression is thought to improve prognosis of course, function and return to work. However, improvements of early detection and treatment of depression in primary care is intensely investigated. Screening does not appear to produce any significant benefit: a Cochrane systematic review of RCTs conducted in non-mental health settings showed that use of instruments did not significantly increase the use of any intervention. Likewise, the use of diagnostic instruments is time-consuming and does not seem to improve outcomes when used in the primary care setting. Recently, a literature review concerning instruments for suicide screening did not find any of the instruments, recommended for clinical use, to reach acceptable positive predictive values.

The aim is to explore how:

- case finding and diagnostics of mental health problems can be improved
- psychological instruments can be best and most efficiently used in the primary care context.

**Method:** workshop presentations of studies accomplished in primary care to test alternative ways of improving case finding and diagnostics:

- Using the doctor as screening instrument for depression
- Efficient use of M.I.N.I.
- How to increase case-finding and treatment effects by care management.

**Results:** Hitherto, the effectiveness concerning case finding, screening and diagnostics is highest when conducted by primary care professionals with broad knowledge of both primary care and communication skills. The workshop can increase our shared knowledge by actively discussing study results and effective use of diagnostic and self-assessment instruments.

## W18

### **Is it possible to eradicate HCV infections through primary care screening?**

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**Background & Aim:** HCV is considered a Public Health Problem. 130-180 millions are infected (3% of the global population). It causes 350.000-500.000 annual deaths and there is no vaccine. The ECDC recommendations are based on the promotion of strategies aimed at key populations at risk to enable early diagnosis of infection.

**Method:** Firstly, our experts will explain the following topics (30 minutes)

1. New treatments for HCV

2. Impact of a screening HCV programme at A Coruña Primary Care Health Area

3. Economic aspects of HCV treatment

4. Proposing the design of a new HCV screening educational tool for Primary Care in Europe. Afterwards, we will split the audience on several groups (6pax) to discuss how will they address HCV screening on their Primary Care Areas. They should address barriers and facilitators to HCV screening may appear on their context. Different approaches suggested by groups will be debated through an open discussion. Solutions to avoid barriers and enhance facilitators will be proposed by our team. The final aim of this workshop is to facilitate tools to promote HCV screening around European Primary Care Clinics, and to find partners interested on HCV. We want to develop an HCV Educational Tool for Primary Care Screening. Funding: Santiago Pérez has received financial aid from Abbvie and PWC regarding prior scientific works and travel expenses related to Hepatitis C Screening at Primary Care Level.

## W19

### **Facing your challenges in teaching and how humanities could help: a peer reflective workshop**

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**Justification and Interest:** Faculty face challenges when they teach and have few opportunities to share them and reflect with their peers. Usually when discussing educational issues with their colleagues, they often spend most of this time talking about problematic students, and barriers with the learning environment. Stating new paradigms implies in learn how to share weakness and frustrations, find resources for a better teaching performance, identify personal role models and use them to inspire and motivate teaching, leadership, and students. Humanities are a powerful resource to facilitate the peer reflection among faculty members. As the humanistic perspective of doctoring and teaching is placed, people realize that communication and sharing experiences are core issues for educating students, residents and faculty themselves as human beings. Working with our core beliefs and values is crucial to job satisfaction, avoiding burn out, developing leadership and rewarding personal and professional development as teachers and family doctors. This workshop is proposed to those who are involved in family medicine teaching. We expect an interactive discussion with the audience, high feedback from the participants, and an opportunity to start a peer feedback scenario on teaching. Their experience will be the basic issue for starting the discussion, enriched with exchanging experiences, and with some classical thoughts taken from well-known family medicine educators.

#### **Contents and Methods:**

- a. Presenters will ask the audience to introduce themselves and list the main challenges they face in their teaching set. (30')
- b. Presenters will describe their experience in using Humanistic Resources (music, movies, poetry, literature) and apply the methodology with the audience (25')
- c. Interactive discussion with the audience: emerging topics, new ideas, how to humanities to encourage teachers to identify their core values and beliefs. (25')
- d. Summarizing: what did we learn? (10')

**Keywords:** Faculty Development, Medical Humanities, Peer Reflection

## **W20**

### **Drawing family-circles**

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The drawing family circles method belongs to the family diagnosis techniques and has a therapeutic input too.

- a. Indications: Whenever the doctor gets the idea that the patient's problem has to do with his/her family or environment or the reason for counselling is unclear he invites the patient to draw family circles.
- b. The patient is asked to draw in him/herself and members of his/her family, peer group, etc. as smaller or bigger circles inside or outside of the large circle. Also friends, enemies, work, god, hobbies, pets, etc. (whatever the patient thinks to be important) may find a place.
- c. The patient is encouraged to speak about his/her interpretation and to describe his feelings and sense.
- d. Useful reflecting questions: Do you like this picture? Is there anything surprising? Would you like to change anything? What is your need for changing? Accept all explanations of the patient, even if they seem to be peculiar.
- e. The patient and the doctor talk about the patient's resources and ideas, for instance about looking for another, better place in the circle. A process can start.

Examples from everyday work are presented.

Each participant draws a family circle of his/her own or of an imaginative patient. The pictures are discussed in small groups. Additionally we can focus on some cases, and develop new views and solutions.

Drawing family circles offers an easy-to-do systemic snap-shot, as if both the patient and the doctor fly like sharp-eyed eagles over the patient's family situation. There is no bad or wrong. The patient is the expert for him/herself. You see and feel more than you can talk about. The method offers a feasible way to solve complexity in the GP's daily work.

## **OP10.1**

### **PTSD: worsening outcomes for comorbid depression- even with collaborative care management**

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**Background and Aim:** Post-traumatic stress disorder (PTSD) has symptoms that exist along a spectrum that includes depression and the two disorders may co-exist. Collaborative care management (CCM) has been successfully utilized in outpatient mental health management (especially depression and anxiety) with favorable outcomes. Despite this, there is limited data on clinical impact of a diagnosis of PTSD on depression outcomes in CCM.

**Methods:** The present study utilized a retrospective cohort design to exam the association of PTSD with depression outcomes among 2,121 adult patients involved in CCM in a primary care setting. Using standardized self-report measures, baseline depression scores and six month outcome scores were evaluated.

**Results:** Seventy-six patients had a diagnosis of PTSD documented in their electronic medical record. Patients with PTSD reported more severe depressive symptoms at baseline (PHQ-9 score of 17.9 vs. 15.4,  $p<0.001$ ) than those without PTSD. Controlling for sociodemographic and clinical characteristics, a clinical diagnosis of PTSD was associated with lower odds (OR 0.457, CI 0.274-0.760,  $p=0.003$ ) of remission at six months and was also associated with higher odds (OR 3.112, CI 1.921-5.041,  $p<0.001$ ) of persistent depressive symptoms at six months after CCM.

**Conclusions:** PTSD was associated with decreased odds of remission and with increased persistent depressive symptoms at six months after CCM. Care coordination programs may benefit from including measures for PTSD for at-risk patients to adjust their approach to care. Providers should consider screening for PTSD in patients with depression as PTSD could potentially inhibit response to depression management.

## OP10.2

### **Social Inequalities in health behaviours: a comparative analysis**

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**Background & Aim:** The lower prevalence of health behaviours (HBs) in lower socioeconomic groups is seen to be one of the mechanisms linking lower socioeconomic position to worse health. HBs contribute all the more to social inequalities in health as they are themselves more socially differentiated. In order to identify targets for intervention aimed at reducing social inequalities in health, the aim of our study was to compare social inequalities among HBs.

**Method:** Fifty-two GPs from two Parisian universities volunteered to participate. Each of them included 70 patients (35 women and 35 men) between 40 and 74 years randomly drawn among their registered patients. HBs (tobacco and alcohol consumption, diet and exercise, gynaecological cancer screening) were collected from the patients by postal questionnaires. A relative index of inequality (RII) was calculated to quantify inequalities related to the occupational group, the educational level and the perceived financial situation, with mixed models, stratified by patient's sex and adjusted for age and primary care utilisation.

**Results:** Among the 2599 patients enrolled (participation rate 71%), the largest inequalities among all HBs, were observed for cervical cancer screening (RII related to the educational level = 3.42, 95% CI=2.25-5.19). Excessive alcohol consumption was the only HB with no social inequalities observed, in both sexes. Exercise was socially differentiated in both sexes (between 1.45 and 1.85 according to the social position indicator considered). Gender differences were also observed: tobacco consumption was socially differentiated among men but not among women (RII between 1.64 and 1.68); diet was more socially differentiated among women (RII between 1.42 and 1.60) than among men (RII between 1.16 and 1.26).

**Conclusions:** To tackle social inequalities in health, GPs should prioritize their interventions toward the most socially patterned HB: tobacco consumption and exercise in men; diet, exercise and cervical cancer screening in women.

### OP10.3

#### **Changes in visit pattern to nurses for patients with diabetes mellitus after the care choice reform in Malmo, Sweden**

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**Background and Aim:** In 2009 a care choice reform was implemented in the region of Scania, Sweden, giving the individual right to choose primary health care provider and enabled freedom of establishment. Since the reform the number of visits to general practitioners (GP) and nurses has increased. In a previous study of adults in the city of Malmo we found that continuity of care (COC) to GPs for individuals with diabetes mellitus decreased substantially after the reform, as did the number of visits. The primary aim of this study was to investigate if this reduction was compensated with increasing visits to nurses for these patients and if the presence of COC had any effect.

**Method:** Descriptive statistics of visits to nurses both in hospital outpatient clinics and in primary care were made on two groups. The first group consisted of all adult inhabitants in Malmo diagnosed with diabetes mellitus (n=7055). The second group was the subgroup of patients where COC was possible to calculate, i.e.  $\geq 3$  visits to a GP.

**Results:** The total number of visits to nurses in the cohort decreased after the care choice reform, independent of sex and age. The mean number of visits to nurses in primary care was notably lower in the COC-group, both before and after the care choice reform.

**Conclusions:** Our data suggests that the declining number of visits to GPs after the care choice reform for individuals with diabetes has not been matched by a corresponding rise in visits to nurses in primary care. The decline in visits for individuals with diabetes must be seen in relation to the rise in visits for the whole population in the region of Scania after the care choice reform. This raises the question if a crowding out effect has befallen patients with greater need.

## OP10.4

### **Social inequality in disability pension: a study of disability risk in intersections of gender and education**

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**Background & Aim:** Studies of social inequality in disability pension have been criticized for lack of theoretical frameworks. Since the likelihood of disability pension is associated with categories of social difference and systemic oppression, using an intersectionality framework may advance our understanding of the issue. The aim of the study was to examine the relation between intersections of gender and education, and disability pension (all-cause and cause-specific).

**Method:** A subsample of 9,964 men and 11,635 women, aged 40 to 49, from the Hordaland Health Study, Norway (1997-1999) provided baseline information on educational level. Outcome was register-based disability pension from 1992 to 2007. Statistical analyses were in line with recommendations for intersectionality-informed quantitative research. We performed descriptive statistics, estimated the main effects of gender and education on disability pension, and potential interactions between gender and education on all-cause and cause-specific disability pension.

**Results:** Men with higher education had lower risk for disability pension irrespective of diagnostic groups (musculoskeletal (MSD), mental, and 'other' diagnoses) compared with women with similar education, as well as men and women with lower education. Women with lower education had an 11-fold risk for disability pension due to MSD compared to men with higher education, whereas men with lower education and women with higher education had a 3-fold risk. The most common disability diagnoses among lower educated women were soft tissue disorders and back pain.

**Conclusions:** Low-educated women with musculoskeletal pain may be particularly vulnerable to mechanisms that lead to health-related exclusion from working life. To prevent further marginalization of these women, the social security system, the workplace and the general physician should intervene early and collaborate closely to reduce exposures and subsequent disability risk.

## OP10.5

### **Social disparities in diabetes care – a Danish cross-sectional study**

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**Objective:** The objective of this study was to describe how socio-demographic factors are associated with the achievement of goals for diabetes care and pharmacotherapy in patients with Type 2 Diabetes Mellitus (T2DM).

**Design.** Cross sectional study.

**Setting:** A general population study in Denmark, Naestved municipality.

**Subjects.** A total of 907 patients with known T2DM.

**Main outcome measures:** Number of patients not achieving goals for diabetes care on: HbA1c- and LDL-cholesterol, Blood Pressure (BP) and lifestyle measures.

**Secondary outcome:** Treatment with antidiabetic, antihypertensive, and anticholesterol medication.

We investigated the association with socio-demographic factors: age, gender, income, level of education, civil status, employment, and cardiovascular disease (CVD).

**Results:** Poor diabetes control was associated with middle-age, low income and low level of education. The sub-group with T2DM and CVD attained treatment goals similar to the total patient sample. Men achieved goals for LDL-cholesterol and physical activity to a higher degree than - women, but were less well regulated on HbA1c. Only a minority of the patients with Type 2 DM were well regulated and reported a lifestyle according to international recommendations. Low socioeconomic status (SES) was not associated with lower levels of pharmacological treatment, rather the contrary.

**Conclusion:** The socio-demographic gradient in achievement of treatment goals for diabetes care is eminent even in a country with universal health coverage and reimbursement of medical expenses, especially for lifestyle measures. Low SES was associated with same or more extensive utilization of antihypertensive, anticholesterol and antidiabetic medication.

**Keywords:** Type 2 diabetes mellitus, Health care, Socio-economic status, lifestyle change

## OP10.6

### Approaches of medical faculty students towards continuing professional development

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**Background & Aim:** One of the aims of medical education is to adopt the principle of lifelong learning. Continuous professional development help individuals to develop their knowledge and skills, obtain personal development that is necessary for their professional lives, reach their career goals and gain build confidence and credibility. It includes training courses, conferences, courses as well as self-learning activities.

**Objective:** The aim of this study is to determine CDP activities and approaches preferred by students and raise awareness about the CPD.

**Method:** The study population consists of the freshman students of medical school. A questionnaire including 26 questions with 2 open-ended questions and 5 sections were administrated. Participation is on a voluntary basis. This is a descriptive study. The data was expresses as n number and %.

**Results:** The number of students included in the study was 239 with N=120 female (50.2%) and 119 male students, respectively. Most of the students (n=175, 73.2%), who didn't participate in CPD activities, have expressed that they were not aware of these activities. The lack of interest and necessity were some other rare reasons. Most of the students want to be a specialist in their fields (n=191, 79.9%). They think that these activities should be sponsored by the university, a project or the council of higher education. The most preferred activities were video presentations, skill trainings, courses and trainings on the Internet.

**Conclusion:** CDP activities help students to be ready for their career by developing knowledge-related professional skills. Supporting these students by raising awareness in these activities is our responsibility.

## OP11.1

### **A primary care practice network-based, IT-supported care management intervention and its impact on health-related quality of life**

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**Background and Aim:** The increasing prevalence of patients with multiple, co-occurring chronic conditions requires a patient-centered and individual healthcare. A primary care practice network (PCPnet)-based, IT-supported care management could be a possibility to deliver the needed patient-tailored care. In contrast to regular care management programs the trained health care assistants, who deliver the intervention, work for a PCPnet. This enables even smaller PCPs to offer their patients a patient-centered, individual care as add-on to usual care. Thus, the aim of this work was to examine the impact of a PCPnet-based, IT-supported care management intervention (GEDIMApplus) on health-related quality of life (HRQoL) of multimorbid patients with type 2 diabetes.

**Method:** A prospective, individual-level randomized parallel-group superiority trial (RCT) with 32 PCP-teams in Mannheim, Germany, and 495 multimorbid patients with type 2 diabetes was conducted. The change in patient-reported HRQoL was captured by the EuroQol instrument EQ-5D as the difference between baseline-score and the score 9 months from baseline. Prior to the final analysis, important patient characteristics were examined regarding their associations with HRQoL in a baseline data analysis. The effect of the GEDIMApplus intervention on HRQoL was then assessed using a multi-level approach including factors with predictive value as covariates in the final multi-level model.

**Results:** The baseline data analysis highlighted several predictive factors of HRQoL in multimorbid patients with type 2 diabetes. Further preliminary results uncovered a positive effect of the GEDIMApplus intervention on patient-reported HRQoL after 9 months in the study sample.

**Conclusion:** Overall, the GEDIMApplus intervention seems to have a positive impact on patient-reported HRQoL of multimorbid patients with type 2 diabetes. Therefore, the findings of this study might help to cope with needs of chronically ill, multimorbid patients as well as with upcoming challenges for healthcare systems.

## OP11.2

### Medical decisions in 372 patient-physician encounters

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**Background & Aim:** Decision-making is a key activity in health care and clinical decisions are important outcomes of patient-physician encounters. Research on clinical decisions has typically focused on a few core decisions and no comprehensive description of decisions as they are conveyed in medical encounters has been described.

**Methods:** We analyzed 50 videotaped patient-physician encounters through a content-driven iterative process. Informed by the findings from the qualitative study, we conducted a cross-sectional descriptive evaluation of 372 encounters from 17 different specialties and three different clinical settings (ward round (WR), emergency room (ER) and outpatient (OP)) recorded at a large Norwegian teaching-hospital.

**Results:** We developed a taxonomy consisting of ten topical categories and three temporal categories allowing identification and classification by defining a clinically relevant decision as “a verbal statement committing to a particular course of clinically relevant action and/or statement concerning the patient’s health that carries meaning and weight because it is said by a medical expert”. The 372 encounters contained 4976 clinically relevant decisions, average of 13.4 per encounter (range 2-40, SD 6.8). On average, there were 15.7 decisions in internal medicine-encounters, 7.1 in ear-nose-throat-encounters, and 11.0-13.6 in the remaining specialties. WR encounters contained significantly more drug-related decisions than OP encounters ( $p<0.001$ ) and preformed decisions than ER and OP encounters ( $p<0.001$ ). ER encounters contained significantly more gathering additional information ( $p<0.001$ ) and less problem-defining decisions than OP and WR encounters ( $p=0.03$ ). There was no significant difference in averages related to physician and patient age or gender, except female physicians presented 14.7 decisions versus male physicians 12.7.

**Conclusions:** The taxonomy could prove helpful in other descriptive studies of clinical decision-making and aid future studies aiming to assess the quality of medical decisions with regards to level of patient involvement, patient safety, provider professionalism and degree of concordance with evidence based practice.

### OP11.3

#### The early orientation of first year students to the teaching hospital

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**Background & Aim:** Atatürk University Medical Faculty is applying a course aiming the early orientation of first year students to the teaching hospital since 2012. Our aim was to check student's expectations and factors which are effecting these expectations and choosing medical faculty.

**Methods:** Before and after sending students to hospital orientation a questionnaire was applied. There was some general information questions such as age,gender,high school they graduated, presence of chronic disease and being in a hospital as a patient or caregiver before choosing medical faculty. The obtained data were analyzed with SPSS 18.0. The significance level of  $p < 0.05$  was accepted.

**Results:** Totally 469 students completed the pre-and post-tests. Mean age was  $18.8 \pm 1.4$  years. The ratio of girls was 49% (n=230). Of the students; 16.8% (n=79) had a doctor in their family, 5.5% (n=26) had chronic illnesses and 36.7% (n=172) were hospitalized previously. Previous hospitalization or in related with a doctor as a factor that affect student's medical faculty choice ratio was 20.9% (n=98). Girls (92.6%) are better answered than boys (87%) the questions about functions of outpatient clinics ( $p=0.04$ ). Girls (87.4%) are better answered than boys the questions about functions of inpatient clinics ( $p=0.01$ ). The ratio of expectation about quality of health services and facilities was higher and statistically significant in previously hospitalized students (68.2%) ( $p < 0.05$ ). Before orientation, ratios of correct answering to the questions about features of outpatient clinics, inpatient clinics, surgical branches and basic medical sciences were 90%, 64.8%, 96.8%, 84% respectively. After orientation all this ratios became 100%.

**Conclusion:** We determined that the most important factor which affecting the ratio of expectations about quality of services was previous hospitalization. Before orientation, the first year's students had less information especially about hospital yards. After orientation all of them answered all questions correctly. We think that early introductory course for newcomer medical students is beneficial.

## OP11.4

### **A cross-sectional study evaluating the predictive value of general practice funding and primary care outcomes in England**

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**Background & Aim:** Studies of the role of financial incentives in primary care in England have focussed primarily on the Quality and Outcomes Framework (QOF); the impact of broader aspects of practice funding on performance has not been examined. In early 2015, detailed primary care financial data were released. We aimed to explore the relationship between non-QOF NHS payments made to general practices in England and primary care performance.

**Methods:** Practice funding data were extracted from the National Health Applications and Infrastructure Services. We confined our analysis to practices with GMS contracts (n = 4338); data were not available for the locally determined contracts used by PMS practices. We constructed regression models to explore the relationship between practice funding ('global sum' plus 'MPIG') and QOF outcomes, secondary care usage (attendance rates per 1000 registered patients) and patient satisfaction (% satisfaction, based on responses to the General Practice Patient Survey, (GPPS)), adjusting for practice and demographic variables.

**Results:** The median funding per patient was £67.74 (5th centile: £59.83; 95th centile: £81.12). Higher funding per patient was significantly associated with lower emergency admissions (B, -0.23), lower admissions for Ambulatory Care Sensitive Conditions (ACSCs) (B, -0.03), and lower Accident and Emergency attendances (B, -0.67). Higher funding per patient was positively associated with overall patient experience, (B, 0.1), ease of access (B, 0.1), nurse domain questions (B, 0.5) and doctor domain questions (B, 0.2).

**Discussion:** Higher levels of practice funding received by GMS practices for the provision of 'essential services' were associated with lower secondary care usage and higher reported patient satisfaction. We found no association between higher funding and QOF performance, possibly because this is incentivised through separate funding. Our findings support the argument for investment in primary care. Further data will allow us to present findings concerning Out Patient attendance rates.

## OP11.5

### **Defining prescription quality indicators at primary care level in Portugal: systematic review and Delphi consultation**

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**Background & Aim:** Prescribing quality indicators (PQI) have been used to assess quality and appropriateness of drug prescription in family medicine practice. This study aims to define a validated and consensual list of PQI to be implemented at Portuguese primary care level.

**Method:** A systematic review was performed in PubMed and Science Direct databases, for studies published between 01.apr.1998 and 31.jan.2015 with “prescri\*”, “quality”, “indicator” and “valid\*” in the Title/Abstract. Additional studies were identified in cross-references and health care guidelines. Two investigators reviewed the selected studies and developed a list of PQI. The list was submitted to a two rounds Delphi panel, consisting of 36 experts including 31 general practitioners (GP) and 5 clinical pharmacologists. Respondents were asked to rate each indicator against a nine-point Likert scale “To what extent is the indicator suitable for assessing the quality of prescribing?”, whereas 1 corresponded to “totally inadequate” and 9 “totally adequate”. In the two rounds, the included PQI were scored  $\geq 7$  by least 69% experts.

**Results:** From a total of 2110 articles, 257 were selected for detailed review. A total of 94 PQI were identified from the review, and 4 proposed by the investigators. A list of 98 PQI was submitted to the experts. Response rate was 72.2%. After the first round, 46 PQI were included together with 8 indicators reformulated with comments from the experts. After the second round, 34 PQI were rated as valid, grouped according to the previously defined dimensions: safety (5), indication (6), necessity/adequacy (18) and cost (5).

**Conclusions:** A total of 34 PQI were validated by a panel of family physicians and clinical pharmacologists, covering the most relevant domains of prescription decision, namely necessity/adequacy, safety, indication and cost. Validated indicators will now be applied to real-data world, to evaluate its feasibility in the assessment of prescribing quality at primary care level.

**Keywords:** Prescribing quality indicators, Primary Care, systematic review, Delphi panel.

**Competing Interests:** The authors have no conflict of interest regarding the present study.

## OP11.6

### **Perspectives on Global Health Education in Germany: background, aims and main contents of a proposed undergraduate curriculum**

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**Background and Aim:** While Global Health (GH) is internationally a vital part of undergraduate medical education, it so far does not play a significant role at German medical faculties. Although students show high interest in this topic, only few Universities offer elective seminars in GH. We aimed to analyse background, main contents and aims of existing GH programs and to compare it with selected curricula from other countries in order to propose a blueprint for a one week elective seminar for undergraduate students.

**Method:** Our study follows a sequential mixed methods design. Utilising a semi-structured interview guide, we firstly conduct expert interviews with senior lecturers in global health and also global health practitioners selected by purposive sampling. Interviews are taped, transcribed and analysed qualitatively by two independent raters. In a second step the main qualitative findings are used to design an online questionnaire that will be sent to students that participated in a global health seminar during the last 5 years. In a final step quantitative and qualitative results will be triangulated and integrated and used to develop a one week 'model'-curriculum for undergraduate GH teaching in Germany.

**Results:** Data acquisition is under way; results will be presented at the WONCA meeting.

## OP12.1

### Developing a collaborative care model for people with severe mental illness: intervention theory development

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**Background & Aim:** Ongoing care for individuals with severe mental illness (SMI) is often split between specialist mental health services and general practices. The PARTNERS2 (P2) programme aims to develop and evaluate a model of collaborative care (CC) to support adults with (SMI) to have improved quality of life and care by situating specialist mental health workers (case managers) alongside GPs. This presentation describes how we developed a coherent, practical intervention in preparation for a RCT.

**Methods:** A realist synthesis involving stakeholders drew from four sources to create an intervention theory: a) systematic review; b) narrative review of recovery; c) telephone interviews with international leaders; d) focus groups with SMI service users. We extracted causal micro-hypotheses embedding them in the CC model.

**Results:** The first stages of the synthesis process produced agreement for most key issues about an optimum model of CC for SMI:

- Physical, mental health and social outcomes are all important
- Care Partners (case managers) are the central intervention resource supported by supervisors
- Individualised goals are prioritised
- Monitoring and support for self-management should be provided through coaching
- Assertive follow up is critical
- Care Partners need to liaise with GPs, practice nurses and psychiatrists to ensure joined up care
- GPs need to understand the role of Care Partner in self-management enhancement
- Shared electronic records. Other issues relating to peer workers, group work and endings needed to be resolved through the consensus meetings.

**Conclusions:** The systematic review revealed great heterogeneity of CC models and anticipated outcomes. The narrative review emphasised the need to build on individuals' strengths and address personal goals. The expert interviews provided strong well-reasoned practical solutions and the focus groups developed understanding of how productive collaborative relationships can work in practice. Consensus meetings with open challenging discussions were able to reach agreement about key uncertainties.

## OP12.2

### Effect of CBT and Yoga on quality of life: a RCT on patients on sick leave because of burnout

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**Background:** Stress related disorders, including burnout are high in prevalence worldwide, with increasing cost at all levels of the society. Evidence based treatment is not established. Cognitive behavioral therapy (CBT) is often used, but relapse is common. Burnout patients have poor health related quality of life (HRQoL), which predicts future morbidity and mortality.

**Aim:** To explore if HRQoL increased after a longer CBT or traditional yoga (TY) group treatment, in patients on sick leave because of burnout.

**Methods:** Sixty-three patients randomized to CBT and TY, participated in group treatment for 20 weeks, three hours per week, with additional homework four hours per week. Patients were aged 18–65 years and were on 50%–100% sick leave. HRQoL was measured by the SWED-QUAL questionnaire, comprising 67 items grouped into 13 subscales, each with a separate index, and scores from 0 to 100. SWED-QUAL covers aspects of physical and emotional well-being, cognitive function, sleep, general health and social and sexual functioning.

**Results:** Twenty-seven patients in the CBT (25 women) and 26 patients in the TY (21 women) were analyzed. Seven subscales in CBT and ten subscales in TY showed improvements,  $p < 0.05$ , in several of the main domains affected in burnout, e.g. emotional well-being, physical well-being, cognitive function and sleep. The median improvement ranged from 4 to 25 points in CBT and from 0 to 27 points in TY. The effect size was mainly medium or large.

**Conclusions:** An extended group treatment with CBT or TY had large effects on HRQoL, and particularly on main domains affected in burnout. This indicates that CBT and TY can be used at different levels in the health care system, as both treatment and prevention, to improve HRQoL in patients on sick leave because of burnout, reducing the risk of future morbidity and mortality.

### OP12.3

#### **What makes collaborative care for depression and anxiety work in general practice? - A literature study**

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**Background:** Collaborative care is an increasingly popular approach for improving quality of care for people with mental health problems through an intensified and structured collaboration between primary care providers and health professionals with specialized psychiatric expertise. Trials have shown significant positive effects for patients suffering from depression but since collaborative care is a complex intervention, it is important to understand the factors which affect its implementation.

**Aim:** to synthesize and review evidence from qualitative studies of enablers and barriers to implementing collaborative care for patients with anxiety and depression.

**Methods:** We developed a comprehensive search strategy in cooperation with a research librarian and performed a search in five databases. All authors independently screened titles and abstracts and reviewed full-text articles. Our subsequent analysis employed a thematic approach based on Normalization Process Theory (NPT).

**Results:** We included 17 studies in our review 16 of which were conducted in the USA or the UK. We identified several barriers and enablers within the four major analytical dimensions of NPT. Securing buy-in among primary care providers was found to be critical but sometimes difficult. Enablers included physician champions, reimbursement for extra work, and feedback on the effectiveness of collaborative care. The social and professional skills of the care managers seemed critical for integrating collaborative care in the primary health care clinic. Daily enactment was also found to be facilitated by co-location.

**Conclusions:** The following areas require special attention when planning collaborative care interventions: effective educational programs, especially for care managers; issues of reimbursement in relation to primary care providers; good systems for communication and monitoring; and promoting face-to-face interaction between care managers and physicians, preferably through co-location.

## OP12.4

### Postpartum depression, prevalence and risk factors in a multiethnic population

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**Background:** Ethnic minorities in Western countries are often exposed to stressors related to migration which may affect their mental health, placing them at higher risk for development of postpartum depression. Little is known about depressive symptoms and risk factors for postpartum depression for ethnic minority groups living in Western societies.

**Aim:** To identify the prevalence of postpartum depression and associations with ethnicity and other risk factors.

**Method:** Population-based, prospective cohort of 643 pregnant women (59% ethnic minorities) attending primary antenatal care from early pregnancy to postpartum in Oslo between 2008 and 2010. Questionnaires covering demographics, health problems and psychosocial factors were collected through interviews. Postpartum depression was defined as a sum score  $\geq 10$  by the Edinburgh Postnatal Depression Scale (EPDS) at 14 weeks postpartum.

**Results:** Preliminary results show that prevalence of depression was significantly different between Western Europeans: 4.8 % (95 % CI: 2.26-7.34) and ethnic minorities: 12.7% (9.31-16.09). Ethnic minorities (OR=3.69; 95% CI (1.68-8.10)) had significantly higher risk for depression than Western Europeans. When adjusting for socioeconomic position, the OR was reduced by approximately 19 % (OR=2.97 (1.31-6.71)). Other significant risk factors were recent adverse life events and self-reported history of depression.

**Conclusion:** The prevalence of postpartum depression was significantly higher in ethnic minorities. The increased risk persisted after adjustment for other risk factors. Our findings point to the potential of improving mental health among high-risk ethnic minority pregnant women by improving socioeconomic conditions.

## **OP12.5**

### **Groupal dialectical behavioral therapy in supported by Medtep digital platform in borderline personality disorder**

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Dialectical Behavioral Therapy (DBT) is an evidence-based program aimed at decreasing impulsive and self-harming behaviors. One part of this treatment is a skills training group, in which participants learn specific techniques to manage behaviors, interact with others and learn how to tolerate painful emotions. During this part of treatment, the focus is primarily on skills acquisition, but may not necessarily provide the chance to strengthen the skills or generalize the skills into day-to-day problems. One possibility to address this issue is to implement a DBT graduate group, in which patients can continue to develop the skills they have learned. General practitioner participates in order to achieve long better results. Conventional approaches to mental health care are insufficient to deal with the magnitude of behavioral and emotional health needs when more than million people face these challenges each year in the Spain. The Gap between Mental Health Needs and services may be an opportunity to develop new support by digital platform. Behavioral health self-management registration not only can facilitate health professional control but empowers patients. This article presents a pilot study for a outpatient DBT graduate group in which 20 patients created specific target goals and then used the skills to work toward these goals, overcome barriers and experience emotions related to life problems using Medtep platform digital.

Results from this study indicate an improvement in mood based on decreases in depression scores on the Patient Health Questionnaire (PHQ-9), reports of achievements of target goals and positive and successful transitions out of therapy. While more information is needed about DBT aftercare programs, this article suggests components of a possible graduate group curriculum by digital platform to help clients continue with the positive momentum gained from the skills training groups.

## OP12.6

### Population profiling & case finding in primary care - two sides of the same coin

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**Background & Aim:** Within the English Health Service, the use of case finding techniques is largely confined to providing GPs with lists of people who are at risk of an unplanned hospitalisation and who may benefit from proactive intervention to prevent this. However, GPs have noted that this group is not homogenous in terms of the principle intervention required. Within a health community in Berkshire, GPs wanted to gain a greater understanding of the high risk patients to identify gaps in care provision and design services based on differing needs.

**Method:** An exercise was undertaken to profile the whole population, concentrating specifically on the key drivers of cost and hospital activity. Patient level data covering a population of circa 150,000 was used to undertake this analysis. GPs were involved in the process.

**Results:** Results illustrate new understanding and insight about key drivers of cost and utilisation of resources and the degree of overlap between those at risk of unplanned hospitalisation, the frail elderly and high cost individuals.

A cohort of patients with multi-morbidity who GPs can offer a new primary care based service to have been identified. Early outcomes of the newly established Complex Case Management Service will be shared.

**Conclusion:** The high risk group is heterogeneous – different cohorts of individuals have different care needs. Population profiling allows:

- A greater understanding of the differing needs of cohorts within the high risk group
- The identification of cohorts of individuals who are of clinical interest to GPs, and who will benefit from services tailored to meet their needs.

Clinical input into what can be seen as a managerial exercise is key to the process of profiling the population and then using sophisticated case finding techniques to align care programmes to the needs of the population.

## W21

### **Health inequalities related to socio-economic status: how primary care may reduce them**

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Primary care may contribute to increase health inequalities related to socio-economic status (SES) when the 'inverse care law' operates, ie when the availability of good primary care varies inversely to the need for it in the population served. At the opposite, primary care may contribute to reduce these inequalities by delivering equitable care.

Learning goals:

- 1) Clarify the concepts: health inequalities, health inequalities related to SES, equity of health care...
- 2) Understand how primary care can increase or reduce these inequalities.
- 3) Identify patient SES informations important to register in the patient medical record, and understand the contribution of these informations to guide the consultation.
- 4) Understand how to improve the equity of primary care.

#### **Methods:**

- 1) Presentation of the concepts and mechanisms connected with health inequalities related to SES.
- 2) Small groups of 5-6 participants will work on the detailed narrative of a low SES patient with negative outcomes:
  - a. what could have been done, when, and by whom, to modify the outcomes;
  - b. what skills primary care providers, and particularly GPs, would have needed to act in this way;
  - c. what modifications of the practice organisation would have been necessary.
- 3) The groups will present a summary of their reflection.
- 4) An EQuIP expert will propose a synthesis.

Expected impact on the participants. To motivate the participants to:

- 1) work on this topic ;
- 2) adapt care to specific social groups needs
- 3) register systematically a limited number of SES standardized data on the patients' records, in a time efficient way
- 4) introduce stratification by social groups when measuring quality indicators
- 5) implement plan-do-check-act projects to improve equity and to demonstrate the benefit for the patients and the practice.

## OP13.1

### Evolution of depressive symptoms in patients starting treatment with antidepressant drugs

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**Objective:** To determine reducing depressive symptoms in patients who initiated treatment with antidepressants and analyze factors associated with treatment response.

#### **Material and Method:**

Design: Prospective longitudinal observational study.

Setting: Primary care of three health areas of Castilla-La Mancha.

Participants: 167 patients older than 18 who initiated antidepressant treatment.

Main measurements: intensity of depressive symptoms (validated 10-item scale Montgomery-Asberg Depression version), health status (CIAP-2 WONCA), consumed drugs, side effects, adherence (Morisky-Green) sociodemographic characteristics and other characteristics of participants.

Descriptive, bivariate regression and Cox statistical analysis.

**Results:** The mean age was 53.4 years (SD 15.7). Through Depression Scale Montgomery-Asberg an average score at study entry 21.5 (9.3 SD) and 8.4 (SD: 8.1) at 6 months was observed. The proportion of patients who responded to treatment (50% reduction of the Montgomery-Asberg score) was 34.7% (95% CI 27.9 to 42.2) after six months, achieving remission (post-treatment score  $\leq 9$ ) of symptoms 28.7% (95% CI 22.4 to 36.0) of patients interviewed. By Cox analysis the variables related to the response to antidepressant treatment were the history of previous depressive disorders (HR:5,2), no previous use of antidepressants (HR:7,2), antidepressant treatment prescribed by family doctor (HR:4,1) and increased attendance at family medicine clinics (HR:1,2).

**Conclusions:** One third of patients treated with antidepressants responded to them after 6 months and more than a quarter showed remission of depressive symptoms. It was found that the variables related to the response to antidepressant treatment are the previous disease, history of previous antidepressant treatment, the doctor who prescribed and attendance.

## OP13.2

### **Efficacy and cost-effectiveness of acceptance and commitment therapy and a workplace intervention for workers on sickness absence**

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**Background:** Mental disorders including depression, anxiety, and adjustment problems are currently the most common reason for sickness absence in Sweden. Evidence-based clinical treatments such as Cognitive Behavioral Therapy have resulted in significant and sustained improvement in clinical symptoms. However, the effect on duration of sick leave is variable, even indicating these interventions might prolong sick leave. Combining workplace interventions and psychological interventions might have a potential to enhance return to work for individuals on sickness absence.

The aim of the present study was to compare the effects of a brief Acceptance and Commitment Treatment (ACT) intervention, a workplace intervention (WI), and ACT+WI with Treatment As Usual (TAU) on improved sickness absence, self-rated work ability, reduced mental health problems as well as cost effectiveness.

**Methods:** We designed a randomized controlled trial with adult participants (n=359, 78.4% females) on sickness absence from work due to mental health problems. Participants were allocated into one of four treatment groups: 1) ACT, 2) WI, 3) ACT and WI in combination and 4) Treatment as Usual (controls). Mixed-effects Model Repeated Measures analysis was used to evaluate possible differences in outcome between interventions at 12 months follow up. A cost-effectiveness analysis was conducted to investigate the clinical and economic impact of the three interventions in comparison to TAU. To evaluate this, costs of the different interventions and the costs for days on sick-leave during the follow-up year were combined. Health outcome used was the Quality-Adjusted Life Year (QALY), generated using EQ-5D data collected during the trial.

**Results:** Data from the 12-month follow-up will be presented including evaluations of the intervention outcomes in terms of sickness absence and mental health, as well as cost effectiveness.

**Conclusions:** Will be presented when data is analyzed.

### OP13.3

#### **Pathogenesis and early detection of inflammatory arthritis: the role of musculoskeletal symptoms, infections and arthritis-related comorbidities in primary care**

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**Background & Aim:** Rheumatoid arthritis is a chronic systemic autoimmune disease characterized by clinically apparent inflammatory arthritis (IA). A preclinical phase has been recognized in which symptoms arise and ambulatory care utilization increases. However, information on location and timing of symptoms before IA diagnosis is still largely lacking. The present study was undertaken to identify pathogenetic clues to the development of IA and to assist early identification of future IA patients with a focus on musculoskeletal symptoms, infections and IA-related disease.

**Method:** We conducted a nested case-control study using data from electronic health records of general practitioners, participating in NIVEL Primary Care Database, to evaluate timing and numbers of visits for 192 symptoms and diseases up to seven years before IA diagnosis. 2,772 IA patients newly diagnosed between 2012 and 2014 were matched (ratio 1:2) with controls on age, gender, general practice and duration of follow-up. The frequency of primary care visits between patients and controls were compared using logistic regression in different time periods before diagnosis.

**Results:** The consultation rate for musculoskeletal symptoms was increased in IA patients within the last 1.5 years before diagnosis with odds ratios (ORs) of 1.8, 1.4 and 1.3, respectively, at 6, 12 and 18 months before diagnosis. For infections, the consultation rate was significantly higher 6 and 18 months prior diagnosis (OR=1.2). Finally, for IA-related diseases and other chronic diseases a significant difference was observed only 3 months before diagnosis (OR=1.2 and 1.3, respectively).

**Conclusion:** We found significantly increased consultation rates in general practice for musculoskeletal symptoms and infectious diseases prior to the diagnosis of IA. This diverging trend was already found for 4-6 years, but becomes statistically significant around 1.5 years before diagnosis. Possibly, these symptoms can be used to develop methods for earlier detection of IA in general practice.

## OP13.4

### **Irritable bowel syndrome and chronic fatigue ten years after a giardia outbreak: a controlled prospective cohort study**

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**Background & Aim:** Irritable Bowel Syndrome (IBS) is a known complication following gastrointestinal infection, whereas chronic fatigue (CF) has been scarcely investigated in this setting. Our research group has previously investigated the prevalence of IBS and CF three and six years after a large outbreak of giardiasis in Bergen, Norway. A prevalence of IBS of 46.1% was found in the Giardia exposed three years after the outbreak, and 39.4% six years after. The corresponding prevalence among controls was 14.0% and 11.6%. The prevalence of CF declined from 46.1% to 30.8% in the same period. Corresponding prevalence among controls were 12.0% and 11.0%. The aims of the current study were to estimate the prevalence of IBS and CF ten years after the outbreak and to investigate changes in prevalence over time.

**Method:** Prospective controlled cohort study of 1252 individuals with laboratory confirmed Giardia lamblia. Questionnaires were mailed to all Giardia exposed and matched controls three, six and ten years following acute infection. Data were compared for the cohorts for each point of follow-up.

**Results:** The response rate for the ten-year follow-up was 50% among exposed and 30% among controls. Preliminary analyses of these data show a prevalence of IBS of 42.6% in the exposed group, as compared to 14.1% in the control group (RR 3.02, 95% CI 2.46 to 3.71). The prevalence of CF was 26.1% in the exposed and 10.5% in the control group (RR 2.48, 95% CI 1.92 to 3.2).

**Conclusions:** Infection with Giardia lamblia in a non-endemic area is associated with an increased risk of both IBS and CF up to ten years later. The prevalence of IBS remained high with little change from six to ten years after the initial infection, whereas the prevalence of CF declined from six to ten years.

## OP13.5

### Evaluation of depression and related factors in the medical residents

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**Background & Aim:** in this study, we aimed to evaluate the depression status and affecting factors in medical residents.

**Method:** The universe of this descriptive observational study was composed of 165 residents. Depression statuses were evaluated by Beck Depression Inventory for Primary Care.

**Results:** 39.4% of respondents (n = 65) were female, 60.6% (n = 100) were male and 57.0% (n = 94) were married. The mean age was  $28.69 \pm 3.13$  years. Mean BDI score was  $3.75 \pm 2.81$ . 70.9% (n = 117) of the participants had chosen their branch willingly, 80.0% (n = 132) were satisfied with their branches, 50.9% (n = 84) could choose their vacation time, 49.1% (n = 81) were subjected to violence by patients and/or their relatives. 94.5% (n = 156) of participants had future professional concerns. Sex, marital status, having children, choice of profession, employment, BMI and the person they are living with were not affecting the depression status ( $p > 0.05$ ), while the ones choosing their branch willingly were less depressed (37.4%) and the ones choosing their branch randomly (64.0%) were more depressed ( $p=0.004$ ).

**Conclusions:** Prevalence of depression had been detected less in those who willingly choose the branch.

There were concerns about the future of occupation in most of the participants and approximately half of the participants were subjected to violence by the patients and/or their relatives at any time. Psychological support must be given to physicians and measures to cope with difficulties must be taken.

## OP13.6

### General practitioners' beliefs and attitudes on pathological gambling

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**Background & Aim:** Pathological gambling (PG) is an addictive disorder with harm related to the high psychiatric comorbidity and increased suicidal risk. Prevalence rates in general population range from 0.2% to 2.1%, and increases as accessibility to online versions grows continuously. The awareness of the risks of pathological gambling is very low in the general population therefore plus treatments programs are not easy to access. In the era of online gambling offer expansion primary care should have a crucial role in identifying identifying and referring patients to specialized treatment programs and treating at first line when needed and possible. The study aimed to collect data on resources in the field from GPs.

**Method:** 272 (age: 55 +/- 15, men 46,3%, women 53,3%) participating on CME courses were asked using a 24-item questionnaire about their screening practice and knowledge. A control group of 470 patients (age: 60 +/- 10, men 39,7%, women 58,2%) were asked about knowledge on PG.

**Results:** The results state that the vast majority of them are aware of the existence and the potential impact of PG on their patients. However, PG screening is not systematic and their knowledge of adequate treatments or referral methods is scarce. We found significant difference among the two groups in several themes: patients underestimate the addiction potential of PG ( $p = 0,0008$ ), PG could worsen indebtedness in current economical context ( $p = 0,0044$ ), PG should be treated ( $p = 0,004$ ), participation in gambling ( $p < 0,00005$ ).

**Conclusions:** GPs being central to health screening in general, targeted advice and training on short screening tools and better knowledge of referral pathways should be promoted and continued to empower the GP's management skills in a public health approach. There is a need to inform the general population about the risks of problem gambling.

**S08**

**Coping with complexity in primary care through collaborative engagement**

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In an ever-changing world, continuing medical education and professional development is crucial. Furthermore, frontline medical care providers such as family doctors, have to cope with the complexity and uncertainty inherent in clinical practice. To deal with this and to become wiser doctors, collaboration in learning groups has been shown to be helpful. In this symposium, four different approaches and models for collaborative professional development will be presented, and we shall discuss benefits, challenges and pitfalls.

Lucia Sommers, based at the University of California, San Francisco, will speak about Practice Inquiry, which she initiated in 2001 for primary care clinician colleague groups. From the UK, John Launer will talk about "Conversations Inviting Change" and Narrative-Based Supervision. Also from UK John Salinsky, an experienced Balint group-leader will speak about the Balint approach. From Denmark Niels Kristian Kjær will speak about the impact a Danish reflective group had on its members. Finally Helena Galina Nielsen will speak about group supervision for GPs in Denmark, and how it can play a role in continuous professional development.

No competing interest.

## **S08.1**

### **Embracing uncertainty through collaborative reflection**

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A group of Danish male GPs managed to establish a reflective group in 2000. The group has been meeting regularly for 15 years, discussing difficult patient encounters and other professional challenges. It has created collaborative reflection and a safe haven for its participants in a challenging clinical world. The participants have experienced personal and professional growth. They have apparently learned to embrace and even value the fundamental uncertain and complex nature of primary care, which seems to benefit their 'heart-sink' patients. The features, which have ensured the long-lasting sustainability of this group, could perhaps inspire other younger GPs to work in such reflective groups.

## **S08.2**

### **Balint groups**

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Balint groups are named after the British psychoanalyst, Michael Balint, who began offering 'research cum training' seminars to general practitioners in London in the 1950s. The aim was to help them with the psychological aspects of their practice. The early work of the seminars was described in an influential book called *The Doctor, his Patient and the Illness* (1957). The groups consist of 8-10 doctors with a group leader (or sometimes two). A Balint group meeting starts with a doctor gives a detailed presentation of a patient who has been preoccupying her for whatever reason. The group then discusses the case with emphasis on the emotional content of the doctor- patient relationship. The discussion is guided by the group leader. The aim is to encourage empathy and hence understanding rather than to provide solutions. The usual ground rules for group safety and confidentiality apply and leaders have to have training and accreditation from their national Balint Society.

### **S08.3**

#### **Narrative based supervision**

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Narrative-based supervision is an approach to case-based discussion that was developed at the Tavistock Clinic in the 1990s, and is now taught in postgraduate medical education in the United Kingdom and elsewhere. It is based on the idea that patients or colleagues often bring narratives that are stuck or stereotypical, and that careful questioning can help them to reframe these stories in more effective ways. Training involves theoretical learning based on narrative studies, and small group coaching in the use of non-directive questions aimed at opening up new perspectives on the case. Groups practising narrative-based supervision use a variety of practical approaches including one-to-one interviewing (sometimes in a 'fishbowl') and the use of a reflecting team. Supervision can address both the technical and psychosocial aspects of the case, as well as the interaction between patient and professional.

## **S08.4**

### **Practice inquiry**

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Practice Inquiry (PI) is a small group, on-going learning process designed to enhance clinical judgment and enable practice change in the primary care setting. Since 2002, over 500 U.S. primary care clinicians have participated in office-based settings and four residency programs have incorporated PI into their curricula. Meetings focus on individual case complexity and the uncertainty engendered in primary care clinicians - specifically, patients that present diagnostic, therapeutic, prognostic, and/or communication challenges. Colleagues are guided in querying each other in non-threatening, imaginative ways to elicit new inputs to clinical judgment in five key areas (clinical experience, current evidence, patient context, clinician context, and the patient-clinician relationship.) Through this collaborative reasoning, the group develops new perspectives on the original uncertainty and strategies for moving forward with the patient.

Subsequent case follow up helps clinicians to calibrate judgment and reflect on how cognitive and affective biases impact clinical reasoning. This presentation will include descriptions of existing PI programs, group structure and process, program evaluations, and attributes of successful groups.

## **S08.5**

### **Group supervision as a part of continuous professional development**

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In Denmark there is a long tradition for group supervision in General Practice. In my research I studied three different supervision groups for GPs and conducted a survey concerning a representative part of Danish GPs. In my presentation I shall present some of the main messages from the study, discuss different approaches and some important elements of group supervision.

## W22

### **Approaching female sexuality and sexual dysfunction - how to overcome GP's apprehensiveness and difficulties?**

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**Background & Aim:** Sexuality is a basic human attribute and, as such, is a vital part of human health and well-being. However, it's the least commonly discussed health topic with female patients for half of providers. Many providers underestimate the prevalence of sexual dysfunction (SD) in their female population or the impact that sexual complaints have on their patients' global health and wellness. Understanding SD as a common problem and having the ability to discuss it with their patients is essential for GP's.

**Methods:** This workshop will have different moments. Discussion groups to discuss fears, concerns but also strategies in approaching sexual health (SH) and share experiences based on participants practice and knowledge. PowerPoint Presentation about how to overcome barriers in approaching SH and female SD, always allowing participants' feedback. Role-plays to practice what has been discussed and learned during the workshop.

**Results:** Participants should leave the workshop with a better understanding of female SH and SD and new confidence in approaching those issues. By the end, it's expected participants to be able to:

- Demonstrate confidence and communicate effectively when approaching sexuality/sexual problems;
- Explain patients the importance of taking a sexual history as part of general healthcare;
- Be aware of and approach medical and psychosocial issues related to SH in a nonjudgmental way, with openness to the diversity of patients;
- Function independently in a community practice with reference to address appropriately SH.

**Conclusions:** Attending to SH and its problems is a basic task of primary healthcare. It's essential to incorporate sexual history taking into the general medical history in a nonjudgmental manner from various patient groups, including young people, older patients and people from diverse backgrounds. GP should be committed to continue exploring the field of SH and providing the best practice in sexual healthcare provision.

## **S09.1**

### **Assessing pros and cons of common strategies to evaluate IMUP**

*Graziano Onder, DL Vetrano*

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**Background & Aims:** Functional and cognitive impairment, geriatric conditions (i.e. falls) and limited life expectancy are common features in the elderly. Such conditions might limit the efficacy of drugs or increase the side effects risk, questioning the appropriateness of their prescription.

**Methods:** We review and discuss the main existing instruments and criteria for the evaluation of the appropriateness of prescription in the elderly.

**Results:** Several instruments are today available to help physicians during the drug prescription and revision process. Both softwares providing computerized decision support and pharmaceutical care approaches have been demonstrated able to reduce the burden related to inappropriate prescription.

The Medication Appropriateness Index, Beers' criteria and Screening Tool of Older Person's Prescriptions (STOPP)/ Screening Tool to Alert doctors to Right Treatment (START), Fit fOR The Aged (FORTA) list are the most used both in clinic and research. Conflicting evidence from intervention studies shows a reduction in hospital admission, improved quality of life and drug-related issues.

**Conclusions:** Sparse and contrasting evidence shows a benefit, in terms of reduced drug inappropriateness after the application of appropriate prescription criteria and computerized decision support soft wares. Further studies should be carried out to confirm such benefits and to provide evidence regarding the potential positive effect on functional outcomes.

## S09.2

### **Prevalence of potentially inappropriate prescribing among older adults: a comparison of the Beers 2012 and Screening Tool of Older Person's Prescriptions (STOPP) criteria version**

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**Background:** There is not any study comparing the Beers 2012 and STOPP version 2 criteria nor reporting Prevalence of Potentially Inappropriate Prescribing (PIM) with STOPP version 2. We aimed to evaluate the prescriptions of patients admitted to geriatric outpatient clinic with these tools and document factors related to PIM use.

**Method:** Older patients (>65-years) admitted to outpatient clinic of a university hospital were retrospectively evaluated for PIM with Beers 2012 and STOPP version 2 criteria. Age, sex, chronic disease and drug numbers, functional, depression and nutritional statuses were studied with regression analysis as possible factors related to PIM.

**Results:** The study included 667 subjects (63.1% female, mean age: 77.6±6.3 years). Mean drug number was 6.1±3.4. PIM prevalence detected by STOPP version 2 was higher than that of the Beers 2012 criteria (39.1% vs 33.3%, respectively;  $p<0.001$ ;  $Z= -3.5$ ) with moderate agreement in between ( $\kappa=0.44$ ). Antipsychotics, over the counter vitamin/supplements, aspirin, selective-serotonin-reuptake-inhibitors and anticholinergics were the leading drug classes for PIM. Extend of polypharmacy [ $p<0.001$ , odds ratio (OR)= 1.29, 95% confidence interval (CI)= 1.20-1.38] was the most important variable related to PIM, along with multiple comorbidities ( $p=0.005$ , OR=1.16, 95% CI= 1.05-1.30), and functional dependency ( $p=0.009$ , OR= 0.90, 95% CI= 0.83-0.97).

**Conclusions:** Inappropriate prescription prevalence of ~40% by STOPP version 2 was similar to the global worldwide prevalence -yet at the upper end. STOPP version 2 was more succesfull than Beers 2012 to detect PIM. Patients with multiple drug use, multiple comorbidities, and more dependency were more likely to have PIM requiring special attention during prescription.

### S09.3

#### **The Norwegian General Practice Nursing Home Criteria (NORGE-P-NH) for potentially inappropriate medication use in nursing home residents. Delphi study**

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**Background and Aim:** Elderly nursing home residents are frequently frail, suffer from multimorbidity (commonly including dementia), and are exposed to polypharmacy. Due to lack of research evidence, clinical guidelines for this population often have to be consensus based. We aimed to develop a set of explicit criteria for pharmacologically inappropriate medication use in nursing home residents, in order to balance the need of medication versus increased risk of negative side-effects and interactions.

**Methods:** The authors developed 27 criteria based on the Norwegian General Practice (NORGE-P) criteria, literature and clinical experience. An expert panel was then invited to validate the clinical relevance of the proposed criteria and to suggest new criteria. Specialists in geriatrics or clinical pharmacology, nursing home physicians and five experienced pharmacists were contacted by mail (in all 241 persons). The 80 who accepted the invitation were invited to participate in a three-round, modified Delphi consensus process via survey software.

Main outcome measure was the panelists' evaluation of the clinical relevance of each suggested criterion. Relevance was scored on a digital Likert scale from 1 (no relevance) to 10 (highly relevant). In the first round panelists could also suggest new criteria to be included into the process. Experts' comments, and mean scores from first and second rounds were fed back in respectively second and third round. Out of the 80 experts, 65 participated in first round while 49 completed all three rounds.

**Results:** The degree of consensus increased by each round. No criterion was voted out. Suggestions from the panel led to the inclusion of seven additional criteria.

**Conclusions:** A clinically relevant list of 34 explicit criteria for potentially inappropriate medication use in nursing homes was developed through a three-round Web-based Delphi consensus process.

(Full paper including NorGeP-NH criteria: Scand J Prim Health Care 2015; 33: 134-141).

#### S09.4

### Updates from the FORTA-group - evaluation of a FORTA-based intervention in hospitalized elderly patients - The VALFORTA study

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**Background & Aim:** Fit for the aged (FORTA), a 4 categories covering classification system (A to D) applicable for all drugs and drug groups in the elderly, was originally developed in Germany and published in english 2009. The categories were evaluated by a Delphi process among experts in german-speaking countries in middle europe. To evaluate these categories in order to reduce polypharmacy-related problems in clinical practice a bicentral study was done implementing a FORTA-based intervention on geriatric hospital wards.

**Method:** Patients (>65 years, >3 drugs, or >60 years, >6 drugs) with 3 relevant diseases and hospitalization for >5 days were randomized. in the intervention, but not the control group, a FORTA team instructed ward physicians on FORTA. Quality of pharmacotherapy was assessed applying the FORTA-score: sum of medication errors classified as over-, under- and mistreatment at discharge. Consecutive patients were randomized to the intervention and control ward, outcome assessment was blinded.

**Results:** 409 patients (age 81.5y, 64% female,.mean hospitalization 17.4 days) were recruited. Overall, in the intervention group quality of pharmacotherapy improved significantly ( $p < 0.0001$ ) intervention vs control groups ( $2.7 \pm 2.25$  vs  $1 \pm 1.8$ , mean+SD, intergroup comparison of admission/discharge differences). Separate analysis of over- and undertreatment scores and use of A and D drugs also showed significant improvement (increase in A-drugs, decrease in D-drugs). FORTA-based intervention also reduced the number of adverse drug reactions (ADR) ( $p < 0.05$ , number-needed-to-treat 5).

**Conclusions:** Applying FORTA in the hospital setting leads to improvement of medication quality and may improve secondary clinical endpoints (e.g. ADR). The FORTA-group prepares further studies to evaluate possible benefits of FORTA based interventions in GP-offices caring for ambulatory elderly and in nursing homes.

## S09.5

### The PRIMA-eDS electronic decision support system – a multinational European project

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**Background and Aim:** The PRIMA-eDS study - Polypharmacy in chronic diseases: Reduction of Inappropriate Medication and Adverse drug events in elderly populations by electronic Decision Support - is a randomized controlled trial performed in four European countries (Austria, Germany, Italy, and United Kingdom). The trial intervention is an electronic decision support service, the Comprehensive Medication Review (CMR) tool. The aim is to develop and validate this tool for use by practicing physicians and nurses at the point of care.

**Methods:** The EBMeDS clinical decision support system developed by Duodecim Medical Publications Ltd. (DMP) ([www.ebmeds.org](http://www.ebmeds.org)) was used as the platform for the CMR tool. A set of systematic reviews was performed that led to the development of 46 recommendations covering 17 drug classes and 15 chronic conditions. Existing decision support rules on medication reduction and safety produced by DMP, and drug databases developed by Medbase Ltd. (Finland) were included in the tool. The study is funded by the European Union Seventh Framework Programme (FP7-Health-2012-Innovation-1-2.2.2.-2), grant agreement no 305388-2.

**Results:** The CMR tool (video: <http://bit.ly/1SuGYxi>) receives coded patient data from the case report form used in the study, and shows the results of the medication review after data entry has been completed. In clinical use outside and after the study, the tool receives patient data automatically from electronic health records that have integrated the EBMeDS system, or the user can enter the data by using a simple web form. A total of 30 171 messages can be triggered from the drug databases and decision support rules included in the PRIMA-eDS CMR tool.

**Conclusions:** The development of a CMR tool that analyzes individual patient data enables a review of the patient's medication during primary care patient encounters. We expect the tool to improve medication safety and avoid inappropriate prescribing.

### **KA03**

#### **Making healthcare affordable: revisiting and revising the case for general practice**

*Martin Marshall*

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Barbara Starfield made a convincing case that health care based on strong general practice delivers better outcomes at lower cost than ones that focus on specialist-oriented hospital care. Despite this evidence, in many countries general practice is under-valued, poorly-resourced and under threat. In this keynote presentation, Professor Martin Marshall will revisit the case for general practice and will examine how general practice may need to change in the future if it is to retain its central role for patients, communities and health systems.

## **S10**

### **Organizing primary care to meet future challenges**

*Morten Charles*

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### **Macro-level: “Organizing the primary care sector”**

#### **Increasing needs and expectations - Challenges to the future primary care sector**

*Greg Irving, UK*

In my practice/backyard, we are going to address these challenges through...?

Parallel discussions (5 minutes)

#### **How do we meet the future challenges in my country?**

*Igor Svab, Slovenia and Robert Dijkstra, The Netherlands*

What can we learn from Slovenia and Holland in my country?

Parallel discussions (5 min)

#### **An emerging future model for general practice.**

*Martin Marshall, UK*

can we make Prof. Marshall's model possible?

Parallel discussions (5 min)

Questions to the speakers.

## **S10.1**

### **Increasing needs and expectations - challenges to the future primary care sector**

*Greg Irving*

*University of Cambridge School of Clinical Medicine, Department of Public Health and Primary Care, Cambridge, UK*

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Across Europe we are now face with unprecedented levels of multimorbidity, increased clinical complexity and rising patient demand. As GPs we are working in a system of industrialised practice that measures efficiency as throughput, process, and the immediate satisfaction of wants and needs. At the same time a recent Commonwealth Fund report showed that UK GPs are amongst the most stressed in the developed world with the majority of GPs dissatisfied with the amount of time they spend with each patient. The UK target of the 10 minute consultation was proposed back in 1973 as the first step towards creating the sort of care we would expect for ourselves. Drawing on the best available evidence I will examine whether the time GPs across Europe currently spend with patients is sufficient to meet patient need.

## **S10.2**

### **Future challenges for family medicine in Slovenia**

*Igor Svab*

*University of Ljubljana, Medical Faculty, Department of Family Medicine, Ljubljana, Slovenia*

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Slovenia has a tradition of a relatively well organised primary care where family medicine plays an important role. It is obligatory to be a specialist if one wants to work independently, the specialty training lasts for 4 years. Family medicine is also firmly established at both medical faculties. One of the recent successes is the project of strengthening team work by introducing nurse practitioners into family medicine teams. Nevertheless, important challenges lie ahead. One of them is the constant struggle to work with policymakers in partnership, which is a constant nightmare. The motivations of a scientific discipline and policymakers are quite different and it is difficult to negotiate them. The second challenge is to incorporate all the new scientific developments in family medicine practice in an organised way. And the third challenge is to keep the physicians happy with their work which then results in delivering better services and attracts new candidates to the profession. During the workshop we will hopefully have time to discuss these challenges from an international perspective.

### **S10.3**

#### **How to preserve the core values of family medicine in a market model society?**

*Robert Dijkstra*

*Dutch College of General Practitioners, Utrecht, The Netherlands*

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In this presentation, Rob Dijkstra, president of the Dutch college of General Practitioners will present the vision 2022 that was written by the college and highlight our progress during the past few years and challenges for GPs in The Netherlands for the coming years. In addition our core values: personalised care, continuity of care and generalism will be discussed, because they may be threatened by the influence of Government and insurance companies on their own perspective of the quality of care, focusing on quality indicators and chronic care. In 2015 a small group of Dutch GPs started a campaign on their own, that became the start of a national revolution. The influence of this initiative on Dutch family health care will be presented.

## **S10.4**

### **An emerging future model for general practice**

*Martin Marshal*

*Professor of Healthcare Improvement, University College London, UK*

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In this presentation, Professor Martin Marshall from University College London, UK, will build on the ideas presented in his key note presentation, highlighting how general practice needs to change in order to continue to provide high value care for patients, communities and health systems. He will describe a potential future model of general practice which maintains the strengths of personal and local care but also utilises the benefits associated with larger scale organisations. In addition, he will consider the challenges facing general practice as it assumes greater responsibility for the functioning of the wider health system and for dealing with social determinants of health.

## S11

### **Did the health care reforms make health care affordable? Experiments of different countries**

*Azize Dilek Güldal(1), Mladenka Keglevic(2), Niels Kristian Kjær(3), Okay Basak(4)*

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**Background and Aim:** Health care reforms have been conducted since late 1980's around the Europe. Many countries reviewed their health care systems from the aspects of financing, organizing and delivering health care in some extend under the pressure of growing costs. The goals of reforms were not only short-term savings to public budgets, but also to promote health and to generate health gain for the entire population, resulting to decrease in health inequalities.

Arguments about the impact of specific cost containment measures on equity and health status have been raised in a number of countries. A substantial portion of the health reform discussion revolved around the two concepts: solidarity and cost containment. Some health care professionals believed that cost containment inherently and necessarily damage solidarity. Alternatively, some economists believed that increased efficiency and effectiveness in the use of insufficient health sector resources essential to preserving solidarity. So many participants of this conference are witnesses of this transition period and we have live experiences and data now to discuss the results of health care reforms around the Europe.

**Method:** Symposium will be conducted. Consequences of health care reforms in different health care countries will be discussed. Presentations will review the health care reforms from three aspects: health expenditures, health outcomes, health professionals working conditions.

1. The rationale of the health care reforms (10 min)
2. Experiences of Croatia (15 min)
3. Experiences of Turkey (15 min)
4. Experiences of Nordick countries (15 min)
5. Discussion (20 min)

**Results:** This symposia will give a chance to discuss different consequences of health care reforms.

## W23

**How to improve research collaboration in general practice among European countries?** *Caroline Huas(1,2,3), M Muñoz(1,4), C Collins(1,5), E Hummers-Pradier(1,6), P Torza(1,7), Esperanza Diaz(1,8), D Petek(9)*

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**Background:** Promoting the implementation of collaborative research studies in General Practice is among the key objectives of the European General Practice Research Network (EGPRN), the research network of WONCA Europe. Significant differences among European countries exist in terms of participation in large European studies; the EGPRN considers that efforts to reduce this gap desirable.

“Actions to bridge the divide in European health research and innovation” is a recent call by Horizon 2020. To be eligible, a project needs partners from both countries with a consolidated research background and those less experienced in research. While preparing this proposal, the EGPRN has gathered information regarding concrete measures for tackling structural barriers to health research and innovation in general practice, including those related to capacity, skills, policy, regulatory environment, and economic and socio-cultural factors from over 20 countries in Europe.

**Aim:** To discuss the process of building up collaborative research projects in general practice including countries at different stages in research: what works and what is missing?

**Methods:** Discussion with audience

- Collection of participants' experiences in collaborative international research
- for experienced countries: how do they think that international research collaboration may contribute to reduce the research gap between countries and what can they do about it?
- for countries with less experience in international research collaboration: what barriers do they have to cope with and what do they think could be elements for facilitating their participation?
- The debate will thereafter be organized using participatory learning techniques according to the themes of the aforementioned call into capacity, skills, policy, regulatory environment, and economic and socio-cultural factors.

**Results:** To increase our understanding of strategies and concrete measures to reduce the research gap in general practice among European countries.

**S12**

**EPCCS State of the Science Workshop Symposium**

**What should we know on thromboembolic risk and anticoagulation?**

*Richard Hobbs(1), Geert-Jan Geersing(2), David Fitzmaurice(3), Carlos Brotons-Cuixart(4)*

*(1) University of Oxford, Nuffield Department of Primary Care Health Sciences, Oxford, UK*

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Atrial fibrillation (AF) is the commonest arrhythmia and associated with high risk of embolic stroke (20% of strokes), which anticoagulation will reduce by about two-thirds. Venous thromboembolism (VTE) is the third most common CV event (after CHD and stroke), and is largely preventable in provoked VTE but often under-treated in unprovoked disease. Earlier diagnosis and better treatment of both VTE and AF would have major public health impact

**Methods:** The prevalence of AF in UK primary care is 1.7% in those over 45, ranging from 1% in the 55-64 year olds, 1.5% in ages 65-74, 8% in ages 76-84, and 12% over 85. AF stroke prevention trials show that anticoagulation with warfarin is significantly more effective than aspirin in prevention of stroke in AF, particularly in those over the age of 75. Primary care studies have validated the best screening strategies for AF. Newer novel oral anticoagulants do not require any INR monitoring, and are at least as effective and are safer than warfarin. Similar data exist on the best diagnostic strategies for VTE, using a combination of a validated clinical decision rule (the Wells Score) and ultrasound imaging, and cost effective treatment options.

**Results & Conclusions:** Plenary sessions will summarise the current evidence base by leading primary care researchers in atrial fibrillation, VTE, and anticoagulation, will further identify uncertainties in the evidence base, and raise areas for debate. The plenary debate session will encourage practitioner contributions to focus the panel response to the audience participation.

**Why is atrial fibrillation important and what reduces risk: a quick update 15 mins**

*Prof Richard Hobbs, UK*

**Suspected pulmonary embolism: what's new in VTE management guidelines? 25 mins**

*Prof David Fitzmaurice, Birmingham, UK*

**Practical cases discussion and Q&A 20 mins**

*Dr Carlos Brotons, Spain and speakers*

## **S12.1**

### **Why is atrial fibrillation important and what reduces risk: a quick update**

*Richard Hobbs*

*University of Oxford, Nuffield Department of Primary Care Health Sciences, Oxford, UK*

*Corresponding author: Professor Richard Hobbs, Oxford University, Nuffield Department Of Primary Care Health Sciences, Oxford, UK. E-mail: [Richard.Hobbs@phc.ox.ac.uk](mailto:Richard.Hobbs@phc.ox.ac.uk)*

Abstract not available.

## **S12.2**

### **Suspected pulmonary embolism: what's new in VTE management guidelines?**

*David Fitzmaurice*

*University of Birmingham, Institute of Applied Health Research, Department of Primary Care Clinical Sciences, Birmingham, UK*

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Abstract not available.

### **S12.3**

#### **Practical cases discussion and Q&A**

*Carlos Brotons-Cuixart*

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*cbrotons@eapsardenya.cat*

Management of typical AF patients with other chronic conditions such as renal impairment, or who require surgical procedures or switching between anticoagulants will be presented and discussed.

## W24

### **A WHO initiative - 'Engaging for effective communication, collaboration and partnership between health professionals and patients: A path to future consultations'**

*Nittita Prasopa-Plaizier, Felicity Pocklington, Katthyana Aparicio, Hernan Montenegro, Shannon Barkley, Ed Kelley*

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**Introduction:** Consultation is the vital process for establishing health issues, explaining care options, identifying an effective and suitable care plan, and monitoring the progress of the patient. Effective consultation requires effective communication and collaboration between the health-care providers and the patient. Empowered, knowledgeable, responsive and collaborative patients and family members can hugely contribute to effective communication and quality consultation. If engaged and empowered the patient and family are more likely to access relevant health information, seek health care and services appropriately and better provide personal information. Their collaboration can help health professionals in timely diagnosis and treatment of illnesses as well as timely detection and prevention of communicable diseases. Vice versa, trained and skilled health-care providers are able to better engage patients, ask questions in a culturally and socially sensitive manner, to collect data on the patient experience and protect patient's privacy. This will help establish trust between the patients and health professionals, increasing the likelihood of a patient to access health services.

**Workshop Objectives:** To engage the participants in a discussion on the importance of engaging and empowering patients and health-care providers in future consultations. This includes exploring practical approaches to strengthen the capacity of patients and the families as well as health professionals for effective communication that promotes mutual trust and respect in consultations.

**Method:** The workshop will consist of scene setting presentations of key concepts, strategies and followed by an interactive brainstorming session to explore practices, approaches and enabling factors of effective engagement and empowerment for future consultations.

#### **Results and Conclusions:**

- Increased awareness about patient, family and community engagement in primary care, especially on patient-provider interactions for medical consultations;
- Identified practical approaches to strengthen patient-provider skills, including communication for effective consultation;
- Identified opportunities where patients and families can contribute to quality primary care services.

## OP14.1

### **Inappropriateness of antibiotic prescription in respiratory tract infections in Spain**

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**Background & Aim:** Antibiotic overprescribing for respiratory tract infections (RTI) has been widely reported in Europe, without really authenticating inappropriate prescription, since information on specific diagnoses, patient characteristics and disease severity is not usually available in the studies performed. This study was aimed at evaluating the inappropriate antibiotic prescribing for RTIs.

**Method:** Observational study carried out in eight Autonomous Communities. GPs were asked to register all patients with RTIs during 15 working days from January to March 2015. Registration was performed according to the Audit Project Odense method by means of a 47-item chart including age, gender, duration of symptoms, signs and symptoms, infection severity, use of rapid tests (StrepA, C-reactive protein, pulse oxymetry, X-ray), diagnosis, treatment, associated comorbidities, demand for antibiotic, and referral to hospital. All this information was compared to the updated Spanish prescribing guidelines (2015) for cold/influenza, acute otitis media, sinusitis, pharyngitis (including tonsillitis), acute bronchitis, exacerbations of chronic bronchitis or COPD, and pneumonia. These guidelines consider three categories of patients depending on whether patients should be always treated, might be treated or should not be treated with antibiotics. Levels of overprescribing and underprescribing were determined.

**Results:** A total of 248 GPs collected 11,451 RTIs. Antibiotics were prescribed in 3,098 cases (26.9%). Of these prescriptions, 1,665 infections (53.7%) were not indicated by the guidelines. Out of the 8,428 patients in whom antibiotics were not given, 84 should have been treated with these drugs (1%). Patients should have been always treated, might have been treated and should have not been treated in 7.2%, 9% and 83.9% respectively. Relative overprescribing was highest for acute bronchitis and pharyngitis, with 587 and 481 cases respectively (64.2%).

**Conclusions:** Awareness of indications and patient groups spurring on antibiotic overprescribing can help in the development of targeted strategies to improve GPs' prescribing routines for RTIs.

## OP14.2

### **Reimbursement restriction for proton pump inhibitors in patients with an increased risk of gastric complications**

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**Background and Aim:** Reimbursement of proton pump inhibitors (PPIs) in the Netherlands is restricted since January 2012. Instead of full reimbursement, PPIs are only reimbursed when a patient needs them for a period longer than six months. However, the first prescription is never reimbursed. Health care providers as well as the political arena raised the question whether patients starting with NSAID or aspirin with an increased risk of gastric complications would avoid to start PPI treatment due to the additional cost for preventing a possible future problem.

We evaluated the effects of a reimbursement restriction of PPIs for patients with an increased risk of gastric complications who started using a NSAID or aspirin.

**Method:** We studied the incidence of PPI use in patients with increased risk of gastric complications who started NSAID/aspirin treatment in the two years before and two years after the introduction of the reimbursement restriction. Data were used from a large population based primary care database. Impact of age and social economic status was taken into account.

**Results:** The overall use of PPIs in patients with high risk of gastric complications who started NSAID/aspirin increased from 65% in 2010 to 74% between 2011-2013. A decrease of 10% in use of PPIs was found during the first months after the introduction of the new rule(2012). Yet, such a decline was also seen during the years when PPIs were completely reimbursed. After the first months, the percentage of users returned to the usual level even showing a small increase. No differences were found for different age groups or for patients with a high or low social economic status over time.

**Conclusion:** Reimbursement restriction of PPIs did not decrease PPI use among patients with an increased risk of gastric complications who started with NSAIDs or aspirin.

### OP14.3

#### Primary day care antibiotics prescribing and out-of-hours care consumption

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**Background & Aim:** Restrictive antibiotics prescribing in primary care during office hours may lead to increased workload after hours. Therefore, we studied the extent to which patients with an upper respiratory tract infection (URTI) who consulted their GP and did not get an antibiotics prescription contacted the out-of-hours services afterwards, within the same disease episode. In addition, we studied whether restrictive prescribing during office hours can explain the GP practice variation in out-of-hours consultations for URTI.

**Method:** Patient level data from electronic health records from general practitioners were linked to data from electronic health records of the primary out-of-hours services (OOH) participating in the NIVEL Primary Care Database. This yielded linked data on 417,041 patients from 102 GP practices and 18 out-of-hours services in the Netherlands of whom 38,579 patients (12,266 0-12 year olds and 26,313 aged 13 years or older) had at least one episode of URTI in 2013.

**Results:** Preliminary analyses showed that 3.4% of the 0-12 year olds who consulted their GP during office hours also contacted an OOH within the same disease episode. Whether or not the GP prescribed antibiotics did not make a difference (4.3% vs 3.1%). Almost 1% of URTI patients  $\rightarrow$ >13 contacted the OOH after consulting a GP during day care. Again, there was no difference between patients with and without antibiotics prescriptions during office hours (0.9% vs 0.8%). In addition, lower antibiotics prescribing rates of GPs in daycare were not associated with number of OOH contacts for URTI.

**Conclusions:** Our results suggest that restrictive antibiotics prescribing during office hours does not invoke additional consultations after hours. However, the number of out-of-hours consultations for URTI related complaints varied greatly between day care GP practices, suggesting that other factors than antibiotics prescribing may be involved.

#### **OP14.4**

#### **Drug Utilization Without Consulting A Doctor in Edirne: A Population Study**

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**Aim:** We aimed to determine the drug utilization of patients without consulting a doctor in Edirne. **Methods:** Out of 6133 patients over 18 years of age admitted to 19 Family Health Centers located in the city center, 36.8% (n=1781) agreed to participate. Patients with a communication problem have been excluded. A questionnaire prepared by the researchers has been filled out face-to-face.

**Results:** According to patients' responses, 62.5% (n=1113) of patients did not use the drug without consulting a doctor, while 37.5% of them did (n=668). There was no significant difference between genders. Students, high-income group and master/doctoral graduates had the highest proportion of using medications. For the reason of using the drugs without consulting (n=668), 53.3% (n=356) stated that "used a previously successful drug", 25.6% (n=171) "emergency use" and 10.8% (n=72) "drug is cheaper than consultation". Of these drugs, 88.5% (n=591) were pain killers, 51.5% (n=344) cold medicines and 12.7% (n=85) were vitamins.

**Conclusion:** An important part of patients had irrational drug use behaviors in our study. The use of drugs without the advice of doctor and over-the-counter drugs are significant problems resulting in irrational drug use along with misuse of prescribed drugs with inappropriate duration, frequency and doses. Doctors' instructions to patients about their condition and the drugs they prescribe will increase patient compliance and treatment efficacy. Pharmacists may also help to decrease the misuse of the drugs with informing the patients on drug usage, dosage and period. People should be informed about the rational drug use by means of communication tools such as newspapers, magazines, television, internet, brochures. Additionally, it will be an important approach to include drug use education into school curriculum as a part of health education in early years.

## OP14.5

### **Consumption of statins and cardiovascular mortality in Croatia and four neighbouring countries: preliminary results**

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**Background and Aim:** Increasing rate in consumption of statins in the last 20 years is almost unparalleled in comparison with other drug classes representing as such an exceptional phenomenon. That increase was viewed from beneficial side due to their role in reducing coronary heart disease mortality in secondary prevention and among high risk individuals. The objective was to study the relationship between trends of consumption of statins and age standardized rates of total cardiovascular mortality, as well as specific mortality from coronary heart disease and cerebrovascular disease, in Croatia and four neighbouring countries.

**Methods:** Longitudinal observational study based on routinely collected data on the use of statins (ATC group C10AA) and mortality. Data were obtained from annual reports of national drug regulatory agencies and health-service yearbooks from Croatia, Slovenia, Hungary, Czech Republic and Austria, from 2000 – 2013. Mortality rates and statin utilization trends were evaluated, firstly by descriptive statistic and than by log-linear regression model.

**Preliminary Results:** The utilization of statins between 2000 – 2013 increased in all five countries, but at different rates: 213% in Croatia (between 2004 – 2011), 445% in Slovenia, 3000% in Hungary, 2800% in Czech Republic, and 14,8% in Austria (between 2011 and 2013). Total cardiovascular mortality for the age 0 – 64 years declined in the same period at much lower rates: 36,01% in Croatia, 43,07% in Slovenia, 29,82% in Hungary, 33,20% in Czech Republic and 44,22% in Austria, or at annual rates: 3%, 3,6%, 2,5%, 2,7% and 3,7%.

**Conclusion:** The trends of utilization of statins in all five countries showed almost exponential pattern, while standardized cardiovascular mortality rates decreased of only couple of percent annually. In the next phases of data analysis, the association of those trends will be determined.

### **S13.1**

#### **How to deal with alcohol in family medicine consultation?**

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**Background & Aim:** alcohol consumption is one of the most common problems in family medicine consultation. Addressing this problem of our patients on time, it can tackle future problems both interpersonal relationships and reduce cardiovascular risk.

**Method:** to create a group of about 20 people which will be given guidelines and then make a rollplaying in pairs or in groups of 5.

**Results:** it intends to acquire transferable skills in the management of patients with alcohol abuse.

**Conclusions:** convey the importance of drinking and prevention systematically in health care.

## S13.2

### **Communication between GPs and patients with mental disorders: a piece of the puzzle for integration mental health into primary care**

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**Objectives:** The workshop aims to raise awareness of the importance of active involvement of GPs in providing mental health services. The workshop is meant to highlight the strengths and difficulties in the communication between GPs and patients with mental health disorders and to find suited solution in order to better integrate mental health into primary care and to improve mental health outcomes and costs.

**Methods and Results:** Presenters: Irina Angela RADU, Ileana Anca Efrim Chairperson: Ileana Anca Efrim  
The main pillars of discussion will be:

- 1) Reviewing and describing the role of GPs in prevention of mental health by identifying links between mental disorders and exposure to risk factors during the life span and the role of GPs in promotion of the protective measures for mental health;
- 2) Reviewing and describing the role of GPs in early diagnose of mental disorders by identifying links between mental disorders and other communicable/non-communicable diseases;
- 3) Highlighting the role of the communication between GPs and their patients with mental disorders as one of the most powerful tool;
- 4) Sharing the Romanian experience. Conclusions GPs can better integrate mental health disorders that result in high morbidity and mortality into primary care by implementing suited solution for a better communication with the patients.

#### **Scientific References:**

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2. Integrating mental health into primary care: a global perspective. World Health Organization and World Organization of Family Doctors (WONCA) 2008.

### **S13.3**

#### **Why addiction is not a disease - new pathways to (multidisciplinary) treat and counsel addicts in primary care**

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**Aim:** The concept of "addiction is a chronic disease" bears a lot of pessimistic views and hence, pessimistic goals by GPs. This Symposium would like to give you some clues to change that view and hinges to hold for change.

**Method:** 4 speakers, 3 GPs and 1 psychologist, will present:

1. what is addiction? anatomy and physiology in brief
2. why is it not a disease? semantics or biological evidence?
3. why is it a multidisciplinary task in an ambulatory setting? French evidence
4. walking in their shoes: on cues, attentional bias, the now appeal, ego fatigue: Danish inspiration
5. changing the perspective of treatment: an expert view

**Facts:** Each presenter will produce some facts that each GP will probably recognise. Each presenter will propose a few questions to initiate a debate with the audience

**Conclusion:** After this Symposium, you will:

1. have another view on the problem of addiction
2. have an update on the anatomy, physiology and future treatment and counselling options
3. have a few new hinges to work with your addicted patients in a more optimistic way
4. be happy to have attended this symposium!

## **OP15.1**

### **Patient with abuse warning symptoms in primary care – are Polish physicians ready to react?**

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**Background & Aim:** Domestic violence (DV) is a major public health problem associated with negative health consequences for victims. Family doctors are in a prime position to both detect and help those patients. Only 0,3% of domestic violence cases in Poland are identified and reported by physicians. The objective of the study was to analyze the frequency of asking questions about the possibility of DV when seeing patients with abuse warnings symptoms and to identify the perceived barriers to react.

**Method:** A cross-sectional survey was carried out among 100 randomly selected doctors in Poland. The study instrument was a translated and adapted for use in Poland version of developed and validated in the United States questionnaire PREMIS - Physician Readiness to Manage Intimate Partner Violence Survey. The anonymous questionnaire included five sections: respondents' characteristics, perceived readiness and knowledge, practical issues, actual knowledge and opinions. Descriptive statistics and Chi-square test were used for statistical analysis.

**Results:** The sample included 54 primary care physicians. Most of the respondents (65%) were uncertain about their skills to recognize violence-associated injuries. Over one third of respondents (35%) never asked about the possibility of DV when seeing patients with depression or anxiety. The majority of the study participants (72%) felt being not able to gather the necessary information to identify abuse as the underlying cause of patient illnesses. Only 13% of the physicians admitted having screening methods for DV. The respondents declared that the most common declared barriers to screening for DV cases were lack of time and lack of knowledge, how to manage the case.

**Conclusions:** Domestic violence recognition in primary care in Poland seems to be insufficient. Further efforts should be undertaken to escalate level of preparedness of general practitioners to manage DV in everyday medical practice.

## OP15.2

### Follow-up of young patients after acute poisoning by substances of abuse: a comparative cohort study at an emergency outpatient clinic

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**Background and Aim:** Young patients with acute poisoning by substances of abuse have increased mortality rates in the long term. Still, many are discharged without follow-up. In 2010, the Oslo Accident and Emergency Outpatient Clinic (OAEOC) implemented an intervention program for patients under the age of 23 presenting with acute poisoning by substances of abuse. The intervention was a brief motivational interview with a social worker before discharge, followed by a telephone consultation. Patients in need of further follow-up were identified and referred.

Our aim was to study effects of the intervention program on referrals to follow-up and repetition rates of acute poisoning.

**Method:** Comparative cohorts were derived from studies at the OAEOC in 2003, 2008 and 2012. Two age groups of patients presenting with acute poisoning with substances of abuse were included: 16-22 years and 23-27 years. Patients in the pre-intervention cohorts of 2003 and 2008 were compared with patients of the same age in the post-intervention cohort of 2012. Repetition rates were estimated using survival analysis. In total, 1323 patients were included; 719 (54%) patients were male; the main toxic agent was ethanol in 823 (62%) cases and opioids in 215 (16%).

**Results:** In the younger groups referrals to follow-up increased from 86/317 (27%) to 156/366 (43%) ( $p < 0.001$ ) after the implementation of the program. Among the older patients, not included in the program, there was no significant change in referrals. There was no change in the repetition rate in either age group. The program established contact with 225/366 (61%) of the eligible patients.

**Conclusion:** More patients were referred to follow-up after the intervention. We expect this to have a beneficial effect on their substance use and reduce excess morbidity and mortality in the long term. There was no change in the repetition rate.

### **OP15.3**

Consumption of anti-depressive drugs in primary care in Denmark, Sweden and Norway – a register based comparative study.

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**Background & Aim:** The use of anti-depressants (ADs) has increased remarkably in the Western countries the last decades. Most AD prescriptions are done by GPs. The relevance of the treatment has been subject to discussion among GPs and psychiatrists. It is interesting for the discussion to compare prescription patterns between countries. The aim of this study was to describe the consumption of ADs prescribed in primary care in three Nordic countries in relation to gender, age, type of AD and geography.

**Method:** The data on redeemed prescriptions was drawn from the governmental prescription databases in Denmark(DK), Sweden(S) and Norway(N). ADs prescribed to in-patients in hospitals were not included.

**Results:** The one-year prevalence of treatment in the populations in 2014 varied considerably from 6.2% (N) over 7.5% (DK) to 9.1% (S). The development in sales 2010-14 was +2% (N), -11% (DK) and +13% (S). The gender difference was substantial: 92% (N), 73% (DK) and 93% (S) more females than males were treated with ADs. In all countries, the prevalence was increasing with age in the age group 15-60, levelling for people in their sixties, and then increasing steeply, reaching 13.9% (N) and 22,5% (DK) in the age group 85-89. In Sweden, 28.5% in the age group +85 redeemed a prescription. SSRI's were the most frequently used ADs: 59% (N) 61% (DK) and 68% (S). Geographically the sales were lower for the younger age groups in the regions of the capitals than in other regions.

**Conclusions:** The level and development of consumption of ADs showed quite different patterns in the Nordic countries, which in many respects otherwise are comparable in relation to standard of living and health care. Age, gender and geography were strong determinants for sales in all countries. The results call for clinical research in the subject.

## OP15.4

### **Children of long-term sick-listed parents in primary care: an explorative study of their perceived health and needs of care intervention**

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**Background & Aim:** In Sweden, parental long-term sick-listing has increased. The parent's illness also impacts on the children's living conditions. For primary care to provide suitable support to long-term sick listed patients who are parents, further knowledge about their children's life situation and needs is required. The Swedish health care system is since 2010 lawfully obligated to provide these children with information, advice and support regarding their parent's illness. How this law should be implemented is yet to be examined. This study has explored how children of long-term sick parents feel and how they perceive their parent's illness, whether or not the children received any support related to their parent's illness and what kind of support they wanted to be offered from primary care.

**Method:** The children's parents were patients at Caphio primary care Farsta, a suburb of Stockholm and they had been on sick leave  $\geq 90$  days. Six children aged between 11 and 16 years participated in the study. Semi-structured interviews were used and ended after saturation. The interviews were analyzed using qualitative content analysis.

**Results:** Living with a sick parent restricted the children's daily lives. They were worried about their parents and felt a great responsibility, both in a practical and emotional sense. All the children had limited information about their parent's illness and none of the children had previously received any support from primary care.

**Conclusion:** Long-term sick leave and illness makes parenting more complicated and limits the living space for both parent and child. The implication is that there is a need to support parenting within this group, mainly in helping them communicate with the children about their illness. Primary care has a responsibility towards these children that has not been fulfilled.

## OP15.5

### The effect of antenatal breastfeeding education on maternal and infant health

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**Background & Aim:** WHO indicates only breastfeeding is necessary and sufficient for infants in the first six months, and it should be given onwards with the additional food from the 6th month up to 2 years. Unfortunately, breastfeeding in Turkey is still not at the desired level. It has positive effect not only for infant health but also for mother health. We aimed to investigate the effect of antenatal breastfeeding education on maternal and infant health.

**Methods:** Ninety pregnant that admitted for antenatal care January-March 2015 were randomly divided in two groups. Breastfeeding education was given face-to-face to the intervention group (IG). Knowledge level of mothers before and after education was determined via a questionnaire related with breast milk and breastfeeding. Breastfeeding behaviour was evaluated by LATCH on the postpartum 5th day. A questionnaire was prepared to assess the baby's health in the first months and Edinburgh Postpartum Depression Scale was used to assess the mother's mental health at 6 weeks after birth.

**Results:** A significant increase in the level of knowledge was observed in the IG (n=42) after breastfeeding education. The mean score of LATCH in IG was  $8.7 \pm 1$ ;  $7.9 \pm 1.5$  in control group ( $p=0.02$ ). IG was found to breastfeed more often control group (CG). 81% of infants of the IG and 52% of the CG were observed that they fed only breast milk in the first month. CG had higher risk for depression. Infantile colic was more frequent with high risk of postpartum depression in the CG.

**Conclusions:** Antenatal breastfeeding education has positive effects on maternal mental health and infantile colic. It provided an increase in the level of knowledge of mothers about breastfeeding. Also more successful breastfeeding behaviour was observed in mothers. We believe that family physicians should support pregnant by antenatal breastfeeding education.

**W25**

**The Opinion Piece**

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The author has written opinion pieces for many publications, including The Irish Times, the BMJ, CMAJ and the Irish Medical independent. He is a GP and Pa lecturer in General Practice. The Aim is to facilitate, encourage and help group members in the art of writing a 700 to 800 piece for publication. The method is an interactive workshop exploring themes of importance to the group, in an enjoyable and informative workshop which will give them the skills to write themselves. There will be an emphasis on creativity.

## W26

### **Healthy ageing: how can family doctors apply motivational interviewing to change behaviour**

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**Background:** The increasing age average of our patients brings a challenge to family practitioners, shifting focus from acute diseases onto long-term conditions, where outcomes are greatly affected by lifestyle choices. Motivational interviewing (MI) is a collaborative, person-centered form of guiding to elicit and strengthen motivation for change (Miller & Rollnick, 2009). It consists on a technique that has shown success in fostering change towards healthier behaviours by eliciting internal motivation and adherence to treatment. MI is a cost-effective tool that family doctors can apply in their daily consultations to improve their patient's health and lifetime expectancy.

#### **Aim:**

- Acknowledge the importance and advantages of using MI at consultations;
- Reflect and identify barriers in applying MI at the daily practice and how to surpass those obstacles;
- Establish the use of MI as a cornerstone of preventive medicine.

**Methods:** The session will start with a brief presentation of the intervenients and then proceed to the exposition of contents:

- Define the workshop objectives and purpose (5minutes);
- Exposition about MI, its definition and steps (15 minutes);
- Examples of MI and personal reflexion (15 minutes)
- Division into 3 groups with 3 daily clinical situations (obesity, tobacco smoking, stroke). Each discussion group will have a facilitator to engage the group into sharing thoughts/opinions on each particular scenario.

#### **Brainstorming/Roleplay:**

Those ideas will be integrated and adjusted to the MI technique in each discussion group (15 minutes)

Discussion about techniques/difficulties (5 minutes)

Review strategies and present keypoints/ take-home messages (5 minutes)

**Discussion:** The workshop will promote a dynamic interaction between peers, allowing them to share their experiences, their obstacles but also their success in applying MI. It is expected that by the end, participants feel comfortable and confident to use MI with their patients to promote change and guidance to a healthier aging process.

## W27

### antibiotic resistance?

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**Background:** In 2014, the World Health Organization published their first global report on antibiotic resistance, predicting the coming of the “post antibiotic era” unless serious measures were taken to halt the emerging resistance patterns throughout Europe and the rest of the world.

Superbugs threaten to relegate us to our prior vulnerable state, where people died of mundane infections.

Given this imminent public health threat, there is an imperative to promote more appropriate antibiotic use among doctors, especially GPs, who prescribe most of the antibiotics used.

**Aim:** The aim of this workshop is to raise awareness on this topic and to exchange and discuss the initiatives to combat antibiotic resistance in European countries. We hope to create a European network between GP-trainees, First Fives and General Practitioners with an interest in the different aspects regarding the emerging resistance to antibiotics.

This workshop will address the following topics:

- What is the scale of the antibiotic resistance in different countries?
- What happens in different countries to manage this problem?
- Are guidelines on antibiotic stewardship and infection prevention available?
- What strategies are needed to improve prescribing behavior of antibiotics? What is meant by antibiotic stewardship?
- What other strategies are needed to combat this problem?

### Methods:

- Introduction and presentation of the most important topics of antibiotic resistance
- A short questionnaire about the main topics of antibiotic use and antibiotic resistance
- Discussion in small groups on the results of the questionnaire (importance of the topics, facilitators and barriers of implementation)
- Plenary feedback and discussion
- Announcement of an European network

**Results:** The participating GPs are aware of the scale of the problem of antibiotic resistance in their own and other European countries and they acknowledge the importance of reducing antibiotic use. GPs gain more knowledge about the ‘ins and outs’ of antimicrobial stewardship. GPs have ideas how their activities could be supported (e.g. participating in a European network, data management, audit and feedback, collaboration with patients, other healthcare professionals).

**Conclusions:** This workshop will discuss potential solutions to combat antibiotic resistance on a national and international level in daily practice.

**Public health focused model programme for organising primary care services***Magor Papp**National Institute For Health Development, Hungary*

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**Background:** Health 2020 the new World Health Organization European health policy framework and strategy indicates as one of its four priority areas ‘the strengthening of people-centred health systems along with public health capacity’. The primary care system, in addition to traditional patient care services, should focus on health promotion, disease prevention and health restoration within the affected community, as well as on the effective rehabilitation of chronically ill individuals.

**Method:** The Swiss-Hungarian Cooperation Programme entitled ‘Public Health Focused Model Programme for Organising Primary Care Services...’ launched in 2012 is a pilot programme targeting the foundation of the Hungarian primary health care reform that encourages an improvement in the general health status of the population. The intervention area of the Programme is in the two most disadvantaged regions of Hungary, where four general practitioners’ (GPs’) clusters based on six practices were established that cover about 40 000 persons, 30% of whom are of Roma ethnicity. Community-oriented health services are delivered by new health professionals (public health professionals, community nurses, physiotherapists, dieticians, health psychologists) and health mediators who are recruited from the Roma population. The work of health professionals and health mediators is organized by the public health coordinator.

**Results:** The new services provided by the GPs’ clusters are organized into the following units within the cluster: (a) health promotion activities in different settings, (b) health status assessment, (c) lifestyle counselling, (d) medical risk assessment and (e) coordinated actions to improve mother and child health. As a result of health status assessment, risk conditions, as well as previously unknown diseases have been identified, and preventive (health promotion, lifestyle counselling) or curative interventions (with rehabilitation focus) were introduced.

**Conclusions:** The programme targets to develop a community-oriented primary care with public health focus to improve primary care services on a national level.

W28

**Designing the perfect primary health care system - comparing international primary health care systems to decrease health inequalities**

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**Background and Aim:** Family physicians operate in primary health care systems that are organized in various ways in different countries. Using the device of asking participants to imagine the ideal Primary Health Care system, this workshop focuses on the strengths and weaknesses of different primary health care systems and encourages the participants to identify the features including structures, and policy settings of successful systems, especially from the perspective of decreasing inequalities in health.

**Method:** The workshop has three parts: first, the conveners will briefly present examples of primary health care systems. Participants will be provided with material identifying the key indicators of primary health care systems from a range of countries, and summaries of their strengths and weaknesses. The second part of the workshop comprises small group discussions, identifying the best features of different systems drawing on the evidence and participants' own experience. The groups will be presented with the following proposition: "You have the opportunity to participate in the planning and development of a Primary Health Care system in a country which has virtually no Primary Care in place, and in which General Practice is rudimentary or non-existent. With a particular emphasis on issues of equity, what would your recommended system look like?" The third part of the workshop the ideas of the participants will be gathered together to form conclusions of key strategies for primary health care systems improvement and equitable provision of health care to the population.

**Goals/Results:** The workshop aims at sharing and increasing participants' knowledge of different primary health care systems and will improve their skills at critically appraising the systems.

**Conclusions:** The workshop will conclude with ideas on how to improve primary health care systems to decrease inequalities in health. The participants interested in elaborating these ideas further will be invited to co-author an evaluation paper of primary health care systems.

## W29

### **Point of care ultrasonography (POC-US) in family medicine - present and perspectives**

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The point of Care Ultrasonography - performed by the clinician at the site of patient care, both in the medical office and at home, to guide the case management in the early diagnosis with targeted purpose. It represents basically, an extension and complement, to clinical examination of the physician to achieve a positive and differential diagnosis. POC-US is now a tool in development, who can complement physical examination of the family doctors, and can guide the case management to the bedridden patients. We need training and quality standards, to ensure us, that this will be done in a way with positive benefits for our patients, being useful, the implementation of ultrasound standards and practice guidelines to primary care level. It involves personal contact between doctor and patient at "bedside", it is a fast in real time method, repetitive and harmless but dependent on the experience and expertise of the examiner. A new opportunity for POC-US represents the application in primary care of the medical projects related to "telemedicine" connections among specialists and family doctors for enhanced patient management. New techniques for ultrasound diagnosis and follow-up of patients with acute or chronic diseases are a real challenge for primary care. The challenges are both the continuous need for training and acquiring new multidisciplinary skills and learning of information from other areas of science. Educational needs of GPs on new methods and technologies are increasing, but the resources and infrastructure are limited now. It is thus necessary, collaboration among family physicians trainers or academics, on the one hand, and to the other, of specialty physicians in the preparation and continuing medical education in family medicine. Early diagnosis can help to save many patients in primary care. Therefore, we will involve, to inform family physicians about the latest diagnostic and treatment protocols in clinical ultrasound.

## OP16.1

### **Necessity of improving lactating mothers` diet**

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Human milk`s composition can be influenced by the lactating women`s diet.

**Background & Aim:** Specific attention should be paid to maternal food sources that contain vitamins A, group B, C, and D, fatty acids and iodine, as the concentration of these nutrients in human milk are at least partially dependent on maternal diet.

Based on these assumptions we aimed to investigate the intake of macro- and micronutrients within lactating mothers in Romania (MAMA study). We selected a representative sample for urban area: 290 lactating women, with infants corresponding to number of births in the same area. The Family doctors collected data on the field between May-August 2015.

Methodology included 2 types of questionnaire:

- a face-to-face interview performed by family physicians to mothers covering frequency of consumption of major food groups;
- a food diary showing all food consumed by mothers during two non - consecutive days (self-registration, quantitative measurement for food cooked at home and labels for processed food).

**Results:** The study revealed a low consumption of fiber, vegetables and increased consumption of saturated fat of animal origin.

All the data from food diaries were transformed in macro- and micronutrients by a company specialised in nutrition.

The Institute of Medicine recommend intake of fiber for lactating women of 29 g per day. In the sample, the national average is 22.02 g (75% of RDA).

The average sodium consumption in the country is +146% vs. RDA.

Saturated fat represents 13.04% of calories compared to a maximum 10%. Polyunsaturated fats are present in a proportion of 5.42 % of calories (vs. 10% RDA).

Folic acid is only 32% of the RDA. Vitamin D has an average intake of 3.46 µg/zi (vs 23% RDA).

**Conclusion:** In Romania, lactating mothers diet supplementation with vitamin D, folic acid and PUFA is needed.

## OP16.2

### **Preschool children in the out-of-hours primary care services – a population-based study of factors related to calls considered irrelevant by GPs**

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**Background and Aim:** The out-of-hours primary care (OOH-PC) services are reserved for problems that cannot wait till office hours. Many of the OOH-PC contacts concern children under 5 years of age. Studies have shown that 50-76.6% of OOH calls are considered inappropriate or non-urgent, and could have waited till the next days office hours or handled by self-care. The aim was to identify factors associated with health problems considered non-severe by the parents that the GPs estimated should have been targeted to the patient's own GP within office hours instead of the OOH-PC.

**Method:** The study is based on data from a comprehensive cross-sectional survey within the OOH-PC in The Central Denmark Region in 2010-2011. GPs filled out electronic questionnaires in a 12 month period from May 2010.

Subsequently a questionnaire was sent to the registered patients. Descriptive analyses were performed and contacts considered non-severe by parents were analysed using general lineary regression for association between baseline factors and being considered an irrelevant contact for the OOH-PC.

**Results:** in total, 1,748 contacts with children were included, 522 telephone consultations and 1,226 face-to-face contacts. in 317 of these, the GPs assessed that the parents should have taken the child to the GP in daytime. Having contact during the first four opening hours of the OOH-PC were statistically significantly associated with GPs considering them irrelevant compared with night time and all other periods (adj. prevalence ratios (PR) 0.41-0.62 the first four opening hours being reference) irrespective of contact type. Additionally, a statistically significant association was also seen for face-to-face contacts involving symptom duration longer than 12 hours (PR>1.98).

**Conclusions:** The results may form a basis for targeted campaigns to the public about the optimal use of the OOH-PC and for further research into the citizens' motives for calling the OOH-PC.

### OP16.3

## Preventing obesity in children aged 0-5 years regarding the general childrens health programme in general practice. A Systematic Review

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**Background and Objectives:** Obesity among children has been described as the primary health problem in developed countries regarding childrens health(2,3). It has been argued, that interventions to prevent obesity should start early and even before birth (4,8).

The aim of this study was to 1.st: Review the available knowledge of managing the obesity challenge in General Practice in infants and pre-schoolers (0-5 years ), the harm of the interventions and cost-effectiveness, and 2.nd: Discuss focus-change regarding the general childrens health programme in general practice to prevent obesity among infants.

**Methods:** Litterature study. Systematic Mesh- search in Pubmed, Google, the Cochrane Library and related artickles. Keywords: "Obesity", "Infant", "Diet", "Physical Activity", "Sleep", "General Practitioner", "Primary Care", "Breast feeding", "BMI-z-score", "socio-economic status", "costs", "harm", "family approach", in mesh-terms. Filters: 0-5 years. A RCT on 5-10 years was included due to lack of relevant artickles . Trial-lenght: minimun 10 months.

**Results:** No available artchicles. Discussion Childhood Obesity is today the greatest healthproblem (2) with enormous health-expences (8) Early prevention, even before birth is evedent to prevent life-long consequences(1,2,6) Educating the parents pre- and post-gestational in healthy infant lifestyles reduces infant obesity significantly. (1,2, 5,6,7,9) Only one RCT was found regarding obesity prevention in schoolers in GP with expensive- and non-significant results(10). A setting with infants/preschoolers without settled lifestyle patterns and a solid education of the GP has not yet been trialed. Developing communication tools (6,7,8,) and infant health guidelines, GP might influence the families in early decission-making regarding life-style as primary part of the children health programme.

**Conclusions:** Further harm and cost-benefit research of early obesity interventions in a Scandinavian General-Practice-setting is necessary.

## **OP16.4**

### **PETALE®**, a detection software for hearing disorders screening in children, proof of concept

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**Background & Aim:** Hearing loss is the most common sensory impairment at birth and is a public health problem. The early management of hearing impairment conditions child's language acquisition and social integration. Our research aims at studying the feasibility of a test using a detection software for hearing disorders screening in children aged 9 to 36 months, in general practitioners' offices, in France.

**Method:** We developed a grounded theory method based on a qualitative study using two focus group interviews. Twelve volunteer general practitioners (GP) have been recruited to use the software and have been specifically trained for. The focus groups will take place in two waves and allow data saturation. T1 focus group will occur after 5 screenings with the tool and will aim at analyzing software integration in the GP's IT environment and screening feasibility during a consultation with a child. T2 focus group, after 10 uses of the software, will analyze routine implementation of the test. Data analysis will be based on double encoding and triangulation using N VIVO®.

**Results and Conclusion:** Study is still in process and results are expected in March 2016. Our research will show whether this software can be integrated in GP's routine practice. This work converges with the principle of "proof of concept" and will allow the researchers to identify improvements. In a second phase, a quantitative multisite research would allow to study the generalization of this tool.

## OP16.5

### **The background of the success of Turkey's struggle with tobacco use: a panoramic vision from 1990**

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**Background & Aim:** Using tobacco is one of the main risk factors for a number of chronic diseases. Despite this, it is common throughout the world. Last few decades, Turkey has been in front amongst a number of countries which have passed legislations such as restricting tobacco advertising, regulating who can buy tobacco products, and where people can or cannot smoke. Through those regulations and cooperation with nearly all level of governmental and social organizations, Turkey has achieved an admirable results in lowering tobacco use. In this review background of this success was evaluated.

**Method:** Original articles, studies, reports and governmental regulations related with tobacco use were searched. Data related with the effect on lowering tobacco use from 1990 to 2013 were analyzed. Tobacco use is measured mainly as grams per capita (+15).

**Results:** Tobacco use gradually increased until 1999, than had decreasing tendency till to 2009. Between 1999-2009 tobacco use lowered about 22%. Moreover, tobacco use decreased by 21% in following four years as a result of additional legislation passed in 2008. The reflection of these new legislations on social life and impact of tobacco use on economy became a determent factor for smokers. Additional legislations were carried out in 2008 that In most of the public places smoking banned and controlled. Later, all public places were included in no smoking areas. The implementation of all of those regulations were firmly controlled by the government. Strong public support, cooperation with organizations and universities facilitated the generalization and acceptance of these new regulations. Of course the support of WHO should not to be forgotten.

**Conclusions:** Tobacco use decreased significantly in Turkey especially from 2009 to 2013. Additional legislations gradually lowered the opportunity to smoke. Firm governmental regulations seem to be the main factor.

## W30

### Meeting the demands of universal coverage through a family centred approach: the case of primary health care services in Palestine

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**Background:** Since the Alma Ata declaration the Palestinian health system has adopted the principles of primary health care and made remarkable gains particularly in relation to maternal and child health services and controlling communicable diseases. The current system is unable to respond to the rights of clients to universal health coverage; complex political and social factors, an epidemiological transition of disease where Non Communicable Diseases are increasing, coupled with demographic changes of an aging population and a large youth segment. The health services within the United Nations Relief Works Agency for refugees (UNRWA) saw an opportunity to move their health system towards a family centered approach that optimizes efforts of the team and responds to the needs of clients in their right to continuity of care. **Method:** The stepped approach for providing family centered care was based on:

- Community participation to ensure understanding and support
- Multidisciplinary teams; reorienting teams towards a family centered approach and designating families to each team to be cared for across their life cycle
- “Task shifting” as a core principle; training and expanding roles of the team members to take on a holistic approach in managing the care of the families assigned to them.

#### **Results:**

- Increased patient and staff satisfaction
- Reduced patient load; allowing doctors to spend more time where needed
- Expose the staff to new principles in care; integration of mental health and child protection
- Rationalization of antibiotic use

**Conclusions:** The success of this effort has led to a snowballing effect; opening up the debate in Palestine with the Ministry of Health for a family centered approach across the primary health care services in general, debating family health vs family medicine. In collaboration with Global Doctors and Partners in Practice, we invite for sharing of experiences and current ways of adopting a Family Centered Approach.

## OP17.1

### **Effectiveness of a multi-faceted implementation strategy to increase usage of the diagnostic primary care guideline for deep venous thrombosis**

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**Background & Aim:** A clinical decision rule (CDR), combined with a negative D-dimer test can safely rule out deep venous thrombosis (DVT) in primary care patients. This diagnostic strategy is currently recommended by numerous guidelines, also in The Netherlands. Yet, uptake of the guideline by general practitioners (GPs) is low. Therefore, we wanted to evaluate a multi-faceted implementation strategy aimed at increasing usage of the guideline recommended CDR plus D-dimer test in primary care patients with suspected DVT.

**Method:** This multi-faceted implementation strategy was applied to 217 Dutch GPs (index group) and consisted of educational outreach visits, financial reimbursements and periodical newsletters. The implementation outcomes 'acceptability', 'feasibility', 'fidelity' and 'sustainability' were evaluated with an online questionnaire. Also, patient outcomes in the index group were compared with a control group of approximately 450 GPs using a parallel group design, and included the proportion of non-referred patients and the proportion of missed DVT cases in those not referred.

**Results:** 89 index GPs filled out the questionnaire (43%). Acceptability and feasibility of the guideline were high. Self-reported guideline use increased from 42% (before the study) to an expected continuation of use of 91% (expected sustainability). The educational outreach visits showed highest fidelity. 135 index group GPs included 619 analyzable patients; 336 (54%) were not referred, missing 6 (1.8% (95% CI 0.7% to 3.9%)) DVT cases. 32 GPs in the control group included 62 patients. of those, 31 (50%) were not referred, missing no DVT cases.

**Conclusions:** This multi-faceted implementation strategy aimed at increasing usage of a guideline recommended CDR and D-dimer test in primary care patients with suspected DVT was successful, resulting in high acceptability, feasibility and expected sustainability, and safely reduced patient referral to secondary care.

## OP17.2

### **Appropriate diagnostic imaging - assessment of the quality of referrals from general practice**

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**Background and Aim:** Diagnostic imaging is the second most used paraclinical examination in Denmark, and radiology accounts for 15% of all referrals from general practice. The fast development in diagnostic imaging poses a challenge for general practitioners when determining the right type of radiological examination for the right patient. Therefore, this study aimed to assess the quality and radiological relevance of referrals from general practice.

**Method:** During an 8-week period radiologists reviewed randomly sampled referrals from general practice to different modalities: X-ray, ultrasound, CT and MRI scanning. The reviews were conducted according to a pre-designed registration chart. Themes for the chart were: Relevance of referral and chosen modality, exhaustiveness and relevance of referral information, and possible suggestions for a more relevant modality.

**Results:** Four regional radiological departments participated in the study. A total of 785 referrals were reviewed. Most reviews were conducted on x-ray referrals (35%). Diagnostic imaging was considered relevant or very relevant in 73.5% of the reviewed referrals, of which referrals to CT scanning was the most relevant (87%). Overall, referral information was relevant in 80% of the cases, and most relevant in referrals to x-ray (87%). In 9.5% of referrals the chosen modality was not the optimal one, which was most pronounced for ultrasound referrals (13%). Referral information was most insufficient regarding MRI, where 56.4% of information was described as less insufficient/insufficient. It was a frequent observation that there was too much irrelevant information, which was ascribed to general practitioners using copy-paste from their records.

**Conclusion:** A majority of referrals from general practice to diagnostic imaging were considered relevant from a radiological perspective. However, there seems to be a potential for development regarding the exhaustiveness of information and modality relevance, particularly for referrals to MRI and ultrasound scanning.

### OP17.3

#### **Proneurotensin can significantly predict cardiovascular disease and diabetes in females - Malmö Preventive Project**

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**Background and Aims:** Neurotensin is a gut hormone and it is released after fat intake. Proneurotensin is a stable fragment of the neurotensin and its fasting levels have shown to be significantly associated with the development of cardiovascular disease and diabetes in middle aged participants of the Malmö Diet and Cancer Study, primarily women. Here, we aimed to replicate the initial findings in an independent cohort with an older population.

**Method:** Malmö Preventive Project (MPP) is a Swedish population based prospective study which comprised 18240 subjects examined in 2002-2006. Fasting proneurotensin was measured in plasma from a random sample of 5402 participants (Age 69 SD (6,2), 68% Male). Multivariate Cox proportional hazard models adjusted for age, sex, use of antihypertensive medications, systolic blood pressure, BMI, current smoking, high density lipoprotein cholesterol (HDL-C), LDL-C, and fasting blood glucose levels for diabetes were used to relate the log transformed levels of fasting proneurotensin to the risk of first fatal or non-fatal cardiovascular event and diabetes in the mean follow up time of up to 6.5 years.

**Results:** There were 456 cardiovascular events observed in the study. Hazard ratios (HR) for CVD were expressed per 1 (SD) increment of log transformed proneurotensin for cardiovascular disease as HR 1,102; 95% CI; 1,06-1,54; P=0,037. There were total 222 diabetes events observed in the study. Hazard ratios (HR) for diabetes were expressed per 1 (SD) increment of log transformed proneurotensin for diabetes disease as HR 1,05; 95% CI; 0,91-1,20; P=0,5. But diabetes events results were more significant in females with HR 1,28; 95%CI; 1,30-1.59; P=0,02.

**Conclusions:** Fasting proneurotensin levels are independently associated with the risk of developing cardiovascular disease and as observed in the MDC study, proneurotensin predicted diabetes in females.

## OP17.4

### **Overdiagnosis in general practice as a category mistake resulting from lack of theory about the person**

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**Background and Aim:** Medicine does not formally espouse a particular theory of what it means to be a person. Probably most of us do not worry about this much – there are many more pressing concerns that keep us awake at night. Nevertheless this absence may be at the heart of problems that cause frustration in general practitioners' everyday work. The aim of this presentation is to explore a twofold hypothesis: First, that as each person presenting in general practice is a biological being with a biography, the doctor must be able to explore the plight of this person along the dimension of biography as well as the dimension of biology. Second, that a particular form of overdiagnosis results when biography is inappropriately ignored, and that this category mistake is more likely to occur if practice is not underpinned by an adequate theory of personhood.

**Method:** Analysis of the concept of the person in the context of sickness, informed by literature on (1) the philosophical anthropology of medicine (implicit notions about the object of medical practice), (2) overdiagnosis and other challenges of medical excess, including expectations that an increasing range of problems have medical solutions, particularly (3) 'third wave morbidity' due to disadvantage and disruption of meaning and belonging, often manifesting as unspecific pain or other 'subjective health complaints', as well as (4) engagement with patients in terms of biology and biography from the authors' research and experience as a general practitioners.

**Results:** The outcome of this analysis can be an improved understanding of errors of excess in general practice, and a certain contribution to the theoretical underpinning of practice.

**Conclusion:** Though seemingly far from everyday general practice, theoretical work to enhance our professional understanding of sick persons may yet help prevent category mistakes that entail waste, harm and frustration.

## OP17.5

### **Chest pain in primary care: Predicting coronary artery disease**

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**Background & Aim:** Chest pain is common amongst primary care patients. The family physician is often tasked with the initial evaluation to exclude coronary artery disease (CAD). Prediction tools have mostly been derived in Western cohorts. We aimed to identify predictors of coronary artery disease and to validate existing risk models (the Duke Clinical Score, CAD consortium score, the Marburg Heart Score) in our Asian primary care cohort.

**Method:** This is a prospective study of consecutive patients from a network of 9 primary care centers referred to a single tertiary unit for outpatient evaluation of chest pain from Jul 2013 to Sep 2015. Patients with existing CAD or aged below 30yrs were excluded. Demographic and clinical determinants were obtained using interviewer-administered questionnaires and from the clinical consult. Significant coronary artery disease was defined as  $\geq 50\%$  stenosis on coronary angiography (computed tomography or actual) or a positive functional test with confirmatory clinical correlation by a cardiologist.

**Results:** A total of 507 (249 male,  $55.9 \pm 11.1$  age, 416 Chinese, 35 Malay, 45 Indian) patients were included analysis. Fifty-seven (11.2%) patients had CAD. On multivariate analysis, male (RR 4.20, 95% CI 1.93-9.12,  $p < 0.001$ ), diabetes mellitus (RR 2.22, 95% CI 1.07-4.61,  $p = 0.032$ ), typical chest pain (RR 4.14, 95% CI 1.65-10.43,  $p = 0.003$ ), pathological Q waves (RR 3.52, 95% CI 1.60-7.78,  $p = 0.002$ ) and ST changes (RR 2.85, 95% CI 1.21-6.71,  $p = 0.016$ ) on ECG were significant predictors of CAD. The C-statistic for the Duke Clinical Score, CAD consortium score and the Marburg Heart Score were 0.782 (95% CI 0.720-0.843), 0.769 (95% CI 0.705-0.832) and 0.668 (95% CI 0.587-0.750) respectively.

**Conclusion:** In our Asian primary care cohort presenting with chest pain, male, diabetes mellitus, typical chest pain, Q waves and ST changes were significant predictors of CAD. The Duke Clinical Score and CAD consortium score performed well in our cohort.

## OP18.1

### **GPs with special interests (GPwSI): an added value for quality improvement?**

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**Background & Aim:** in 2002 The Dutch College of General Practitioners started the development of advanced education for general practitioners with special interests (GPwSI) in order to improve Quality of Care. The Dutch College is responsible for the attainment targets, programme and certification. The 12 courses are organized by 7 universities. A course exists of about 24 study days in 2 years, plus several traineeships, literature study and intervision. They are accessible to experienced GP's who want to extend their capacity in a certain field, including diabetes, asthma, emergency care, coaching and management/governance. These 'GPwSI' (so called 'gypsies') acquire specific qualities, capabilities and skills on a specific field of general practice. They work at local, regional or national level as counsellor, teacher/trainer or project manager in quality projects. in 2015 a number of 561 GPwSI are active. They contribute to quality improvement by implementing actual and evidence based knowledge and experiences. The GPwSI are united in specific expert groups.

in 2015 a study has been done on the effects of this development, leading to conclusions and recommendations.

**Method:** The qualitative study was performed in 2015. The response percentage of GPwSI was 38,6 %.

**Results:** Stakeholders as well as GPwSI appreciate the connection between course and practice as positive; GPwSI spend 18 hrs. per month to this work; and especially in chronic care the demand exceeds the supply. However all GPwSI meet several financial and organizational challenges and bottlenecks.

Participants of the presentation are informed about the conclusions and recommendations of the study GP's with special interests, and the implications for general practice in primary health care.

**Conclusions:** The introduction of general practitioners with special interests in primary health care is successful and useful. However compliance to several conditions is obligatory.

## OP18.2

### General practitioners' perspectives on tailored communication skills trainings – results from focus groups in Germany

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**Background & Aim:** The quality of communication between general practitioners (GPs) and patients has a significant impact on treatment outcomes of patients and on job satisfaction of GPs. This DFG-funded research project aims at developing a training course supporting the GPs in Germany in aligning their communication with patients more closely to patients' needs and make consultations more effective. As part of the training development the current GPs' perspectives on demands for communication skills trainings have been investigated.

**Method:** Focus groups with GPs were conducted on the experiences with everyday consultations and patient-doctor communication. Discussions were recorded and transcribed verbatim. The material was analysed using content analysis. A multi-professional research team developed a coding system which was then applied to the entire material independently by two researchers. Data organisation and analysis was conducted computer assisted (MAXQDA).

**Results:** Seven group discussions were executed in the North, East and West of Germany with in total of 45 participants. Emerging themes in the discussions were (1) the need for effective communication techniques to organise the consultation due to time constraints; (2) the importance of a trustful relationship; (3) dealing with challenging patients. GPs emphasised their professional role as patients' advocates and felt responsible for accompanying patients through the health care system in order to avoid oversupply of medical treatment. Communication plays an important role in relation to health education, information and enhancing the patients' health behaviour.

**Conclusion:** Strategies to addressing patients individually and focusing on patients' resources can be deduced as central in the development of communication training. At the same time restrictions in general practice routine should be considered. A differentiated training approach should be offered in which time-efficient, patient-oriented and non-verbal communication techniques are taught and practiced.

### OP18.3

#### **Burnout on family medicine practice: the relative benefits of biofeedback therapy (Qi Gong)**

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**Background & Aim:** Primary care health professionals suffer from high levels of burnout. Psychological, cultural, financial and political background: influence stress and self-motivation on the daily practice. Expectations on family medicine are higher and more demanding, so it is important to take preventive actions. The aim of this study was to evaluate the benefits of biofeedback therapy on reducing burnout levels in primary care professionals.

**Method:** All eighteen professionals (doctors, junior doctors, nurses and administrative assistants) of a Family Practice Unit were asked about their work satisfaction by CBI (Copenhagen Burnout Inventory) and questions related to workload, on a confidence basis. They were randomly allocated as participants and non-participants to the biofeedback's 10 minute sessions that happened on a weekly basis for three months. The CBI data was summarised as group means.

**Results:** All professionals show initial moderate burnout levels (46 score), with high expression on the clinical assistants (68 score) or professionals who work for over 20 and less than 30 years (56 score). After the biofeedback sessions, all the participants have shown reduced Burnout levels (41 score), with significant impact on professional (46 vs 37 score,  $p < 0.05$ ) and patient-related burnout (46 vs 41 score,  $p < 0.05$ ). On the non-participants branch, Burnout levels have increased overall, with significant impact on the personal-level (44 vs 57 score,  $p < 0.05$ ) and patient-related burnout (46 vs 50 score,  $p < 0.05$ ). Overall, all professional groups have reduced or maintained their burnout levels, independently of the years of work, with the exception of junior doctors who have shown increases (36 vs 38 score) with high expression on personal and professional levels (both 43 score).

**Conclusions:** Interventions, such as Qigong practice, positively decreased Burnout levels. Healthy lifestyle and team building activities helped to reduce Professional and patient-related Burnout levels on primary care professionals. This is a practice to take into consideration on future preventive programs to family medicine clinicians.

## OP18.4

### **An Italian proposal: “Scegliamo con cura” a proper communication as a resource for both patients and family physicians**

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**Background and Aim:** In 2012, the American Board of Internal Medicine and Consumer Report launched the “Choosing Wisely” campaign with the aim to avoid unnecessary medical tests, treatments and procedures. In Italy the movement Slow Medicine, in the end of 2012, launched a similar campaign titled “DOING MORE DOES NOT MEAN DOING BETTER”. The Italian Society of General Practice (SIMG, Torino) identified five procedures that were overused in their contest also if did not provide meaningful benefit (see [www.slowmedicine.it](http://www.slowmedicine.it)). In 2014 SIMG Torino, Slow Medicine and Change (Communication and Counseling group) set up a program titled "Scegliamo con cura".

**Method:** The program provided:

- 1) Educational events for clinicians with the aim to discuss the practices and develop communication skills
- 2) Meeting with press and population
- 3) Production of patient-friendly materials
- 4) Prospective evaluation of effectiveness monitoring drug and diagnostic examination prescription in selected cohorts of patients and doctors.

**Results:** In 2015, we performed three educational events for family doctors, two press conferences and four presentations in different meetings open to doctors and/or patients. We projected and printed patient-friendly materials that are disseminated through the health center of clinicians involved.

Besides, with the help of psychologists, we created a focus group of patients to discuss about healthcare and drugs

**Conclusion:** At the end of the first year we can say that the impact was positive both for clinicians and patients. Public health services was concerned too and they were interested to spread the project.

Our next challenges will be the evaluation of the efficacy and effectiveness of the project and improving doctor-patient relationship to sustain such a cultural change.

## OP18.5

### **Effectiveness and security of corticoesteroids injections in primary care. Analysis of the first 100 patients**

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**Originality and Relevance:** Effectiveness of corticoesteroids injections in periarticular musculoskeletal diseases is controversial.

**Objectives:** To determine the effectiveness and safety of corticoid periarticular injections in primary care.

**Population:** The first 100 patients treated from two family physicians.

**Methods:** A cross-over study was performed. A maximum of three corticoid injections were administered in an interval of four weeks. Variables: Age, sex, previously antecedent and treatment of corticosteroids injections, number and location of corticosteroids injections, treatments after corticosteroids injections (analgesics, rehabilitation, orthopedic treatment), referral to the traumatologist, complications, results of corticoesteroids injections measured by change of means between the initial and the later injection and reduction of 3 or more points of visual analogue scale (VAS). Proportions were compared using the Chi-square test and the means were compared using the t-test.

**Results:** The mean age was 57.8 years old (SD 14.6), and 70% were women. 15% had previous treatment with corticoesteroids injections. The most frequent locations were: 38 patients shoulder pain, 17 plantar surface fasciitis, 12 epicondylitis, 9 anserine tendonitis, and 8 trochanteritis. The mean of corticosteroids injections administered was 1.7 (SD 0.6). 9% were referred to the traumatologist, 14% needed analgesics, 12% rehabilitation, and 2% orthopedic treatment. Only 3 patients suffered minor complications: hematoma, skin atrophy and hiperpigmentation. The mean of initial VAS was 7.5 (SD 1.7), and the mean of later VAS was 4.0 (SD 3.0), with a difference of means of 3.5 (95% confidence interval 2.8 to 4.1, p-value <0,0001). 60% of patients had a reduction equal or higher to 3 points in VAS, without relation of age, sex, location or antecedent of corticosteroids injections.

**Conclusions:** Corticoesteroids injections therapy in primary care are effective and safe.



## OP19.1

### Practice variation in surgical procedures and IUD-insertions among general practitioners in Norway

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**Background:** White papers and policy statements indicate that general practitioners (GPs) in Norway should perform some surgical procedures and IUD-insertions.

**Aim:** To investigate variation in surgical procedures and IUD-insertions and determinants of such variation.

**Design:** Retrospective registry study.

**Setting:** Norwegian GPs on fee-for-service reimbursement.

**Method:** Using a database with reimbursement claims from all Norwegian GPs, information on procedure codes in addition to GP characteristics such as age, gender, list size and municipality characteristics between 2006-13 was extracted. Multivariable logistic regression models were performed to explore possible determinants of practice variation.

**Results:** We extracted data from 4,828 GPs among which 90%, 75% and 77% were reimbursed at least once during the study period for minor or major surgical procedures and IUD-insertion, respectively. The proportion of GPs doing surgical procedures increased whereas insertion of IUDs decreased over time. Female GPs had lower odds for performing surgical procedures (OR 0.38, 95% CI 0.32-0.45) and higher odds for performing IUD-insertions than male GPs (OR 4.55, 95% C.I 3.71-5.58). Older GPs, GPs living in urban municipalities and GPs with shorter patient lists were less likely to perform surgical procedures. GPs with longer patients lists and GPs working in middle-sized municipalities had higher odds for performing IUD-insertions.

**Conclusion:** About one in four Norwegian GPs never performed major surgical procedures or IUD insertion from 2006-2013, while almost 90% performed minor surgical procedures. GP gender was strongly associated with performing the procedures. Furthermore, practice varied by age, list size and practice municipality. The findings indicate a discrepancy between expected and observed practice of Norwegian GPs.

## OP19.2

### **Effects of numerical information on cervical screening intentions in HPV-vaccinated women: A randomised study**

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**Background and Aim:** in a few years, women in a number of countries will be covered by two preventive programmes targeting cervical cancer: HPV vaccination and cervical screening. The HPV-vaccines are expected to prevent approximately 70% of cervical cancers. In Denmark, the first women vaccinated as adolescents will soon enter the cervical screening programme. When the incidence of a condition screened for decreases, the benefits and harms also decrease. Moreover, the benefits probably decrease more than the harms. Thus, the premises on which these women make a choice about participation in cervical screening are relevantly different from the premises in the generations before the HPV-vaccine.

We aimed to investigate the effects of different types of information on intention to participate in cervical screening among women offered HPV-vaccination.

**Methods:** We developed a web-based questionnaire and information intervention. A random sample of Danish women from the birth cohorts 1993-95 was randomised to one of three different (numerical or non-numerical) information modules about harms and benefits of cervical screening or to no information (controls). The main outcome measure was intention to participate in cervical screening.

**Results:** We found a significantly lower proportion intending to participate in screening in the groups of women receiving numerical information modules compared to controls. There was no statistically significant difference between controls and women receiving non-numerical information about benefits and harms of screening. When providing information about benefits and harms of screening in two steps, firstly without considering HPV-vaccination and lastly considering HPV-vaccination, we found a significantly lower intention to participate in screening after the last step.

**Conclusions:** Women are sensitive to numerical information about the benefits and harms of cervical screening. HPV-vaccinated women are sensitive to information about the expected changes in benefits and harms of cervical screening after implementation of HPV-vaccination.

### OP19.3

#### **Sociodemographic features and smoking status in female infertility**

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**Background & Aim:** Being able to have children has an important positive effect on the future lives. Infertility is an important health issue and smoking significantly increases the risk of infertility in both men and women. Infertility is associated with some long-term chronic medical conditions (Such as diabetes, thyroid dysfunction, hypertension, hyperlipidemia, anemia, obesity). in industrialized countries, being overweight/obese and sedentary lifestyle are often found to be the principal causes of female infertility. We aimed to investigate the smoking status, sociodemographic and anthropometric features in female infertility in this study.

**Method:** This descriptive study consisted of 701 infertile women aged between 20-42 years who applied for examination of infertility to the family medicine outpatient clinic. Age, education, own and husband's occupation, pregnancy history, general health and smoking status were examined. Anthropometric measurements were done.

**Results:** The participants had a mean age of  $29.9\pm 4.4$  years, marriage age  $22.1\pm 4.1$  years, marriage duration  $7.5\pm 4.1$  years. of the respondents, 53.9% had primary school education, and only 18.0% had university degree, 81.6% were housewives and 7.6% were current smokers. Only six cases were diagnosed as secondary infertility and 56.9% were overweight and obese. 14.8% were relatives with his husband. The husbands mean age was  $32.5\pm 4.4$  years. of the husbands, 39.7% were worker, 30.1% were trades, 25.7% were officers and the rate of smoking was 49.4%. Brucella agglutination was positive in 19 women, 11 (1.5%) HBsAg positive, 18 (2.5%) diabetes mellitus, 111 (15.9%) impaired fasting glucose, 63 (9.0%) hypertensive, 135 (19.3%) anemic (Hemoglobin level  $<12\text{gr/dl}$ ), 11 (1.5%) hypothyroidic.

**Conclusion:** Obesity, a history of long-term health problems, smoking, some infectious diseases were the factors independently associated with infertility. These problems must be treated before the infertility therapy. Healthy lifestyle habits can lower the risk of becoming obese and developing comorbid diseases.

#### **OP19.4**

#### **Acceptability of recommendations for screening for varicella in primary care emergency consultations and immunization degree in women of childbearing age**

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**Background & Aim:** Varicella is highly contagious and has a worldwide distribution. Congenital anomalies risk by primary infection of the mother during the first trimester of pregnancy is approximately 2%. The second-third trimester, is rarely associated with birth defects. Maternal infection varicella around the childbirth, has a high risk of serious neonatal infection (20% attack rate and 30% fatality rate).

We believe that women in fertile age with reproductive intentions are unaware their immune status against the VVZ, and that outpatient urgency can be a good place to perform the Council for being a frequent point of first contact in this population.

We'll evaluate the effectiveness of medical advice given in PAC to substantiate immunity to Varicella in regular consultation and describe the prevalence of immunization against varicella in women of fertile age with spawning will.

**Method:** It's a cross-sectional study following the completion of an intervention at the time of recruitment. We'll select all women in fertile age, taking into account the inclusion/exclusion criteria who come to community emergency for any reason of inquiry. We'll explain and give recommendations for checking/corroborate immunity in their primary care physician, to subsequently analyze the degree of compliance with the recommendations given in PAC.

**Results:** We hope that our recommendations have positive impact in the population to which it's addressed, reaching patients in optimal conditions to pregnancy, limiting the risks. Assess the implementation of new protocols of preventive measures in CAP with favorable results.

**Conclusions:** Preventive medicine is an important part of the family doctor. This proposed topic seems interesting, due to the impact of our recommendations in the general population, outside the scope of the regular consultation. It's interesting too, since we detected doubts about the possible immunization in pregnant patients and, with the risk that this entails especially in the case of having children of school age.

## OP19.5

### At the crossroads: general practice education in China

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**Background and Aim:** China is making great efforts to train 300,000 general practitioners (GPs) by 2020 to meet its population's escalating healthcare needs. This paper discusses the shortage of GPs, compares GP training programs and examines challenges facing these programs in China.

**Method:** Literature review and secondary data from Health Statistical Yearbooks, China

**Results:** Shortage of well-trained primary care practitioners (PCPs) exists nationwide. Despite a rising trend of GPs, the ratio of GPs out of all types of doctors was 5.6% in 2013. Three general practice training programs are running concurrently. These are post-transfer training program, residency training program, and designated general practice undergraduate education program. These programs face several challenges. Urban-rural disparities in educational attainment of PCPs are enormous. The percentage of PCPs with 3-year or longer medical training in urban community health facilities is 20% higher than that of rural township health centers. Ninety-five percent of PCPs in rural village clinics possessed only secondary education or less, compared to 23% in urban areas. Distributional imbalance among regions is another challenge. The better-off eastern part of China has a ratio of 1.50 GPs per 10,000 population, nearly doubling that of central (0.70) and western China (0.86). The common aspiration to become hospital specialists acts as another obstacle to retaining GPs in primary care. Better-educated doctors prefer working in hospitals where a better career path with higher pay and social status is offered. In addition, enrolling trainees into general practice training programs with curriculums which are sub-specialty driven is problematic. Excessive exposure to complicated cases in hospital wards resulted in misconception of general practice among the trainees.

**Conclusions:** Intervention packages combining student selection policy, career intent and other incentive strategies are worth experimentation to retain GPs in primary care. Regarding training future GPs, clinical exposure and rigorous evaluations are key to enhance the quality of training.

**Pre-school child health assessments – what are they for?**

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**Background & Aim:** There is little international consensus on the provision of screening for developmental problems in preschool children, despite many countries dedicating substantial resources to such assessments. Developmental screening has been identified as one of the major gaps in European child health research.

The evidence for net benefit from routine child development assessments is weak but this largely reflects lack of evidence of effectiveness rather than evidence of lack of effectiveness. Consequently, services are forced to make difficult decisions regarding pre-school checks and families are offered preschool child health surveillance services ranging from a single post-neonatal preschool developmental assessment in Scotland to at least 14 scheduled assessments in Denmark, Norway and the Netherlands. Not only the number and timing, but also the content of developmental screening assessments varies widely between health services.

Few preschool screening activities meet internationally recognised criteria for screening programmes, so what is the point of child health checks?

**Method:** Two presenters will propose and oppose the motion “Child development checks should only contain elements meeting international screening criteria” and the debate will then be opened to the audience. After brief summing up speeches, a vote will be taken. We shall focus on screening for developmental problems, on the properties of some screening instruments, on the effect of screening on therapeutic relationships between clinicians and families, and on the risks of over-medicalisation.

**Results:** Participants will learn about differing national approaches to child health assessment, and will understand the extent to which screening policies align to WHO screening criteria. They will also learn about the screening properties of a variety of instruments.

**Conclusions:** The science of assessing child development is in its infancy, and there is huge international variation in practice. An agenda for child development screening research is needed.

## W32

### Lead the next health movement Part I:

#### Learn how to become family medicine changemakers

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**Background:** Healthcare systems will never have enough practitioners to:

- Reverse the epidemics of unhealthy habits
- Prevent premature deaths and chronic diseases
- Add good-years-to-life despite chronic diseases

Mindsets can limit or expand our innovative abilities to address complex problems. Mindsets are our particular ways of valuing, believing, perceiving, thinking, feeling and behaving.

**Aim:** Become changemakers and organize workshops to set up leadership and change management teams to overcome:

- The constraints of 1-to-1 clinical encounters and 1-to-n population health programs and create
- An abundance of (n-to-n) peer health coaching networks and learning communities

Learn about you can:

- Implement peer coaching platforms and programs
- Create self-organizing groups to scale peer health coaching learning opportunities for all

**Method:** Read the learning modules from the Changemaker's guidebook (Download at [www.HealthCoachingBuddiesMovement.com](http://www.HealthCoachingBuddiesMovement.com)) to discuss questions designed to evoke self-reflection and group dialogues about how to open, expand and align our mindsets.

**Results:** Learning Outcomes:

1. What do you think, and how do you feel about:

- Experiencing educational programs versus learning platforms?
- Using evidence-based guidelines and creating your own personal evidence?
- Leading healthier lives and becoming changemakers together?

2. Plan to organize a Changemaker's workshop for your organization and community.

3. Learn about how we need to use social media, m-health and e-health to:

- Implement peer coaching platforms and programs at all levels
- Develop leadership, professional and social movements
- Build health movements for the people and led by the people

**Conclusion:** We must open, expand and align our mindsets to design transformational innovations for population health improvement. To participate in this learning journey, you can join the SIG on Complexity and Health to:

- Take the CPD Changemaker's online course <http://bit.ly/1zLgwqv>
- Participate in an ongoing online learning communities
- Develop peer coaching relationships between junior and senior doctors using Social Media to deliver the Changemaker's and Peer Health Coaching learning platform

## IS

### “Getting your work published – Meet the Editors!”

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*(6) Journal of the American Board of Family Medicine*

*(7) European Journal of General Practice*

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**Background & Aim:** Peer reviewed medical journals are important media for the publication of articles relevant to Primary Health Care and General Practice/Family Medicine, such as research papers, reviews of literature, clinical lessons, and opinion papers. They are the means to disseminate original research results and educational information, discuss available evidence and share experiences. However, many colleagues find writing and submitting a scientific paper a challenge.

In this grand session, questions like 'How do I start?' and 'How do I get published?' will be addressed. Our intended audience are colleagues interested in research or medical writing and with little or no previous experience in publishing. More experienced authors are welcome to join this session to share their experiences.

**Methods:** We will start this one-hour session with 4 short presentations. In the second half of the session, there will be ample time to answer questions and discuss issues raised by the audience.

Part I:

- Just starting out - figuring out the right fit for your manuscript
- Preparing your manuscript – learning from common mistakes
- The Cover letter - getting the editors' attention
- Peer-review – how to deal with it

Part II: Questions & Discussion

**Results:** Participants will have received basic knowledge and practical advice (“tips & tricks”) on how to prepare a manuscript for publication in a peer-reviewed medical journal. Participants will have learned about editors' expectations for papers submitted for peer review, and how to increase the probability that a manuscript will be accepted for publication.

**Conclusions:** If you are interested in ‘getting your work published’, you are invited to join this Grand Session.

## S16

### **Nordic research network for children and adolescents – GPs and prevention, diagnosis, effective treatments, next of kin and family health teams**

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**Background & Aim:** There is surprisingly little published work on child and adolescent health in primary care. In this network, we have common objectives to focus on the GPs' maintenance of child and adolescent health. Observation of 21 preventive health examinations in Danish family practice, and interviewing the parents and the GPs immediately after the consultation, will be presented. Along with some colleagues in Scotland, Norway, Sweden and Denmark we applied for funding a survey of child health screening practice in Europe in order to develop a trial of screening for behaviour problems linked with a psychosocial intervention. Some members of the group have validated instruments to diagnose mental disorders and the effect of the training of general practitioners in CBT. Children facing parental cancer are found to be at risk for developing short and long term consequences. Many ill parents have frequent encounters with their GP, thus the GP may be in a good position to provide support. The aim of this symposium is to strengthen the scope and quality of research for children and adolescents.

**Method:** Several planned and conducted studies are presented. The studies use quantitative and qualitative measures and mixed-methods. Psychometric methods are used in studies that validate diagnostic tools.

**Results:** The GP is a key figure for children, youth and their families. Young people deserve thorough assessment for underlying causes of their health problems. Parents with cancer want recognition as responsible parents but evaluating children's health and well-being in this situation is complicated and parents may find it difficult to know whether their children are in need of support. A tool for supporting parents and children in these families is presented.

**Conclusions:** There is insufficient evidence about how GPs should provide better services for children, youth and their families.

**Harms from screening for life-threatening diseases**

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Screening for life-threatening diseases has potential benefits but also inevitably unintended harms. These unintended harms and their consequences are underreported in scientific papers and in the media. Furthermore, the focus on information to potential screening participants is often sparse and misleading. This makes it difficult, not only for the health professionals but also for the individual citizen and the society to evaluate the benefits and harms of a screening programme properly.

In this symposium we will present different perspectives on the unintended harms of screening covering screening programmes for colorectal cancer (CRC), breast cancer (BC), abdominal aorta aneurysms (AAA) and cervical cancer (CC) in five short presentations:

1. A discussion of how sparse information of the harms from screening is in the medical literature and in the different forms of communication with patients (doctor consultations, leaflets and websites).
2. The development of a condition-specific questionnaire measuring psychosocial consequences of CRC screening will be presented, using data from group interviews with screening participants having a false-positive screening result and benign polyps.
3. The possible negative psychosocial consequences and the potential derived costs of CRC screening will be presented.
4. Estimates of overdiagnosis and overtreatment in AAA screening, based on data from previous randomised AAA screening trials will be discussed.
5. After implementation of the HPV vaccine, concern has been raised that vaccinated women will not attend CC screening; because they believe that they have full protection from the vaccine. Screening intentions and risk-perceptions among HPV-vaccinated and unvaccinated women will be presented from an ongoing survey.

Each presentation will be followed by a possibility for clarifying questions and discussion. The symposium will end with a discussion about the overall topic: harms from screening for life-threatening diseases.

### W33

#### **The Hippokrates and Family Medicine 360° Exchange Programmes incorporating the Claudio Carosino and Hippokrates Exchange Prizes**

*Rosa Avino, Per Kallestrup, Katrina Whalley, Juan Maria Rodriguez, Cristiano Figueiredo, Sara Rigon, Ana Nunes Barata, Demet Merder Coskun, Jenny Studer, Dinky de Haseth, Ronen Brand, Elodie Hernandez Vasco da Gama Movement - Exchange Theme Group*

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**Background & Aim:** The 10 year old Vasco da Gama Movement (VdGM) has been actively promoting several initiatives within Europe concerning exchanges, which are getting more and more popular and rewarding as years go by. The Hippokrates exchange Programme offers a two weeks exchange in one of the 28 participating countries as a unique opportunity to have an insight in the country's Primary care. In addition to this well consolidated programme two to three days conference-exchanges has been successfully organised alongside Primary care national conferences involving actively many colleagues. The recently launched "Family Medicine 360°" wants to take the concept of exchanges even further, to a global level and it offers the possibility to spend two to four weeks in the primary care setting. Since the first meeting in 2013, during the 20th WONCA World Conference in Prague, Young Doctors' Movements from all over the world have been working steadily in order to build a global exchange programme, with educational contents. This year competition for the 2015 Hippokrates and Carosino prizes will award the best urban and rural exchanges. Following the tradition of other WONCA conferences, the aim of this workshop is to present different activities of the VdGM Exchange Theme Group and make participants familiar as to how they may actively join the group's activities.

**Method:** The workshop will be centred on the dynamic interaction between all the actors (participants, presenters and facilitators). Firstly, participants will be invited to share ideas on the benefits and burdens of exchanges as well as the potential difficulties met at every stage. Then, former participants and conference exchange organizers will share their experience, allowing attendees to familiarise with VdGM's Exchange Theme Group activities. Finally, winners of 2015 Hippokrates Exchange & Carosino Prizes will be announced and they will present their inspiring experiences.

## **S18**

### **Time for a change ('Het Roer Moet Om')**

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15 months ago a group of about 15 GPs started an initiative to bring to light the growing frustration of Dutch doctors with bureaucratic, tick-box medicine and their inability to address this daily problem through negotiations with health insurance companies. Within 3 months, 75% of all registered Dutch GPs had signed a web-based petition: 'Manifesto of the Concerned Family Doctor' endorsing the importance of this initiative. This grass roots movement led to a national debate involving all stakeholders, attended by the Dutch Minister of Health and with a live public webcast. The minister accepted the importance of the issues raised and put all stakeholders to work with a deadline of three months to formulate proposals to solve these problems. Since last summer, several groups have worked on the three issues that need to be addressed if we are to strengthen daily integrated care for patients and support, motivate and inspire family doctors:

1. Bring an end to market-based competitiveness in family doctor medicine.
2. Stop unnecessary administrative rules and tick-box medicine.
3. Redesign a family doctor quality system based on trust and clinically-based principals.

Over the last 9 months there has been a lot of improvement in all three areas, but it remains hard to overcome the core differences in the mind sets of the two systems: doctors do their best to work in a patient-oriented way using medically-based values, whereas the health insurance companies apply financially-based principles, focus on efficiency and have a tendency to distrust the medical system. A lot of work still needs to be done if we are to achieve a brighter future. We have analysed some of the elements we believe helped ensure the success of our initiative and that we feel might be of use to other comparable movements in this area.

**The Vasco da Gama Movement Junior Researcher Award 2016**

**Research by new and future GP's**

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**Justification:** Since 2011, the Vasco da Gama Movement (VdGM) promotes sciences among junior general practitioners who combine research with patient care. In our workshop we aim to provide an opportunity to discuss relevant research topics in small groups of people who are interested in similar topics. Additionally, we will award outstanding careers and ideas with the Junior Researcher Award. The award honours the best research idea of GP-trainees or junior GPs with up to 5 years working experience after graduation. The auditorium is invited to learn from junior champions in research. This workshop sets the stage for bringing together junior researchers and/or trainees, senior researchers with outstanding expertise and interested GP trainees to learn from each other in order to promote future careers combining general practice research and training. Linking senior and junior generations in general practice research is expected to promote exchange of ideas, methods and opportunities for funding and collaboration. By this workshop European GP-trainees and junior GPs may become enthusiastic about a future lifetime career in research and practice.

**Content:** The workshop will contain two parts. In the first part we will divide the audience into small groups based on themes of interest. Thereby, people who are (interested in) doing in similar fields of research meet and can actively build a network and participate in knowledge transfer. In the second part three finalists selected by an international jury will present both their ideas for future research and their personal career. Every presentation will be followed by a discussion. In the end we will announce the final winner.

## **OP20.1**

### **Classifying European models of primary health care organisation, what best describes the structure of your PHC system?**

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The classification of the primary health care (PHC) system involves the selection of key features and their modalities that define the different types. Classifying is a required step for measuring and comparing performance, which provide evidence-based rationale for PHC improvement. Several studies have aimed to classify and measure the impact of PHC in population health. There is abundant evidence on the impact of PHC delivery (accessibility, continuity, comprehensibility...) on health outcomes, but evidence on how to organise PHC (physicians' employment status, remuneration type, ownership of facilities...) is scarce. This workshop aims to develop a set of criteria to classify PHC organisation in Europe in order to measure and compare its performance.

It has three sections:

- 1) Oral Presentation on the description of PHC system, particularly the structure, and the ways to categorize and measure it, followed by previous studies on PHC classification and performance.
- 2) Discussion on the appropriate indicators to describe aspects of the PHC structure and selection of indicators to develop our framework.
- 3) Classification of European countries according to our framework, based on attendants' expertise.

This workshop will give participants a broader perspective of the PHC system, to which we belong, and the different paths we have to seek its improvement.

Moreover, the outcomes of this workshop will make a valuable contribution in the study of the impact of PHC structure on quality, costs and equality of health care in Europe, which is currently developed at the Centre for Health Policy, IGHI, Imperial College London.

Authors declare no conflicts of interests. The study has been approved by the Research Ethics Committee at Imperial College London.

## OP20.2

### **Mindfulness group therapy in primary care patients with depression, anxiety or adjustment disorders: randomized controlled trial and follow-up study**

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**Background and Aim:** Individual-based cognitive-behavioral therapy (CBT) is resource-intensive and expensive. The aim of this randomized controlled trial was to compare group-based mindfulness therapy with treatment as usual (primarily individual-based CBT) in primary care patients with depression, anxiety or adjustment disorders.

**Method:** An 8-week randomized controlled trial was conducted during spring 2012 at 16 general practices in southern Sweden. Eligible patients (aged 20-64 years) scored  $\geq 10$  on the Patient Health Questionnaire-9,  $\geq 7$  on the Hospital Anxiety and Depression Scale and/or 13-34 on the Montgomery-Åsberg Depression Rating Scale (self-rated version). In total, 215 patients were randomized to group-based mindfulness therapy or treatment as usual. Ordinal mixed models were used for the analysis. One year later the patients' mental well-being was followed-up by a questionnaire. In the symposium, methods and results will be presented, along with strengths and weaknesses and future implications.

**Results:** For all scales in both groups, the scores decreased significantly. There were no significant differences in change from baseline between the mindfulness and control groups after 8 weeks of treatment. Preliminary results suggest that the effect of mindfulness group therapy as well as the effect of treatment as usual remain 1 year after treatment. Those who participate in the symposium will get an insight into mindfulness and its usefulness as therapy in common mental disorders.

**Conclusions:** Mindfulness group therapy was non-inferior to treatment as usual in patients with depressive, anxiety or adjustment disorders. For all scales in both groups, the decrease in scores seems to be sustained for at least one year after treatment.

### OP20.3

#### **Relationship between health literacy level and breast cancer knowledge and screening behavior of women**

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**Background & Aim:** Breast cancer mortality rate under age 50 is decreasing as treatment options improved, awareness of community increased and screenings lead early diagnosis possible. Health literacy seems to be an important for cancer awareness and screening behavior and it's aimed to determine this relationship in Turkish women.

**Method:** This cross sectional study was conducted in 500 women who are above 40 years and applied to one rural and one urban primary healthcare centers (PHC) in March- April 2015, in Izmir, Turkey. REALM (Rapid Estimation of Adult Literacy Measurement) scale, validated for Turkish by Ozdemir et al. and AHLS (Adult Health Literacy Scale), developed by Sezer et al. were given for HL measurement. Additionally a questionnaire including sociodemographics, breast cancer knowledge, screening behavior of women was used.

**Results:** Mean age of women was  $49.62 \pm 8.428$  years. of the women, 52% (n=260) were registered at rural PHC, 51.2% (n=256) graduated from primary school, 61.0% (n=305) housewives and 74.4% (n=372) had average economic status. According to REALM 31.8% (n=159) had limited/inadequate HL and mean AHLS score was  $19.55 \pm 2.64$  (min-max=0-23). REALM score of women was decreasing with increased age (p=0.010), low education (p<0.001) and economical status (p<0.001). Women having a job and applied to urban PHC had higher scores. AHLS score of women showed similar significant associations. Mean breast cancer knowledge score of women was  $7.47 \pm 3.17$  (min-max=0-15). of the women 55.2% (n=261) never had mammography screening. Women who never had mammography screening had lower REALM (p<0.001), AHLS (p=0.185) and breast cancer knowledge score (p=0.004) than women who had at least once.

**Conclusion:** HL studies are limited in Turkey and as known this is the first study focused on HL and breast cancer knowledge, screening behavior. for cancer screening success, physicians have to be aware of their patients HL levels.

## OP20.4

### **A WHO initiative: Health literacy - a way to engage and empower patients and families**

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**Background:** According to the World Health Organization (WHO), health literacy has been defined as ‘the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health’. Thus, health literacy goes beyond the transmission of information and a person’s capacity to read brochures or listen to instructions. Individuals should have access to health information relevant to their needs and be able to understand and use it appropriately. In this context, health education leads to health literacy and health literacy is critical to empowerment. By improving people’s access to health information and their capacity to use it effectively, we will be able to engage them in health-care improvement efforts meaningfully. Patient and family engagement and empowerment can lead to better health outcomes, better care, better patient experience and lower health-care costs. A pathway to achieve this is to work to ensure that people are health literate so that they are enabled to make informed decisions, choose appropriate care options and seek health interventions appropriately.

**Aim:** The aim of this workshop is to explore ways to engage people and the community to strengthen their health literacy as well as to identify opportunities and key challenges.

**Methods:** This workshop will be an interactive session in which key concepts will be presented briefly showcasing different experiences. This will be followed by a brainstorming session where the audience will be asked to share ideas, experiences and reflections.

#### **Results and Conclusions:**

- Strategic actions to achieve health literacy identified;
- Identified participatory approaches to determine how people can develop skills and knowledge to overcome structural barriers to health, both in developed and low and middle income countries;
- Factors and actors that can improve health literacy identified.

## OP20.5

### **Efficacy of step-down versus step-up analgesics in patients with (sub)acute sciatica in primary care: protocol of a randomized controlled trial**

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**Background & Aim:** Sciatica is the most prevalent specific type of low back disorders seen by general practitioners. Treatment of patients with (sub)acute sciatica is for a large part aimed to stay active and return to daily activities. Adequate prescription of pain medication is an important condition. There are two prescription strategies: 1) immediate opioid pain medication, followed by a step-down approach; and 2) step-up approach; starting with paracetamol (step 1), if necessary adding a NSAID (2), tramadol (3), morphine (4). This trial will assess the (cost-)effectiveness of immediate opioid prescription (step-down) compared with the current Dutch clinical guidelines' step-up approach, over a period of 6 and 12 weeks respectively.

**Methods:** The STEP-UP trial is a multi-center, open-label, randomized controlled trial in general practice with a 12 week follow-up. Patients aged 18-65 years with (sub)acute sciatica, severe radiating leg pain (NRS  $\geq 7$ ; range 0-10), duration of complaints <12 weeks and no current opioids usage are eligible to participate. Included patients are randomized in the two prescription strategy groups, and treated accordingly. Primary outcome is severity of radiating leg pain measured daily by 11-point NRS during 6 weeks follow-up. Secondary outcomes are among others: adverse reactions, quality of life, patient satisfaction, costs (direct medical and productivity costs), low back and leg pain severity, perceived recovery, treatment compliance, rescue medication usage, patient satisfaction and co-interventions. Outcomes are measured at baseline and at 3, 6, 9, and 12 weeks follow-up. Linear mixed model analyses with repeated measurements will be used to assess clinical differences between both groups. An economic evaluation will be performed using a cost-effectiveness analysis with severity of radiating leg pain and a cost-utility analysis with quality of life (QALY). Explorative subgroup analyses will be performed to identify possible effect modifiers.

**Results:** Currently recruiting eligible patients.

**Conclusions:** Expected in year 2019.

## W34

### What keeps the family doctor happy?

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**Background:** Many countries experience great difficulties to recruit family doctors, or keep them from quitting. Burn-Out Syndrome is a rather common problem. On the other hand there are family doctors, who are enthusiastic and happy on their jobs, even after many years. Factors influencing job satisfaction in GPs are poorly understood. Individual characteristics as well as motivations and expectations towards being a GP might have an impact on job satisfaction. Working conditions have been subject to significant changes for the last years, adding to the problems. Using the workshop participants' many years of experience should help to identify possible predictors for job satisfaction, and to collect knowledge on working conditions that help or hinder GPs staying happily on their job. Aims: The workshop will use the experience of the workshop attendees, working in many different health systems, to analyze capabilities, strengths and resources needed to successfully work as a GP.

#### **Methods:**

1. Open ended key questions are defined.
2. The facilitator introduces the topic and poses the questions.
3. Small groups of about six are formed to discuss the questions, sitting at round tables, hosted by a "coffee house owner". Ideas are written on the table covered by a paper – e.g. based on mindmaps.
4. After 15 minutes the group changes tables, except for one participant, who hosts the next group, presenting the predecessor's results, then a new discussion starts combining views from both groups.
5. This rotating principle continues till the time specified.
6. Participants return to the large group for a final 20 minute session to share thoughts, insights and ideas.

**Results:** Doctors will analyze the challenges of General Medicine: what kind of skills, abilities and attitudes does it need, which system characteristics facilitate or jeopardize job satisfaction. They will reflect the gaps between expectations and reality, and on their possible effect on the way they feel about their jobs after many years in practice.

## OP21.1

### **Is vitamin D deficiency in pregnancy associated with birth weight and other anthropometric measures?**

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**Background and Aim:** Vitamin D deficiency has been associated with adverse health outcomes for mother and child. We investigated associations between serum-25-hydroxyvitamin D [25(OH)D] in pregnancy and birth weight and other neonatal anthropometric measures.

**Methods:** Population-based, multiethnic cohort study of 823 pregnant women (59% ethnic minorities) attending the Child Health Clinics for antenatal care in Oslo, Norway and their offspring. Birth weight of 719 singletons, neonates born at <37 weeks was measured, including study representative measurements of crown-heel-length, head circumference, abdominal circumference and skinfold thickness. At gestational weeks (GW) 15 and 28, maternal S-25(OH)D was measured. Ethnicity was categorized according to country of birth and information about a range of explanatory factors (parity, educational level, pre-pregnancy BMI) was collected. Women with 25(OH)D <37 nmol/L at GW 15 were recommended vitamin D3 supplementation. Maternal 25(OH)D was categorized: consistently low, consistently high, increasing and decreasing. Separate linear regression analyses were performed to model the associations between explanatory factors and each of the outcomes: birth weight, crown-heel-length, head circumference, abdominal circumference, sum skinfold thickness and ponderal index.

**Results:** In early pregnancy, 51% of the women had 25(OH)D <50 nmol/L. In univariate analyses maternal 25(OH)D in early pregnancy was significantly ( $p < 0.05$  for all) associated with birth weight, crown-heel-length, head circumference, abdominal circumference and ponderal index. After adjusting for maternal age, parity, educational level, pre-pregnancy BMI, gestational age and neonate gender, 25(OH)D was still associated with birth weight, head circumference, abdominal circumference and ponderal index. However, after adjusting for ethnicity, 25(OH)D was no longer associated with any of the outcomes. The same was found for those with consistently low and consistently high 25(OH)D, and for those which had an increase or decrease in 25(OH)D during pregnancy.

**Conclusions:** Maternal 25(OH)D in pregnancy is not associated with birth weight or other anthropometric measures after adjusting for ethnicity.

## OP21.2

### **Associations between vitamin D deficiency, leg muscle strength and grip strength in an immigrant population**

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**Background & Aim:** A majority of immigrants from the Middle East and Africa who live in northern Sweden were found to have vitamin D deficiency or insufficiency. Our aim was to examine the impact of vitamin D status on muscular strength in this population.

**Methods:** The cross-sectional population-based Vitamin D Deficiency in Immigrants (VIDI1) study was conducted from September 2009 till June 2010. All immigrants, ages 25-65 years originating from nine African or Middle East countries living in three districts in Umeå were invited. 216 immigrants participated; 111 men and 106 women. The participation rate was 16,5%. 73 % of the immigrants had 25(OH)D3 <50 nmol/L and 12 % had vitamin D deficiency (25(OH)D3 <25 nmol/L). Mean 25(OH)D3 was 41,0 nmol/L with no significant difference between men and women. Participants were examined with the Standardised Muscle strength test of lower extremities and a JAMAR hand dynamometer. S-25(OH) D3 was measured with HPLC. Anthropometry, medical history, socioeconomic and lifestyle data were registered.

**Results:** Immigrants with vitamin D deficiency had significantly weaker leg muscle strength ( $p=0,004$ ) and grip strength ( $p=0,029$ ) compared to other immigrants. 25(OH)D3 levels were significantly lower in immigrants with weakness in leg muscle strength ( $p=0,005$ ).

Other variables significantly associated with leg muscle weakness were obesity, low education level, occurrence of sick leaves and high age. Weakened grip strength was also significantly associated with being female, high age, occurrence of sick leaves and low education level. After adjustment for these variables leg muscle weakness and grip strength remained significantly associated with vitamin D deficiency ( $p=0,049$  and  $p=0,022$ ) in multiple regression analyses.

**Conclusions:** Our results support that vitamin D deficiency is significantly associated with weakened leg and grip strength. Doctors should be aware that vitamin D deficiency is not uncommon and might have negative health impact in immigrants from Africa and the Middle East.

### OP21.3

#### **Hippocrates 2.0 - how Hippocrates exchanges can benefit the host doctor, community and health care system?**

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**Background & Aim:** The Hippocrates Exchange Programme was created to encourage the exchange and mobility of young family doctors between European countries in order to promote professional and personal development while giving a unique opportunity for intercultural communication and peer collaboration. The multiple gains for young visitors have been recognized and widely disseminated in reports, articles and conferences. However, little has been said about the benefits for the host doctors. This presentation aims to share the potential benefits for the host doctor and community by accepting to host young international doctors to observe and engage in their activities.

**Method:** I will share my experience during a Hippocrates exchange held in London in 2015, where in addition to observe the daily work of a English General Practitioner, I participated actively in the development of a long-term project regarding the local Portuguese immigrant community, the Portuguese Community Engagement Project. This project works as a platform that bridges the gap between the National Health System (NHS) and this marginalised community by tailoring patient education to their cultural and linguistic needs. Recently, the project won a NHS health innovation fund.

**Results:** My experience proves that Hippocrates exchanges can directly benefit the host practice, community and health care system. The visitor can help the host doctor to engage with specific patient groups and be able to address more accurately their health needs. These exchanges can be exceptional opportunities to start international cooperation projects sensitive to European migration flows in order to adapt the provision of health care to certain migrant populations while promoting the effectiveness and sustainability of host health care systems.

**Conclusions:** The growth of Hippocrates exchanges is a reflection of the increasing mobility of citizens between European countries and can contribute to improve the provision of health care to increasingly multicultural populations.

## OP21.4

### **Perceived stress, multimorbidity, and risk for hospitalizations for ambulatory care-sensitive conditions: a Population-Based Cohort Study**

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**Background & Aim:** Ambulatory care-sensitive conditions (ACSCs), e.g. diabetes, COPD, and hypertension, should be treated mainly in primary care, and hospitalization for these common and costly conditions is potentially preventable. Psychiatric disorders are associated with an increased risk for ACSC-related hospitalizations, but it remains unknown whether this holds for individuals with non-syndromic psychosocial stress which is more prevalent in general practice. **Aim:** To determine whether perceived stress is associated with hospitalizations and rehospitalizations for ambulatory care-sensitive conditions and post-hospitalization 30-day mortality.

**Method:** Population-based cohort study with 118,410 participants from the Danish National Health Survey 2010 followed from 2010 to 2014, combined with individual-level national register data. Information on Cohen's Perceived Stress Scale was obtained from the survey. Multimorbidity was assessed using health register information on diagnoses and drug prescriptions within 39 condition categories.

**Results:** Being in the highest perceived stress quintile was associated with a 2.13-times higher ACSC-related hospitalization risk (95% CI, 1.91–2.38) versus being in the lowest stress quintile after adjusting for age, sex, follow-up time, and predisposing conditions. The associated risk attenuated to 1.48 (95% CI, 1.32–1.67) after fully adjusting for multimorbidity and socioeconomic factors. Individuals with above reference stress levels experienced 1,703 excess hospitalizations for ACSCs (18% of all ACSC-related hospitalizations). A dose-response relationship was observed between perceived stress and the ACSC-related hospitalization rate regardless of multimorbidity status. Being in the highest stress quintile was associated with a 1.26-times increased adjusted risk (95% CI, 0.79–2.00) for ACSC-rehospitalizations and a 1.43-times increased adjusted risk (95% CI, 1.13–1.81) of mortality within 30 days of hospital admission.

**Conclusions:** Elevated perceived stress levels are associated with increased risk for ACSC-related hospitalization and poor short-term prognosis. Further research is needed to determine if primary care-based stress reduction interventions could prevent these costly events and improve patient outcomes.

## OP21.5

### Level of competencies of family physicians from patients' viewpoint in post-war Kosovo

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**Aim:** Our aim was to assess the level of competencies of family physicians from patients' viewpoint in transitional Kosovo.

**Methods:** A nationwide survey was conducted in Kosovo in 2013, including a representative sample of 1340 primary health care users aged  $\geq 18$  years (49% males aged  $50.7 \pm 18.4$  years and 51% females aged  $50.4 \pm 17.4$  years; response rate: 89%). Participants were asked to assess the level of competencies of their respective family physicians. The self-administered questionnaire included 37 items structured into six domains. Answers for each item of the instrument ranged from one ("novice" physicians) to five ("expert" physicians). An overall summary score related to family physicians' competencies was calculated for each participant [range: from 37 (minimal competencies) to 185 (maximal competencies)]. Furthermore, demographic and socioeconomic data were collected. General Linear Model was used to assess the demographic and socioeconomic correlates of the overall level of family physicians' competences according to patients' perspective.

**Results:** Mean value of the overall summary score for the 37-item instrument was  $118.0 \pm 19.7$ . It was higher among the younger and the low-income participants, and in patients who reported frequent health visits and those not satisfied with the quality of the medical encounter. Conversely, no sex, or educational differences were noted.

**Conclusions:** Our findings indicate a relatively high level of competencies of family physicians from patients' perspective in post-war Kosovo. Future studies should comprehensively assess the main determinants of self-perceived competencies of family physicians among primary health care users in Kosovo.

**Keywords:** competencies, family physicians, primary health care users, quality of care.

### W35

#### **Clinical teachers, like Monsieur Jourdain, do clinical reasoning all the time without knowing it, but how can they teach it?**

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**Background and Aim:** The clinical setting in Primary Care provides a fertile learning environment for medical students and junior doctors who can engage in authentic professional tasks and problem-solving. This is particularly true for clinical reasoning. However, experienced teachers have to be conscious of their own clinical reasoning to be able to guide learners through the process of decision-making to come to a diagnosis, to decide on investigations or a management plan. Additionally, supervisors face specific challenges that render their task difficult, since they have to play both a clinical role with their patients and an educational one with their learners.

**Method:** The workshop will be divided into two parts. To begin, a brief overview of recent research in cognitive psychology will help participants to understand the analytical and non-analytical processes involved in clinical reasoning. Helpful supervisory behaviours will be discussed such as direct guidance on clinical work; linking theory and practice, engaging in joint problem-solving and offering feedback, reassurance and providing role models. In the second part, skills-building practical exercises will allow participants to simulate supervising clinical reasoning with learners. Thus, participants will learn how to use SNAPPS (a six-step, learner-centred technique for case presentations), the One-Minute Preceptor method (a technique for revealing clinical reasoning and providing constructive feedback) and the 4 steps Flipped supervision (that helps raise the cognitive level of clinical reasoning in the outpatient setting).

**Results:** Participants will be encouraged to reflect on their own clinical reasoning skills and will have practiced 3 supervision tools that can be immediately applied in educational outpatient settings. This will help experienced clinical supervisors to continue to care for their patients while efficiently helping learners to acquire complex problem-solving skills.

## **W36**

### **Theoretical framework for a study of WONCA women: influencing professional resilience of female family doctors during lifecycle transitions**

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With the WONCA Working Party on Women and Family Medicine (WWPWFM) we are embarking on a study titled “What do female family doctors believe influences their professional resilience during lifecycle transition events?”. The objectives are to:

1. Explore the types of lifecycle transitions experienced by female family doctors and the commonalities in resilience used.
2. Understand the individual, organisational and systemic factors common to all participants that can facilitate or act as a barrier to resilience.
3. Elicit key strategies for maintaining resilience through lifecycle transitions.
4. Utilise the research findings to develop recommendations for individuals and workplaces to help develop and maintain professional resilience amongst women family doctors.

in the initial phase of the study a literature review was performed and focus groups were held at four international conference workshops (in London, Dubai, Taipai and Denver). Then themes were tested that emerged from these focus groups at the Wonca Europe 2015 workshop in Istanbul. The data collected so far has provided a framework within which factors can be categorized and ranked. We plan to formally test our current framework, explore the themes further, and gather richer data through qualitative methodology, using in-depth semi-structured interviews with female family doctors from all seven WONCA regions; Africa, Asia Pacific, Eastern Mediterranean, Europe, Iberoamerica, North America and South Asia. The interview topic guide will be piloted at a workshop at the Wonca World Conference 2016, to ensure it is appropriate to doctors globally.

in this workshop we will present the background and findings of our scoping work, and then spend time considering the most appropriate epistemology and theoretical framework for the study. Delegates do not need to have expertise in qualitative research or theory, just an interest in the topic and willingness to explore ideas through discussion.

### W37

#### **Integrating health care in Skåne University Healthcare: how we went wrong and how to do it right again**

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**Background & Aim:** The aim of this workshop is to exchange ideas about how a fruitful integration between primary care and specialized care can be achieved. The session draws on experiences from Skåne University Healthcare, formed in 2013 as primary care was integrated into Skåne University Hospital. One central ambition with the new organization was to strengthen the cooperation between primary and specialized care. In practice, the realization of the vision has included organizational trials where elements of the specialized outpatient care have been moved to selected primary care centers. Integration attempts have been made in the areas of gynecology, pediatrics, cardiology and endocrinology.

**Method:** Experiences from the above-described trials will be presented, with a special focus on the implementation process and its challenges. Results to date will be displayed, but also ongoing redirections of the integration work as a response to organizational conditions.

Workshop participants will then be invited to reflect upon, discuss and exchange ideas regarding the prerequisites for integration between primary care and specialized care more generally. Group discussions will be guided to dwell upon systemic aspects including, but not limited to, the impact of reimbursement systems, physical and organizational boundaries, professional cultures, and the actual needs of the patients targeted.

Participants will have discussed the organizational challenges of integrating health care, notably primary and specialized care. Popular concepts like the "lowest effective level of care" (known as the LEON principle in Scandinavia) and what "closeness" to the patient really means will have been problematized and discussed. Ideally, participants will also have shared experiences from own organizational trials and how these issues have been approached in local contexts.

The overall aim is to gain a deeper understanding of systemic barriers that must be handled in order to achieve useful and sustainable health care integration in the future.

## W38

### **‘GP take care’: a self-care workshop**

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**Background:** ‘GP Take Care ©’ (Hayes, 2015) could be an invitation or a warning. Since 2013 over 80 Irish GPs have chosen to see it as a timely reminder to genuinely take care of themselves. This programme has been developed by Dr. Claire Hayes, Consultant Clinical Psychologist, in partnership with the Irish College of General Practitioners (ICGP). The programme has been delivered as a core part of the ICGP’s Summer and Winter Schools. Participants have described it as a practical, enjoyable, non-threatening and effective way to proactively develop resources to cope with the challenges of being a GP in Ireland.

**Aim:** To provide GP delegates to the WONCA Conference:

- 1) Increase their knowledge of the impact of stress and their understanding of the importance of self-care;
- 2) Develop their abilities to employ cognitive behavioural principles, imagery and relaxation techniques to increase self-care practically;
- 3) Explore their experiences of self-care and possible blocks to prioritising this area daily.

**Method/Content:** This workshop will bring participants through a process in which they consider their key stressors, explore how they typically cope with these and increase their coping resources.

**Results:** Participants will complete a form at the start of the workshop to establish their level of stress, their top stressors and how they typically cope. They will complete a second form at the end to evaluate the workshop and to assist in developing a plan as to how they can prioritise taking care of themselves.

**Integrated healthcare organization in academic oriented Julius Health Centers, The Netherlands**

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**Background:** The Julius Health Centers (JHC) are the academic primary care practice of the University medical center in Utrecht in the Netherlands. The JHC provide innovative, integrated primary health care for almost 40.000 patients, from five multidisciplinary health centers. Services are provided by 26 general practitioners, in close collaboration with practice nurses, physiotherapists and mental health staff. JHC employs nine general practitioners with a special interest (SIGP) and training in resp. chronic disease (Diabetes, Asthma and COPD, cardiovascular disease), prevention, mental health, gynecological- and orthopedic care and e-health. These SIGP's are responsible for the quality of care, research, development of health care innovation and professional education in their field. Aim of this Workshop: To discuss and exchange success factors, pitfalls and challenges in the development and implementation of innovative integrated care programs for chronic disease management and prevention.

**Method:** The following aspects will be presented:

**Brief introduction about the aims and organization of academic practice in the Julius Health Centers**

*Niek de Wit*

**Example of diabetes care. From disease management program to more personalized care with an online self-management program for diabetes mellitus**

*Bertien Hart, SIGP Diabetes*

**Example of Cardiovascular care.**

Experiences about an integrated CVD disease management program (with project-based approach, case-finding and a programmatic prevention consultation screening program) will be presented.

*Monika Hollander, SIGP Cardiovascular Disease*

**Example of COPD and Asthma care.**

Besides the disease management program for patients with COPD, the study about 'overdiagnosis' of asthma in children in primary care, which lead to a structured proactive asthma disease management program for children, will be presented.

*Ingrid Looijmans, SIGP Asthma/COPD)*

A variety of best practice preventive projects, such as the web-based cardiovascular health risk assessment (the personal health check) and the implementation model 'infrastructure of a healthy community, will be presented

*Karolien van den Brekel, SIGP Prevention*

**Updates of quality improvement strategies in the Nordic countries - retrieval and analysis of data in changing the processes of care**

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(2) Conmedic, Espoo, Finland

(3) University of Southern Denmark, Odense and Danish Quality Unit of General Practice, Denmark

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**Background:** There is a need for continuous and systematic quality improvement in general practice using data retrieved from patient records and registers. Several initiatives in the Nordic countries are examples on strategic efforts in order to improve quality of care in different diseases, but there is also a need for a more general perspective e.g. drug prescription, chronic diseases with comorbidity and continuity. The aim is to present examples from the Nordic countries and how a more general perspective is supported from the national authorities.

**Methods and Results:** Finland is heading for a major change in health care system; 15 regions will organize care instead of over 200 health centers today. The change calls for good data management in patient records and systematic follow-up of quality of care. In Denmark data capture has been in use since 2006 and became mandatory for specific chronic diseases in 2013. There is an on-going debate in Denmark concerning use of data collected from primary care. Data offers large opportunity for research in chronic conditions and may give raise to health care improvements, but may however induce strategic coding and affect the quality of data. The Norwegian Medical Association established the SKIL center in 2015 in order to make quality improvement an integrated part of clinical practice. To achieve this, customized reports from the EMR are combined with group activities to help doctors plan quality improvement strategies within central clinical themes. This model used on revision of medication lists in GP's offices will be presented. In Sweden the strategies of 20 years work of Strama for prudent antibiotic use with decreased antibiotic prescribing will be presented. A national system for primary care quality has now been launched using data from the patient record and evidence based indicators, where experiences from Strama can be used.

## W39

### **Barriers and facilitators to implementation of clinical practice guidelines**

*Esra Meltem Koc(1), FG Cihan(2), I Kunnamo(3), A Baydar Artantas(4), S Rabady(5)*

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*(2) Necmettin Erbakan University School of Medicine, Department of Family Medicine*

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**Background:** Clinical practice guidelines (CPGs) are statements that include recommendations intended to optimise patient care that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options. To improve the health care services as evidence based and scientific, the implementation and usage of the clinical practice guidelines should be increased. Workshop Purpose: The aim of this workshop is to determine facilitators and barriers to implementation of clinical practice guideline and discuss experiences of different countries Workshop Target Audience: Guideline developers, Clinical Physicians, Decision makers Workshop Description: Clinical practice guidelines are developed by different governmental and non-governmental institutions and international guideline networks all over the world. The number of CPGs has risen a hundred-fold from 70 in 1990 to 7508 in 2012. Despite this overwhelming number of CPGs, implementation of guidelines is a complicated and difficult task. The barriers and facilitators can be changed from settings to settings. The effectiveness of an intervention to improve adherence to guidelines is therefore not generalisable and must first consider the barriers and facilitators that are present. In this workshop development process of the CPGs will be presented by ABA. EMK will give informations about barriers and facilitators that can be seen at the implementation process and present findings from Turkey. IK (Finland) and SR (Austria) will explain the implementation process in their countries. The session will continue with an open discussion with speakers and audiences about which barriers and facilitators identified in their daily practices and which kind of precautions should be taken about implementation process in order to increase the usage of CPGs. Key words: guidelines, implementation, barriers, facilitators

**S22**

**Prevention of urinary incontinence in women: detecting risk factors during life-time in general practice**

*Toine Lagro-Janssen(1), Doreth Teunissen(1), Guri Rortveit(2), Eva Samuelsson(3), Carmen Verhoeks(1)*

*(1) Radboudumc, Primary and Community Care, Nijmegen, The Netherlands*

*(2) University Bergen, Department of General Practice, Bergen, Norway*

*(3) Umea university, Department of Public Health and Clinical medicine, Umea, Sweden*

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**Background & Aim:** Urinary Incontinence (UI) is a huge and prevalent problem among women of all ages. Although there are effective treatments available, many women will not seek help. The prevalence of UI increases with age. Therefore it is important to detect risk factors, contributing to UI, during a women's life-time. Pregnancy and delivery are such risk factors, so the symposium will focus on risk factors associated with both conditions. In getting older, women will meet several problems which might be at risk for UI. Therefore, detection of risk factors in the elderly will also be one of the subjects of this symposium. Lastly, to optimize the help-seeking behaviour of women suffering from UI, it is important to get insight into their views and experiences with help-seeking behaviour and about their wishes concerning appropriate help.

**Methods:** Symposium with four presentations and discussions (10 minutes per presentation with 5 minutes discussion after each presentation), chaired by Prof dr Toine Lagro-Janssen, Department of General Practice, Radboudumc, Nijmegen, The Netherlands

**Presentations:**

***Risk factors of UI associated with pregnancy and delivery***

Prof dr Guri Rortveit, Department of General Practice, University Bergen, Norway:

***Risk factors of UI in elderly women***

Dr Doreth Teunissen, Department of General Practice, Radboudumc, Nijmegen, The Netherlands:

***The eContinence project and the mobile application Tat for treatment of stress urinary incontinence-will it influence access to care?***

Dr Eva Samuelsson, Department of Public Health and Clinical Medicine, Umea university, Sweden:

***Who prefers e-health treatment and why: a systematic review.***

Dr Carmen Verhoeks, Department of General Practice, Radboudumc, Nijmegen, The Netherlands:

**Results:** Participants will achieve knowledge about what is known from research and literature about risk factors of UI in women, about help-seeking behaviour and preferences of treatment.

**Conclusions:** Based on this knowledge the management by GP of UI in women can enormously be improved.

## **S22.1**

### **Risk factors of UI associated with pregnancy and delivery**

*Guri Rørtveit*

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Normal vaginal delivery can cause significant strain on the pelvic floor. Compared to vaginal delivery, caesarean section appears to protect against urinary incontinence, but the effect decreases after patients reach their fifties. Women who have had cesarean sections only have increased risk compared to nulliparous women, indicating that the pregnancy itself is a risk factor for urinary incontinence, too. There is no scientific basis for identifying sub-groups with a high risk of pelvic floor injury. Caesarean section will have a limited primary preventive effect on pelvic floor dysfunction at a population level. The degree of severity is frequently unreported in the literature, and most women under 50 years of age have only milder problems. Prevention and management of urinary incontinence in women in fertile age should include pelvic floor exercises

## **S22.2**

### **Risk factors for urinary incontinence in elderly women**

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**Purpose:** The aim of the study is to evaluate riskfactors for urinary incontinence among elderly women (>65 years).

**Methods:** We conducted a computerized searches on PubMed for reviews and guidelines about riskfactors for urinary incontinence in elderly women (>65 years).

**Results:** Urinary incontinence in older persons may be caused or worsened by comorbid conditions, medications, and functional impairment. These conditions are ability to get the toilet (like functional impairment, poor access to toilets), fluid balance (like the use of diuretic medications, excessive intake), urethral closure (like obesity, cough because of chronic pulmonary disease), bladder contractile strenght (like medication, diabetes mellitus) and uninhibited bladder contractions (like CNS diseases, stroke). But also white women are more at risk to developpe UI compared to black women (OR 2.8).

**Conclusion:** Healthcare providers should known which elderly women are at risk for developing urinary incontinence. Optimising the comorbid conditions like improve mobility, improve access to toilets, reduce weight, change medication if possible can help to reduce UI.

### **S22.3**

#### **The eContinence Project and the mobile application Tät® for treatment of stress urinary incontinence - will it influence access to care?**

*Eva Samuelsson*

*Department of Public Health and Clinical Medicine, Umeå University, Sweden*

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The use of the internet and smartphones increases rapidly, offering new possibilities to prevent and treat urinary incontinence. Health apps may have the potential to change help-seeking behaviour for women with incontinence. Within the eContinence research project we have developed and evaluated an internet programme and the smartphone app Tät® for treatment of stress urinary incontinence (SUI). The app has information about SUI, lifestyle factors, and features a pelvic floor muscle-training programme along with reminders and user statistics. We demonstrated its efficacy for symptom severity and quality of life in a randomised controlled study (RCT), including 123 women with SUI. The app is now available free of charge at App Store and Google Play and we continue to follow the use and the effect of treatment. During the symposia we will discuss the access to first line treatment for UI in our different countries, benefits and disadvantages with eTreatment of UI.

## **S22.4**

### **E-health from women's perspective: a systematic review**

*Carmen Verhoeks*

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**Background & Objective:** E-health interventions might be promising for the treatment of Stress Urinary Incontinence. Before we'll be able to develop and implement an E-health intervention for this purpose, more has to be known about women's perceptions regarding E-health.

**Methods:** A search was conducted in Medline, Embase, Cinahl and PsycInfo to identify articles reporting on E-health interventions that are entirely text-based (internet-based self-help, online counselling through chat or E-mail) and include adult women.

**(Preliminary) Results:** We included 17 articles evaluating 15 interventions. Five different categories relating to women's perceptions of E-health emerged:

- (1) expectations regarding E-health,
- (2) motivations to choose E-health,
- (3) barriers to persist with E-health,
- (4) barriers to face-to-face care, and
- (5) preferences and recommendations regarding treatment modality.

Motivations to choose E-health were related to perceived barriers to face-to-face care.

**Conclusions:** Although E-health seems to lower barriers to healthcare, support from a therapist is perceived as fundamental. More research is required to determine which women might benefit from E-health interventions.

## **W40**

### **Selecting and allocating our future GP colleagues**

*Peter Prydz(1), Søren Prins(2), Roger Damoiseaux(3), Margit Vermeulen(3), Nynke Scherpbier-deHaan(4)*

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**Background & Aim:** To improve the quality of general practice it is important to attract competent medical doctors for GP specialty training who serve all regions of the country. Countries in Europe face different situations when it comes to selection and allocation. It is important to get an overview on the factors that play a role in selection procedures: what are the aims of the various procedures? Opting out the ones who will underperform? Or opting in to get the best future GP's? Should a ranking be made and how should this be done? How can be arranged that all areas of the various countries are served with GPs? The various settings in Europe have led to various procedures. EURACT, the European academy of teachers in general practice/family medicine, is investigating the aims and procedures of the various selection and allocation procedures. What works and why? Knowledge of the various procedures and selection tools in Europe could help future implementation of selection procedures.

**Method:** All EURACT council members have filled in a survey on selection procedure in their county. Preliminary results show that there is a great variety in procedures. The results of the survey will be available during the conference. The discussion in the workshop will have the character of a focus group in which participants will explore aims of selection and allocation and the procedures designed to fulfil these aims. The discussion will be preceded by short inspiring presentations on the procedures in Norway, Denmark and the Netherlands.

**Results and Conclusions:** The conclusions of the workshop, combined with the results of the survey, will be published in a peer reviewed journal. Abstract theme Postgraduate education and health care organization.

## S23

### **Harnessing real-world data to address unmet needs in asthma & allergy care**

*Dermot Ryan(1), Job van Boven(2), Michael Thomas(3), Daryl Freeman(4), Victoria Carter(5)*

*(1) Honorary Clinical Research Fellow, University of Edinburgh, Edinburgh, UK*

*(2) University of Groningen, Groningen, The Netherlands*

*(3) The University of Southampton, Southampton, UK*

*(4) Norfolk Community Health and Care NHS Trust, Norwich, UK*

*(5) General Manager of Optimum Patient Care Ltd, Cambridge, UK*

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Bringing together collaborators from the Respiratory Effectiveness Group – an international research and advocacy initiative set up to conduct and promote high-quality real-life research ([www.effectivenessevaluation.org](http://www.effectivenessevaluation.org)) the session will discuss the value of real-life research and where it can supplement and complement the existing classical randomized controlled trial (RCT) evidence base, and provide examples of high-quality studies conducted by REG (and others) that consider how primary care data can be used to risk profile asthma patients and guide clinical decision making.

It will also discuss some of the practical quality considerations involved in conducting high-quality database research – covering issues around diagnostic coding in clinical databases as well as the data parameters necessary to enable meaningful asthma/allergy research. The symposium will balance conceptual ideas about the relative strengths and weaknesses of different research methodologies, with examples of high-quality peer review asthma and allergy research as well as provide practical advice for those currently planning to conduct their own real-life studies and/or develop clinical databases with future research utility. For the benefit of the WONCA delegates, the session will aim to:

- Raise awareness of different of real-life research methods
- Demonstrate the potential value these real-life study methods can offer in addressing unmet clinical and research needs in allergy
- Share worked examples of peer reviewed database research in asthma and allergy and how allergy is currently managed
- Address quality issues in database research.
- Evaluate the real-life research evidence in the context of asthma and allergy guidelines
- Raise awareness of the role real-life studies can take in planning patient-centric care and in tailoring available therapies to the needs of individual patients (e.g. stratification)

### **Proposed presentations, moderators, speakers**

*Moderator: Dermot Ryan, Honorary Clinical Research Fellow, University of Edinburgh, Edinburgh, UK: [dermotryan@doctors.org.uk](mailto:dermotryan@doctors.org.uk)*

### **Presentation titles / presenters**

**Presentation 1:** The role of primary care databases in developing asthma and allergy service delivery

*Presenter: Dermot Ryan, Honorary Clinical Research Fellow, University of Edinburgh, Edinburgh, UK: [dermotryan@doctors.org.uk](mailto:dermotryan@doctors.org.uk)*

**Presentation 2:** Leveraging datasets and insisting on quality to address unmet research needs

*Presenter: Jens Søndergaard, The Research Unit of General Practice, Institute of Public Health, at the University of Southern Denmark: [Jsoendergaard@health.sdu.dk](mailto:Jsoendergaard@health.sdu.dk)*

**Presentation 3:** Routine primary care data - the new crystal ball?

*Presenter: Mike Thomas, The University of Southampton, Southampton, UK; [D.M.Thomas@soton.ac.uk](mailto:D.M.Thomas@soton.ac.uk)*

## **S23.1**

### **The role of primary care databases in developing asthma and allergy service delivery**

*Dermot Ryan*

*Honorary Clinical Research Fellow, University of Edinburgh, Edinburgh, UK*

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Current asthma and allergy guidelines place evidence at the center of clinical decision making, adopting a generalized rather than individualized approach to therapeutic management. The result is that some patients end up on high levels of medication, possibly over-treated, yet still sub-optimally uncontrolled. A more patient-centric approach would put the patient at the center and adapt the available evidence to their specific needs in line with the original concept of evidence-based medicine (EBM). Clinical databases can assist in the examination of the interactions that occur between clinical, lifestyle and demographic characteristics of patients and their real-world, routine care therapeutic outcomes. The way such data is utilised may benefit outcomes at the individual patient level (e.g. by characterising current control, barriers to optimum outcomes and potential opportunities to improve current care) and at the practice level (e.g. to help stratifying the patient population, assist in targeting available resources and training, and in practice benchmarking). Practice data can also be aggregated to support the planning of integrated care pathways or budgets for medications use. This session will explore both worked examples of how clinical databases have and are being used and propose and explore further opportunities.

## **S23.2**

### **Leveraging datasets and insisting on quality to address unmet research needs - the epidemiologists' dream WONCA SIG Symposium**

*Jens Søndergaard*

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By aggregating data from large numbers of heterogeneous patients managed in everyday routine care, electronic health records can be used to explore clinical realities and related outcomes to wide effect. They can be used to evaluate current care practices, examine differential safety and effectiveness treatments (and across key patient subgroups of interest) and, at an international level, to compare and contrast system-based outcomes, demonstrate differences in disease prevalence (between regions and countries) and possible differences in etiology. As recognition of the potential value of database studies grows, there is a parallel need to raise awareness of what constitutes quality in database research. The robustness of database research is not only impinging upon high quality database research methodologies and selection of the appropriate data source for the question at hand, but also on the very quality of the data contained available (e.g. variables, the completeness and quality of data). This presentation will review some of the strengths and limitations of databases for medical research and offer recommendations for how to optimize quality at the development / design stage and opportunities to support high quality data entry.

### **S23.3**

#### **Routine primary care data - the new crystal ball? WONCA SIG Symposium**

*Mike Thomas*

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In their 2014 recommendation update, the Global INitiative for Asthma (GINA) called for a more risk-focused approach to management. If used appropriately primary care records capturing routine data can be used not only to characterize current asthma control and current/prior practice, but also to "predict future risk". By considering aggregate patient data, it is possible to identify common characteristics associated with future events and to explore combinations of factors that, together, may have a stronger association with specific future risks, such as exacerbations, multiple exacerbations, hospitalisations. Used in this way, clinical records can point to opportunities to modify risk and to intervene to mitigate against future events. This presentation will consider examples of how primary care records have been used in this risk prediction capacity within asthma and, in particular, at how they have been used to examine the potential role of routinely collected blood eosinophils (rather than more invasive and less routinely recorded sputum eosinophils) as biomarkers in asthma and allergy. Future opportunities for biometric use of primary care databases (e.g. IgE, FeNO and multi-allergen screening) will also be discussed.

**Organization of the healthcare system in Europe: what facilitates & what impedes the delivery of effective primary care**

*Mehmet Ungan(1), Christos Lionis(2)*

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Symposium is based on a Project by WONCA World Working Party on Research. EGRPN is in coordination. The project is supported and endorsed by WONCA, WONCA Europe & EGPRN and by the NAPCRG. Professors Ungan & Lionis will co-chair. Format is designed to address a knowledge gap in terms of how primary care (PC) is organized around the world, and to create dialogue between colleagues and colleges about how the fundamental values of PC can be addressed, preserved within the constraints of different healthcare systems, sometimes operating within the same country. The representatives from 7 countries will present the facilitators, barriers that the organization of the healthcare system in their nation impacts on providing effective PC. Each will have 7 minutes and not more than 11 slides to answer to questions in the template. A facilitated discussion will be in the last 20 minutes. The presentations will be published in web sites together with the presentations of last symposium held in the 2014-2015 WONCA Europe Conferences. The presentation template is as follows:

1. Introduction:

- Population
- Distribution (eg urban / rural / remote)
- Socioeconomic breakdown
- Ethnic groups
- Other relevant characteristics, religions

2. Health system design:

- Funding – state, public
- Secondary care
- Health insurance available? Who would get? offers choice of specialist & hospital care
- Primary care
- Medicines & investigations

3. How primary care is delivered in - model(s) of care

4. Access to primary health care in

5. Benefits and drawbacks of health care system 6. Impact of system on care

7. Growing health care burden in

8. Lessons for other countries - Summary of what works well and does not work well in PHC in this country.

## W41

### **Lessons from a far off land: The ethics and impact of medical volunteerism in family medicine**

*Claire Marie Thomas(1), C Gallivan(1), Per Kallestrup(2), Veronika Rasic(3)*

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**Background & Aim:** Every year hundreds of doctors from across Europe travel around the globe to volunteer overseas. What effect does this have on European and overseas health systems? How does it contribute to professional and personal development of doctors? Are there any special considerations for Family Medicine/Primary Care orientated work? This workshop aims to share personal examples of medical volunteering overseas, provide an overview of current research into the effects of medical volunteerism and to encourage participants to explore and share their own views on the ethics and effects of medical volunteerism.

**Method:** There will be 3 presentations from GPs who have volunteered overseas, sharing their personal experiences and perspectives. This will be followed by small group work looking at:

- 1) Advantages, disadvantages and learning opportunities for individual doctors
- 2) Advantages, disadvantages and learning opportunities for overseas health systems
- 3) Advantages, disadvantages and learning opportunities for European health systems

Each group will be encouraged to consider any specific issues that may be unique to medical volunteerism in the field of Family Medicine and Primary Care. The work shop will close with a summary of the latest research into medical volunteerism and signpost people to opportunities for further learning and opportunities for Family Medicine Doctors in this field. Results and **Conclusions:** Key discussion points will be communicated live on social media under MedicalVolunteer . The outcomes of the workshop will be developed into a declaration on Medical Volunteerism and disseminated through the Vasco de Gama Beyond Europe group and other relevant WONCA SIGs and Working Parties.

## W42

### Can education of GP's be a waste of time?

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**Background & Aim:** in general practice, care quality and patient security rests to a great deal upon doctor's knowledge, skills and attitudes. Throughout their career, doctors continuously learn in order to maintain and develop professional ability.

Contrary to what many of us believe, the main portion of learning emanates from informal collegial interactions and from experiences that we achieve in daily practice. Undoubtedly, there is also a need for keeping up with new scientific findings that will be obtained on courses, conferences etc. There is also a need for reading on one's own and for professionals to come together in formal small group discussions.

Many countries have elaborated educational programs for GP:s of which some are optional and some compulsive. In many countries CME credits are used to ascertain relevant competence and hence to allow for further practicing as a specialist.

It has been argued (Janet Grant and others) that isolated learning activities like sporadic clinical courses are ineffective unless they are reflected on and coherently managed as a part of a personal learning plan.

This workshop will address two questions:

1. What constitutes a national educational policy designed to fulfill the requirements of being pedagogic, feasible, cost-effective and appealing to GP:s?
2. What should GP:s, professional bodies and decision-makers do to implant such a policy into practice?

**Method:** After a brief introduction by workshop leaders, delegates are invited to share experiences and ideas, which will be discussed later in the workshop.

**Result and Conclusions:** The workshop will end up with a conclusion and a summary of important sayings during the session.

## W43

### Lead the next health movement Part II

#### Learn how to become peer health coaches

*Rick Botelho*

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**Background:** Disease is an individual, private and clinical affair. Health is a social, public and political affair. To improve the health of the overall population, we must expand beyond:

- The constraints of 1-to-1 doctor-patient encounters and 1-to-n population health programs to create
- An abundance of (n-to-n) peer health coaching communities

We must design and build health movements for the people, and led by the people. Health movements break through the evidence-based ceiling of organizational performance.

#### **Aim:**

- Develop peer health coaching skills for everyday life.
- Become the researcher of your own behavior to create personal evidence about deep change
- Collaborate with a colleague, family member or friend to improve your health habits together

**Method:** Download handout from [www.healthcoachingbuddies.com](http://www.healthcoachingbuddies.com)

Experience peer health coaching with a colleague

- Use the peer health coaching principles and guidelines
- Complete self-reflective learning exercises
- Take turn coaching each other about making deep change

#### **Results:**

##### **Learning Outcomes**

- Understand what it means to go beyond surface change: gaining knowledge, having good intentions and setting goals
- Develop your own personal evidence about making deep change (reducing resistance, increasing motivation, etc)

**Conclusion:** We must learn how to improve our health habits before helping our patients and their families do the same. To participate in this learning journey, you can join the SIG on Complexities in Health to:

- Take the online peer health coaching course <http://bit.ly/1zLgwqv>
- Participate in an ongoing online learning community about how to implement peer health coaching platforms and programs within your organization and community

W44

Paper No.: 290

Presentation Type Preference: WONCA Network/Special Interest Groups

Main Abstract Theme: 04 - DIAGNOSING – A VITAL TASK FOR FAMILY MEDICINE

**Overdiagnosis and patient harm or how unsafe is striving for certainty? A workshop using advanced quality circle methods**

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*(3) On behalf of the European Society for Quality and Safety in Family Practice*

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**Background and Aims:** As diagnostic methods increase, overdiagnosis is an increasing threat to patient safety. Harmless disorders are unjustifiably considered dangerous, non-specific definitions like blood glucose levels or blood pressure limits are exaggerated, self-limiting diseases are too carefully evaluated and stable or slowly-progressing, symptom-free diseases are clinically overemphasized. Anatomical or biochemical variations are considered diseases and life-stages are increasingly medicalized. Careful evaluation of patients' needs is key before starting diagnostic procedures to avoid overdiagnosis and related overtreatment. It is important to understand the origins of overdiagnosis and the skills for dealing with uncertainty are particularly important in General Practice as undifferentiated and unorganized problems present a common challenge. Each participant in this workshop learns what overdiagnosis is and its relevance for patients. Practical approaches are discussed and assessed.

**Methods:** Groups of max 12 people contemplate typical clinical situations, like cancer-screening, medically unexplained symptoms or cases of polymorbidity, and it mirrors practice by looking at diagnostic pattern habits. Emerging topics are discussed considering evidence-based information. Facilitators involve all workshop participants with an appropriate balance between comfort and challenge, using different techniques to reflect practice, such as brain-storming, followed by contentious discussions and reaching a consensus, professional reprocessing of patient situations and raising awareness of emotions. Practitioner knowledge is combined with evidence-based medicine (EBM) knowledge and discussed among the groups.

**Results:** Origins of overdiagnosis include social problems that need solutions, experts and their attachment to industry, expansion of the disease concepts through guidelines, faith-based medicine, culturally-induced mania or patient and staff anxieties. Practitioner knowledge and EBM knowledge are combined to form new concepts for avoiding overdiagnosis.

**Conclusion:** Group discussions are an excellent method of mobilising practitioners' expert knowledge. They provide participants with the opportunity to integrate personal experience with EBM knowledge-sources to create a new way of thinking.

## **EP01.01**

### **The significance of the anamnesis in primary care regarding a deep vein thrombosis in a 24 old girl**

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Making a diagnosis of deep vein thrombosis (DVT) requires both clinical assessment and objective testing because the clinical features predict DVT like-hood but are still unspecific, and on the other hand investigations mostly ultrasound a dimer-D lab test, can be either falsely positive or negative. In our case a 24 years old woman came to our consult at the emergency consults area, she had a constant pain on her right leg that had appear suddenly 12 hours before and kept in constant ascent. She had no traumatism on the area, no fever, and no clinical background: neither surgery, she was taking oral contraceptives daily since she was 20. She also told that she had been visited by her GP doctor hours before and that have given no importance to the clinic and prescribed paracetamol which had not helped with the pain. I explored the patient I saw redness on her right tight, also high temperature respect to the other low extremity, the femoral pulses were symmetric but the pedis right pulse was weak, the right foot area was coloured blue. Based on the anamnesis and physical exam I first thought of DVT and isquemia, she had 6 points on the wells score, high risk. Blood lab test including Dimer-D were run and also an ultrasound which was positive for DVT. She was treated with sodic enoxaparin. In conclusion, this patient was treated by two doctors, the first didn't do an exhaustive anamnesis and so did not get to the accurate diagnosis which supposed a risk to the patient. Luckily she was after visited by a second doctor and based on an anamnesis reached to a diagnostic suspicion that was confirmed with tests and the patient is recovering OK, therefore the importance of the anamnesis and physical exploration.

## EP01.02

### Knowledge of nulliparous women healthcare professionals & students about child development

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**Background & Aim:** in developing countries like Turkey, parents are not informed or got satisfying knowledge about child development. in this study, our aim is to evaluate the maternal knowledge about child development in healthcare professionals, who are expected to exemplary in this field.

**Methods:** The female healthcare specialist and students who are in faculties related with health (school of medicine, dentistry, nursing etc.) were included in the study. The Caregiver Knowledge of Child Development Inventory (CKCDI) was used to determine their knowledge and their sociodemographic features were recorded. for statistical analysis; Chi square, Student T-test, and ANNOVA were used via SPSS v20.0,  $p < 0.05$  was considered significant.

**Results:** in total, 120 female whose mean age was  $25.69 \pm 5.40$  were included the study. 70.9% graduated from university, 26.7% were nurse and 75.0% were single. While only 11.7% of them acquired knowledge about child development from Family Physicians, most of them (35.8%) learned from journals/books. The mean score of the CKCDI of the total group out of 40 points was  $17.66 \pm 8.21$  (min=0, max=34). The mean CKCDI score was significantly higher ( $8.21 \pm 1.50$ ) in married females than single women ( $p = 0.007$ ). The most correct answers that participants got were to the questions; “when to teach them how to count” (67.5%, n=81), “the colors” (64.2%, n=77), and “the time when children start to walk” (66.7%, n=80). On the other hand, the questions about; “looking at children’s books” (87.5%, n=105), “giving safe household items to them” (88.3%, n=106) were answered most incorrectly. There was borderline significant relation with CKCDI scores and the occupation in medical doctors ( $p = 0.051$ ).

**Conclusions:** in our country, female health staff and students have unsatisfying knowledge about child development. As being role models to the public, all health staff should be trained about child development and it should be obligatory lesson in all health related schools.

### EP01.03

#### Using medical knowledge sources on handheld computers – A qualitative study among junior doctors

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**Background:** The emergence of mobile computing could have an impact on how junior doctors learn. To exploit this opportunity it is essential to understand their information seeking process.

**Aim:** To explore junior doctors' experiences of using medical knowledge sources on handheld computers.

**Method:** Interviews with five Swedish junior doctors. A qualitative manifest content analysis of a focus group interview followed by a qualitative latent content analysis of two individual interviews.

**Results:** A focus group interview showed that users were satisfied with access to handheld medical knowledge sources, but there was concern about contents, reliability and device dependency. Four categories emerged from individual interviews:

- (1) A feeling of uncertainty about using handheld technology in medical care;
- (2) A sense of security that handhelds can provide;
- (3) A need for contents to be personalized;
- (4) A degree of adaptability to make the handheld a versatile information tool. A theme was established to link the four categories together, as expressed in the Conclusion section.

**Conclusion:** Junior doctors' experiences of using medical knowledge sources on handheld computers shed light on the need to decrease uncertainty about clinical decisions during medical internship, and to find ways to influence the level of self-confidence in the junior doctor's process of decision-making.

#### **EP01.04**

### **The accreditation of the Family Medicine Postgraduate Program MRCGP INT- Kosovo by RCGP - a new hope and understanding**

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MRCGP[INT] accreditation is granted to postgraduate examinations outside the UK and testifies that they are of the same academic rigor and professional standard as the MRCGP examination in the UK. From the outset RCGP IDA;s has assisted a family medicine master trainers out of eight Family Medicine training site achieving a MRCGP INT . On March CDFM-K 2015 MRCGP-INT has been awarded, The Accreditation of the Family Medicine Postgraduate Program by RCGP. The aim is to present the impact of MRCGP-INT in the quality, strengthening both the role and development of family medicine in Kosovo. The “Exam Board” consisting of local master trainers agreed between RCGP AND CDFM-K has developed, the whole submission package which consisted of Curriculum, Blueprint, Log Diary ,work place based assessment (WPBA) forms, summative assessment consisting of Applied knowledge test and Clinical skills Assessment. MRCGP INT has been completed to a satisfactory level and approved by RCGP. The 75 Candidates who’s successfully completed the 3 year Specialization program went thru examination process consisting of formal and summative assessment on AKT and CSA. A formal EDA’s from RCGP has directly observed and assessed entire process. The CDFMK accreditation is a recognition towards achieving the optimum standards and continuous improvement of the quality of the program with the aim for it to become the Regional reference center for MRCGP INT postgraduate specialization program in Family Medicine. Developing a high Standards of Academic staff and establishing a Family Medicine Department in Collaboration with Medical Faculty is one of the next targets. This accreditation will also serve as a model for the reforms of the postgraduate specialist programmes in the secondary and tertiary level by the Ministry of Health of Kosovo.

## **EP01.05**

### **Website about classroom education in the field of health**

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**Goals:** To make public the educational offer of our city in the area of Medicine and to promote educational stays.

**Description:** Courses, workshops, master's degrees, short training stays, meetings and exchanges. As an educational unit we receive requests from many professionals who are interested in the participation of health related events in our city. Small health centers, hospitals, and universities have a wide range of offers in training, but many doubts arise on where the training is held and how to contact centers, as well as the opinions of professionals and many other issues.

We have designed a website that provides answers to these issues. Our website aims to provide all the information that a health professional from any country needs in order to organize their stay and facilitates a full service.

**Conclusion:** Our experience allows us to provide answers to the increasing demand of educational stays in our city. Applicability The project began in the first quarter of 2016 and its growth depends on the success of the offer.

## EP01.06

### Topical non-steroidal anti-inflammatory drugs for pain in knee osteoarthritis - an evidence based review

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**Background & Aim:** Osteoarthritis (OA) is a common form of degenerative joint disease with increasing prevalence. The first line of treatment includes oral analgesics like paracetamol, topical non-steroidal anti-inflammatory drugs (NSAIDs) and oral NSAIDs. Oral NSAIDs are effective in pain relief in OA, but are also associated with risks of adverse systemic side effects, making topical NSAID a possible, safer alternative. The aim of this review is to examine the evidence for the efficacy and safety of topical NSAID in the management of OA of the knee.

**Method:** The MEDLINE database, The Cochrane Library, National Institute for Health and Care Excellence and others sites of international scientific associations were searched using various keywords, including various combinations of search terms “Topical Administration”, “Non-Steroidal Anti-Inflammatory Agents”, “Osteoarthritis” and “Knee”. It was used the Strength of Recommendation Taxonomy (SORT) of the American Academy of Family Physicians to evaluate the level of evidence and the strength of recommendations.

**Results:** From the numerous search results, 8 studies (5 guidelines and 3 meta-analyses) were chosen and their data were gathered in order to provide a complete overview of the literature. All studies confirmed beneficial effects of topical NSAIDs, recommending that should be considered ahead of oral NSAIDs, cyclooxygenase 2 (COX-2) inhibitors or opioids.

**Conclusion:** Our review shown that topical NSAIDs were superior to placebo for pain control in OA of the knee, with good tolerability and safety profile and few adverse effects. The heterogeneity of the studies, with different drugs investigated as well as in the duration of treatment, limits the conclusions that can be drawn and the generalizability of results. Further well designed, long term (including follow up) studies are required.

## EP01.07

### **Adhesive shoulder capsulitis severity, subjective health complaints and insomnia: is there a relationship?**

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**Background and Aim:** Adhesive capsulitis of the shoulder, also called frozen shoulder, has a prevalence of 2% to 5% in general population and has a strong correlation with other medical conditions such as diabetes, rheumatic disease, heart disease, and hyperthyreosis. We want to explore relationship, if any, between adhesive shoulder capsulitis, subjective health complaints (SHC) and insomnia and whether there is a correlation between SHC and insomnia with severity of adhesive capsulitis.

**Methods:** This prospective randomized controlled, intention to treat study was performed between 2010 and 2013 in primary care. All the 105 recruited patients were randomized to one of three groups: Group 1 received intra-articular corticosteroid injection and Lidocaine; group 2 received in addition sodium chloride as distension varying from 8 ml to 20 ml; group 3 served as control group. But in the present study we analyse all patients as a single group. We collected data on Pain and function using Shoulder Pain and Disability Index (SPADI), sleep, using Bergen Insomnia Scale (BIS) and Subjective Health Complaints (SHC) at baseline, after 4 weeks and 8 weeks besides other parameters. We intend to perform multiple regression analysis to explore relationship between SPADI, BIS and SHC.

**Results:** Out of the 216 patients referred for the study, 146 met the inclusion criteria, 40 patients declined to participate. Results will be presented by end of March.

Key words: adhesive capsulitis, subjective health complaints, insomnia, SPADI

The trial is registered with ClinicalTrials.gov identifier: NCT01570985

## EP01.08

### **40% of adolescents with patellofemoral pain do not seek medical care**

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**Background and Aim:** A large proportion of adolescents suffering from patellofemoral pain (PFP) does not receive treatment for their knee pain. It is unclear if this is because they do not seek medical care or if they are not offered treatment after seeking medical care. The purpose of this study was to investigate the care-seeking behaviour among adolescents currently suffering from PFP.

**Method:** A retrospective investigation of the care-seeking behaviour among 121 adolescents with PFP enrolled in a randomized controlled trial was conducted. A questionnaire was sent to each adolescent's general practitioner (GP). The questionnaire included questions on the dates for consultations regarding knee pain, potential diagnoses, if treatment was initiated and if the adolescent was referred for further investigations.

**Results:** 60/95 of the adolescents had consulted their GP about their knee pain and the median number of contacts was 1.5 (range 1-7). The GPs initiated treatment in 48 out of the 60 adolescents who consulted their GP. The most common treatment used by the GP was information and advice (36/48) followed by pain medication (6/48). 26/60 of the adolescents who consulted their GP were at some stage referred, most commonly to physiotherapy followed by the departments of rheumatology and orthopaedics.

**Conclusions:** Among the 95 adolescents currently suffering from PFP only 60 had previously consulted their GP because of knee pain. There was a large heterogeneity in the treatments initiated by the GP. Most adolescents were given advice and information, which seems to have been unsuccessful as the adolescents still reported knee pain years after. These findings demonstrate the need for initiatives to ensure better treatment of adolescent PFP. As a first step, these initiatives should aim at establishing clinical practice guidelines for the treatment of adolescent PFP.

## EP01.09

### **Prognostic factors or treatment effect modifiers in patellofemoral pain: a systematic review**

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**Background and Aim:** Patellofemoral pain (PFP) is a heterogeneous and often persistent knee condition. More than one third of patients with PFP still report symptoms despite receiving evidence-based treatments that are initially effective. To improve long-term success rates, a strategy is to identify which of clinically assessable patient factors are likely to be most important in predicting successful outcome for an individual patient. This systematic review aimed to comprehensively search of the literature to identify 1) investigate which baseline patient characteristics are associated with a successful or unsuccessful outcome, and 2) whether these patient characteristics are associated with outcomes in response to a specific treatment (treatment effect modifiers) or generically associated with outcomes regardless of treatment (prognostic factors).

**Method:** Six electronic databases were searched (to December 2015) for studies investigating non-surgical treatments for PFP. Studies were included if they had investigated or reported an association between patient characteristics and outcome. Two reviewers independently assessed papers for eligibility, quality and extracted results.

**Results:** Ten studies on prognosis and nine evaluating outcome to a specified treatment (including five clinical prediction rules) were included. Three prognostic studies determined that a longer duration of PFP was associated with greater risk of an unsuccessful outcome regardless of treatment. Nine studies identified 23 patient characteristics that were associated with successful outcomes after specific treatment with foot orthoses, lumbopelvic manipulation, or patellar taping. It is unclear whether these patient characteristics predicted response to a specific treatment, or the prognosis for improvement regardless of treatment selected, because the studies lacked comparator treatments.

**Conclusions:** Clinicians can use the current evidence to help identify patients who are at risk of an unsuccessful outcome regardless of treatment, but not to use it as evidence in support of their ability to predict the outcome to a treatment beyond other potential treatments.

## EP01.10

### Strategies to improve uptake of annual influenza vaccination rates among healthcare workers in community-care

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**Background & Aim:** Annual influenza vaccination is an important strategy against healthcare workers (HCWs) contracting influenza illness and transmitting to their patients. Influenza vaccination of HCWs decreases HCW absenteeism, patient mortality and enhancing patient safety. However, rates of annual influenza vaccination among HCW have been reported to be low worldwide. Prior to June 2014, vaccination rate in our department has been suboptimal (<60%). Based in a tertiary centre, our HCWs work in multidisciplinary teams and work almost entirely in community-based settings, interacting with patients, caregivers and communities all over Singapore. Because of this, a team was set-up to review the literature and propose strategies to improve vaccination uptake in June 2014.

**Method:** Free staff vaccination, email reminders and mobile vaccination team has already been in place since 2011. After literature review and informal discussions with departmental staff, the team decided to employ the following additional measures from July 2014 (prior to the 2014 NH influenza season): staff education and staff declaration form indicating understanding of the benefits of influenza vaccination. This was an idea modified from institutions using declination form. Due to staff turnover, all new staff is required to fill up the form. Mandatory vaccination was not considered as it was not a hospital policy.

**Results:** Vaccination rate among HCW improved from 48.1% (Jun – Aug 14) to 60.7% (Sept - Nov 14; p=0.3) and 100% (May-Jun 15; p <0.001).

**Conclusions:** A strategy of employing different approaches has increased HCW vaccination rate. This may be due to educating HCWs about safety of the vaccine and the importance of vaccination in patient-care and removing barriers to access by HCWs.

## EP02.01

### Lower urinary tract infections in primary care in Skåne, Sweden

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**Background:** The increasing frequency of bacteria resistant to antibiotics is a global health problem. Though resistance levels still are comparatively low in Sweden we need to optimize our antibiotic use in order to preserve the effectiveness of antibiotics. Urinary tract infection (UTI) is very common among patients in primary care and prescriptions of UTI antibiotics represents the highest share of antibiotic prescriptions in primary care.

**Objectives:** To describe pathogens and prevalence of resistance to antimicrobials in urine cultures from patients 15 year and older with urinary tract symptoms in primary care and to describe symptoms and cure in relation to treatment and bacterial findings in cultures.

**Methods:** Patients aged 15 years and older attending the primary care center with a suspected UTI are invited to participate. Clinicians are asked to manage the patients according to their usual practice. Included patients will fill out a questionnaire and a symptom diary, urine samples will be sent for culture and susceptibility testing. Data collection is ongoing and we aim to recruit 400 patients.

**Results:** Data collection will be completed in February 2016. In December 2015, 302 participants with the mean age 49 years were included in the study. Urine cultures were analysed in 279 patients, 214 samples (77%) showed bacterial growth. E.coli represented 153 (71%) of the positive samples, 20% of E.coli showed resistance to Trimethoprim and 3% were ESBL-producing. Antibiotics were prescribed to 207 (69%) patients.

**Conclusion:** The present study will explore patients symptoms, the bacterial resistance in urine samples, and the cure in relation to background patient data in patients with suspected UTI seeking primary care. Key words: urinary tract infection, primary care, antibiotic resistance, urine sample.

## **EP02.02**

### **Infection prevention in general practice, the challenge of developing a guideline**

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**Background & Aim:** Worldwide, there is an urgent need for reducing dissemination of infections associated with healthcare. This includes the prevention of infections in general practice, where the prevalence of MRSA and other multiresistant bacteria is increasing. The Dutch College of General Practitioners aimed to update the 2004 guideline on infection prevention in general practice and bring it in line with other (hospital) guidelines on this subject in 2015.

**Method:** We composed a multidisciplinary guideline development group consisting of general practitioners, microbiologists and an expert on infection prevention in the hospital. We carried out literature searches on the most important questions. We made evidence based recommendations or, in case there was no evidence, recommendations based on consensus. However, the field of general practitioners and microbiologists was unenthusiastic about our concept and there was a big gap in the proposed changes. In order to achieve a feasible guideline, we organized an invitational conference for all stakeholders, including the Health Care Inspectorate.

**Results:** During the invitational conference, barriers for general practitioners were discussed: recommendations for hospital care being adapted for general practice, the lack of evidence for most recommendations, little sense of urgency for following the guideline and the fear of being judged by the Health Care Inspectorate. The invitational conference led to consensus on a set of minimum requirements for infection prevention in general practice, which can be used as minimal standard for auditing by the Health Care Inspectorate.

**Conclusion:** Developing a guideline on infection prevention for general practice is a challenge. The guideline will raise awareness among GPs and help them to deal with the problems of infection prevention. Recommendations for hospital care need to be adapted to ensure acceptability and feasibility of the guideline in primary care. A set of minimum requirements can help to set a standard.

### **EP02.03**

#### **Investigating cultural determinants for antibiotic prescribing and consumption in Europe**

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**Background and Aim:** Antibiotic resistance is a growing problem worldwide. Research shows a clear connection between a high consumption of antibiotics and the development of resistance. There are great variations between the European countries when it comes to consumption and these variations seem to be constant. Cultural differences are often cited as an explanation for this. In Norway 60 % of all antibiotics prescribed in Primary Care are prescribed for Respiratory Tract Infections (RTI's). Many of these are unnecessary because most RTI's are due to viruses which cannot be treated with antibiotics. Several studies show that the labeling of illness is an important factor when it comes to seeing the GP and asking for antibiotics. In a study by Deschepper et al on Cross-cultural differences in lay attitudes and utilization of antibiotics in a Belgian and Dutch city, Dutch participants labelled most URTD episodes as 'common cold' or 'flu'. The Flemish participants labelled most of their URTD episodes as 'bronchitis' and used more antibiotics. Certain symptoms are also a contributing factor for seeing the GP, together with the length of the symptom. Having a cough is one of those symptoms. While patients in some countries see their doctor after three days of coughing, patients in other countries waits for twelve days. The aim of the study is to identify cultural determinants for patient preconceptions and expectations of respiratory tract infections and antibiotic treatment and health seeking behaviour.

**Methods:** Semi structured in-depth interviews with adult patients in Norway, France and Poland seeing their GP with a respiratory tract infection. The patients are interviewed before and after consultation.

**Results:** The inclusion of patients is finished by mid-February and the results will be presented at the conference.

**Conclusion:** The identification of certain cultural determinants for antibiotic prescribing and consumption could help tailor make interventions targeting antibiotic consumption and prescribing.

## **EP02.04**

### **European network on antibiotic resistance**

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**Background and Aim:** In 2014 the World Health Organization published their first global report on antibiotic resistance, predicting the coming of the “post antibiotic era” unless serious measures were taken to halt the emerging resistance patterns throughout Europe and the rest of the world. We, the present and next generation of drug prescribers, have a big responsibility in participating in this crucial endeavor.

The aim is to create a European network between GP-trainees, First Fives and General Practitioners with an interest in the different aspects regarding the emerging resistance to antibiotics, i.e. sharing of ideas, information and practices, education of patients and professionals alike, development of quality improving tools, research, increasing public awareness and understanding, and influencing the political system.

#### **Method:**

- Inviting to a founding meeting during the summer/autumn of 2016, establishing the network within the VdGM-Equip collaboration
- Seeking funding nationally and internationally to support network activities
- Engaging on different media platforms in order to ensure effective communication between network members and to promote the network (Facebook, twitter, newsletters, etc.)
- Encouraging the formation of national work groups
- Arranging campaigns, symposiums and workshops in order to improve and exchange knowledge, and to improve awareness of the network
- Organizing annual meetings in order to coordinate network activities

**Results:** Hopefully, within a few years, the network will expand throughout all of Europe to become a relevant part in the efforts to revert the emerging resistance to antibiotics worldwide through the engagement and important work of the committed network members throughout Europe.

**Conclusions:** Antibiotic resistance is an emerging problem worldwide that requires immediate attention. With the formation of this network general practice takes an important step and shows itself as a serious part of the solution to this global problem.

## EP02.05

### Implementation of the primary care guideline 'sexually transmitted infections'

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**Background & Aim:** in 2013 the Dutch College of General Practitioners (NHG) published the updated guideline 'Sexually transmitted infections' (STIs). To facilitate the implementation of this guideline and to improve the quality of care for STIs in general practice, a whole range of educational and supporting products were developed by the NHG and its partners.

The aim of this presentation is to demonstrate the developed educational and supporting implementation products; a free e-learning module for GPs, other educational programs for GPs, public health information and patient education (online self-management), instruction films on partner notification for GPs and patients. To evaluate the appreciation of the e-learning module, a questionnaire was included.

The results of a second questionnaire on the effect of the e-learning module on knowledge of STIs, attitude towards STIs and preventive/diagnostic behaviour will be presented in a separate presentation.

#### **Method:**

- A main source of input for product development was a focus group of GPs, conducted by the NHG.
- Development of implementation products was done by the NHG and its partners.
- Evaluation of the appreciation of the e-learning module by using a questionnaire.

**Results:** A broad range of implementation products have been developed by the NHG and its partners to facilitate implementation of the primary care guideline 'Sexually Transmitted Infections'.

**Conclusion:** The participating GPs are aware of the possibilities to support implementation of a guideline on STIs for GPs.

## EP02.06

### Typologies in GPs' referral practice

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**Background:** GPs' individual decisions to refer and the various ways of working when they refer are important determinants of secondary care use. The objective of this study was to explore and describe potential characteristics of GPs' referral practice by investigating their opinions about referring and their self-reported experiences of what they do when they refer.

**Methods:** Observational cross-sectional study using data from 128 Norwegian GPs who filled in a questionnaire with statements on how they regarded the referral process, and who were invited to collect data when they actually referred to hospital during one month. Only elective referrals were recorded. The 57 participants (44,5%) recorded data from 691 referrals. The variables were included in a principal component analysis. A multiple linear regression analysis was conducted to identify typologies with GP's age, gender, specialty in family medicine and location as independent variables.

**Results:** Eight principal components describe the different ways GPs think and work when they refer. Two typologies summarize these components: confidence characterizing specialists in family medicine, mainly female, who reported a more patient-centred practice making priority decisions when they refer, who confer easily with hospital consultants and who complete the referrals during the consultation, and uncertainty characterizing young, mainly male non-specialists in family medicine, experiencing patients' pressure to be referred, heavy workload, having reluctance to cooperate with the patient and reporting sparse contact with hospital colleagues.

**Conclusions:** Training specialists in family medicine in patient-centred method, easy conference with hospital consultant and cooperation with patients while making the referral may foster both self-reflection on own competences and increased levels of confidence.

## EP02.07

### Improving healthcare through patient and family centered care

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**Background and Aim:** When we think of improving healthcare, the immediate thought is new innovations and low cost. Patient safety and family involvement is the essence of quality family medicine. This type of nurturing sets the foundation of patient and family centered care in any health care organization's success. Patients and family have a level of confidence and trust with their care when hospital team-members demonstrate a culture of team based care. Our mission was improve our hospital's culture of the way we deliver care by implementing quality improvement processes that highlighted patient safety and involvement in their care.

Our aim was:

1. Find the gaps in the process of quality, patient and family service, safety and involvement in overall patient care and education in the importance of good outcomes and
2. Multi-disciplinary team-based approach impacted a more efficient hospital stay which leads to greater patient and family satisfaction outcomes.

**Methods:** Multi-disciplinary team approach implementing processes to increase patient safety and decrease negative quality outcomes.

**Results:** Initially, patient and family engagement in understanding of their illness and treatment was 71.2%. In July, the decrease in scores was due to a lack of partnership of physicians, nursing, and staff engagement. Since that month, we have implemented quality processes that have improved in our patient and family safety and involvement in their health care. The overall health care organization moral has increased as well as quality outcomes.

**Conclusion:** Maximizing our hospital operational efficiencies using the SWOT process has introduced change and improved understanding of the influences in patient and family centered care. We stand committed to our patients/their families as well as our staff in moving forward to taking healthcare to the next level in the importance of staff and patients engagement in their care.

## EP02.08

### What do Turkish family physicians know about critical reading?

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**Background:** As technology and science advance rapidly, users require access to up-to-date information in the field of medicine, similar to all other fields. For healthcare workers to monitor advancements in their scientific field closely to keep their knowledge up-to-date, how they access information, the reliability of the information they access and their ability to perform a rapid and adequate evaluation of the information are very important. There are many studies in literature exploring how scientific articles should be written, however, there are very few studies investigating how articles should be read. Aims: The purpose of this study is to determine the level of scientific paper reading awareness and knowledge among family medicine residents and specialists. This study also aims to increase the level of scientific paper reading awareness among family medicine residents and specialists, to identify their weaknesses in this area and to develop suggestions for the family medicine residency curriculum about scientific paper reading.

**Method:** The survey consisting of questions developed by researchers was distributed by sending study invitations to a mail group with 1350 members that are family medicine residents and specialists, and the study was conducted online on a website.

**Results:** Eighty-nine people responded to the survey. Four people stated that they did not participate in the study. The answers of 85 people that completed the survey were evaluated. Of the participants, 45.9% are male, and 54.1% are female, the mean age is  $34.51 \pm 7.64$ , 43.6% are family medicine residents, 17.6% are academics, and 38.8% are family medicine specialists. Nearly all (97.6%) of the participants state that they read scientific papers. The doctors express that they use the MEDLINE and Pubmed databases to access scientific papers the most. Study data is still being gathered.

**Conclusion:** Primary care doctors have an important role in operating healthcare services, it is important to develop their knowledge and awareness of scientific paper reading to ensure that they access current and exact information. No similar study has been conducted in our country, and our study is exceptionally important as it sheds light on this area.

## EP02.09

### The Children's Obesity Clinic's Treatment Protocol transferred into a community-based treatment programme

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**Background:** The prevalence of childhood obesity has reached alarming levels worldwide and improvements in treatment capacity and accessibility are needed. Community-based childhood obesity treatment has the potential to improve treatment capacity and accessibility, but few treatment programmes have been evaluated in community settings, and their results are inconsistent.

**Objective:** To evaluate if an efficient, family-centred, multidisciplinary, hospital-based childhood obesity treatment protocol transferred into a community-based setting would reduce the degree of obesity during a 1.5-year period of treatment. The community-based treatment was provided by nurses and dieticians employed at eight municipal health care centres across Denmark, and the degree of obesity was assessed by the body mass index (BMI) standard deviation scores (SDS). Improvements in BMI SDS were analysed in this single-arm, observational study.

**Results:** From June 7, 2012 to January 23, 2015, 1,001 children (455) boys were consecutively enrolled in treatment. Upon entry, the median age was 11 years (range: 3-18), and the median BMI SDS was 2.85 (range: 1.26-8.96) in boys and 2.48 (range: 1.08-4.41) in girls. After 1.5 years of treatment, BMI SDS was reduced in 74% of the children. The BMI SDS was reduced by 0.38 (95% confidence interval (CI); 0.30-0.45,  $p < 0.0001$ ) in boys and by 0.18 (95% CI: 0.25-0.12,  $p < 0.0001$ ) in girls, regardless of baseline age, BMI SDS, or pubertal development stage ( $p > 0.08$ ). The dropout rate was 31% after 1.5 years. On average 4.5 consultation hours were invested per child per year.

**Conclusion:** The degree of obesity was significantly reduced during 1.5 years of community-based treatment, with low dropout rate and low time cost. Thus, community-based treatment may help improve treatment capacity and accessibility.

**Key words:** Body mass index, Childhood, Community, Obesity, Treatment.

**Trial registration:** Registered at [Clinicaltrials.gov](https://clinicaltrials.gov), ID numbers NCT02013843.

## **EP02.10**

### **Disparities and the financial impact of diabetics**

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**Background and Aim:** Diabetes wreaks havoc on all the lives it touches, the patient and their families. The socioeconomic ramifications are staggering across the globe. Since there are so many advances in medication in diabetes there seems to be a chilling twist on the staggering numbers as we look around the world with the incidence, prevalence and disparities of this very common household disease. Globally in 2013, the World Health Organization (WHO) “estimated that almost 382 million people suffer from diabetes for a prevalence of 8.3%. North America and the Caribbean is the region with the higher prevalence of 11% having 37 million people with diabetes followed by the Middle East and North Africa with a prevalence of 9.2% having 35 million people with diabetes. Western Pacific is the region with higher number of people living with diabetes (138 million); however its prevalence is 8.6%, close to the prevalence of the World.”

**Methods:** Existing literature was reviewed and compared from different nations/countries.

**Results:** Diabetes not only affects the quality of life of people with the disease, but also presents a tremendous economic burden. It seems that much of the economic burden of diabetes is related to its complications, including blindness, amputation, kidney failure, heart attack, and stroke. In the United States, every 17 seconds, someone is diagnosed with diabetes. Every day, 230 Americans with diabetes will undergo an amputation, and 120 will develop end-stage renal disease. Additionally, 45% of people with diabetes have some diabetic retinopathy.

**Conclusion:** Racial and ethnic minorities have a higher prevalence and greater burden of diabetes compared to whites, and some minority groups also have higher rates of complications. Despite medical advances and increasing access to medical care, disparities in health and health care still persist.

### EP03.01

#### **Characteristics and one-year follow-up in patients referred to cancer patient pathway for patients with non-specific symptoms and signs of cancer**

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**Background:** in 2012 a new cancer patient pathway for patients with non-specific symptoms and signs of cancer (NSSC-CPP) was introduced in Denmark, in the capital region of Denmark implemented by forming 4 outpatient clinics, one situated at North Zealand Hospital (NOH). Little is known about patients referred to the NSSC-CPP. The primary aim of this study was to find the prevalence of cancer and one-year mortality, describe the population and the investigational course and find factors associated with cancer diagnosis in patients referred to the NSSC-CPP.

**Method:** A single centre cohort study including patients with at least one visit at the NSSC-CPP at NOH. Study period covering 1st October 2013 to 31st September 2014. Data based on retrospective reviews of the electronic patient files. Descriptive statistics were made to describe the population. Logistic regression was used to identify factors associated with cancer diagnosis. Multivariate analyses adjusted for age, gender, smoking status and alcohol consumption. Kaplan-Meier survival plots at one-year follow-up.

**Results:** 825 patients included with an average age of 67 years, 47.4% were male. Prevalence of cancer within one year was 16.4% (138/825). 70.3% (97/138) solid cancers, 29.7% (41/138) hematologic cancers. During the investigational course 76.7% went through diagnostic imaging (ultrasound, CT, PET/CT or MRI). Anaemia (OR1.63 CI1.02-2.60), leucocytosis (OR 2.06 CI 1.34-3.15), thrombocytopenia (OR 4.13 CI 2.02-8.47) and LDH (OR 1.64 CI 1.07-2.52) and CRP above references (OR 2.56 CI 1.66-3.95) were associated with a cancer diagnosis. No symptoms were significantly associated with cancer diagnosis. One-year mortality for those diagnosed with cancer was 44.2% and 3.3% for those with no cancer.

**Conclusion:** The prevalence of cancer matches other NSSC-CPP's in Denmark. High one-year mortality is seen amongst patients with cancer. Deviations in basic biomarkers should raise awareness for the GP or investigating physician and lead to further investigations.

## EP03.02

### **Chronic obstructive pulmonary disease: validation of IPAG questionnaire and PIKO-6® and COPD-6® devices, in Portuguese primary health care units**

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**Background and Aim:** Chronic Obstructive Pulmonary Disease (COPD) is a major cause of morbidity and mortality worldwide, usually not diagnosed until advanced stages of the disease. In Portugal, the BOLD study in the Lisbon region estimated a prevalence of 14.2% in adults over 40 years of age, with 86.8% of under-diagnosis. The use of simple screening tools in primary health care (PHC) can increase the number of identified cases at risk of developing COPD, leading to more timely diagnosis and implementation of appropriate treatment. This study aimed to validate the use of IPAG questionnaire and Piko-6® and COPD-6® mini-spirometers as tools for early detection of COPD cases, in the Portuguese population, from the PHC.

**Methods:** We selected patients over 40 years of age from 5 different PHC units. It was applied the IPAG questionnaire and tests with Piko-6® and COPD-6® devices were performed. The results were then compared with spirometry.

**Results:** Data from 568 subjects were analyzed (284 men; mean age  $59.4 \pm 11.0$  years), of whom 471 underwent mini-spirometry with Piko-6® and 97 with COPD-6®. The IPAG questionnaire was applied to the whole sample. Sixty-three (11.1%) cases of COPD were diagnosed. The sensitivity and specificity were, respectively, 84.13% and 49.90% for the IPAG questionnaire; 61.4% and 93.69% for the Piko-6®; 66.67% and 97.80% for the COPD-6®; 45.61% and 96.46% for the IPAG+Piko-6®; 66.67% and 98.90% for the IPAG+COPD-6®. The best area under the curve was found with the IPAG+ COPD-6® combination (83%), suggesting that it is the most accurate diagnostic test.

**Conclusion:** The IPAG questionnaire and Piko-6® and COPD-6® devices are important COPD screening tools and should be used in combination. A confirmatory spirometry should be carried out in the presence of positive results from IPAG and/or Piko-6®/ COPD-6®. The combination IPAG+COPD-6® was shown to be the most accurate test.

### EP03.03

#### Diagnostic of haematuria in primary care

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**Background & Aim:** A 40 year old man, natural of Senegal. Resident in Spain for 7 years, has not returned to his native land. He does not know medical precedents of interest, does not take any medication, without toxic habits. He comes to our clinic because he has haematuria for 4 days. He says that he always has terminal hematuria that begun in his country when he was a child, but not like these days.

**Method:** Good general state.. Abdomen: depresible, without masses. Painful to the hypogastrium palpations. Given the clinical history our first suspicion is an urinary esquistosomiasis, for what we request: Abdomen X-ray: calcification in bladder of foetal head. Without other alterations Thorax X-ray: normal Analytical of blood: normal included PSA Dregs: parasites are not observed Urine test: 500 leukocytes, >100 hematies. Parasites in urine: presence of eggs of schistosoma haematobium.

**Results:** The patien was referred to Internal Medicine consultation with urinary Esquistosomiasis's diagnosis to complete the study with an abdominal ultrasound scans and starts the treatment with praziquantel.

**Conclusions:** Schistosomiasis is an acute and chronic parasitic disease caused by trematode worms of the genus Schistosoma. More than 40 million people were treated for schistosomiasis in 2013. Transmission occurs when people suffering from schistosomiasis contaminate freshwater sources with their urine containing parasite eggs. People become infected when larval forms of the parasite penetrate the skin during contact with infested water. There are two major forms of schistosomiasis intestinal and urogenital. The classic sign of urogenital schistosomiasis is haematuria. Bladder cancer is another possible complication in the later stages. The immigration is a phenomenon that affects worldwide and it implies an effort to all the doctors. They have to be update of the endemic pathologies of other zones that are not known in our country.

## EP03.04

### Eosinophilia as trigger factor for vein thrombosis and pulmonary embolia

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**Introduction:** Pulmonary infiltrate and eosinophilia represent a heterogeneous group of diseases caused by extrinsic or intrinsic factors. We report the case of a 53 years old, male patient with pulmonary infiltrate and eosinophilia secondary to Toxocariasis infection who was diagnosed with deep vein thrombosis and pulmonary embolia one month later from the diagnosis of pneumonia. The further investigations demonstrated a hypercoagulable states.

**Case Presentation:** A 53 years old male came to my office for very intensive pain on the left posterior thorax which was increased by deeply breath in. Physical exam was in normal range, but chest computer tomography without contrast done in emergency showed pulmonary infiltrate at the base of the left lung with pleuritic reaction. Blood tests showed eosinophilia and inflammatory syndrome. Investigation for eosinophilia showed a positive Western blot test for Toxocara canis so the patient began the treatment with Albendazole three weeks with positive response. One month later patient visited us for a pain on the right calf .The ultrasound vein Doppler confirmed the diagnosis of deep vein thrombosis and the chest computer tomography with contrast substance described mild right pulmonary embolia. The patient started the anticoagulation treatment. The thrombophilia tests were done which were positive for MTHFR gene and PAI1 675.

**Discussions:** Helminthic infections are associated with eosinophilia. Our questions was is eosinophilia responsible for the patient thrombosis or was it only the trigger factor? .As two genetic tests for thrombophilia (MTHFR, PAI 1 675) were positive we considered deep vein thrombosis and pulmonary embolia in the context of hypercoagulable states.

**Conclusion:** This case highlights the implication of eosinophilia as trigger factor for vein thromboses and pulmonary embolia.

### EP03.05

#### **Type 2 diabetes and colorectal cancer: a case control study - Research protocol**

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**Background and Aim:** Diabetes Mellitus (DM) and Colorectal Cancer (CRC) are common pathologies, especially in developed countries. The prevalence of DM in Europe is 7.9%, while in Portugal was 13.1% in 2014. Worldwide, the CRC is the third most common cancer in men and the second in women, still being the third cause of death. Beyond the known sharing of risk factors, some studies have raised the possibility of an association between DM and CRC, being hyperinsulinemia suggested as a possible mechanism for carcinogenesis. The aim of this study is to verify the existence of an association between type 2 DM and CRC. Furthermore, prevalence of type 2 DM in the population with CRC will be determined.

**Method:** It will be performed a case-control study in the three General Practice Centers, in Minho region of Portugal. The individuals diagnosed with CRC (code D75 according ICPC-2) within the last 5 years will be the selected cases. The controls will be randomly selected in the proportion of 1:1. The variables in study – gender, age and type 2 DM - will be collected, and the data will be introduced in a database, built for the purpose. Finally, a descriptive and statistical analysis will be applied to verify the association under study, using logistic regression.

**Results and Conclusions:** European and American guidelines aware for the association of smoking and obesity with CRC, but do not enhance the risk in patients with DM. This study started in August 2015 and is ongoing until October 2016.

## EP03.06

### Low back pain, diagnostics and management

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No matter if it is acute (<6 weeks), sub-acute (6-12 weeks) or chronic (> 12 weeks), low back pain (LBP) is a notion related to a pain localized between ribs and gluteal region, with or without spreading down the leg(s). When diagnosing LBP the most important are physical examination and a history of diseases, in order to identify so called "red flag" symptoms (age <20 and >55, recent trauma, progressive pain which is not reducing when patient is resting, malignancies in personal history, thoracic pain, long history of taking corticosteroids, misuse of drugs, unexplained weight loss, bad general health condition, neurological symptoms including cauda equine syndrome, malformation of spine and fever. If those "red flags" are not present, none radiology procedures are needed. Degenerative changes in spine such as narrowing of inter vertebral space, osteofits, sclerosis etc. that are found often have no impact or influence on final results in treatment.

**Aim:** is to investigate whether family doctors strictly stick to guidelines in diagnosing LBP, and how often are radiology procedures and imaging of no use in final outcome of the treatment.

**Methods and examinees:** This retrospective study included 647 patients in three family medicine teams, age > 18, of which 57% were female and 43 were male. We used data from medical records, for the period January 1 - December 31, 2013, for patients diagnosed as M54 according to ICD10.

**Results:** Out of total number of examinees diagnosed as LBP, 66 % of patients were sent to X-ray, although 36,43% were negative for "red flag" symptoms. 63.57% of examinees had positive "red flag" symptoms. Degenerative changes of spine were found in over a half of examinees (56,87%).

**Conclusion:** Family doctors do not completely follow guidelines when diagnosing LBP. In order to reduce and limit unnecessary radiology imaging, we should use „red flag“ signs.

### EP03.07

#### **Dizziness and vertigo in primary care: prevalence, aetiology and prognosis – a systematic review**

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**Background and Aim:** Dizziness and vertigo are common reasons for consulting a general practitioner and there is a broad range of possible underlying aetiologies. There are few evidence based data in regard to prevalence, aetiology and prognosis in primary care. We aimed to conduct a systematic review of symptom-evaluating studies on prevalence, aetiology or prognosis of dizziness and vertigo in primary care.

**Method:** We systematically searched MEDLINE and EMBASE. Two independent researchers screened titles and abstracts according to predefined criteria. We included all studies evaluating the symptoms ‘dizziness’ or ‘vertigo’ as a reason for consultation in primary care. We extracted data about study population and methodology and prevalence, aetiology and prognosis. Two raters independently judged study quality and risk of bias.

**Results:** We identified 32 studies (22 on prevalence, 14 on aetiology and 9 on prognosis). Consultation prevalence differs between 1,0 to 15,5. The most common aetiologies are vestibular/peripheral (5,4-42,1%), benign peripheral positional vertigo (4,3-39,5%), vestibular neuritis (0,6-24,0%), Menière’s disease (1,4-2,7%), cardiovascular disease (3,8-56,8%), neurological disease (1,4-11,4%), psychogenic (1,8-21,6%), no clear diagnosis (0,0-80,2%).

**Conclusions:** There is a broad variety of possible underlying diseases for the symptom dizziness/vertigo. There exist only few methodologically sound studies in regard to aetiology and prognosis of dizziness/vertigo.

## EP03.08

### POCT WBC reduces antibiotic prescription - a prospective study

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**Background & Aim:** The aim of this study was to test the hypothesis that usage of a point-of-care WBC count as a complement to the clinical investigation would significantly decrease the prescription of antibiotics for children with flu and flu-like symptoms. The definition for flu or flu-like symptoms was fever, coughing, sneezing, muscle pain, runny mucus or purulent mucous lasting less than ten days, a finding of hyperemia of the pharynx, and/or eardrums and normal breath sounds.

**Method:** In the study, children were randomized into 2 groups; one using the point-of-care WBC count as part of the clinical investigation, and one prescribing antibiotics according to normal procedure with delayed antibiotic prescription with at least 3 days of fever. WBC count of 15,000/mm<sup>3</sup> was used as cut off for antibiotic prescription in the group where WBC was measured.

**Results:** 792 patients were randomized into 2 well-balanced groups. In the first group (n= 437) WBC was measured point-of-care (WBC group) as part of the clinical investigation. 56 patients had a WBC >15,000/mm<sup>3</sup>. They all received antibiotics. The remaining 381 children were treated symptomatically. At a follow-up visit after 48 h, additional 44 children received antibiotics. In the second group, the control group (n= 355), antibiotics was prescribed according to normal procedures using delayed prescription. The reduction of antibiotic prescription was 77% where the WBC count was included compared to the control group. No influence could be observed between the two groups in recovery, complications or other medical outcome.

**Conclusions:** By adding a point-of-care WBC count as part of the clinical investigation on children with flu and flu-like symptoms, the prescription of antibiotics in a pediatric setting could be significantly reduced (77%). Reduction of inappropriate use of antibiotics is important in avoiding antibiotic resistance.

### EP03.09

#### ***Brucella endocarditis. A late onset complication of acute Brucellosis?***

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**Background & Aim:** *Brucella endocarditis* (BE) is a life threatening complication of Brucellosis. Even though there are many reports in the literature on BE it is not clear whether endocarditis occurs early in the course of the illness or as a late onset complication.

**Method:** A systematic review on MEDLINE and Google Scholar retrieved 135 articles, case reports and cases series of patients with *Brucella endocarditis*. of them only 45 contained information on the history of the disease and its course over time, accounting for 125 patients in total.

**Results:** 125 patients were included. 89 were male (71.2%), mean age was 44.6 years (12.6 sd). Aortic valve was affected in 61% of patients, mitral valve 8% and both valves were affected in 31%. The majority of patients were treated with combined surgical valve replacement and prolonged antibiotic treatment. Overall survival was 75%. 107 patients (85% of total, 5.94 times more probable) described symptoms for a period longer than 2 months before seeking medical treatment and 32% reported a history of prior infection and proper antibiotic treatment. No association was observed between age, sex, affected valve and history of prior infection.

**Conclusions:** *Brucella endocarditis* is 5.94 times more likely to occur in a patient with symptoms of brucellosis present for more than two months. Also BE may develop in patients that have a prior infection, were treated properly and considered cured. Thus all patients with Brucellosis should be followed up properly in order to recognize timely a potentially fatal complication, since BE seems to be a late onset complication of the disease.

### **EP03.10**

#### **The effect of family counselling on anxiety, depression and stress level of disabled children's mothers**

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**Background & Aim:** It was aimed to research the effect of family counselling (FC) on anxiety, depression and stress levels of disabled children's mothers.

**Method:** The research was done on mothers of 80 children who were randomly selected among 200 disabled children having training at a private education and rehabilitation centre. Mothers were separated into two equal groups. The mothers in study group are equally divided into 5 groups. Each group had six FC sessions. Perceived Stress Scale (PSS), Beck Depression Scale (BDS) and Beck Anxiety Scale (BAS) were performed three times: at the beginning of the study, just after the counselling sessions were finished and after three months. The same questionnaires were performed to the control group at the same times without giving counselling. The study data were analysed with SPSS. Categorical data were presented as number and percentage; numeric data were presented as mean and standard deviation for descriptive statistics. Student t test, Mann-Whitney U test, Repetitive ANOVA, Unidirectional ANOVA, Kruskal-Wallis and Fisher's Exact Tests were used as hypothesis testing.  $p < 0.05$  was considered statistical significance limit.

**Results:** The main outcome of our study was the difference of the mean PSS, BDS and BAS scores of mothers in study group before and after giving counselling services. The mean PSS, BDS and BAS scores of the second tests that were done after counselling were found significantly lower than the first test mean scores. There were no significant differences between the control group mothers' first and second PSS, BDS and BAS mean scores.

**Conclusion:** The mothers of disabled children expose to more anxiety, depression and stress than the other people of community and they need more psychological support and FC can fulfil this support.

## EP04.01

### **Like father, like son? – Characterization of children of obese patients from three Family Health Units**

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**Background:** Levels of childhood and adolescence obesity and overweight represent an important public health issue and have been rising both in developed and underdeveloped countries. Parents have a genetic and environmental influence on their children, because they establish dietary patterns at home, serving as role models to their children.

**Aim:** Characterization of children of obese patients from a sample of 3 Portuguese Family Health Units (FHU), according to their last registered value of Body Mass Index (BMI).

**Methods:** Study: observational, descriptive, cross-sectional Population: offspring of obese patients from 3 FHU Inclusion Criteria: offspring of patients from the 3 FHU, with ages between 40 and 50 years old and BMI  $\geq 30$  (registered between 01/01 and 31/12/2014) Sample: offspring of the first 50 obese patients from each FHU, selected by alphabetical order and fulfilling the inclusion criteria Variables: gender, age, last registered BMI value and respective percentile Data source: digitally available clinical files (SAM®, MedicineOne®, VitaCare®). Statistical analysis: Microsoft Excel 2010®.

**Results:** From the 236 children of the 150 obese patients evaluated, 50.4% were female. Ages of the offspring ranged between 2 months and 33 years old (mean of 16.9 years). From the offspring with registered BMI (196): 2.0% had low weight, 54.6% presented normal BMI; 24.5% were overweight and 18.9% were obese. From the latter, 24.3% had both parents obese.

**Conclusions:** From the population analyzed, almost half of the children (43.3%) who had registered BMI were overweight or obese. Furthermore, about a quarter of the obese children had both parents obese. The results of this study emphasize the importance of health education provided in Primary Health Care units - thus showing that the family doctor has a privileged position in family interventions, especially concerning the obesity problem.

Disclosure: No conflict of interest declared.

## EP04.02

### **Improvements in exercise capacity among inactive using electrically assisted bicycles to commute**

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**Background:** Physical inactivity is a leading cause of premature death in the 21st century. Interventions to change a sedentary lifestyle in a general population have so far not been very successful. Active commuting by bike is a promising intervention because it overcomes time constraint and accessibility, the two most important obstacles reported by those unable to maintain a new activity. Active commuting by bike is chosen by 4 % in the norwegian population, a lower proportion of workers compared to most European countries. Electrically assisted bicycles (EABs) are perceived to make active commuting more manageable, and some evidence indicate that EAB provide an exercise intensity level likely to produce health benefit. **Aims:** In this study we wanted to examine if providing inactive people with EAB would lead to an increase in physical activity and an improvement in their exercise capacity.

**Method:** Inactive employees in a selection of private and public corporations in three Norwegian cities where invited to participate in the intervention. Inclusion criteria were: a desire to cycle to work, more than 3 km commuting distance and currently not being physically active. Twenty five participants were included and provided with EABs and GPS-bike computer. They were followed from 3-8 months, 226 days on average. A questionnaire and testing of maximal oxygen consumption (VO<sub>2</sub>max) were performed at inclusion and after the intervention. Bike usage was measured using a GPS bike computer.

**Results:** Participants used their EABs 102 minutes/week on average. VO<sub>2</sub>max improved significantly with 2.36 ml/kg/min (7.7 %), p=0.05.

**Conclusions:** Offering EABs to inactive employees to promote active commuting can lead to substantial increase in physical activity and significant improvements of V02 max.

### **EP04.03**

#### **Pre-graduate medical training on breastfeeding in Portuguese medical schools**

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**Background & Aim:** Breastfeeding has important implications on public health. However, a lack of medical preparation in this area was found, which may have been contributing to the high early breastfeeding discontinuation rate in Portugal. The aim of this study was to analyze the knowledge about breastfeeding of the last year Medicine students of the Portuguese universities.

**Method:** Observational and descriptive study, based on the application of an online questionnaire about breastfeeding to the Portuguese sixth year Medicine students, of the academic year 2012/2013. A quantitative descriptive analysis of the variables included in the questionnaire was performed, as well as a bivariate analysis to test possible associations between these.

**Results:** of the total of 261 students tested, 75,1% considered the topic of breastfeeding very important. However, 80,5% revealed feeling insufficiently or only reasonably prepared to assist women who breastfeed. Information about breastfeeding was transmitted essentially in the form of oral communications, and 67% of the students did not contact more than twice with the theme in clinical practice. The average grade for the global knowledge assessment was 42,4%, with 74,3% of the students having a grade lower than 50%. Active learning methods are associated with better performance in terms of knowledge.

**Conclusions:** Skills and competencies related to breastfeeding are an important but neglected aspect in medical pre-graduate training. Knowledge deficits presented in this study reveal the poor preparation of most finalists in providing assistance to women who breastfeed. As such, this study can be a starting point for the incorporation of appropriate breastfeeding curriculum in the Medicine Courses as well as in the specific training of Family Medicine, Pediatrics and Obstetrics/Gynecology internships.

#### **EP04.04**

#### **The awareness of family physicians about child abuse and neglect in Turkey: a cross sectional study**

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**Background:** Similar to other countries, child abuse and neglect is a public health issue that has recently began gaining medical, legal and public importance, and has recently started to be discussed in the field of medicine in Turkey. The approach to child abuse requires teamwork. However, family medicine doctors that provide individually tailored protective, and primary diagnostic, therapeutic and rehabilitative healthcare services have the most important role in the evaluation of cases with suspicion of child abuse and neglect or cases that are being diagnosed for the first time. The knowledge of doctors on the diagnosis, evaluation and legal reporting procedures of cases suspicious of or diagnosed with child abuse and neglect is insufficient. There is a limited number of studies on child abuse and neglect in our country, the topic has only recently started to find a place in pre- and post-graduate studies. Therefore, healthcare workers, particularly doctors, lack the knowledge and experience, and unfortunately, cases that present to healthcare facilities may be overlooked.

**Aim:** The purpose of this study is to identify the level of child abuse and neglect awareness among family medicine residents and specialists.

**Method:** The sociodemographic data survey consisting of 15 questions and the Child Abuse and Neglect Awareness Scale consisting of 20 questions were distributed by sending study invitations to a mail group with 1350 members that are family medicine residents or specialists and the study was conducted online on a website.

**Results:** The survey was opened to online access on 09 January, 2016 and data is still being gathered. The results will be announced at WONCA EUROPE 2016.

## EP04.05

### Feedback and assessment of GP trainees' suturing skills in a Dublin general practice training programme

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**Background:** Ability to suture is a requirement on the curriculum for general practice training in Ireland, yet it does not form part of the MICGP examination.

Traditionally GP trainees acquired basic surgical skills (including suturing) during their preliminary hospital exposure. However, with restructuring of clinical services, minor cases requiring suturing are being diverted away from the trainee.

**Methods:** This project evaluated three things:

- A quantitative and qualitative measure of GP trainee acceptance of the suturing workshop using an anonymous online questionnaire.
- Qualitative feedback of the suturing workshop using focus groups.
- Suturing assessment of the GP trainee before, during and six to eight weeks after the workshop using an objective scoring system (OSATS).

GP Trainees from Trinity College Dublin were invited to attend a surgical skills workshop as part of their weekly day release training. Their suturing technique was assessed using an Objective Structured Assessment of Technical Skills (OSATS) score.

OSATS is an objective measure that is both reliable and valid and in this circumstance was used to assess the GP trainee's suturing skill.

**Results:** 41 GP trainees were assessed on their suturing skill initially and immediately after a suturing workshop. 30 of the initial 41 were re assessed six to eight weeks subsequently. Immediately after the suturing workshop there was overall a 39% improvement in the trainee's OSATS score. When the trainee was re assessed six to eight weeks later there was a further improvement of 4% in OSATS score overall. There was a 22% improvement in the trainees confidence after one suturing workshop. 98% of the participating GP trainees felt that suturing is a basic requirement in General Practice. 51% of trainees stated that lack of training was the main reason why GP trainees do not suture.

**Conclusion:** A suturing workshop improves a GP Trainees suturing skill and confidence.

## EP04.06

### Impact of young-doctors movement exchange program on junior GPs: a qualitative research

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**Backgrounds and Aims:** To date, the Vasco da Gama movement (WONCA Europe group for junior GPs) has representatives coming from 30 countries, enabling the movement to bring together GPs from diverse cultural backgrounds and different health systems. One of the ways to facilitate knowledge and skill exchange is conference-exchanges, which are organized around a national conference of GPs in a hosting country and include a few days visit to a local GP office.

in this research we explored the values that justify the expense of organizing and attending international conference-exchanges for junior GPs.

**Methods:** Our qualitative study included 25 participants from different European countries registered for the conference-exchange in Israel, March 2014.

We sent an open-ended questionnaire to the participants asking about experiences with former conference-exchanges, obstacles to participation and use of other peer-learning methods. From the received answers we deducted a topiclist for a focusgroup, held during the conference. We analyzed the data, obtained from the questionnaires and focusgroup, to come to conclusions and recommendations for further research.

**Results:** Questionnaire was answered by 15 GPs from 11 nationalities. Former experiences from conference-exchanges have been said to yield many practice tips, contacts with new colleagues, enhanced cross-cultural skills and created open attitude. Obstacles to participation were financial, days off work limit and finding replacement for the clinic back home. 90% stated they don't believe social media can replace learning made through conference-exchanges.

The focusgroup explored noticeable reactions on the questionnaire: exchange program' benefits come mainly from valuable personal contacts, learning at the site, comparing health systems and getting a more open minded attitude. Anti-burn-out effect was marked.

**Conclusion:** Conference exchanges seem to be beneficial and not replacable by social media. Further study is warranted to validate research results.

## EP04.07

### **“It's not like fat camp”. A focus group study of adolescents' experiences on group based obesity treatment**

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**Background:** Overweight and sedentary lifestyle is associated with somatic diseases, psychosocial problems and lower quality of life. Obesity in childhood is an increasing problem worldwide and prevalence increases into adolescence and adulthood. Few studies have explored the effects of obesity treatment in adolescence. Self-Determination Theory and Motivational Interviewing withhold an individual perspective from where and how to initiate an obesity treatment in order to succeed. Aim of the study This study aims to explore adolescents' motivation underlying obesity treatment and their experiences of participating in group-based obesity treatment programs.

**Methods:** in total, ten girls and seven boys in the age from 13 to 24 years were included from three different group based obesity treatment programs. All participants filled out a basic questionnaire regarding their age, sex, weight, length, medication use and from whom they had heard about the course All three interviews followed a semi-structured interview guide. A data-driven analysis representing an editing analysis style was conducted using systematic text condensation following a verbatim transcription of the tape-recorded interviews.

**Results:** The analysis resulted in 4 major themes: motivation, body experience and self-image, relationships and sense of belonging and the road ahead. Motivation to initiate a lifestyle change was to a large degree founded on dissatisfaction with body and appearance, and on influence from parents or healthcare providers. During the obesity treatment program the motivation shifted as new knowledge, personal insight and positive group experiences resulted in several positive physical and mental outcomes. Several participants had experienced bullying, and related their experience of being overweight to these experiences.

**Conclusions:** The individual experiences related to living with obesity in adolescence are important to explore. Personal experiences are often barriers for change, but also sources for self-efficacy experiences that may facilitate self-determined reasons for lifestyle changes.

## **EP04.08**

### **Profit-orientation of public healthcare institutions and patients' preference for hospital-based services in China**

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Doctors' profit-oriented practices in public institutions were widespread in China. Two major targets of the healthcare reform launched in 2009 were to curb the profit making practices in public institutions and to encourage the citizens to use primary care. After six years, the status of profit-orientation of public institutions remains unknown. Compared to hospitals, there is no trend of increasing use of primary care. Our study aimed to explore the status of profit-orientation of public institutions and patients' utilization preference. The impacts of guanxi (personal relationship), a unique Chinese culture, on patients' utilization of healthcare and doctors' practices were also explored. From September 2014 to September 2015, we conducted focus group and individual interviews, followed by a survey with doctors (n=1111) in Hangzhou, Zhejiang province. Thematic analysis, descriptive analysis and Fisher's Exact Test were conducted to analyze the data. This study found that 36.8% of respondents needed to consider making profits for their institutions, especially the hospital specialists. Up to 38.5% and 40.7% thought that their practices led to patients' worries of unnecessary drugs and tests respectively. Doctors attributed their profit-oriented practices to institutions' agenda setting, poor salary, and an organizational bonus system. Their awareness of breaching medical ethics created a guilt feeling and frustrations. Nearly 65% reported patients' preference for hospital-based care even for minor conditions and 76.2% if the patient was a child. Ineffective gate-keeping mechanism, weak primary care and mistrust in community-based care were major reasons. One-third said that patients would use guanxi to gain better health services and 64.5% reported better dedication when patients were somehow personally connected. Guanxi appears to be an assurance to patients but may affect doctors' practices in some way. In conclusion, profit-orientation still widely exists in public institutions. Patients generally prefer hospital-based services and guanxi affects both patients' and doctors' practices.

#### **EP04.09**

### **Evaluation of hypertension related mortality rates of Turkey between 1987-2008 using join point regression analysis**

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**Background & Aim:** Hypertension remains the leading risk factor for cardiovascular disease and mortality throughout the world. Also in Turkey, it is a prevalent condition affecting approximately 22.5 million individuals. In this study it is aimed to evaluate Hypertension mortality rate in Turkey between the years 1987-2008, using Joinpoint Regression Analysis regarding age and gender.

**Method:** Analyses were based on Hypertension mortality from Turkish Statistical Institute death database, between the period 1987-2011. The age was grouped as 15-24 years, 25-34 years, 35-44 years, 45-54 years, 55-64 years, 65-74 years, 75 and over age group. These data were analyzed by Joinpoint Regression Analysis.

**Results:** A total of 45 291 people included in the study; 43% (n=19321) of them were men and 57% (n=25970) were women. The standardized, adjusted Hypertension mortality rate in Turkey from 1987 to 2008 were found as 6.58 per 100 000 people. There was a significant decrease in all ages among men especially after the year 2001. Only in 65-74 age group of men there was a significant increase between 1987-2001.

On the other hand while there was a significant decrease in all other age groups of women after 2001 except 75 and over. In 75 and over age group an increase of mortality rate was observed in women through the period.

**Conclusions:** Although hypertension is a common health problem in Turkey hypertension related deaths decreased during the past decade. The role of awareness, treatment, and control rates of hypertension seem to be affective in our country. The accessibility to the health-care system by means of Primary Health Care Centres and the improvement of the drugs, both local and national educational activities and campaigns performed by the national societies like Family Medicine Societies may have an impact on these results.

## **EP04.10**

### **Decreasing homophobia among people: a before and after study**

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The prevalent social perspective and governmental policy in many countries still is that homosexuality is a perversion. As a result, many homosexual individuals suffer from discrimination and expose to physical, sexual violence and sexual abuse socially, economically and in many other aspects. We need some tools to abolish homophobia in society. The aim of this study is to investigate the benefit of visual and audio materials on changing homophobic attitudes and behaviours of people towards LGBT individuals.

The design of the study is pre and post intervention study. 31 female and 32 male volunteer is included to the study. Lesbian and gay individuals are excluded from the study .

As a data collection tool, a questionnaire with demographic variables and "Hudson and Ricketts Homophobia Scale " applied to participants.

As the content of intervention, documentary called "Don't look at me like that " is shown to participants. After, homophobia scale was applied again to the participants .

Besides descriptive analysis, t test and one way anova test are applied in the study.

The average age of the participants was  $40.57 \pm 39.00$  (min 35, max 65). When mean value of HRHS score was 82,46 before the intervention, it was 80,52 after the intervention. The decrease of the mean score was statistically significant ( $z=-2.079$ ,  $p=0,038$ ). According to the results, there is no difference in 6 people (9.5 %), decreased homophobia in 37 people (58.7 %), increased homophobia in 20 people (31.7 %). There was no statistically significant relation between the change in homophobia score with sex, education level and income.

It has been revealed that even short and simple interventions can change the attitudes of people. The intervention tool has a crucial role.

## EP05.01

### **Citizen help seeking behaviour in case of an acute health problem out of office hours – Denmark, The Netherlands, Switzerland**

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**Background & Aim:** Demands in out-of-hours (OOH) primary care are high, resulting in high workload and costs. It is being debated whether all contacts are relevant for OOH primary care. Contact rates with OOH primary care vary between countries. A previous study showed that Danes have a higher contact rate with OOH primary care than Dutch citizens, despite comparable health care systems. We aim to study citizens' help seeking behaviour contacting OOH care in case of an acute health problem and compare the differences between Danish, Dutch, and Swiss citizens in thresholds for contacting OOH care, as an explanation of the difference in consumption.

**Method:** We performed a cross-sectional study, including a random selection of citizens from three age groups (i.e. 0-4, 30-39, and 50-59 years) in Denmark, the Netherlands, and Switzerland. A questionnaire was developed, consisting of background characteristics, six written case scenarios of acute health problems out-of-office hours, and factors related to help seeking. Health problems presented varied in level of urgency.

**Results:** Dutch and Swiss data have been collected, while Danish data collection ends the 31th of January 2016. In total, 1,846 Dutch citizens and 1,200 Swiss citizens responded and currently we have 1,614 Danish respondents. Analyses are planned to present the following: description of respondents (overall and stratified, e.g. per country, age group), description of help seeking per case scenario, threshold for contacting OOH care (overall and stratified, e.g. per country, age group) corrected for important help seeking related factors.

**Conclusions:** An answer to the question whether a difference in threshold between citizens could be an explanation of the difference in contact rate with OOH primary care. Furthermore, the identification of specific groups with different thresholds for contacting OOH care gives input for interventions to redirect patient flows and future research.

## EP05.02

### **E- mail consultations - patients and practitioners have different approaches.**

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**Background and Aim:** The few extant Danish studies on e-mail consultations were undertaken before it became mandatory under Danish law to offer patients this form of consultation. This study investigates the ways in which patients and general practitioners communicate with each other by e-mail, explore factors influencing this means of communication and puts into perspective the potential of e-mail consultations in patient treatment.

**Material and Methods:** The study is explorative and based on an individual interview and four qualitative focus group interviews. The empirical data were analysed from a social constructivist and a practice-theoretical approach.

**Results:** The study indicated that patients wanted to be able to use the general practitioner (GP) as a sparring partner in e-mail consultations. They expected a reply in case of uncertainties. The GPs found it difficult to handle complicated medical problems by e-mail and they tended to send a standard reply. A number of patients perceived the wording of the standard reply as a rejection of their problem. Patients highlighted the logistical advantages of e-mail consultations, the physical separation of doctor and patient which made it easier for them to disclose psychological or intimate issues. The GPs preferred short uncomplicated questions with no option for the patient to enter into a discussion.

**Conclusion:** Patients and GPs have different approaches to e-mail. The development of clear guidelines for patients and revised guidelines for GPs regarding e-mail consultations is therefore recommended.

### EP05.03

#### **Evaluation of the quality of initial consultations for low back pain in a primary care centre, and suggestions for improvement**

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**Aim:** To analyse causes for the low quality of consultations for low back pain in a Primary Care Centre (PCC) and to develop corrective actions and prioritize interventions.

**Method:** Meeting of doctors from the PCC was held to report on the problems found with the quality of consultations for low back pain. A structured brainstorming was carried out using nominal group technique to develop a list of the hypothetical causes. They were organized and categorized with a cause effect diagram (Ishikawa Method).

Group of experts selected causes which had the potential to be improved, so as to enable them to be focused on when prioritizing action. Prioritization was determined through the use of a Hanlon modified matrix based on four criteria: magnitude, vulnerability, importance and time permanence. After selecting the fundamental problems, feasible corrective actions were designed.

**Results:** Ishikawa diagram identified 6 main causes related to physician, patient, doctor-patient relationship, organization, context, infrastructures and resources. The sub-causes selected due their high score generated from the Hanlon matrix were: lack of knowledge of clinical practice guidelines (CPG) (16 points), advising patients on posture (15), and the benefits of physical activity and avoiding rest (15). The lack of standardised protocols (13), and the belief in the superior efficacy of medications above physical exercise (15) were also prioritized.

Suggested corrective actions:

- Feedback of results from the previous study.
- Organizational changes providing accessible tools (information and advice on physical activity/ stretches).
- Continued training (CT) sessions on CPGs available and evaluation of evidence for therapeutic efficacy.
- CT and interprofessional communication with primary care physiotherapists.

#### **Conclusions:**

- The greatest opportunities for improvement are related to the lack of knowledge about CPG and incorrect knowledge about treatment.
- Corrective actions are focused on continued training, accessible tools to provide a greater quality of information for patients and interprofessional communication with physiotherapists.

#### **EP05.04**

### **The development of quality circles for quality improvement in Europe from 2003 to 2015 involving 26 European countries**

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**Background/Aims:** Quality Circles (QCs) are commonly used as a tool in primary health care in Europe to consider and improve standard practice over time. They represent a complex social intervention that occurs within the fast-changing system of primary health care. QCs were first established in Canada and the Netherlands from where they spread to other European countries. This study aims to describe the spread and variety of this tool in primary health care in Europe and to compare to the findings of Beyer et al 2003.

**Method:** Experts from 26 European countries, belonging to the European Society of Quality and Safety in Family Medicine (EQuIP), completed an online survey documenting the number and objectives of QCs in their country, sources of support, incentives and didactic methods used. The answers were cross-checked and verified. Descriptive statistical techniques are used to analyse quantitative data.

**Result:** Findings from the quantitative analyses compare and illustrate how common QCs are, their aims, organization, type of facilitation, incentives, level of autonomy, support, use of data and didactic methods.

**Conclusion:** Substantial development of QCs has taken place in numerous European countries. Their impact on the quality of care has been seen in many projects. Quantitative data from the survey provide us with an contemporary overview of QC activity in Europe.

## EP05.05

### Use of electronic instruments for opportunistic screening of undiagnosed diabetes and other disorders of glucose metabolism. The DSP (Diabetes Screening Palermo) Study

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**Introduction:** The Diabetes Screening Palermo Study evaluate, in primary care setting, the effectiveness of a screening strategy of type 2 diabetes mellitus (T2DM). This study used electronic instruments to identify individuals at a high risk of diabetes and to provide early detection of undiagnosed T2DM and prediabetes.

**Methods:** This is an observational study, in primary care, from Italy. The screening program is divided into two phases.

Phase1: identification of patients at high risk of diabetes, through the analysis of databases of general practitioners.

Phase 2: execution of screening tests. To test for Diabetes or prediabetes, the HbA1c, the fasting plasma glucose (FPG) and the 2-h plasma glucose (2-h PG) value after a 75-g oral glucose tolerance test (OGTT) are appropriate. T

he OGTT was a central component of the screening program, in fact, a significant proportion of individuals at high risk for diabetes, with impaired fasting glucose (IFG), had blood glucose levels, after glucose load, compatible with diagnosis of T2DM or impaired glucose tolerance (IGT).

**Results:** After 24 months of the study: the total population was composed of 26410 subjects, of which 13319, (50.43%), was at high risk of T2DM. A total of 40.75% of these high-risk individuals had an impaired fasting glucose (IFG). A total of 965 subjects with IFG, were then subjected to OGTT, on the basis of which 136 subjects (14.09%) were identified with IGT and 83 subjects (8.60%) gave a response compatible with the diagnosis of T2DM.

**Conclusion:** in a primary care setting, a proactive approach towards diabetes screening, especially, performing OGTT in subjects with IFG, facilitate the early diagnosis of T2DM. This reduced the percentage of cases of undiagnosed diabetes and allowed for the identification of individuals with prediabetes. The information systems, lead to better management of the screening program.

## EP05.06

### Relationship between childhood adversities and fibromyalgia in general population

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**Background & Aim:** Persistent and widespread pain, fatigue, stiffness, depression and sleep disruption are the main symptoms of fibromyalgia. Its exact etiology is still unclear. Traumatic events and stress are linked to fibromyalgia. Previous studies show association between negative childhood experiences and widespread pain.

Aim of this study is to find out if there is a connection between childhood adversities and self-reported fibromyalgia.

**Method:** The Health and Social Support Study (HeSSup) is a prospective etiological follow-up study on the psychosocial health of the Finnish working-age population carried out by a postal questionnaire. All participants were asked whether a doctor had told them they have or have had fibromyalgia. Those responding affirmatively were regarded as fibromyalgia patients. Moreover, those who in the national registers had ICD10 diagnoses M79.0 or M79.7 were also regarded as fibromyalgia patients. The data comprised 515 fibromyalgia patients. Two randomly selected age- and sex-matched controls were selected for every fibromyalgia patient. The participants were asked to think about their childhood adversities in terms of the following questions: "Did your parents divorce?"; "Did your family have long-lasting financial difficulties?"; "Did serious conflicts arise in your family?"; "Were you often afraid of some member of your family?"; "Was someone in the family seriously or chronically ill?"; "Did someone in the family have problems with alcohol?". Statistical significance was tested by  $\chi^2$  test."

**Results:** There was a statistically significant positive association between all adversities except being afraid of a family member and self-reported fibromyalgia. Alcohol problems in the family had the strongest association. It was reported by 34.4% of fibromyalgia patients vs. 24.5% of controls,  $p < 0.001$ .

**Conclusions:** This study confirms the connection between fibromyalgia and childhood adversities.

## EP05.07

### **Development of care coordinator performance measurement tool for the Indonesian family physicians**

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**Background and Aim:** One of the role of family physician in primary care is Care Coordinator. Until now, there is no tool available to measure such performance. This study aims to develop care coordination measurement tool for family physician in Indonesia.

**Methods:** Various aspects for care coordination were listed from open ended questionnaire by experts: professional organization's member, academic staffs and health policy makers. All answers were grouped into various themes. Items were developed based on these themes. Delphi method towards experts, primary care physicians, and health facility managers was conducted to obtain consensus of items using 1-9 Likert scale. The items considered very relevant (Likert scale 8-9) with care coordination from more than 75 % respondents were selected for factor analysis.

**Results:** Thirteen themes for care coordination were obtained from 19 experts. From those 13 themes, 88 items were drafted from its definition and literature search. After having 2 rounds of Delphi (110 samples and 81 samples), 54 items were selected. No significant difference of characteristics were found in both Delphi samples. A study of factor analysis was conducted on 249 samples, consisting of doctors, nurses, and head of health care facilities. The study showed adequate number of samples and correlation for all items (KMO of Sampling 0.936 and Bartlett's Test  $< 0.001$ ). Eleven factors were derived from the results of eigenvalue  $> 1$  and screeplot, with total variation explained as high as 77%. Thirty three items were filtered after determined loading factor  $> 0.4$ . Cronbach's alpha for each factor varied from 0.700 - 0.913. Cronbach's alpha for total 33 items was 0.940.

**Conclusions:** A valid and reliable care coordination measurement tool for The Indonesian Family Physicians has been developed, consisting of 11 factors and 33 items. This tool will be beneficial for quality assurance in primary care services.

## EP05.08

### Comparison of the effectiveness of conventional therapies and hirudotherapy in the treatment of varicose veins

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**Background & Aim:** It's aimed to compare the effectiveness of the conventional medical therapies and hirudotherapy in the treatment of varicose veins.

**Method:** The study is a controlled, open labeled clinical trial, and conducted on 41 patients who were diagnosed with chronic venous insufficiency. The study was conducted at the Acupuncture and Complementary Medicine Practice and Research Center in Ataturk University, from June 2013 to January 2014. in the leech therapy group, patients had a 10-sessions therapy. in each session 5 leeches were applied on the leg with varicose vein. The control group composed of randomly selected 29 patients who first time had the diagnoses of varicose vein and complied with given medical treatment.

**Results:** There was statistically significant difference between pretreatment VAS (65.12 mm±20.5 mm) and post treatment VAS (34.12 mm±24.45mm) in the leech therapy group ( $p<0.01$ ). The induced therapeutic effect of hirudotherapy continued thorough 6 months and there was a statistically significant difference between the pretreatment VAS and VAS at 6th month ( $p=0.004$ ). There were a statistically significant differences between baseline and 3rd month hemoglobin levels (14.18 gr/dl±1.48gr/dl and 12.80 gr/dl±1.56gr/dl, respectively;  $p<0.01$ ) and platelet values (249.26±66.68 and 270.39±1.48, respectively;  $p=0.001$ ). There were no difference in other studied parameters.

**Conclusion:** in the leech therapy group, an improvement was seen in the pain symptom in the patients with chronic venous insufficiency. in the patients with chronic venous insufficiency, the decrease of the VAS for pain after hirudotherapy demonstrates an increase in the quality of life of the patients. in the light of these findings, we conclude that hirudotherapy may be alternate therapy modality for the treatment of chronic venous insufficiency. Our finding should be re-evaluated with controlled trials composing of larger number of patients.

## EP05.09

### **Casi e birra: an example of peer education in North-Eastern Italy**

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**Background and Aim:** Casi e birra (italian for “clinical cases and beer”) is a self-directed peer education programme for trainees in general practice taking place in Udine (Friuli Venezia Giulia, Italy). The goal of the programme is to integrate the knowledge acquired during the residency course with topics that were poorly addressed or not addressed at all. From the analysis of the cases brought to Casi e birra it might be possible to identify the gaps in the family medicine education and suggest improvements. **Materials and Methods:** Casi e birra sessions were organized monthly except for the summer period. During each session 14 trainees were invited. The participants were free to expound the clinical cases they came across or not. Participants were asked to specify the topic of their cases, if the clinical case concerned an acute or a chronic problem and the setting where they came across that case, choosing among 4 alternatives: GP training, hospital training, OOH rounds and GP practice during substitutions.

**Results:** 39 clinical cases were expounded by 9 people. 6 cases were seen during GP training, 22 during hospital training, 5 during OOH rounds and 6 during GP practice substitutions. Neurology was the most encountered topic (6 clinical cases), followed by cardiology and infectious diseases (5 clinical cases each). 3 clinical cases were considered multidisciplinary and in 2 cases the main issue was organizational, not clinical. Most of the clinical cases concerned acute problems (65%).

**Conclusions:** Casi e birra can provide complementary education for trainees in General Practice. The clinical cases analyzed suggested that residents need further education on acute illnesses. Hospital training and complementary jobs (OOH or GP substitutions) are useful to integrate the knowledge obtained during the training in the GP setting.

## **EP05.10**

### **Electronic cigarette in Saudi Arabia: an online survey**

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**Background:** E-cigarettes have been recently used to quit smoking. Their use became popular regardless of the fact that WHO considered them as a source of toxic fumes. Data about their safety is not yet confirmed, but major tobacco companies are advertising and producing them. Conducting clinical trials of these devices is challenging.

**Purpose:** To measure e-cigarette awareness in Saudi Arabia, and study their use among smokers and non-smokers.

**Methodology:** An electronic survey (Part of the validated WHO Global Adult Tobacco Survey) was used to reach participants through many internet communication applications. Microsoft Excel® was used to enter and analyze the data.

**Results:** 3027 participants were included in the analysis. Most of the participants were males (67.7%), aged between 18-40 years (73%), Saudi national (96 %), having a university degree (56.9%) and employed (56.9%). Awareness of e-cigarettes was high, as more than three quarters of respondents (82.5%) had heard about e-cigarettes. Less than half (42.5%) of those respondents who were aware of e- cigarettes have bought it or have seen anyone buying it. Among those respondents who were aware of e- cigarettes, one third (33.5%) had tried it. Of those who didn't ever smoke e-cigarettes, only (17.4%) were willing to try it in the current time. Less than one quarter of the respondents (22.3%) were smoking regular cigarettes. Of those, around two thirds (62.9%) were trying to quit smoking regular cigarettes, and among those, only (18.2%) were using e-cigarettes to help them do so. Only (8.8%) of the respondents believed that e-cigarettes is not harmful.

**Conclusion:** Smoking e-cigarettes is popular in Saudi Arabia, especially in non-smokers. Such popularity may “re-normalize” smoking, and lead to an increase in an “already alarming” smoking prevalence and addiction, especially to youngsters or at least a slowing down of the rate of decline.

## EP06.01

### **Antibiotic prescription in Danish general practice: determinants of variation in the use of microbiological diagnostics and prescribing patterns**

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**Background & Aim:** The overall aim of the project is to describe antibiotic consumption in Danish general practice with emphasis on specific types of antibiotics. The project will shed light on the impact of microbiological diagnostic methods (MDM) on the choice of antibiotic and the project will explore how the GPs prescription behaviour is influenced by selected factors. Antibiotics are essential when treating potentially lethal infections. An increasing development of resistant bacteria is considered one of the primary threats to public health. The majority of antibiotics (90%) are prescribed from general practice. The prescription of broad-spectrum antibiotics can cause unnecessary side effects for the individual and increases the risk of development of bacteria resistant to antibiotic treatment. Both the prescription of broad-spectrum antibiotics and the level of resistant bacteria are increasing.

**Method:** The study consists of a registry study and a questionnaire study. The registry study is based on data from the Register of Medicinal Product Statistics (prescribed antibiotics), Statistics Denmark (socio-demographic data) and the Danish Microbiology Database (performed MDM). The project will assess and quantify the usage of MDM prior to antibiotic prescription. Furthermore we will investigate associations between GP characteristics, use of MDM and description patterns. A questionnaire comprising a discrete choice experiment will allow us to investigate the relative importance of selected factors (microbiological diagnostics, point-of-care tests, patients' expectations) in the management of infectious diseases.

**Results:** This PhD project is scheduled to be carried out in 2016-2019. The hypotheses and anticipated perspectives will be discussed at the conference.

**Conclusions:** The project will contribute to existing knowledge with information on the diagnostic approaches to infections in general practice. The results will create a base for targeted interventions aiming to optimize diagnostic approaches to infectious diseases benefitting the individual patient and society as a whole.

## EP06.02

### **Brief psychiatric interventions in primary care as a model for improving communication and diagnostic skills**

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**Background & Aim:** Mental health disorders are among the most common diseases seen in primary care. However, family doctors do not always receive sufficient training to take care of patients with mental health disorders. In the Department of Ambulatory Care and Community Medicine at the University of Lausanne (Switzerland), residents are trained to provide continuous and holistic care for their patients. If these patients present undifferentiated or complex mental health symptoms, residents can request a brief psychiatric intervention, provided in cooperation with a psychiatrist. The aim of this study was to analyze the role of brief psychotherapeutic interventions as a method for teaching communication and diagnostic skills to residents while caring for patients with undifferentiated or complex mental health disorders.

**Methods:** A mixed-methods observational study was conducted during 2015. The number of patients, diagnoses and interactions between physicians were analyzed. A focus group with five residents was conducted by a sociologist to ascertain the impact of the interactions with psychiatrists and their interventions on the residents' training.

**Results:** 78 brief interventions were conducted during 2015. Residents unanimously felt that the direct participation of psychiatrists in their consultations increases their communication and diagnostic skills in undifferentiated or complex mental health disorders. Although the interventions were brief (maximum of 4 encounters) and sometimes difficult to schedule, residents consider them as being very relevant to their training. The interventions were perceived positively by patients and as having improved the relationship between the residents and their patients.

**Conclusions:** Brief psychotherapeutic interventions, conducted in cooperation with a psychiatrist, are considered by general practice residents as a valuable method to enhance communication and diagnostic skills of undifferentiated or complex mental health disorders.

### EP06.03

#### Diarrhea ... or something else?

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**Background & Aim:** Diarrhea is defined as stool consistency decrease, increase of the frequency of fecal defecation and stool weight >200g/day. The differential diagnosis becomes more complex in chronic diarrhea. Non-infectious causes are the most common in developed countries, such as: irritable bowel syndrome, inflammatory bowel disease and malabsorption syndromes.

**Aim:** describe a clinical case of chronic diarrhea.

**Method:** The patient was interviewed and the authors consulted his medical file for additional information. The patient gave his written consent for the presentation of this clinical case.

**Results:** 20 year old caucasian male, student. Family history: maternal aunt 51 years old with colitis (not sure which group). Irrelevant personal background. In a routine medical appointment (MA) with his general practitioner (GP), the patient refers 3 watery fecal dejections/day (without blood, mucus or pus), during the past month. No other complaints were referred. Denied changes in the usual diet, toxicological consumption, recent travels or contact with animals. Physical examination (PE) showed no significant changes. The GP gave dietary advice and requested blood tests. He returned for a MA, already without complaints, to show the blood test, which revealed no changes. A month later, he returns to his GP MA and refers the maintenance of five daily fecal dejections with loose stools, fecal urgency and two episodes of rectorrhagia since his last visit. PE unchanged. GP requested a colonoscopy, which revealed extensive ulcerative colitis, being the user referenced to the hospital gastroenterology appointment.

**Conclusions:** Ulcerative colitis is part of the differential diagnosis of chronic diarrhea, and rectorrhagia is the most common initial symptom. This case illustrates the importance of the GP's role in the accessibility and following of the complaints of its patients, as well as the proper diagnosis and reference to secondary healthcare.

Disclosure: No conflict of interest declared.

## EP06.04

### Consensus management protocol for urticaria and angioedema in primary care

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**Background & Aim:** Urticaria is a common condition that involves pruritic, raised skin wheals and represents a frequent dermatological consultation in primary care (PC). As an improper management approach can lead to an unnecessary increase in visits and a decrease in the quality of life (QoL) of patients, the application of an adequate diagnostic and therapeutic protocol is required in PC. Therefore, the aim of the present project was developing a management protocol for urticaria and angioedema in PC.

**Methods:** On the basis of the European guidelines EAACI/GA2LEN/EDF/WAO (Zuberbier T et al., 2014) a group of dermatologists and PC physicians discussed the main points in the management of urticaria and angioedema in order to develop a consensus management protocol.

**Results:** Algorithms for diagnosis and treatment were developed. In the case of diagnosis, language standardization (definitions), properly diagnose and differential diagnosis were highlighted so as to avoid incorrect **Conclusions.** Indeed, the importance of early referring to specialist when needed was also remarked. In the treatment algorithm, the importance of distinguish between acute, chronic and an emergency when treating urticaria was shown. Additionally, the main selective H1-antihistamines and urticaria diagnostic tests were included according to provide a completely helpful tool for PC physicians.

**Conclusions:** The standardization of this urticaria protocol for PC physicians could provide an improvement in the diagnosis and treatment of patients, in addition to decreasing the number of visits and increasing their QoL. Indeed, the proper implementation could reduce healthcare costs.

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## EP06.05

### **Gabapentin and pregabalin use in Italy: evaluation of use and appropriateness in General Practice**

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**Background and Aim:** Since January 2007, the Italian National Health System took a health-policy intervention by restricting the refundability of pregabalin and gabapentin. The aims of this study were: to explore the trend in the use of gabapentin and pregabalin in a general practice setting; to analyse the predictors of inappropriate use of these drugs.

**Methods:** We analysed a population of almost 150.000 individuals registered in 123 general practitioners' (GP) lists. Patients who received at least one prescription of gabapentin or pregabalin were identified. Over the study years, one-year prevalence and incidence of use of these drugs was measured.

**Results:** Gabapentin incidence of use dropped from 55.4/10000 inhabitants in 2005 to 10.4 in 2011. On the contrary, pregabalin prescription raised from 30.5/10000 inhabitants in 2005 to 47.7 in 2011 with a peak to 106.1 in 2006. Inappropriate prescriptions account for almost 55% of all prescriptions of gabapentin or pregabalin. GP characteristics mainly associated to inappropriate prescriptions were: male gender, shorter career duration, higher number of patients registered in GPs lists and higher number of patients treated/1000 patients. Inappropriate prescriptions were more frequent if filled to females and patients older than 71. Concomitant diseases as diabetes or neoplasm were associated with higher appropriateness; conversely prescriptions in patients affected by mood disorders and arthritis were more frequently inappropriate. Moreover, concurrent prescriptions of antidepressants, antipsychotics, proton pump inhibitors and antiosteoporotics were related to higher risk of inappropriateness. Conversely, the concomitant use of analgesic drugs, especially opioids reduced the risk of gabapentin or pregabalin inappropriate use.

**Conclusion:** This study documented a significant rate of inappropriate prescriptions in clinical practice. The restriction of refund criteria reduced by about 4 times their incidence of use. However it was not able to contain pregabalin use, which progressively raised to pre-note levels.

## **EP06.06**

### **The Dutch National Hepatitis Practice Plan**

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**Background:** The identification and treatment of hepatitis B and C can be improved. In the Netherlands, approximately 40,000 and 28,100 patients are infected with hepatitis B or hepatitis C respectively and a large part has not yet been identified. The identification of hepatitis B and C even decreased from 1892 patients in 2003 to 1331 patients in 2013. Furthermore, the time between initial diagnosis and referral to a hepatitis specialist is too long. This can be harmful as long-term complications of untreated hepatitis B and C, cirrhosis and hepatocellular carcinoma, occur in up to 25% of cases after 25 years. The mortality has increased from approximately 450 in 2003 to 500 patients in 2013, whereas the effectiveness of treatment of hepatitis B and C has been improved up to 90% last years.

**Method:** To improve the identification and treatment of hepatitis B and C in the Netherlands, all stakeholders were invited to join the national hepatitis practice plan taskforce and were asked to write an action plan for all hepatitis related services. The main objective is to increase the numbers of identification and referrals to a hepatitis specialist. Furthermore, working procedures and results of best local practices on collaboration between primary care providers and specialists were collected.

**Results:** All stakeholders joined the taskforce. A practice plan was written and presented at the Dutch National Hepatitis Conference on October 1, 2015. All stakeholders were asked to authorize and implement the plan. The practice plan, working procedures on how to improve collaboration and results of local practices will be published on a public website soon.

**Conclusion:** It is feasible to draft a hepatitis practice plan with all stakeholders within 1 year. The effects on identification of hepatitis B and C, morbidity and mortality need to be evaluated.

## **EP06.07**

### **How to say No?**

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**Background & Aims:** At the end of this workshop the participants will be able to identify and to carry out, in real practice the communication strategies which could be used with a patient's demanding unnecessary medical interventions.

**Methods and Subjects:** The critical incident technique and small group work will be used as educational methods during the workshop. The participants are expected to be GPs/FDs or any other health care professionals working with patients. The critical incident technique is based on the participant's experience; description of the specific incident, a patient case, that has happened in reality. They will be asked to describe their latest experience with a patient who expressed an inappropriate medical request.

Description will be in written form, and the following questions should be answered: Who was the patient? What intervention did he/she request and why (reasons)? What did you do (precise description of your behaviour) and why? How did you feel? The individual case descriptions will be followed by the work in small groups based on individual presentations of the cases, followed with discussion.

**Results:** Formulation of the most appropriate strategies to communicate with patients expressed unnecessary demands are the expecting results of the small groups work. The discussion of the following questions could be expected: What are the elements of decision making process to assess if a demand is unnecessary and how to decide to accept or reject the patient's demands? What are the elements of the negotiating strategies? Which one is the most appropriate and when? How to deal with own uncomfortable feelings?

**Conclusions:** The workshop is a model of experiential learning. The participants will bring their own experience and share it with the colleagues as well as the emotions always present in such difficult consultation.

## EP06.08

### **Reminders to general practitioners improve follow-up after abnormal or inadequate cervical cytology - a nationwide before and after cohort study**

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**Background & Aim:** Postponed or lost follow-up after an abnormal cervical cytology may give dysplasia time to progress. In Denmark, general practitioners (GPs) obtain the cytology and convey results to women, by which approximately 40,000 women/year are recommended follow-up. It is estimated that 18% of the women postpone follow-up, including 5% of the women with the most severe dysplasia. Postponed follow-up is associated with socio-demographic differences among women and is more common in some GP practices. This study aimed to evaluate if an electronic GP-reminder system launched in Denmark in 2012 would decrease the proportion of women without follow-up, level out sociodemographic variation and decrease the variation in follow-up proportions between GP practices.

**Method:** In a national before-after study, all cervical cytology samples with a follow-up recommendation (from 2009-2013) were identified in the Danish Pathology Data Bank. The proportion of women without follow-up 6 month after the GP-reminder was calculated for the after group and compared to the proportion of women with no follow-up 6 months after a fictional GP-reminder in the before group.

**Results:** Preliminary results indicate that GP-reminders decreased the proportion of women without follow-up, regardless of type of follow-up recommendation. The improvement was seen for all socio-demographic groups, but disparities were not levelled out. The interquartile range of proportions with no follow-up among GP practices was reduced from before to after.

**Conclusions:** An electronic reminder system alerting GPs about women with no follow-up after a dysplasia diagnosis decreased the proportion with no follow-up and the variation between practices. Still, lower social position had higher non-follow-up compared to women with higher social position.

## **EP06.09**

### **Flexibility in general practice- methods of evaluation**

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**Background and Aim:** Flexibility in General Practice has been defined as: «a capacity owned by general practitioners to adapt and act in a relevant way facing complex clinical situations and of biomedical and societal changes, in communities and individuals, in respect of ethics and cultures.» Measuring flexibility as a physical parameter is well described. Measuring flexibility as a capacity in General Practice, as defined by the CIRK, seems to be difficult, it seems impossible to elaborate an assessment grid. It is more a model of thought; we can only use indirect measures to evaluate flexibility. The aim of the workshop is to give GP trainers the appropriate tools to evaluate the flexibility of trainees.

**Methods:** Starting from the different aspects of flexibility, we elaborated different tools for the evaluation of flexibility. We found different methods for indirect evaluation of flexibility like multidisciplinary teaching, interviewing patients about the flexibility of trainees, direct observation of trainees during a consultation, oral structured clinical examination, narrative methods, evaluation in time during the training years, informal evaluation by questioning about the progression of the trainee. During the workshop participants will work in different groups, each group should elaborate two methods of evaluation. At the end we will compare the outcomes with our proposals.

**Conclusions:** Evaluation of flexibility seems to be more challenging than evaluation of other capacities of GP trainees. We want to facilitate this evaluation in order to enhance the capacity among trainees.

## **EP06.10**

### **The use of quality circles as a tool in the taking over of practices by young general practitioners**

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**Background and Aims:** Although informal meetings of healthcare professionals in smaller groups are common in the area of primary care in the Czech Republic, there is no use of the method known as Quality Circles. The Aim of our project is to use this method to help new general practitioners when they take over a medical practice, and to suggest measures to improve the organization and overall attractiveness of the practice, as well as patient satisfaction.

**Methods:** For the purposes of this observation, an already existing informal group formed by healthcare professionals and their trainees. The group met a total of four times in a six-month period. In the first meeting, problematic areas were identified. In the second, specific issues of newly starting to practice were discussed, with time to consider suggestions for improvements. The third meeting consisted of an analysis of the suggested measures and their implementation, and in the fourth, these measures and their effects were evaluated.

**Results:** On the basis of the discussion in the first and second meetings, suggestions were made, and then, during the third meeting, structured into three dimensions: The organization of work, including clinical activities, The attractiveness of the practice and employee satisfaction The satisfaction of employees. In each area, specific measures were proposed. The new doctors' feedback in the fourth phase of the project was positive. The main problems the new doctors faced were related to their lack of knowledge and experience with buying or starting their own practice, as well as being an effective team leader.

**Conclusion:** Despite the application of small groups being significantly larger, it was demonstrated that if practitioners are given direction and clear goals in their meetings, these meetings can be very constructive. Small groups thus offer a good platform for young GPs in starting their own practice, giving them the capacity to do so.

## EP07.01

### Evaluation of breaking bad news practice with simulated patient interviews at medical faculty

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**Background & Aim:** Breaking bad news to a patient is one of the most challenging communication task. in most medical faculties where technical skills have a major importance, such as physical exam, the teaching of communication skills are not be in priority. But recently there is increased importance given to this issue and then it took place in the under graduate national core curriculum which published in 2014.

**Objective:** To evaluate breaking bad news practice with simulated patient interview in third year of medical faculty students as their self-assessment of interview.

**Method:** It is a descriptive ongoing study conducting at Ataturk University Medical Faculty. After theoretical breaking bad news lesson, third year medical students were asked delivering a cancer diagnosis to a simulated patient and this interview was videotaped. Data were collected through survey from students after simulated patient interviews. Survey were including questions that evaluate self-assessment of interview.

**Results:** Sixty nine of 125 students (55.2%) were female. A hundred eleven of students (88.8%) regard as a skill for breaking bad news. Ninety students (72 %), stated that breaking bad news lesson was a need and suitable. Only 17 students (13.6%) thought that theoretical courses were enough, 77 students (61.6%) thought that there should be simulated patient application. Self-assessment of interviews with simulated patient were analyzed with survey, there was no significant difference between genders ( $p > 0.05$ ). Students felt competent themselves for first meeting (85.6%) and using understandable language. Students felt incompetent themselves for asking patient if they have any question (%13,6).

**Conclusion:** Students thought that breaking bad news is a competency and it is appropriate to teach with simulated patients interviews. They felt incompetent for asking the patient if they have any question. This problem can be overcome by repeating this practice in later years.

## EP07.02

### **A new method for estimating morbidity rates based on routine electronic medical records in primary care**

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**Background & Aim:** Routinely recorded electronic health records (EHRs) from general practitioners (GPs) are increasingly available and provide valuable data for estimating incidence and prevalence rates of diseases in the general population. Valid morbidity rates are essential for patient management by health care providers and developing and evaluating health care policy. In this study we developed an algorithm to construct episodes of illness based on EHR data to calculate morbidity rates.

**Method:** The algorithm was developed in discussion rounds with two expert groups and tested with data from NIVEL Primary Care Database, which consisted of a representative sample of 386 participating general practices with approximately 1.2 million patients in 2012. Morbidity data were used from EHRs in the period 2010-2012, including recorded ICPC-coded episodes of care, encounters and prescriptions.

**Results:** All 685 symptoms and diseases of ICPC-1 were categorized as acute symptoms/diseases, long-lasting reversible diseases, and chronic diseases. Based on knowledge of the duration of a disease, for each category an algorithm was developed to construct episodes of illness ('time between symptom onset to complete resolution') based on recorded episodes of care ('time between the first and last encounter for a complaint'). Compared with recorded episodes of care, for acute and long-lasting diseases, applying the algorithm resulted in a reduction of both the number and average duration of the episodes up to 53% and 94%, respectively. On the other hand, for chronic diseases, the algorithm resulted in a slight increase in the number of episodes as well as the episode duration.

**Conclusions:** An algorithm was developed to construct episodes of illness based on routinely recorded EHR data to estimate morbidity rates. The algorithm constitutes a simple and uniform way of using EHR data and can easily be applied in other registries, especially in registries based on recorded episodes of care.

### **EP07.03**

#### **Differentiated access to out-of-hours primary care through emergency access**

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**Background:** Patients calling the Danish out-of-hours primary care service (OOH-PC; i.e. lægevagt) and Medical Helpline 1813 (i.e. Akuttefonen) queue up in the telephone waiting line. . At the moment, a patient calling has to wait in line for their turn to talk to the triage GP or triage nurse, even if the health problem is experienced as highly urgent or life-threatening. The alternative to waiting in line is calling 112 ambulance care instead, as there is no possibility to bypass the telephone waiting line.

**Objective:** To implement and test an emergency access intervention that allows callers to the out-of-hours service to jump the telephone waiting line if they experience their health problem as highly urgent.

Design: Randomized controlled trial

Setting: OOH-PC in the Central Denmark Region and Medical Helpline 1813 in the Capital region of Denmark

Subjects: All patients calling the OOH-PC and 1813 from April to June 2016

**Main Outcome Measures:** Patient satisfaction and patient feeling of safety with the intervention and frequencies of patients who jumped the line along with the relevance of the jump evaluated by the triage professional.

**Results:** As the final study is planned for medio 2016, only preliminary results from a pilot study in the Central Denmark Region can be presented.

#### **EP07.04**

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**Background/Aim:** Although Continuing Medical Education (CME) programmes are regularly conducted in Myanmar (Burma), they are not need-based. Therefore, it is deemed necessary to assess the learning needs of GPs as CME programmes should be relevant to the general practice and match the needs of GPs. **Methods:**

Study design: A two-phase study

Study population: GPs from Yangon and Mandalay divisions of Myanmar

Sample size determination and sampling procedure: Non-probability purposive sampling for Phase I (34 GPs) and multistage sampling for Phase II (380 GPs)

Data collection method: In Phase I, six focus groups were organized to explore their CME needs and a questionnaire was constructed based on the findings from the focus groups. In Phase II, the questionnaire was distributed to the selected GPs. Data analysis: Descriptive analysis of the questionnaire response was carried out by SPSS and Stata.

**Results:** The response rate of the survey was 62%. The majority of the GPs were keen to increase their existing knowledge in medicine (65%) and improve their clinical skills (63%). However, they were less concerned about therapeutic updates (48.6%) and disease prevention and control measures (28.2%). The 10 highest ranking topics were identified from the pre-defined list of 33 topics. Reading and attending workshops/seminars and talks were the most commonly used learning methods at present. However, GPs liked face-to-face group discussions and social media groups for the continuing learning.

**Conclusion:** The study showed that GPs perceive their learning needs based on issues they encounter during patient consultations. Although the study has some limitations, there was a good mixture of gender and experience and most of the respondents were exceptionally motivated to provide quality information. As the findings constitute a well-grounded basis for designing need-based CME programmes, these will be transferred to the planners and educators to translate them to actual training programmes.

## EP07.05

### Consultation outcomes and analgesic prescribing in A&E for patients with terminal cancer

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**Background:** Patients with cancer often experience complex pain and symptom control issues that can cause them to presentation to Accident and Emergency [A&E]. We aim to determine what acute pain-related prescriptions are dispensed by Accident and Emergency (A&E) to patients with cancer.

**Methods:** Using GRO death data, we identified 4,407 patients who had died from cancer between 2011 and 2014. Data from each A&E attendance in their last 12 months of life was obtained, including admission data, prescribing details for acute prescriptions dispensed through A&E.

**Results:** Of the 4,407 patients in the cohort, 1,668 patients (38%) used A&E in their last year of life, with 797 (18%) presenting more than once giving 2465 total attendances. An overwhelming 71% of cohort patients who presented to A&E were admitted to hospital. A further 2.8% died in the department. Of the 25.2% (622 patients) who were discharged, 300 were given acute prescriptions in addition to their regular medication. These prescriptions were: strong opiates (15%), weak opiates (31%), other analgesics (12%), antibiotics (26%), antiemetics (3%), steroids (4%), other palliative care drugs (1%) and other non-analgesic and non-palliative-care drugs (22%).

**Conclusions:** For patients with cancer who present to A&E, the overwhelming majority are admitted to hospital. When patients are discharged, nearly half are given prescription medications. Of prescriptions written in A&E, over half are for analgesia, suggesting pain is a primary reason for A&E attendances not requiring admission. This research can potentially identify factors associated with unscheduled care use and suggest clinical and service provision changes that could be made to improve the patient journey. Determining patient factors, care planning, and prescribing features that are associated with use of unscheduled care services is crucial to increase patients autonomy, facilitate greater continuity of care, and reduce demand on unscheduled care.

## **EP07.06**

### **Variation in medication adverse events in general practice**

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**Background & Aim:** Inadequate signaling of adverse events can influence the quality of individual patient care and healthcare in general. In this study we investigated the number of medication adverse events recorded in general practice and the variation between general practices.

**Method:** Data were derived from electronic health records (EHR) of general practices that participate in the NIVEL Primary Care Database (NIVEL-PCD) in 2014, including 308 general practices with a total practice population of 1,256,049 listed patients. Medication adverse events were defined as ICPC-code A85 (adverse effect medical agent). Data were examined according to sex, age, number of different prescriptions and number of chronic diseases. Between practice variation in signaling medication adverse events was studied using multilevel logistic regression analysis corrected for age, gender and EHR system.

**Results:** 2.3 consultations per 1000 consultations in general practice were due to medication adverse events. The rate of medication adverse events was 6.6 per 1000 patients in the population and increases with age, number of different drugs, and number of chronic diseases. There is large variation between practices. Corrected for age, gender and EHR system, medication adverse events were signaled for 9 patients per 1000 patients in the population. More than a tenfold difference between general practices was observed in signaling medication adverse events (95% CI: 0.26-3.34).

**Conclusion:** The variation between general practices suggests that improvement is possible in terms of signaling and recording of adverse events.

## EP07.07

### Use of *Helicobacter pylori* antigen stool test in PHC and family medicine setting, eastern Croatia

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**Background and Aim:** The *Helicobacter pylori* antigen stool test is a relatively new, noninvasive test for diagnosing *Helicobacter pylori* (HP) infection, appropriate for screening of patients with dyspepsia and other upper abdominal symptoms, in PHC setting, and for detection of patients in whom eradication therapy was unsuccessful. The aim was to assess the rates and patterns of this test use, in our working surrounding, Osijek-Baranja County, eastern Croatia.

**Methods:** Retrospective study. Results were analysed on the sensitive (monoclonal) ELISA test for the detection of HP stool antigens, performed in 2014, in the Microbiology Department of the Public Health Institute of Osijek-Baranja County. From the list of patients tested several times, we identified those in whom eradication therapy was unsuccessful.

**Results:** A total of 3223 patients were tested on HP stool antigens in 2014, with 3516 tests performed. Referred patients were 52,4±14,5 years old, predominantly women (70%). The number of patients tested once (referred by primary physicians for screening on HP infection) was 2909. There were 2317 negative and 314 positive results. The rate of post-treatment testing was 45%. The percent of patients to whom eradication treatment was unsuccessful after the first, but yet successful after the second round of treatment was 37,5%. The percent of patients to whom eradication treatment was unsuccessful even after the second round of treatment was 28%.

**Conclusion:** Primary physicians in Osijek-Baranja County, eastern Croatia, have taken the sensitive test for the detection of HP stool antigens into their routine practice, primarily for the purpose of screening of patients with upper abdominal symptoms, while post-treatment checks have been insufficiently performed. Results indicating patients resistance to treatment were comparable to those found in other studies.

## EP07.08

### Academic detailing in general practice – a study protocol

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**Background & Aim:** The current evidence suggests that dissemination of new knowledge to clinicians through scientific articles has a small effect. More interactive techniques such as Academic Detailing has been shown to be effective in changing behavior. Academic Detailing is a method of Continuing Medical Education, where a health care professional disseminates new knowledge within a specific field to a peer in an outreach visit. The effect of Academic Detailing in general practice has not been systematically studied in Denmark but has proven to be effective in other countries. Our aim is to investigate the effect of Academic Detailing in the Capital Region of Denmark.

**Method:** We plan to randomize all general practitioners in the Capital Region of Denmark to receive two short visits of 15 minutes duration by a pharmacist trained in Academic Detailing or no visits. The key messages will be: (1) avoid diclofenac and selective COX-2 inhibitors, alternatively prescribe ibuprofen or naproxen for the shortest time possible. In addition, the pharmacist will provide information on (2) risk patients and interactions and on (3) alternative drugs such as paracetamol. Three months after the primary visit, a new brief visit will be planned for a recapitulation of the key messages. The prescribing of NSAIDs among general practitioners receiving visits will be compared to the prescribing of NSAIDs among general practitioners not receiving visits. Furthermore, we plan to compare the prescribing of NSAIDs before and after the intervention. Prescribing patterns will serve as a proxy for the effect of an Academic Detailing intervention. Information on the number of dispensed prescriptions for NSAIDs will be gathered from the National Prescription Registry, where both patients and practitioners will be anonymized for the researchers. Perspectives Academic Detailing could potentially be a cost effective support to the General Practitioners in the Capital Region of Denmark.

## EP07.09

### **Incidence and epidemiology of PSVT in Sweden 1987 – 2010**

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**Background:** Studies on prevalence and demographic constitution in the general population with the diagnosis paroxysmal supraventricular tachycardia (PSVT) are sparse. Though the diagnosis itself is rather common in a hospital setting. Aim Calculate the PSVT incidence between 1987 and 2010 in Sweden overall. Examine the incidence rate over time. Examine the descriptive epidemiology of patients with a PSVT diagnosis. Compare incidence rates between men and women, overall and over time.

**Methods:** Patients were identified according to international classification codes for PSVT in in-patient care (1987–2010) in the nationwide Swedish Patient Register.

**Results:** A total of 39 973 individuals with physician-diagnosed PSVT were diagnosed in Sweden between 1987 and 2010 (mean age 60 years; 44% men). A total age-adjusted incidence of 19 per 100 000 person years were seen. The incidence increased with age, and peaked in women at ages 80–84 and men in ages 75-79.

**Conclusions:** The Swedish nationwide register-based PSVT incidence was lower compared with previous international estimates. The only other study describing PSVT in the general population are based on a patient material with 1 000 fold less diagnosed cases. The sheer size of the patients diagnosed with PSVT in our dataset and the well documented validity of the registers used makes the results very reliable.

## EP07.10

### Impact of referral source on patient attendance outcomes in patients with cancer presenting to Accident and Emergency Departments

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**Background & Aims:** Patients with cancer often experience complex pain and symptom control issues that can cause them to seek medical advice from a number of sources including Accident and Emergency departments (A&E), emergency services, their general practitioner (GP), and other medical and non-medical sources. We aim to examine the impact of referral source on clinical outcomes in patients with cancer who present to Accident & Emergency (A&E).

**Methods:** We identified 4,407 patients who had died from cancer between 2011 and 2014, and obtained routine clinical data from each A&E attendance in their last 12 months of life.

**Results:** 1,668 patients (38%) attended A&E. Patients either self-presented (19.7%), or via Emergency Services (62.7%), General Practitioner (4.7%), NHS-24 service (5.3%), other healthcare professionals (1.5%), or other non-healthcare professionals (6.1%).

Breakdown of severity of presentation by source was as follows: Emergency services: Resuscitation (R) 28.7%, Majors (Maj) 60.1%, Minors (Min) 11.1%; GP R(18.4%), Maj(53.5%), Min(28.1%); NHS24 R(18.9%), Maj(24.4%); self-presentation R(8.6%), Maj(33.5%), Min(57.7%); other medical: R(13.7%), Maj(35.3%), Min(51.0%); and other non-medical R(22.4%), Maj(49.2%), Min(27.9%).

Referral source compared to patient outcome demonstrated: patients admitted by emergency services were either admitted (76.1%), died (3.8%), transferred (2.6%), Discharged (17.1%). Patients admitted via GP were admitted (60.5%), died (2.6%), transferred (2.6%), or discharged (34.2%). Those admitted via NHS24 were admitted (74.0%), transferred (6.3%), or discharged (19.7%). Patients presenting via other medical routes were admitted (60.8%), transferred (9.8%), discharged (29.5%) and those presenting from non-medical sources were admitted (67.3%), died (3.4%), transferred (0.7%), discharged (27.4%). Where patients had self-presented they were admitted (36.5%), died (0.4%), transferred (9.9%), discharged (51.9%).

**Conclusions:** A significant number of patients with cancer attend A&E in their last year of life. The majority are admitted to hospital. Referral source is associated with severity of illness and likelihood admission.

## EP08.01

### Changes in knowledge of and attitudes towards family medicine along the degree of Spanish medical students from two different curricula

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**Objective:** A course in Family Medicine (FM) could dispel possible negative stereotyping about the specialty. When it is preferable, at the beginning or at the end of the degree? To determine changes in the knowledge of and attitudes towards FM between 2nd-6th year of medical students who completed a course in primary care (PC).

**Method:** Cohort study. Students from two medical schools (A: course in PC in 2nd year; B: course in PC in 6th year) were asked to respond a questionnaire including the brief CAMF, socio-demographic and academic items. In A they were requested to respond before the PC course beginning, and the day of the final exam; 2nd year students from B at the end of first trimester. All of them were invited to respond at the end of their 6th year. Statistical analysis was performed with SPSS 17.0: Chi square, Student t/non parametric tests.

**Results:** In A, at the 2nd, 6th year, 8, 64 students responded, respectively; 50,98 at B.

In 6th year the mean age was 23 in A, 24 in B ( $p=0.003$ ); 53.1% and 71.0% were women ( $p=0.008$ ).

A: after completing the PC course 43.7% students said they would like to become a family doctor in the future (vs 36.5% before the PC course,  $p=0.028$ ); 22% in B ( $p=0.01$  vs A at the end of 2nd year). At the end of the degree were 35.9% and 55.1%, respectively in A and B ( $p=0.02$ ).

A: the mean CAMF scores: 15.4(SD:7.0), 22.7(SD:7.1), 21.8(SD:7.1) before and after the PC course and at the end of the degree. B: 13.9 (SD:6.4), significantly lower than A after PC course ( $p<0.0001$ ), 23.5 (SD:5.7), no significant differences respect to A.

**Conclusions:** Student interest by FM showed at their 2nd year decreases at the end of the degree. Although there were no significant differences on CAMF scores, students from B showed.

## EP08.02

### Satisfaction of patients attended in two different models of primary care in Spain and Portugal

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**Background & Aim:** Patient satisfaction can be important as a measure quality of care in acceptability terms to individual patients of different primary care organizational models. The aim of the study is to know the degree of user satisfaction regarding the health care service in a Spanish health center(public, SESCAM) and another Portuguese(Unit of Functional Health).

#### **Method:**

Design: Cross-sectional study.

Setting: Primary Care.

Participants: 87 and 80 patients in Spain vs Portugal.

Main outcome measures: They were asked to respond the EUROPEP instrument, 23-item validated and internationally standardized measure evaluations of general practice patients.

Other variables: age, sex, education level.

The collected data were coded and entered into a database using the SPSS 17.0 statistical programme. The analysis included a description of the variables, comparing both health center ( Mann-Whitney U test).

**Results:** The mean age was 50.1 (SD:16.3) and 56,9 years (SD:17.0) in Spain vs Portugal ( $p=0.011$ ); 56.3% and 61.2% were women, there were no statistically significant differences (NS) by sex. (84.3 and 73.7%) had primary or higher level (NS). in general, Portuguese patients had more favourable opinion about the care they received. The most striking differences ( $p<0,0001$ ) were found: telling them what they wanted to know about their illness (97,2 vs 81,7), helping to deal with emotional problems related to health status (94.5 vs 74.1);waiting time in the waiting room (74.7 vs 40,0). With regard to questions assessing some professionalism aspects (confidentiality, helping to feel well, physical examination, knowing what he or she had done, preparing to expect from hospital care) and administrative ones (getting an appointment, getting through the practice or the doctor on phone) there were NS.

**Conclusions:** Portuguese users of Unit Functional Health have shown a higher degree of satisfaction with the care provided compared with those who were attended in Spanish health center.

### EP08.03

#### **Knowledge and attitudes toward family medicine at the second year of the degree and election of specialty**

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**Objective:** A cold climate towards primary care (PC) in the medical academia would constitute a barrier to choosing Family Medicine (FM) as a career option. This study was designed to determine medical students' knowledge of and attitudes towards FM at the second year of the degree predicts the election of FM as career.

**Method:** This is a cohort study. Before taking a course in PC in 2007-2008 and 2008-2009 academic years, 159 2<sup>nd</sup> students were asked to respond to the brief CAMF (Spanish acronym for "Knowledge and Attitudes towards Family Medicine"), a questionnaire with 21 closed response items (5 options on a Likert scale). All of them were investigated about the election of specialty in 2013, 2014, based on the information provided by the Ministry of Health in its web.

Statistical analysis was performed with SPSS 17.0: comparison of proportions (chi square) and means (Student t test).

**Results:** The mean age was 19.2 years (SD:0.88), ranging from 18 to 28 years;78.0% were women. The specialty chosen was known in 139 students:17 (12.2%) chose FM,17 pediatrics,11 internal medicine,10 gynecology, 35 internal medicine specialties, 31 other surgical specialties and 18 others.

Before starting the PC course 30.8% of students said they would like to become a family doctor in the future;58.8% for those who chose FM, significantly ( $p=0.01$ ) bigger than 25.4% for the others. But only 4.3% considered it to be their first career choice (no statistical differences between both groups).

The brief CAMF score range was -3 to 31 (mean:16.4; SD:6.2). Graduates who chose FM had mean 19.2 (SD:6.1), significantly higher than the 15.8 (SD:6.1) of the others ( $p=0.037$ ).

**Conclusions:** Family Medicine is a minority option as specialty. Those who choose MF score higher in the CAMF, so this could be a predictor of choice of specialty.

#### **EP08.04**

#### **The student monitoring benefits: experience in skills, attitudes and communication discipline in the Vila Velha University Medical School, in Brazil**

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**Background & Aim:** The monitoring is an academic extension graduation activity, performed by the students capable of orienting other students in a specific field. This activity enriches students bond, and grants to the mentor the possibility to apprehend the knowledge already acquired, improving the teaching-learning process and preparing the mentor to future teaching practice. The aim of this study is to encourage the students to practice monitoring, to develop an awareness about its importance, as well as demonstrate the benefits of its practice during graduation.

**Method:** in Vila Velha University, the Skills, Attitudes and Communication Discipline addresses topics mostly referred to Medical Semiology. During a maximum period of two years, the mentor acts in all precedent periods for eight hours a week. During these hours, the mentor orients students, on a previously chosen subject for the monitoring session.

**Results:** Around 400 students participate on the monitoring sessions offered per semester. The subjects chosen in advance allow the mentor to review and prepare the session. By being prepared to explain the topics, the mentors acquire a better understand on the subjects covered on the session. The monitoring activity introduces the student on teaching experience, promoting a possibility to graduate future doctors and professors.

**Conclusions:** The Medical Semiology is essential for the doctors' practice. The opportunity that mentors have on reviewing all the topics already studied since the first semester by preparing the monitoring sessions, enable them to improve their knowledge on the subjects, their teaching skills and their clinical techniques and abilities. It is essential to stimulate the monitoring practice in the academic community to promote better quality of education and better clinical practice.

## EP08.05

### How to cope with a cohort study in primary care

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**Background:** research in GP setting face with barriers such as workload and a lack of time which can influence the motivation to collaborate in large collaborative studies.

The objective of this communication is to present the process made for the implementation of a multinational European cohort study in primary care and the strategies to motivate healthcare professionals to collaborate in it.

**Methods:** HEFESTOS is a cohort study aimed at knowing the main triggers and the prognosis of some factors related to the heart failure decompensations. The first protocol was presented in the European General Practice Research Network (EGPRN) meeting in 2013 in Malta to be discussed and improved. The final version has been granted by Spanish Government and EGPRN. Researchers from 8 countries accepted to participate in the validation cohort.

We present the strategies made to develop the derivation cohort study in Spain.

**Results:** The study was presented in 16 Primary Healthcare Centers in Barcelona. Among 236 health professionals attending these sessions, 117 (49.6%) accepted to participate. An informed consent form, recruitment sheet and study protocol were sent to them by e mail. A pulsioximeter, certificates of collaboration and partnership in scientific communications were offered to the collaborators recruiting a higher number of patients. After nine months, five out of 16 centers have not recruited any patient, and only 11% of the potential collaborators have recruited patients. Among centers participating, median of patients recruited was 5,5 (IQ 2.- 112).

An informative report showing their participation has been sent to the collaborators in order to motivate them to recruit patients by comparing them with the others.

**Conclusions:** Implementing a collaborative cohort study in primary care in the current circumstances is very difficult and strategies to improve the motivation are needed.

## EP08.06

### **Social vulnerability: detection by emergency medical teams (EMT) and intervention by primary health care (PHC) and municipal social services (MSS)**

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**Background:** Emergency Medical Teams (EMT) are good detectors for social vulnerability situations. This information of vulnerability needs to be transferred to Primary Health Care (PHC) and Municipal Social Services (MSS) networks. These two services guarantee a health care continuum. Aims:

- To describe the characteristics of visited patients.
- To evaluate the result of the intervention taking into account detection and response time.

**Method:** A retrospective, descriptive study of notifications received from the 1st of January to the 30th of October 2015. The system created works as follows: EMT notifies via email the situation of social vulnerability risk to PHC. PHC informs the person in charge of the case and also the MSS so that an immediate response can be prioritised.

**Results:** 22 cases were detected, 20 in the city of Manresa and 2 in the region of Bages. 64% of the subjects were women. The average age was 70 years old (21-89). 82% were > 65 years old and, in this group, 41% were > 80 years old. 64% of the individuals lived alone, 7 people lived with relatives and 1 in a hostel. All individuals were known by PHC and 7 had no open case in MSS. Situations of social vulnerability risk found were: loneliness, dementia, confusion and alcoholism. One aspect in common was bad living place conditions (lack of equipment and/or dirt). In 94% of the cases the feedback of the information of PHC and MSS was given before 24-48 hours. **Conclusions:** The system created in social vulnerability situations detected by EMT has allowed to share the information in an agile and quick way. It has improved social and health intervention.

## EP08.07

### The development of quality circles for quality improvement in Europe: a qualitative study involving 26 European countries

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**Background/Aims:** Quality Circles (QCs) are commonly used as a tool in primary health care in Europe to consider and improve standard practice over time. They represent a complex social intervention that occurs within the fast-changing system of primary health care. QCs were first established in Canada and the Netherlands from where they spread to other European countries. This study aims to describe the spread and variety of this tool in primary health care in Europe and to update Beyer et al 2003.

**Method:** Experts from 26 European countries, belonging to the European Society of Quality and Safety in Family Medicine (EQuiP), completed an online survey documenting the number and objectives of QCs in their country, sources of support, incentives and didactic methods used. The answers were cross-checked and verified. Selected experts then took part in semi-structured online interviews to describe their local QC development. Thematic analyses are used to analyse the qualitative data and compare them with 2003.

**Results:** Findings from the qualitative analyses are synthesized to illustrate how common QCs are, their aims, organization, type of facilitation, incentives, level of autonomy, support, use of data and didactic methods.

**Conclusion:** Substantial development of QCs has taken place in numerous European countries. Their impact on the quality of care has been seen in many projects. Qualitative data from semi-structured online interviews provide us with an overview of QC activity in Europe.

## EP08.08

### GP's attitudes towards participating in emergency medicine: A qualitative study

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**Background and Aim:** Health authorities want to increase GP participation in emergency medicine, but the role of the GP in this context is a matter of controversy. We aimed to gain insight into GPs' attitudes towards participating in call outs.

**Method:** Focus group interviews with GPs at four rural or remote casualty clinics in Norway were analysed using thematic analysis as described by Braun and Clarke. The GPs had experience ranging from one to 32 years.

**Results:** The GPs felt that their role has changed from being the only provider of emergency care to now being one of many. In particular, the Emergency Medical Technician teams (EMT) has evolved and may manage well without a physician. Consequently, the GPs get less experience and feel more uncertain when encountering emergencies. Nevertheless the GPs wanted to participate in call outs. They believed that their presence contribute to better patient care, and that the community appreciated it. Being on-site on a regular basis was seen as vital to maintain skills as they sometimes handle medical emergencies on their own. The GPs had difficulties explaining how to decide whether to participate in call outs. Decisions were perceived as difficult due to insufficient information, and the GPs had divergent approaches to similar cases.

**Conclusions:** Although their role may have changed, GPs still play a part in rural emergency medicine. By participation in call outs the GPs can maintain their skills and improve patient care in several ways, but further research is needed to help policy makers and clinicians to decide when the presence of a GP really counts.

## EP08.09

### Hypertensive patients' adherence to medications and lifestyle changes in Kotor, Egypt

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**Background & Aim:** Worldwide, hypertension is the greatest significant preventable risk factor for premature death. Stricter adherence to hypertension medication and therapeutic lifestyle changes lead to greater reductions in blood pressure and other cardiovascular risk factors. Aim of this study was to assess medications adherence, dietary salt use, and physical activity levels among hypertensive patients in Kotor, Egypt.

**Methods:** This was a cross-sectional study conducted in Kotor district, Egypt. 440 patients were randomly recruited for the study after consent was obtained. Pre-tested interviewed questionnaire was structured with four sections: sociodemographic, physical activity, adherence to medications and restriction of dietary salt.

**Results:** Of 440 patients, 200 (45.5%) were illiterate, 264 (60%) were male, and 56.4% were older than 60 years of life. Good medication adherence was reported from 23.6% of the patients; 16.4% reported complying with salt restriction. 41.3% were physically inactive and 43.6% had controlled blood pressure. There was significant difference in medication adherence scores between males and females ( $\chi^2 = 4.835$ ;  $P = 0.028$ ), and additionally in the number of drugs taken ( $\chi^2 = 49.427$ ;  $P = 0.000$ ). On logistic regression analysis, female patients were found to be four and a half times more likely to be non-adherent with medications than the male patients (OR 4.364, 95% CI: 1.692 –11.257;  $P = 0.002$ ).

**Conclusions:** the majority of the patients in this study were non adherent to medications and in limiting their dietary salt use, as well as physically inactive. Special care and improved health education among these patients is highly recommended, especially as most of them are illiterate.

**Keywords:** Medications, adherence, hypertension.

## EP08.10

### Patient-as-partner project: a mind blowing experience

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**Background:** The patient-as-partner approach is an educational and organizational project, developed since 2010 through the Direction of Collaboration and Patient Partnership, Montreal University, in which the patient, through a multistep, dynamic learning process, acquires the skills and expertise to teach other patients, medical students (pre and post graduate) and healthcare students.(1) In the model, patient mentorship and sharing of experience play a key-role in education. The University of Modena and Reggio Emilia is pursuing a similar project, in partnership with Montreal(2). Currently, 10 patients are enrolled 8 patients and 2 caregivers (henceforth referred as patient) at different stages of their training.

**Aim:** To create a school for patient partnership in Italy by fostering medical students', family medicine residents' and other healthcare students' comprehension of the powerful role of the patient's experience and the importance of patient's empowerment in medical education, research and healthcare.

#### **Methods:**

1. Patients who have developed resilience and can share their experiential knowledge were selected according to Montreal criteria
2. Education of both patient and healthcare professionals involved in teaching was started during the Master of Education course, in Modena
3. Patient partnership framework will be introduced gradually in healthcare students' education

**Expected results:** Expected enhancement of students' and healthcare professionals' insight and sensitivity. Improvement of the relationship between patient and healthcare professionals. Basic knowledge of the model will be useful to help health professionals with a teaching role evaluate the feasibility of introducing the patient-as-partner in their courses.

**Conclusions:** The project has just started, we are enrolling new caregivers and patients and working on selection criteria. The project could lead to a huge change in paradigm. Hoping that in Italy, sooner or later, patient revolution begins.

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## **EP09.01**

### **Exploring the knowledge and attitudes of medical students towards early dementia diagnosis and prevention in family medicine in the UK**

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In the United Kingdom (UK), there are 800,000 people with dementia; this number is increasing due to an ageing population. This has huge implications for healthcare, particularly for primary care who care for people with dementia throughout their illness. As there is no cure for dementia, current policy focuses on prevention and earlier diagnosis, with initiatives such as case finding in asymptomatic, high-risk patients introduced in England; care responsibilities largely fall to general practitioners. Recent research in England found medical students receive very little teaching on dementia despite its growing prevalence; however this study focused on their knowledge of dementia as an illness and attitudes towards it and did not explore emerging issues such as prevention and case finding. The aim of this medical student project is to explore if current medical teaching develops the awareness of medical students regarding: dementia prevention and risk factor modification, and ethical implications of targeting asymptomatic high-risk individuals.

We will survey a group of medical students from several English Universities in a range of teaching years using a short online questionnaire to assess their current awareness of dementia and its risk factors. The questionnaire has been developed based on the findings of a systematic review and recent research.

We will present findings from the questionnaire with particular focus paid to what research has already been done and other relevant factors to risk assessment in general practice. We will focus on assessing the current understanding of UK medical students and how a development in their understanding may improve the quality of dementia care, early identification and prevention, in the future.

The findings will help to inform current undergraduate medical teaching, improving the awareness and attitudes of medical students, tomorrow's doctors, towards dementia, and hopefully influence future dementia care.

## EP09.02

### **A primary care quality improvement initiative to increase influenza and pneumococcal vaccinations in the elderly and diabetics**

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**Background and Aim:** The elderly and those with diabetes face more severe complications of influenza and pneumococcal disease. However, both influenza and pneumococcal vaccines are under-prescribed. Our objective was to measure and improve the proportion of patients receiving these recommended vaccinations through a multifaceted quality improvement initiative.

**Methods:** Using a Plan-Do-Study-Act quality improvement model, a process was developed to improve the proportion of elderly and diabetics receiving influenza and pneumococcal vaccinations over a 5-month period. Interventions were designed to 1) increase patient demand; 2) enhance access; 3) improve provider reminder systems.

**Results:** The overall influenza immunization rate increased from 9% to 47.1% ( $\geq 65$ y/o: 11.5% to 48.7%; diabetics 5% to 50.5%). Improvement in pneumococcal immunization rates were also observed, from 6% to 47.1% ( $\geq 65$ y/o: 4.5% to 48.7%; diabetics 4% to 50.5%).

**Conclusion:** This multifaceted quality improvement initiative incorporating administrative, organization and educational strategies improved influenza and pneumococcal vaccination rates. Further efforts will be needed to evaluate sustainability and applicability in other primary care settings.

### **EP09.03**

#### **Look at this X-ray... what is your diagnosis?**

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**Background and Aim:** Young adult who came to the clinic because of headache. He had taken analgesics and antiinflammatories but they didn't work.

**Method:** When we checked over this guy, the first thing we thought about was sinusitis. We asked him if he had a cold, he said no. We asked if he wore glasses, he said that he should, but he didn't use them. We asked about backgrounds, his father told us he fell when he was five years old and doctors had to drain a hematoma on his scalp.

In the physical exploration, the only thing we found, was a strong pain when we pressed on the upper part of his left orbit. After that, we asked for X-rays to test if he had sinusitis.

**Results:** When we saw checked X-rays, we were really surprised. We found an image in the upper part of his left orbit. We called to the hospital where he was attended ten years before, and we discovered that he suffered from multiple fractures on his skull. He was operated and they joined bones with plates and screws. That image of X-rays was a screw completely extruded from its plate.

At the end, we call the neurosurgeon who had operated him before and he said that he would see him in a few days to put that screw on its place.

**Conclusions:** With this clinical case, we want to emphasize the importance of collecting backgrounds correctly. In this case, it's impossible to get the right diagnosis without knowing that this patient had been operated.

To sum up, talk to your patients, ask about familiar medical history and make sure that they have understood everything because this father didn't know about his son's operation; and the impact he suffered, was really painful.

#### **EP09.04**

#### **Fibroscan, a new non-invasive tool for the follow up of patients with NAFLD: a pilot study**

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**Background and Aim:** NAFLD is present in 20% to 40% of the general population in Europe. It is closely associated with obesity, diabetes, and metabolic syndrome, the most common diseases in our clinical practice. The aim of the study is to evaluate the role of CAP measurement as a rapid, non invasive tool to follow up the patients with NAFLD in outpatient clinic of family doctors.

**Method:** Retrospective interventional case series. The medical records of 16 consecutive patients with ultrasound diagnosis of liver steatosis and body mass index (BMI)  $>25$  kg/m<sup>2</sup> were reviewed. Steatosis reduction was considered as decreasing of one or more steatosis grade according to the NAFLD activity score. All patients underwent physical examination, blood tests and fibroscan at time zero and after a period of diet restriction and counseling for the improvement of physical activity.

**Results:** A total of 16 patients were included (M/F:11/5), median BMI was 29.25 kg/m<sup>2</sup> (sd 5,19 kg/m<sup>2</sup>). The steatosis grade distribution was the following: 8 patients (50%) had S3, 4 patients (25%) had S2, 3 patients (18,75%) had S1 and 1 patient (6,25%) had S0. The mean follow up time was 6,7 months. At final follow up 11 patients(68,75%) showed reduction of steatosis grade. in the group of patients who showed reduction of steatosis grade the BMI, cholesterolemia and triglyceridemia were significantly lower ( $p<0,05$ ).

**Conclusions:** Data suggest that CAP measurement can be used as a rapid non invasive tool to follow up patients with NAFLD. in patients with steatosis grade reduction we observed significant reduction of BMI, cholesterol and triglycerides levels. Further studies, with greater sample, are necessary although this study represents the largest series of NAFLD patients that underwent follow up with CAP measurement.

## **EP09.05**

### **Functional constipation in children: a literature review**

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**Background and Aim:** Functional constipation is defined by difficult, infrequent defecation or abnormal stool volume or consistency, in the absence of an anatomical or biochemical cause. Although the prevalence of functional constipation in children can be up to 30%, this is a frequently underestimated disease due to its benignity. This review aims to understand the etiology, diagnostic and treatment of functional constipation in children.

**Methods:** Literature search in Medline, UpToDate, National Guideline Clearinghouse and Index of Portuguese Medical Journals, until April 2015, with the MeSH terms «Constipation»; «Constipation in children»; «Infant, Newborn»; «Infant»; «Child, Preschool»; «Child»; «Adolescent»; «Encopresis»; «Toilet training».

**Review Body:** Functional constipation in children is etiologically related to painful defecation, which leads to voluntary withholding of stools and fecal incontinence. The diagnosis is clinical, after excluding symptoms and signs that could point to an organic cause of constipation. Management includes dietetic, behavioral and pharmacologic treatment, with osmotic laxatives being the most effective and safe option. Dietetic and behavioral treatment, are effective only when used combined with pharmacologic treatment.

**Conclusion:** Given the proximity of family doctor to community, he's in a privileged position to diagnose and treat functional constipation in children. However more studies long term safety and efficacy of treatment are necessary to establish more powerful strength of recommendation.

## EP09.06

### A diagnosis to consider

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**Background & Aim:** A 35 year old woman, arrived to our clinic after changing primary care physician for the 4th time because nobody pays attention to her. The patient reported being extremely tired from seven years ago, just coinciding with the birth of her last child. Since then she had several diagnoses: postpartum depression, anxiety and even fibromyalgia. None of the treatments she has done was effective. She refers has not suffered any major illness, and only refers that she had a complicated delivery 7 years ago. After that it roses no milk, and then she had menstrual disorders and underarm (armpit) hair loss.

**Method:** Personal history: no drug allergies. No cardiovascular risk factors, or toxic habits. Her only history of interest was a complicated delivery 7 years before, after that menstrual disorder, marked asthenia and malaise. Physical examination: Good general condition. We request a blood count and biochemistry, including liver function. VSG: 16, total cholesterol 319, triglycerides 104, HDL 77, TSH 2.52, T4 0.49, FSH 6.4, LH 2.5, PRL 8.8. Normal urine, including cortisol urine 24h. It was requested a cranial TAC where it was found an image of pituitary empty sella. She was referred to internal medicine consultation to complete the study with a resonance. Cranial MRI: The pituitary is crushed on the floor of the sella, herniation of the suprasellar cistern. Compatible with empty sella.

**Results:** With the analytical and NMR (test of choice) Sheehan Syndrome was diagnosed. She was treated with 20mg daily hydrocortisone, returning to normal cholesterol levels and symptoms disappeared asthenia and malaise, without requiring further action.

**Conclusions:** Postpartum pituitary necrosis or Sheehan syndrome is the infarction of the pituitary gland secondary to postpartum hemorrhage. This is a rare syndrome and its symptoms depend on the effector gland dysfunction, which can delay diagnosis years.

## EP09.07

### Contribution of glomerular filtration rate in cardiovascular risk assessment of a population with low incidence of coronary heart disease

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**Background and Aim:** Early chronic kidney disease (CKD) has been defined as a marker of cardiovascular risk prevention. This relationship has been little studied in populations with low incidence of coronary heart disease (CHD). Glomerular filtration rate (GFR) could help to improve the performance of cardiovascular risk prediction equations.

**Aim:** To analyze the association between CKD and cardiovascular disease and the performance of GFR in improving the prediction of cardiovascular risk in a population with low CHD incidence.

**Methods:** Population-based retrospective observational cohort study of 1,079,272 people aged 35-74 years. Main exposure: GFR. Outcomes: CHD, cerebrovascular disease, cardiovascular diseases and all-cause mortality. The association between GFR and outcomes was tested with Cox models. The predictive ability of GFR was evaluated by integrated discrimination improvement (IDI) and net reclassification improvement (NRI) indices.

**Results:** The incidence rate of CHD at GFR category G3a remained close to 6% at 10 years. Beginning at GFR category G3a, risk was significantly increased for CHD (HR 1.34 (95%CI 1.22-1.47)), cerebrovascular (HR 1.16 (95%CI 1.06-1.27)) and cardiovascular diseases (HR 1.24 (95%CI 1.16-1.33)). Increased risk of all-cause mortality was significant beginning at CKD stage 3b (HR 2.02 (95%CI 1.79-2.27)). GFR did not increase discrimination and reclassification indices significantly for any outcome: CHD (NRI 0.6%, 95%CI -0.09-1.39), cerebrovascular (NRI 0.3%, 95%CI -0.50-1.05), cardiovascular diseases (NRI 0.01%, 95%CI -0.51-0.54) and all-cause mortality (NRI 0.3%, 95%CI 0.59- 1.10).

**Conclusion:** in general population with low incidence of CHD and CKD from GFR category G3a, impaired GFR was associated with an increased risk of cardiovascular diseases; however, the incidence of CHD of 6% at 10 years raises questions to consider this population automatically at high cardiovascular risk. The addition of GFR in a cardiovascular risk function did not improve prediction of CHD.

## EP09.08

### Use of GP services over a five-year period after an episode of depression

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**Background:** Depression occurs frequently and is mostly treated in general practice. Little has been reported about its long-term course and long-term use of medical services. **Aim:** To follow up patients with these depression in general practice for five years, looking at the length and number of index episodes, prescribing behaviour and use of services within general practice and compare them with patients with psychological symptoms and mentally healthy patients. Design and setting: A case-control study based on data from Electronic Medical Records (EMR).

**Methods:** Three cohorts of patients with depression (N=453), anxiety symptoms (N= 442) and emotional distress (N=185) were compared against a cohort of control patients (N= 4156) during a 5-year follow-up looking at the occurrence or recurrence of the index disorders, other psychological disorders and medical disorders, numbers of prescriptions and the number of contacts with the general practice.

**Results:** The depression group had 1.1 follow-up episodes of depression, the anxiety group 0.9 follow-up episodes of anxiety and the emotional distress group 0.5 follow-up episodes of emotional distress during five years. All three groups had more consultations (for both psychological and somatic reasons) during each of the follow-up years than control patients. Furthermore, they are given more prescriptions for psychopharmacological treatment.

**Conclusion:** Five years after the index episode in 2007, patients with an episode of depression, anxiety or emotional distress are still not comparable with control patients, in terms of the prevalence of psychological disorders, the number of prescriptions and healthcare use. Depression appears a chronic disease.

## EP09.09

### **Integrated primary care triage and treatment in emergency room settings is a tentative future model of consultations**

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**Background:** Skåne University Healthcare consists of two hospitals, 22 km apart, and the public primary care in the area of Malmö and Lund. Malmö has 85 000 emergency care visits yearly and Lund 68 000.

in late spring 2015 it was obvious that the number of skilled acute nurses available for the summer was inadequate to offer 24/7 access to acute and trauma care at both hospitals. A decision was made to change the standard procedures temporarily over summer by redirecting ambulances and to introduce a new type of primary care triage. The aim of this study was to study the outcome of our new strategy

**Method:** All ambulances except the “fast tracks” (cardiac and brain ischaemia, hip fracture) were redirected to the emergency room in Malmö between 9 pm and 8 am from June 21 to August 16. All patients coming to the emergency room in Lund during these hours were initially seen by a primary care nurse and physician. Some were referred to the hospital emergency room for further care or admission to the hospital.

**Results:** 49% of patients coming to the ER night time could get the final handling when introducing a combined primary care triage and care by a primary care nurse and/or primary care physician. in all, 1485 patients came to the emergency room during these hours. 1208 were initially seen by the primary care team. 482 of these patients were later referred to the hospital emergency room. 277 went directly to the hospital emergency room. Thus 726 patients (49%) were handled by the primary care team and 759 (51%) by the hospital emergency room team. There was no reported impact on patients safety

**Conclusion:** A primary care team in an emergency care setting at a University Hospital can handle approximately half of the patients.

## EP09.10

### Impetigo... about a case report

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**Introduction:** Impetigo is a contagious bacterial infection of the surface of the skin, is caused by species of staphylococcus or, more rarely, streptococcus bacteria and is more common in children than in adults. There are two types of clinical impetigo: non-bullous and bullous. The non-bullous impetigo is the most frequent clinical presentation, occurring in about 70% of cases. It is primarily characterized by papules that quickly became vesicles surrounded by erythema. Subsequently they become pustules that enlarge and rupture easily to form a thick and adherent crust with a characteristic honey-colored appearance. This clinical evolution typically occurs in about one week. Regional lymphadenitis may occur, although systemic symptoms (f. e. fever) are usually absent. These lesions usually involve the face and extremities but can also be presented in previously traumatized skin or in other areas of the body through direct dissemination. The diagnosis of non-bullous impetigo usually is made based on clinical manifestations although seborrheic, atopic or contact dermatitis; herpes simplex; tinea or pediculosis capitis; chickenpox or scabies should always be considered as differential diagnosis. Description of the Clinical Case: An 8 years old male, with no personal disease.

**Background:** comes to the Healthcare Center due to a itching lesion on the upper lip. The lesion was about 3 inches of diameter, with 15 days of evolution, initially described as a “bubble” that had rupture and released a yellow liquid that formed a crust. He had no fever or other symptoms. After clinical history and physical examination, the diagnosis of non-bullous impetigo was made. It was prescribed oral and topic antibiotic therapy.

**Conclusion:** The diagnosis of non-bullous impetigo is essentially based on the physical exam in a family doctor daily routine. We intend to alert for the diagnosis of this disease as well as its treatment.

## **EP10.01**

### **Mortality and recurrence of COPD hospitalisation: a nationwide Danish cohort study**

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**Background & Aim:** to analyse the association between recurrence of hospitalisation with chronic obstructive pulmonary disease (COPD) and in-hospital and one-year mortality.

**Methods:** A register-based cohort study was conducted in Denmark (5.4 million citizens). All hospitalisations with COPD in Denmark during the period from year 1994 to 2011 were identified. For the year 2011, hospitalisations were categorized according to the patient's number of prior COPD hospitalisations. By use of logistic regression this number was related to the in-hospital and one-year mortality, adjusted for age, gender, and comorbidity index.

**Results:** in total, 14 705 patients were hospitalised 23 031 times. With recurrence of hospitalisation the in-hospital mortality decreased gradually from being highest at 8.3% in second time hospitalisations to 3.5% in hospitalisations of patients who had been hospitalised more than 15 times before (8 % of the patients) adjusted OR 0.49(95% CI 0.38-0.65). One-year mortality increased gradually from 26% in first to 41% in +15-time hospitalisations, adjusted OR 2.32(95% CI 2.07-2.60). The average length of stay and time between hospitalisations decreased with recurrence of hospitalisations.

**Conclusion:** in COPD the in-hospital mortality decreases with increasing recurrence of hospitalisation. This is probably due to lowering of the severity threshold for admission. Nevertheless, long-term mortality increases with each additional exacerbation-related hospitalisation.

## EP10.02

### **Achieving exercise goal amongst multi-ethnic Asian patients in primary care: what is the impact on their control of dyslipidemia?**

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**Background and Aim:** Exercise is a recommended measure to manage dyslipidemia and for the maintenance of cardiovascular health. Physicians often rely on patient's self-reporting to assess their exercise status in clinical practice. This study aimed to determine the prevalence, demographic characteristics and attitude of patients with dyslipidemia in Singapore, who reported achieving the recommended 150 minutes of weekly exercise in association with their LDL-Cholesterol (LDL-C) treatment goals.

**Methods:** Assistant-administered questionnaires were fielded to patients with physician-diagnosed dyslipidemia, aged 31-80 years, to determine their attitude and exercise pattern. Their clinical and lipid profile data were retrieved from their electronic clinical records. Demographic and laboratory variables were described for patients who self-reported achieving recommended 150 minutes of exercise per week (RE-group) and those who did not (NRE). Logistic regression analyses were performed to identify factors associated with achieving LDL-C goal. A  $p < 0.05$  was considered statistically significant.

**Results:** The complete records of 1060 patients (37.8% male, 44.0% aged < 60 years, 33.5% Chinese, 34.0% Malay, 32.5% Indian, mean LDL-C 99.5mg/dL) were reviewed. 50.7% self-reported episodic laziness and 47.2% would find excuses not to exercise occasionally. of the 57.5% reported fulfilling the RE-group criteria, ethnicity, gender, highest education attained, pharmacotherapy, employment and smoking status were significant associated factors. Those with ischemic heart disease (IHD) were associated with failure to achieve LDL-C treatment goal in the NRE-group.

**Conclusion:** 58% of the patients reported 150 minutes of weekly exercises. Their demographic characteristics and lipid-lowering medication prescription influenced their achievement of LDL-C treatment goals. IHD may deter patients from regular exercises.

### EP10.03

#### Healthcare seeking behaviors among the hypertensive patients in a health care center in Stockholm

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**Aim:** The aim of current study was to investigate the healthcare seeking behaviors of patients with hypertension in a health care center of Stockholm and their satisfaction with the care received.

**Methods:** As in the baseline study of a prospective study on self-care and health care seeking behaviors of patients with hypertension, 300 subjects living in an area of Stockholm were enrolled. In present report the healthcare seeking behaviors of this population and their satisfaction with the health care they have received is analyzed and presented as baseline statistics for 2006 survey.

**Results:** Men comprised about 43% of the participants and 57% were women. Mean age was 60.8(SD: 11.3) years. Sixty-eight percent of subjects were born in Sweden, 11.3% in Nordic countries and the rest were born in other countries. In response to the question that did you have a doctor in recent year to turn to? 108(42.2%) answered yes. 79.3% said they searched for doctors in 2005. They were visited by the doctor 3.2 times in average. 34.6% said they visited the doctor for controlling their blood pressure. 30.8 %persons visited other medics such as nurses for their blood pressure control. About 62.3% were visited during the recent year exclusively by the district family doctor and about 9.3% of others were visited additionally by at least one other type of health care providers making a sum of 71.6% of the participant that have been visited at least once by the district family physician. Asking for their satisfaction with the health care they receive overall, about 83% stated that they were satisfied. Eighty percent of the subjects also stated they were satisfied with the health provided by their local health center (vårdcentral).

**Conclusion:** The healthcare services for people with hypertension in this study population in Stockholm was overall satisfactory with respect to service utilization and patient satisfaction, however, there is a capacity for further improvement.

## EP10.04

### Role of family physicians in education and self-management support for patients with chronic heart failure

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**Background & Aim:** Chronic heart failure (CHF) is a disease that requires self-management by the patient and so it is understood that when they are diagnosed they need access to relevant information about their disease. The purpose of this paper was to ascertain the sources and content of education for patients with CHF and evaluate the use of patient education for self-management support of patients with CHF in primary care.

**Method:** The study was a cross-sectional survey carried out from September 2014 to March 2015, of patients categorized as having type CHF. 371 persons responded to the questionnaire and we estimated the effectiveness of patient education. A questionnaire was developed asking a series of questions including basic demographic data, a series of questions regarding the education received, who provided it and self-perceived knowledge.

**Results:** Whilst 91% of patients reported receiving education at the time of diagnosis, it is a concern that 9% say they were not given information. Only a few patients said they had received education from hospital consultants. The coding of the interviews yielded three major topics including loss, fear, and desire for improved care. These major topics were composed of seven sub-topics including four ones associated with loss, two with fear, and one with desire for improved care. After the training, the percentage of patients who kept a diary of introspection increased by almost three times, the percentage of patients measuring blood pressure and heart rate increased by four times, measuring the body mass increased by six times.

**Conclusions:** CHF education was mainly delivered in primary care by family physicians. While there have been a growing number of efficacious pharmacological and non-pharmacological interventions for patients with CHF, their effectiveness will be limited without self-management support to assist patients in adopting behaviors that contribute to improved health.

## EP10.05

### **Causative factors that contribute to cardiac decompensation of heart failure in patients attended in primary y care setting**

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**Background:** Most knowledge about the main causes of heart failure decompensation and come from hospital setting. Evidence coming from primary care is scarce.

**Objective** To determine the distribution and importance of potential causative factors that contribute to cardiac decompensation in patients attended in primary care setting and their relation with very short term (<72 hours) hospital admission or death.

**Methods:** HEFESTOS is a cohort study aimed at knowing the main triggers and the prognosis of some factors related to the heart failure decompensations attended in primary care setting. During the first nine months, patients with heart failure decompensation attended in primary care setting were prospectively followed during one month after the episode.

**Results:** A total of 177 patients were included. Women represented 50.6% and mean age was 81.4 (8.55) years. Potential causative factors for decompensated heart failure were identified in 83.4 % of cases. More than one factor was identified in 48.4% of patients. Respiratory infection was the most commonly identified factor, present in 32.5%% of cases. Non-compliance with fluid or salt restriction was found in 31.5%, and lack of adherence to the drug treatment was found in 24.3% of patients. Other factors related to decompensation were taking contraindicated drugs (10.2 %), agudization of a pre-existing atrial fibrillation (10.2 %), worsening renal function (7.3%), anemia ( 5.6 % ), inadequate reduction in the diuretic therapy (4.5%), coronary ischaemia (2,8%) and others 2,4%. During the first 72 hours after the visit, 42 patients were hospitalized or died. No causative factor was found to be associated with a higher probability of events.

**Conclusions:** The main factors related to the heart failure decompensation are respiratory infections and non-adherence to the prescribed measures. A proper management of stable patients would prevent a high number of decompensations.

## EP10.06

### **Glycaemic control during six years after the diagnosis of type 2 diabetes and morbidity and mortality during 13 years thereafter**

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**Background and Aim:** Hyperglycaemia increases the risk of mortality and morbidity. The benefit of pursuing intensive glucose control in all patients, however, has been questioned, and a patient-centered approach in the management of hyperglycaemia has been proposed. The aim was therefore to analyze the association between the quality of glycaemic control (change in HbA1c) during 6 years of personal, structured diabetes care after the diagnosis of type 2 diabetes and the subsequent morbidity and mortality during 13 years.

**Method:** The participants in this cohort study are from the intervention group from the randomized controlled trial, Diabetes Care in General Practice (DCGP). HbA1c was measured yearly in the intervention group and during the intervention period a regression line was fitted through the HbA1c-measurements from year 1 to year 6 for each patient. From the regression line, glycaemic control was characterized by i) the estimated level of HbA1c one year after diabetes diagnosis and ii) the slope of the regression line. Outcomes were assessed from Danish registries, and included mortality and diabetes-related morbidity year 6 to 19 after the diagnosis of diabetes. The association between change in HbA1c (the slope of the regression line) and clinical outcomes was assessed in Cox regression models.

**Results:** Data were from 494 participants. Mean age was 69.1 years, 49.4% were men. Poor glycaemic control during the first 6 years after diagnosis increased the risk of both microvascular complications, HR (for 1 percentage point yearly increase in HbA1c in the intervention period)=3.77 95% CI (1.64-8.67) and peripheral vascular disease, HR=3.67 (1.02-13.24).

**Conclusions:** Lack of glycaemic control during 6 years of intervention increased the risk of microvascular complications and peripheral vascular disease in patients newly diagnosed with type 2 diabetes, but not the risk of death or other macrovascular complications during 13 years of follow-up.

## EP10.07

### Factors associated with reduction of albumin excretion in type 2 diabetic hypertensive patients: the AMANDHA Trial

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**Background and Aim:** in the AMANDHA trial we found that the addition of Manidipine on top of a RASB was much more effective than the addition of Amlodipine in type 2 diabetic patients with uncontrolled hypertension and microalbuminuria and preserved renal function, in spite of similar blood pressure reduction. We sought to analyze the relationship of the reduction in albuminuria with the changes in other variables.

**Methods:** A post-hoc multivariate linear regression analysis was performed with the percentual reduction of albuminuria as the independent variable, and the rest of the variables (assigned treatment, age, gender, fasting glucose, HbA1c, creatinine, total cholesterol, HDL-cholesterol, triglycerides, reduction of metanephrine and normetanephrine excretion, systolic, diastolic, mean and pulse pressure, heart rate) as dependent.

**Results:** The AMANDHA trial involved 91 patients (59% women, mean age 56 yr.) with a 6 month follow-up. The percentual reduction of albuminuria was 54% with Manidipine and 15% with Amlodipine ( $p < 0.01$ ). The multivariate analysis yielded a correlation value  $R = 0.612$  ( $R^2 = 0.375$  corrected  $R^2 = 0.344$ ; typical estimate error = 14.47%).

Variable

HbA1c (%): Coefficient -6.33, P-value 0.042

Reduction Metanephrine excretion ( $\mu\text{g}/\text{gr Cr}$ ): Coefficient 0.06, P-value 0.022

Reduction Normetanephrine excretion ( $\mu\text{g}/\text{gr Cr}$ ): Coefficient 0.09 P-value 0.014

Mean blood pressure (mmHg): Coefficient -1.24, P-value 0.009

Treatment (0 Amlodipine, 1 Manidipine): Coefficient 32.14, P-value 0.004

The rest of the studied variables showed no significant relationship with the reduction of albuminuria. Systolic, diastolic and pulse pressure showed relationship in bivariate analysis but with the inclusion on mean blood pressure they were no longer significant.

**Conclusions:** in the AMANDHA trial the most important factor in the reduction of albuminuria was the assigned treatment, but changes in blood pressure, sympathetic tone (as estimated by metanephrine and normetanephrine excretion) and glycemic control were also independently associated with the change in albumin excretion.

## EP10.08

### Periodic general health checks for employees as a source of information on CV risk factors

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**Background and Aim:** The health benefits of general health checks have not been confirmed. In Croatia, these checks are common elements of health care for employees. The aim was to assess the usefulness of information from periodic general health checks for employees for screening of middle aged individuals, old 40-50 years, on CV risk factors.

**Methods:** Available information related to CV risk status, systematically recorded during periodic general health checks for employees, in a private Medical Centre, the town of Osijek, eastern Croatia, were used to assess the presence of CV risk factors in the group of 100 individuals (50 M and 50 F) old 40-50 years. Information on age, sex, BMI and blood pressure were used from the health records, together with the results of routinely performed laboratory tests indicating fasting blood glucose and lipid parameters. Statistical Methods: Fisher's exact and chi-square tests, the level of significance  $\alpha=0,05$ .

**Results:** Overweight/obesity was found in 54% of examined individuals with the predominance of males who were also more frequently recorded with increased blood pressure than females. No one individual with normal BMI values had increased fasting blood glucose, while there were 4 out of 54 individuals classified as overweight/obesity with increased fasting blood glucose. Only one third of individuals had normal total and LDL cholesterol values, while even 12% of them showed very high values. Related to dyslipidemia within the metabolic syndrome, decreased HDL cholesterol was found in 21% and increased triglycerides in 25% of examined individuals.

**Conclusions:** Although according to the evidence, the screening of the middle aged population on CV risk factors is not feasible, periodic general health checks for employees might be a ready-to-use source of such kind of information.

## **EP10.09**

### **The 5 minute lumbar back pain consult in family medicine**

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**Background & Aim:** The lumbar spine pathology represents one of the most prevalent issues in the Family Medicine (FM) consult. 90% of these will resolve within one year. of the other 10%, some might need referral to the Orthopaedics consult, mainly due to lumbar radiculopathy (herniated disc compression), lumbar stenosis or spondylolysis. Nevertheless, many are the pain generators in the lumbar spine, and so, the picture might be confusional.

The purpose of this presentation is to make the FM able to do a systematic evaluation of the patient with lumbar pain, and choose between conservative treatment or orthopaedic referral.

**Method:** Presentation of an algorithm of Lumbar Spine Pain evaluation.

**Results:** The first step is to exclude the “red flags” that need an urgent referral: Trauma, Suspicion of Neoplastic or Infectious disease and Neurologic Deficits. After that, we should try to fit the patients pain in one of the surgically treatable pathology previously mentioned. Age is the first discriminator: young patient – disc herniation; older patient – lumbar stenosis. The younger patient with herniated disc will have usually unilateral leg pain, with no clear alleviating position and with a positive Straight Leg Raise (SLR).

The older patient with lumbar stenosis will have bilateral leg pain with walking (Neurogenic Claudication), that limits his daily activities and that improves with flexion. The SLR is negative. The spondylolysis might be present in younger or older patients, and can be seen in an X-ray in a patient with lumbar back pain for more than 1 month.

**Conclusions:** We purpose a simple algorithm and systematic evaluation for FM practice, that together with the feedback from the orthopaedic consult, should easen the assessment of a patient with lumbar back pain.

## EP10.10

### **Risk of cardiovascular events in a hypertensive population in primary care**

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**Background and Aim:** Data on characteristics and outcomes of patients with hypertension managed in primary care in Switzerland are limited. We aimed to describe the association of known risk factors with cardiovascular events in patients with hypertension.

**Method:** A prospective observational longitudinal cohort recruited between 2006 and 2013 in Swiss primary care. 755 patients with hypertension aged 18 to 103 years (mean= 65, SD =13) from primary care and at least one follow-up visit were analysed. Patients were followed prospectively for up to 6 years. GPs assessed the incidence of cardiovascular events (myocardial infarction, stroke/transient ischemic attack, new-onset coronary heart disease, revascularization, cardiac failure, new-onset arteriosclerosis). Multivariate survival models were adjusted for known baseline cardiovascular risk factors, such as age, gender, BMI, smoking, diabetes mellitus (DM), dyslipidemia, cardiovascular disease, glomerular filtration rate (GFR), systolic and diastolic office blood pressure and left ventricular hypertrophy (LVH). Cox proportional hazards models were used to relate time to cardiovascular events to patients' clinical and demographic characteristics.

**Results:** We observed 55 cardiovascular events during a mean follow-up period of 2.11 years. Multivariate Cox proportional hazards analyses revealed that the number of comorbidities (HR: 1.45 per additional comorbidity, 95% CI 1.03-2.04), COPD (HR: 5.05, 95% CI 2.15-11.84), DM (HR: 1.89, 95% CI 1.06-3.38), LVH (HR: 2.27, 95% CI: 1.12-4.61), nicotine withdrawal (HR: 3.78, 95% CI:1.32-10.81), the use of insulin (HR: 3.34, 95% CI: 1.22-9.17), the use of coumarine (HR: 2.60, 95% CI: 1.21-5.59) and GFR (HR: 4.12 comparing 30-60 mL/min with >90 mL/min, 95%CI: 1.34-12.7) are independent predictors of cardiovascular events.

**Conclusions:** Besides the known risk factors, the analyses showed that the uses of insulin and coumarine as well as COPD and -unexpectedly- nicotine withdrawal were independent predictors of cardiovascular events in hypertensive primary care patients in Switzerland.

## EP11.01

### **Efficiency in questionnaire - based screening activities in family medicine practice. Using previous project experience for better results with less unnecessary costs**

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**Background:** Ageing Europe enlarges the target population suitable for screening activities. Being main actors for most of such activities, family doctors face multiple pressure for successful outcome.

Increasing public health money makes it lately more affordable for central and eastern European countries to have national screening programs, costly investigations become accessible. Higher availability of such possibilities have to be used wisely, but doctors lacking them need better tools and techniques to make a good decision for their patients screened voluntarily.

#### **Aim:**

To help family doctors to:

- find the best balance between doing the screening and invested time
- reach hardly accessible patient groups
- deliver best results, avoiding unnecessary upcoming costs with false candidates

General objective: To choose the most efficient way to conduct questionnaire-based screening activities and improve output results.

Specific objectives: After workshop participants will be able to:

- Know the 6 most common questionnaires suitable in family medicine practice, to interpret results and how to raise decision quality by including additional patient data and scoring
- Identify at least 4 common issues and solutions to get from the whole target population of patients the correctly completed questionnaires, in time.

**Methods and Results:** Results will be presented from the experience of a voluntary screening project for prostate pathology conducted in parallel with 89 Romanian doctors and 56 Lithuanian for 1626 patients, by using different techniques.

Distributed in 3 groups, participants will identify the best techniques and approaches for 2 familiar questionnaires each. Different devices and software to test questionnaire input experience will be provided for higher interactivity.

Results will be presented and discussed with all together. Participants will be required to give workshop feedback by applying the freshly learned questioning abilities.

**Conclusions:** The workshop will develop abilities and know-how to conduct efficient and valuable screening activities.

## EP11.02

### Migrant child vaccination schedule

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**Background:** Migrant child's vaccination may represent a problem to every vaccine provider. The outcome of IWG of SNMF's activities in WONCA Europe 2015 show the need of a Vaccine Passport, preferably in an electronic format. As a result, a computer technical solution is required, and the vaccine provider has to know this kind of tool, and a few others.

**Aim:** To help vaccine providers in view of a better computer data collection regarding the vaccines of a migrant child, in order to build a correct catch-up schedule.

General objectives: identification of some tools that may help general practitioners who are vaccine providers, to manage migrant child's vaccine schedule.

Specific objectives: at the end of the workshop the participants will be able to:

- identify at least 2 computer resources to collect data about vaccine schedule from a specific country;
- identify at least 3 barriers and solutions in data collection about the vaccine schedule of a migrant child.

**Methods:** A brief presentation to reveal the Internet resources to help general practitioners vaccines providers in data collection about vaccine schedule in case of a migrant child. The participants will split in 2, in order to identify the resources of computer data collection.

**Results:** The participants will set up solutions to overcome the data collection barriers. A computer solution will be presented by Syonic in a medical soft named IcMed. At the end of workshop participants will complete a questionnaire.

**Conclusions:** This workshop will develop knowledge and skills for computer data collection regarding the vaccination history.

### **EP11.03**

#### **Takotsubo cardiomyopathy, a differential diagnosis for patients with chest pain. A case presentation**

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Takotsubo cardiomyopathy (TCM), named after a round bottomed narrow-necked Japanese fishing pot used for trapping octopus, and previously described as “LV apical ballooning syndrome” is an important differential diagnosis of the acute coronary syndromes (ACS). Although it is not often reported, it is not rare; the awareness of TCM (likely) will lead to a higher reported incidence. Starting from a case report, we are presenting the features of this syndrome, and a protocol to diagnose similar cases. The diagnosis of TCM, first described in 1990 in post-menopausal Japanese women who presented ischemic-like chest pain early after an episode of acute emotional or physiologic stress patients, has important implications for clinical management at presentation and afterward. Symptoms of chest pain, ECG, echocardiography and troponin level are assessed. The presentation is with chest pain or dyspnoea after emotional or physiological stress, and ST-segment elevation on electrocardiogram and minor elevations of cardiac enzyme levels, typically less than in acute anterior STEMI. It is also characterized by normal coronary arteries, and echocardiographic regional wall motion abnormalities extending beyond a single coronary vascular bed, with a transient regional systolic dysfunction involving the LV apex and mid-ventricle with concomitant hyperkinesia of the basal LV segments. In the described case, electrocardiography shows also a prolonged QT interval; this feature is described in several other cases of Takotsubo cardiomyopathy. The cause of the syndrome remains unknown, but catecholamine-induced myocardial dysfunction, diffuse epicardial arteries spasm, and coronary microcirculation dysfunction have been proposed as underlying mechanisms. Because, the TCM is potentially life-threatening during the initial presentation, we consider that the initial clinical management of patients with TCM similar to that of patients with ACS is beneficial until diagnosis is proved otherwise. The long term-prognosis of the TCM is generally favorable. Recovery of left ventricular function is within 2-4 weeks of presentation.

## EP11.04

### Evaluation of quality indicators for Type-2 Diabetes care in Primary Care

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**Background & Aim:** Study on the quality of clinical care provided to patients with Type-2 Diabetes assigned to a medical practice (during the period 2014).

#### **Method:**

Design: Longitudinal evaluation: Palmer's Quality Cycle

Setting: An urban health care center.

Population and Sample:

Patients (total according to inclusion criteria, year 2014) with type-2 diabetes (year 2014) (n=130).

Interventions: Internal evaluation, dimensions: scientific-technica, quality, adequacy, accessibility, continuity of care; data related to the care process and intermediate results; explicit, evidence-based procedural criteria.

Subjects: analysis of coverage. Analysis on the evolution of treatment compliance. The Z statistical test for comparing proportions, alfa 0,05.

**Results:** Compliance criteria (year 2014):

- Tipe-2 diabetes prevalence: 9,67% (21 patients).
- Patients with tipe-2 diabetes with HbA1c recorded in 2014: 63,08 % (82 patients).
- Patients with tipe-2 diabetes with HbA1c<7% in 2014: 42,31% (55 patients).
- Patients with type 2 diabetes with controlled BP in 2014 (without nephropathy BP <140/90, with nephropathy BP <130/80 in 2014: 63.08% (82 patients).
- DM2 patients with foot scan data registered in 2014: 1.54% (2 patients).
- DM2 patients with fundus registered in 2013-14 (or derided to ophthalmology): 20.77% (27 patients).

**Conclusions:** Establish a plan of intervention activities to improve **Results:** diagnosis and control of type 2 diabetes to avoid complications.

## EP11.05

### ACR select application: improving the efficiency and patient safety in radiology

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**Background:** The American College of Radiology (ACR) has developed evidence-based guidelines to optimize the use of Radiology in clinical practice Appropriateness Criteria®, creating an application for clinical decision support ACRSelect.

**Aim:** The primary objective of this project is to assist GP's in choosing the most appropriate radiological test for each specific clinical condition, using ACR Select. Additionally, to improve GP's efficiency in the clinical process by better managing radiological tests and the quality of patient care. **Methodology:** A group of GP's and Radiologists from the hospital of reference was created to implement the ACR select. ACR select was embedded into primary care support systems to serve as a guide when ordering medical imaging scans. When requesting radiological tests and selecting the clinical situation of each patient, different alternatives are recommended on a scale of three color coded numbered categories ("adequate"; "marginal benefit", "non adequate"). However, The GP is who finally decides which test is chosen. If it is classified as a "non adequate" test, it must be justified.

**Results:** The data from January to April 2015 was analyzed: 9093 tests were requested, 1122 of them with ACR (12.3%). 6% were quantified "Marginal benefit" (4-6), 4% as "non adequate" and 89% (998) of them were considered "adequate" (7-9). Within the 998 adequate tests: 69,6% radiography, 15,8% ecography, 5% scanner, 9,3% NMR.

**Conclusions:** We believe that implementing this system will improve the GP's decisions related to radiological requests, increasing efficiency and reducing the number of unnecessary tests. It will also reduce the variability of different procedures requested by various professionals as well as the patient's total radiation exposure.

## EP11.06

### **The association between stress level in daily life and age at natural menopause in Korean women: outcomes of the Korean National Health and Nutrition Examination Survey in 2010-2012**

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**Background:** Although several risk factors associated with reduced age at natural menopause (ANM) have been investigated, the results are inconsistent. Excessive stress, which leads to elevation of stress hormones, can also negatively affect reproductive ability, including by accelerating menopause. However, a direct association between stress level and ANM has not yet been demonstrated. Therefore, the object of this study was to investigate the association between stress level and ANM in Korean women.

**Method:** Study participants were Korean women between 40 and 70 years old who were in natural menopause during the 5th Korean National Health and Nutrition Examination Survey (n=3,176). The level of stress in daily life was estimated based on data from the mental health topics of the survey. We used the t-test and one-way analysis of variance to analyze the correlation between stress level and ANM. Regression ( $\beta$ ) coefficients calculated by multiple regression analysis were used to estimate various factors affecting ANM.

**Results:** Women who experienced a high level of stress in daily life had a lower mean ANM than women with a low stress level ( $50.17 \pm 3.7$  and  $50.58 \pm 3.5$  years, respectively), with a statistically significant correlation ( $P < 0.05$ ). This correlation was still observed after adjusting for age, body mass index, menstrual regularity, and personal income ( $P < 0.05$  for variables).

**Conclusions:** in Korean women between 40 and 70 years of age who are in natural menopause, there is a statistically significant correlation between stress level and ANM. in particular, women who experience a high level of stress in daily life have reduced ANM.

## EP11.07

### Impact of obesity on the level of glycaemic control in type 2 diabetic patients

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**Background & Aim:** Obesity is associated with an increased risk of developing insulin resistance which is the major risk factor for type 2 diabetes. We aimed to assess the correlation between obesity and level of glycaemic control (measured by fasting blood glucose and HbA1c levels) in patients with type 2 diabetes mellitus.

**Methods:** The study included 103 examinees diagnosed with type 2 diabetes that are treated in three family medicine outpatient departments of the ECPM Polyclinic, Primary Health Centre Banja Luka. Examinees were selected from the Registry of patients with diabetes. The study was carried out on the basis of analysis of the data extracted from patients' medical records and examinees-centred interviewing. Examinees were interviewed about dietary habits and physical activity. Data on age, duration of illnesses, fasting blood glucose level, HbA1c level and lipid status were extracted from patients' medical records. Blood pressure and waist-hip ratio of each examinee was measured and body mass index (BMI) calculated. Survey data were entered in a questionnaire developed for our study, statistically analysed, and the results are presented in tables and graphs.

**Results:** Out of 103 examinees, 55.3% were female and 44.7 % male. During the survey period 12.6% of the examinees were non-obese, 46.6% overweight and 40.8% obese. No statistically significant correlation was observed between the degree of obesity and fasting blood glucose level ( $p=0.88$ ) and HbA1c level ( $p=0.65$ ). No statistically significant difference between waist-hip ratio of male and female examinees and fasting blood glucose and HbA1c levels was found.

**Conclusion:** The results of this study indicate that there is no positive correlation between the obesity (measured by body mass index and waist-hip ratio) and the level of glycaemic control in examinees with type 2 diabetes.

## EP11.08

### **Family physicians' approach and knowledge about the use of child car safety seats and seat belts**

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**Background & Aim:** Ttraffic accidents(TA) are at the sixth order among all causes of children deaths. More than 618,000 children rode in vehicles during a 1 year period without the use of a child safety seat, booster seat, or seat belt at least some of the time, according to the Centers for Disease Control and Prevention (CDC). Child safety seats(CSS) reduce the risk of death in passenger cars by 71% for infants, and by 54% for toddlers ages 1 to 4 years. Booster seats reduce the risk for serious injury by 45% for children ages 4 to 8 years. It is essential for the parents to be aware of the importance of car safety seats and seat belt use for their children. The aim of this study was to determine the self practices of family physicians in use of car safety systems for children and their approach to inform their patient population.

**Method:** In this descriptive cross-sectional study, volunteer family physicians fulfilled a form. Statistical analysis were made by SPSS 20.0.

**Results:** Sixty family physician participated the study, 55.0% (n:33) were male. 86.7% (n:52) were married. 93.3% (n: 56) had a private car. 75.0% were using seat belt in front seats everytime, 8.0% only for inter city journeys. 48.3% were never using rear seat belts. 60.0% were not using CSS for their children. 87.5% were putting the CSS on right hand side at the rear seat. Only 18.3% knew the mandatory legal age interval to use CSS. 95.0% did not ask their patients' CSS useage and 68.3% did not think they should inform their patients about CSS usage. Only 1.7% felt inadequate, whereas 48.3% wanted to be trained.

**Conclusions:** TA are an important preventable cause of death and disabilities in children. Family physicians should inform parents about CSS.

## EP11.09

### Pott's disease

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**Background & Aim:** 28 year old male, native of Mali, resident in Spain for 9 months without recent visits to his country. He comes to our consultation for back pain. He is employed at glasshouse, where he makes a lot of physical efforts. Personal history: no drug allergies. No cardiovascular risk factors or toxic habits. He recounts back pain for 4 months, with irradiation to right leg, which limits his movements. Good general condition, exploration without alterations except pain to the palpation of lumbar column in region paravertebral and thorny apophyses of L4 to L5. Right Lassegué. Hiporreflexia rotuliana right. He has started treatment with Ibuprofeno every 8 hours that was indicated in Urgencias but he was told that if not improves, go to his doctor.

**Method:** In view of the evolution we request a lumbar X-ray where we find a lytic destruction of anterior portion of vertebral body and intervertebral disks L4-L5 destroyed, that suggests us lumbar tuberculosis as the first diagnostic option, for what we request an urgent thorax X-ray for discard a pulmonary tuberculosis active process, that was normal. The patient was referred to the emergency service to start the treatment and complete the study.

**Results:** Lumbar MR was realized: diffuse affectation of the space discal L4-L5 with partial liquefaction of the disc. Destruction of the previous wall of L5. Caudal extension with occupation to level S5-L1. On having administered IVC we appreciate abscess in prevetebral level in L5, epidural and to level of iliac psoas. Compatible with espondilodiscitis of tubercular origin.

**Conclusions:** Pott's disease is a form of tuberculosis that occurs outside the lungs. Is usually a result of hematogenous spread of Mycobacterium tuberculosis. It is important to consider the history of the patients, specially when they came from countries with another kind of endemic pathology.

## EP11.10

### Evaluation of cardiovascular risk of patients with hypertension in a primary care practice

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**Background & Aim:** Study on the quality of clinical care provided to patients with Hypertension assigned to a medical practice (during the period 2014)

#### Method

Design: Longitudinal evaluation: Palmer's Quality Cycle

Setting: An urban health care center.

Population and Sample: Patients (total according to inclusion criteria, 2014), with Hypertension (n=312).

Interventions: Internal evaluation, dimensions: scientific-technical quality, adequacy, accessibility, continuity of care; data related to the care process and intermediate results; explicit, evidence-based procedural criteria.

Subjects: analysis of coverage. Analysis on the evolution of treatment compliance. The Z statistical test for comparing proportions,  $\alpha$  0.05.

**Results:** Compliance criteria (2014).Hypertension: Prevalence: 23,2% (312 patients); Percentage of patients diagnosed with hypertension, with Blood Pressure <140/90 at last take recorded: 72,44% (226 patients); percentage of patients with Hypertension, having registered Cardiovascular Risk (CR):61,86% (193 patients).

**Conclusions:** The capture of patients with Hypertension and CR; degree of control in Hypertension; integrated care in Hypertensión and measuring CR.

## EP12.01

### Is accessibility to public services damaged in hospitals with private services? The Jerusalem experience

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**Background:** Two large hospitals in Jerusalem provide private in parallel to public services. Proposals to extend the model to other hospitals fuel controversy in part because of paucity of information about impacts on public services. Study Questions: What are the waiting times for appointments in public vs. private outpatient clinics and what are the perceptions of family physicians (FP) about accessibility to public services in Jerusalem hospitals?

**Methods:** Medical students, as secret shoppers, called hospital appointment centers requesting earliest slots in public and private hospital clinics. In addition, we conducted a web-based survey of FP on perceived accessibility.

**Results:** Respective times to public and private appointments averaged 55 days (range 3-244) and 7 (range 0-38) - differences culminating at 6-8 months for some specialties. Most FP reported reasonable waiting times to public appointments for only a minority of their patients. Many felt accessibility to public services had deteriorated in the last decade at both hospitals. Nearly half said they were usually unable to reach a hospital physician for consult. When able, most reported suggestions to refer the patient to private service and 80% described self-referral to further private procedures after initial consult. Cancellations regularly occurred more often in public appointments. To shorten wait times, 80% of FP admitted referring patients to private services, 70% use personal contacts or other hospitals, 50% refer patients to emergency rooms while 30% feel helpless. Significant differences were observed between the two hospitals suggesting modification by local culture. Most FP felt large public vs. private wait gaps should be averted and constitute illegal discrimination.

**Conclusions:** Accessibility to public services appears to have been damaged in hospitals with private services in Jerusalem. Health policy implications: In-hospital private services tend to take over public services because of financial incentives. Access equity requires better regulation of this model.

**EP12.02**

**Paper No.: 1254**

**Presentation Type Preference: Poster Presentation**

**Main Abstract Theme: 06 - OTHER**

**Content randomization: a method to compare guidelines presentation formats. A randomized controlled trial in the Finnish citizens' health portal.**

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**Background and Aim:** It is challenging to write patient versions of guidelines that patients can engage with when making healthcare decisions. DECIDE was an EU-funded project that developed formats for presenting evidence in patient versions of clinical guidelines.

Our aim was to compare the effects of DECIDE patient versions to those of traditional patient versions of guidelines used in the citizens' portal.

**Methods:** The guidelines producers at Duodecim in Finland created a system that enables randomizing users of the health portal to two or more different presentation formats. Users of the Finnish citizens' health portal were randomized either to the DECIDE type of patient versions (with explicit and patient-friendly presentations of evidence) or traditional patient versions. Outcomes were measured included understanding, intention and perceived usefulness of the presentation. The outcomes were measured with short Internet surveys and with Likert scales from 1 to 7.

**Results:** The randomized controlled trial was carried out in 2015 with four guidelines examples (salt reduction, home measurements for hypertension, antibiotics for flu and use of cough medicines). A total of 426 randomized health portal users answered the Internet questionnaires. With the salt reduction example, the patient information with specific DECIDE type of evidence initiated more intention to follow the guideline than the ordinary presentation format ( $p=.039$ ). The answerers also found the DECIDE format more useful ( $p=.017$ ).

**Conclusions:** Content randomization is a feasible technique that enables comparative studies to help guidelines production. Randomized controlled studies can be conducted within the framework of a health portal for citizens. There is some evidence in our pilot study that evidence based presentation formats create more adherence to guidelines than the traditional formats.

### EP12.03

#### **Are there differences between the men and women attending the health center regarding their knowledge of osteoporosis?**

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**Background & Aim:** To assess whether there are differences between the men and women from rural backgrounds, as far as knowledge on osteoporosis is concerned.

**Method:** Descriptive, transversal study using questionnaires completed by patients attending the rural medical centre in Lamasón, between June and September 2015. Social and demographic variables related to calcium, vitamin D, and how these are obtained, were collected. Averages and standard deviation was used for quantitative variables, and percentages for qualitative values.

**Results:** 50 subjects were interviewed, with an average age of  $62.16 \pm 17.8$  years, and mainly female (56%). Significant differences were found with regards to the knowledge about this bone ailment (women 64.3% vs men 18.2%) on identifying vertebral fractures as being the most frequent (37.5% vs 0%), on identifying menopause (46.4% vs 4.5%), older age (89.3% vs 54.5%), and a high consumption of coffee (35.7% vs 4.5%) as risk factors; on considering that it is more important to increase bone mass than to reduce fractures (13.6% vs 47.1%), physiological osteoporosis in menopause (87.5% vs 30%), in believing that bone mass peak can always be treated (86.4% vs 50%), and in knowing about bone density tests (17.9% vs 0%). No differences were found regarding the identification of smoking, alcohol consumption, lack of physical activity, older age, a family history of fractures or a previous fracture themselves, or a low consumption of calcium as risk factors. Neither were there differences in thinking that it only affects women or that bone density tests should always be carried out on menopausal women.

**Conclusions:** There are important errors in the knowledge both genders have of osteoporosis, both as far as general concepts and the risk factors are concerned, although this is more obvious. A preventative measure would be to provide people in rural areas with information on osteoporosis.

## EP12.04

### Pleural effusion in an old woman

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**Background & Aim:** An 83 year-old woman attends her general practitioner for general discomfort and cough, no fever, ongoing for 2 days. Medical history: breast cancer with left radical mastectomy and hormone therapy, without radiotherapy or chemotherapy; scoliosis, bipolar disorder. Physical examination: cutaneous dehydration signs, malaise, slightly tachypnea. Pulmonary auscultation: hypoventilation of the left inferior lobe. Abdomen: no pain, hepatomegaly.

**Method:** Complementary tests: anemia of chronic cause, elevated tumor markers (CA 125 and CA 15-3), rest normal. Arterial blood gases: hypoxemic respiratory failure. Chest X-ray: left pleural effusion (not present in previous X-rays) CT-scan of the thorax: paratracheal and subcarinal mediastinal adenopathies, with malignant characteristics. Left pleural effusion with collapse of the left inferior pulmonary lobe with malignant with a probably malignant cause. Probable metastatic implants in the subcutaneous area of the left hemithorax. Abdominal CT-scan: hepatic, left suprarenal and bone metastases

**Results:** Diagnosis: Breast cancer progression with bone, hepatic, left suprarenal gland and subcutaneous region metastases. Left pleural effusion Differential diagnosis: Causes of pleural exudative effusion: cancer, pulmonary embolism, tuberculosis, parapneumonic effusion, dressler syndrome, connective tissue diseases. Causes of pleural transudative effusion: congestive heart failure, cirrhosis, nephrotic syndrome, hypothyroidism.

**Conclusions:** The pleural fluid originates from the pleural capillaries, the pulmonary interstitium, intrathoracic blood and lymphatic vessels or peritoneal cavity. It is being resorbed mainly by the lymphatic vessels of the parietal pleura. The pleural effusion is due to the excess of the fluid generation or due to a diminished reabsorption. The prevalence of pleural effusion is around 400/100000 persons. The most frequent cause of transudative is the congestive heart failure, meanwhile the most frequent cause of exudative effusion is the pneumonia, followed by cancer and pulmonary embolism.

## EP12.05

### **A qualitative study on pattern of practice and decision making on palliative sedation among physicians in Thai medical schools**

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**Background:** in Thailand, palliative sedation is not systematically taught in both undergraduate and post-graduate medical curricula. This causes variation of practice which is depending on individual physician experience.

**Aim:** To study physician thinking process and prescription pattern of palliative sedation. **Method:** A qualitative research by in-depth interview among physicians who have experience of palliative sedation in three medical schools from June 2014 to November 2014.

**Results:** From total of 20 physicians in this research, there are 7 faculty physicians, 2 hospitalists, 1 fellowship physician, and 10 resident physicians. Thinking process and decision making for palliative sedation among physicians started from the patients in their care were in terminal stage and had suffering symptoms or unconsciousness. Physicians considered patient factors, relative factors, share-cared physicians and hospital system factors. When all factors are concordant, physicians would make decision. The commonly used medications are opioids, benzodiazepines, muscle relaxant, antipsychotics and amnestic agent. Starting dose, adjusting dose and drug monitoring is different between physicians who have knowledge or formal training in palliative sedation and physicians who have experience on learning by doing. Furthermore, the study found different paradigm of palliative care definition.

**Conclusions:** Thinking process, decision making and prescription pattern of palliative sedation depend on whether the formal training has been provided. Physicians who got formal training have more confidence and prescribe more safe dosing than physicians who learned by doing only. Almost all physicians recognize the importance and necessity of formal training in palliative sedation in undergraduate medical curriculum.

## EP12.06

### Meeting real patients: a qualitative study of medical students' experiences of early patient contact

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**Background and Aim:** Teaching communication skills is an important task in the medical curriculum. It is widely agreed that the ability to communicate with the patient is just as important as biomedical knowledge and technical skills. At University of Copenhagen we have conducted a course in early patient contact (EPC) for first semester medical students since 1986. The course is integrating theoretical and practical skills inspired by a modification of Kolb's learning cycle. Every student interview a patient three times during the course and personal reflection is supported. The aim with this study was to examine first term medical students' personal experiences and challenges with early patient contact.

**Method:** A qualitative design was adopted, with data from written logbooks and focus groups interviews with medical students who had recently completed an EPC course. Data were analysed with a grounded theory approach.

**Results:** We found that meeting with a real patient – a person – was a central point of learning. Students' perceptions and reflections on their future profession and personal skills were broadened. Students became respectful of a patients' life and illness experiences, and their understanding of communication as central to a doctor's daily work increased. In students' views 'patients were turned into persons' and they discovered that they actually learned something from every patient. Furthermore professional communication was experienced as a skill rather than the innate ability to talk to other people.

**Conclusion:** Our results deepen the current knowledge of students' benefit from EPC by taking it into first-term students' perspectives and focusing on the personal experiences and challenges that the students met during the course. More integration of the patient in the learning processes in medical students is recommended and further research in the combination of theoretical and practical communication skills is recommended.

## EP12.07

### What's the role of breast self-examination in breast cancer screening?

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**Background and Aim:** Breast cancer is the most common non-skin cancer and the second leading cause of cancer death in women. In Portugal, there are detected each year about 4500 new cases of breast cancer and 1500 women die from this disease. Mammography is the only screening test shown to reduce breast cancer-related mortality. There is general agreement that screening should be offered at least biennially to women 45 to 69 years of age. Although it's a common practice, teaching breast self-examination (BSE) doesn't reduce breast cancer mortality and may increase false-positive rates. The aim of this work is to review the role of BSE in breast cancer screening.

**Methods:** A search was conducted on MEDLINE, Guidelines Finder, The Cochrane Library, using the MeSH terms "breast self examination" and "breast cancer". The researches were limited to the articles published in the last 5 years in English, Spanish and Portuguese. To assess the level of evidence, the scale of Strength of Recommendation Taxonomy American Family Physician was used.

**Results:** From the research resulted 13 articles: 5 randomized clinical trials and 8 systematic reviews. From their analysis, we conclude that: Routine teaching of BSE doesn't reduce mortality and likely increases benign biopsy rates (strength of recommendation I); BSE shouldn't be routinely taught to women (strength of recommendation ID); A full discussion of BSE, including risks, should be provided for the woman who requests it (strength of recommendation IIIA); If a woman makes an informed decision to practise BSE, care providers should ensure she is taught the skills and that she performs self-examination proficiently (strength of recommendation IIIA).

**Conclusions:** A review of the evidence not only showed that regular BSE conferred no benefit in terms of survival from breast cancer, but also provided evidence of harm, increasing the number of unnecessary invasive procedures and woman's anxiety.

## EP12.08

### What kind of health care regulations we need for immigrants and refugees: a new vulnerable group in Europe

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**Background and Aim:** More than 9 million Syrians have fled their homes since the outbreak of civil war in March 2011, taking refuge in neighbouring countries or within Syria itself. More than 200.000 Syrians have declared asylum in the European Union. One of the aspects of this situation is health care needs of this vulnerable people. It is necessary to organize a specific health care delivery system for these needs. All European countries have health care regulations for refugees in some extend. There is a collaborative project under the acronym 'EUR-HUMAN' (European Refugges-HUMAN Movement and Advisory Network) that has been submitted to the CHAFAEA-3rd Health Programme and it has been recently approved. The aim of this project is to enhance the capacity of European member states who accept migrants and refugees in addressing their health needs, safeguard them from risks, and minimize cross-border health risks. This initiative will focus on addressing both the early arrival period and longer-term settlement of refugees in European host countries.

**Method:** A workshop will be conducted.

Getting acquainted (5 min) Group work: (20 min)

1. What would be the health needs of refugees in regard with the reason of migration.
2. What kind of regulations should be made to maintain healthy migration? (On the road)
3. What would be the consequences of leaving refugees in unhealthy conditions: for refugees and for the society?
4. What is the role of GP/FD in the health care of refugees?
5. Presentation: of group works and discussion (20 min) Presentation: Content, methods and preliminary results of EUR-HUMAN project.(20 min)

**Results:** At the end of this workshop the participants will get familiar with the problems of refugees and with the project.

## EP12.09

### Association of education level, daily habits and complications in diabetic patients in a rural area of Crete

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**Background & Aim:** The success of glycemetic control is associated apart from medication, with proper diet, exercise and compliance in a comprehensive intervention program. The purpose of this study is to investigate the possible association between the level of education of patients with type 2 diabetes with their daily habits and the appearance of complications.

**Methods:** The study enrolled 106 patients with SDT2 [78.3% > 60 years, male 59.4%]. All patients answered a specific, structured questionnaire on demographic, anthropometric data, the level of education, questions about food and their daily habits as well as information on the presence of complications of diabetes.

**Results:** The duration of diabetes was  $14,0 \pm 10,0$  years and body mass index (BMI) was  $31,66 \pm 6,14$  with no significant difference between sexes ( $p = 0,470$ ). 74% of patients were obese with females showing higher rates ( $p = 0,014$ ). The 77.1% of patients consume breakfast, 63.4% two main meals and 41.3% two intermediate snacks. 33.1% (27.4% men) were smokers, while 69.5% walked short-distances. The average television viewing time per week was  $34,52 \pm 17,62$ . 29.9% of patients suffered coronary heart disease, 2.5% nephropathy, retinopathy 23.1%, erectile dysfunction 22.6% of men, diabetic foot 8.9% and amputation was performed in 1.9% of patients. 6.3% of patients were of higher education, 20.1% average, 57.2% basic and 16.4% were illiterate. The study revealed also correlation between the education level and the hours of TV viewing per week ( $p < 0.0001$ ), the number of main meals intake ( $p < 0.001$ ), breakfast habits ( $p = 0.013$ ), the occurrence of coronary artery disease ( $p = 0.002$ ), diabetic foot ( $p = 0.005$ ), amputation ( $p = 0.001$ ), erectile dysfunction ( $p = 0.011$ ).

**Conclusions:** The low level of education seems to be associated with complications of diabetes as well as with the basic nutritional habits, which affect the glycemetic regulation of patients with diabetes.

## **EP12.10**

### **Ebola virus disease in Sierra Leone: local experience & evidence of a preponderance of female survivors**

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As a GP trainee, I worked in an Ebola Treatment Centre in Sierra Leone during the height of the outbreak. My aim in this study was to record the demographics and outcomes of patients in this Ebola Treatment Centre. This was done as a prospective case-series study between 1st January 2015 and 4th February 2015. During this period, there were 59 presentations to the centre. Of these, 30 (51%) tested Ebola PCR positive with 29 negative sequential tests. There were 22 deaths, including 4 deaths unrelated to Ebola, giving our Ebola treatment centre a 60% mortality rate for confirmed Ebola patients. Our Ebola patient group was composed of 53% female and 47% male patients with an age range of 7 months to 85 years old; average age 32. Out of the 18 deaths in confirmed Ebola patients, 12 (67%) were in males. Of the 12 Ebola survivors, 83% were female. As the epidemic in West Africa enters the final stage, it is important to collate local data and experience so that we can mobilise a more rapid and efficient response to future outbreaks. Demographics in this specific Ebola Treatment Centre compare similarly to other Sierra Leonean centres. Our experiences also echo wider findings about the preponderance of female survivors compared to males and provide further evidence for considering sex-specific public-health interventions in future haemorrhagic fever outbreaks.

**KA04**

**The future of primary care**

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Primary care is changing, and many of the changes are common across different countries despite differences in our healthcare systems. The changes include expansion of primary care teams to include a wider range of clinical disciplines (e.g. nursing, pharmacy), the development of networks or federations of practices to enable general practice to operate at scale, and increasing use of information technology to enable health professionals to communicate with each other and with our patients. In this talk I will discuss the factors which are driving these changes and suggest a model of how the primary care practice will look in future.

**W45**

**Head and heart of the family doctor in end-of-life care**

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**Background & Aim:** The Dutch College for General Practitioners developed a postgraduate educational course for GP's about Advanced Care Planning (ACP). ACP is a process in which a patient, in consultation with health care providers, family members and significant others, makes decisions about his/her future health care, in anticipation of becoming incapable of participating in medical treatment decisions. The course starts with an instruction on how to select patients who need ACP, followed by a training in ACP and doctor-patient communication about care demands in the end of life. The aims of the training are: doctors have knowledge about ethical and legal aspects of end-of-life care; they are capable in making well-considered decisions and develop a proactive attitude towards ACP. The training consists of two meetings in a small group, led by two trainers. The effects of the courses are systematically evaluated.

**Method:** in the workshop the techniques and skills in ACP will be demonstrated and discussed, the results of the evaluation will be presented, and the participants exchange their ideas on ACP and the value of the course.

**Results:** Participants are informed about the aims, procedure and conclusions of the programme. They have refined their ideas and views on ACP and the value of the course, and on the possibilities for adoption and implementation in their country.

**Conclusions:** End-of-life care is an essential task for the GP, and training in the concept of ACP, including the knowledge and communication skills needed, is recommended.

## W46

### **Chronic care model – are there differences between rural and urban areas in Europe?**

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**Background:** Ensuring a high quality of life (QoL) for healthy and chronically ill citizens is a major goal of both governments and local communities. This goal can be achieved by means of a well-organized health care system that meets not only clinical requirements but, more importantly, patients' social needs and the needs associated with their living and working environments. Chronic diseases and their related disabilities determine the level of well-being of people worldwide. Results of the Global Burden of Disease Study of 2013 show that people are living longer, but with multimorbidity and increased disability. However, the literature lacks reports on the differences in the management of chronic diseases between rural and urban areas, as well as on differences in disease prevalence and mortality in rural and urban Europe. Moreover, a comparison of existing results does not allow unambiguous conclusions to be drawn regarding the influence of the living place on the QoL of patients with chronic diseases. It is necessary to conduct further research on this group of patients.

**Aim:** To explore the possibility of collecting data from different studies on urban–rural differences across Europe and to establish an EU project to investigate this issue.

**Method:** Existing data and conclusions from finished projects will be presented and a SWOT analysis will be carried out on the proposed EU project on chronic disease management in European rural areas. This will be followed by small-group discussions on the possible approaches and domains of the project. Results Our workshop will allow for the identification of problematic domains in the EU project on chronic disease management in European rural areas. The project will provide useful insights into perceived priorities.

**Conclusions:** The workshop may inspire participants faced with the challenge of chronic care management to tackle the differences between rural and urban areas.

**W47**

**Joint European Union of General Practitioners (UEMO), European Forum for Primary Care (EFPC) & WONCA Europe Workshop**

**The remuneration policies within primary care in Europe**

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**Objective:** To present and evaluate the different remuneration systems in primary care in Europe with the purpose of comparison and influencing policy and decision making.

• Clarify

- How the working conditions and burden of GP/FP in various environments relate to optimal job performance and delivering the best quality of service.
  - What could be the best communication between the policy makers and the GP/FP. remuneration policies?
    - o What countervailing force Primary Care can be in the decision making concerning remuneration.
  - How to contribute to optimal working conditions in a respective environment.
- Stimulate the discussion and networking between professional associations with the purpose of optimizing working conditions and delivering the highest quality of service.
- Increase the awareness of the great variety of policies and possibilities of remunerating
  - Understand how EU regulatory decisions and remuneration policies impact practice in primary care.
  - Gravitare towards the best possible solutions in a specific environment in this domain regarding the examples of best practices.

**Timely diagnosis of symptomatic cancer in primary care; where do we stand and can we improve?**

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**Background & Aim:** The annual number of patients newly diagnosed with cancer in Europe is rising. Consequently, cancer is now one of the primary causes of death. Survival rates in countries with a GP centered gatekeeping healthcare system are generally below average compared to other countries in Europe. Recently, it has been suggested that ‘delay’ in primary care is a substantial contributing factor to these unfavorable cancer outcomes, through suboptimal recognition of cancer patients and subsequent delayed referral. In several European studies the duration of the diagnostic process and predictors of delay in primary care have been studied. We aim to present data on the diagnostic process of cancer in primary care and subsequent routes of referral, compare timelines in different countries, and discuss the possibilities for preventing unnecessary delay in this process, thus improving cancer outcomes. **Method:** In this symposium, we will provide an overview of the diagnostic process of cancer in primary care for the five most prevalent cancer types (breast, colon, lung, and prostate cancer and melanoma) in Netherlands, UK and Denmark. We will address the duration of diagnosis, predictors of relatively long duration and discuss the possibilities for reducing time in the diagnostic process. Presentations are provided by international expert speakers;

- Dr. Henry Jensen (affiliation 2), Denmark
- Prof. Richard Neal, PhD, (affiliation 3) Wales.
- Dr. Charles Helsper, MD and Nicole van Erp, MD, (affiliation 1) The Netherlands
- Chair; Prof. Dr. Niek de Wit, (affiliation 1) The Netherlands

**Results:** After the symposium participants will have an overview of the diagnostic process in primary care in different countries, including an indication of duration and patients at risk of delay.

**Conclusion:** This symposium aims to provide an overview of the diagnostic process of cancer in- and from primary care and discuss the possibilities for preventing unnecessary delay, and improving outcomes.

## W48

### 45 years of the 'Inverse Care Law': developing sustainable approaches to reducing health inequalities

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**Background and Aim:** in 1971 Professor Julian Tudor Hart described the Inverse Care Law: that 'the availability of good medical or social care tends to vary inversely with the need of the population served'. 45years later inequalities in access and outcomes of care persist- and in some cases have increased. Clinicians working with vulnerable populations face additional workload and these demands exacerbate recruitment and retention challenges.

Wales is the birthplace of the UK National Health Service and the country where the Inverse Care Law was first described. The health care system serves a population of 3 million people with a strong focus on actions to reduce social and health inequalities. The health strategy encourages family practices to play a lead role in the redesign of the healthcare system to more effectively meet population needs and to integrate with social care services. This is set within the context of a 'Wellbeing of Future Generations' Act.

**Method:** Networks of family practices have been established to work with communities of 50-100,000 citizens to plan services. This 'Cluster' approach builds on a shared assessment of need, influencing the use of all public and third sector services to address local priorities.

**Results:** This approach is:

- Increasing sensitivity to local need
- Ensuring a 'prudent' approach strengthening, not duplicating, existing services with equity as one of four guiding principles
- Identifying new, complimentary workforce roles
- Highlighting organisational development priorities to ensure sustainable family practice.
- Examples will be used to inform and stimulate discussion.

**Conclusion:** Family practitioners are well placed to understand individual and community concerns. When this knowledge is informed by high quality population health intelligence and developed through peer and public discussion, a powerful programme can be developed to drive community focused service improvement. This collaborative approach supports the development of sustainable primary care systems: opportunities to develop attractive new roles for family practitioners and to extend the multidisciplinary workforce are emerging.

Competing interests: No competing interests

1 <http://gov.wales/topics/health/nhswales/plans/care/?lang=en>

2 <http://www.legislation.gov.uk/anaw/2015/2/contents/enacted>

3 <http://www.prudenthealthcare.org.uk>

## OP22.1

### **Launch of patient-centered website is associated with reduced health care utilization: a nationwide natural experiment**

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**Background:** Health care costs and utilization are rising. High quality patient-centered online information may reduce health care utilization, but evidence of the effect of online health information on health care utilization is scarce. We hypothesized that the release of a nationwide evidence-based health website is associated with lower health care utilization.

**Methods:** An interrupted time series analysis was used to evaluate the association of the launch of an evidence-based patient-centered health website (GPathome) in march 2012 with primary health care utilization. Observational primary care data were used of on average 230 general practitioners from 2009 to 2014. The primary outcome was the slope change in primary care consultation rate (consultations/1000 patients/month). A control group was created by including consultations about which no online information was provided during the study period. In addition, subgroup analyses were performed for sex, age and socioeconomic status.

**Results:** After the launch of the website, the trend in consultation rate decreased with -1,620 ( $p < 0,001$ ). The trend in consultation rate of the control group did not change at all. Subgroup analyses showed a significant decline in all subgroups, except the youngest age group (<16 years).

**Conclusions:** The launch of an evidence-based health information website is associated with a decrease of primary health care utilization. This suggests that an evidence based e-health information website guides patients on their decision to visit a primary care physician.

## OP22.2

### The implementation of a mobile app for treatment of stress urinary incontinence

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**Background:** We developed the mobile app Tät® for first-line treatment of stress urinary incontinence (SUI). The app has information about SUI and features a pelvic floor muscle-training programme along with reminders and user statistics. We demonstrated its efficacy for symptom severity in a randomised controlled study (RCT) that included 123 women with SUI  $\geq 1$ /week. The app is now available free of charge. This study compared the characteristics of recent users with those of the participants in the RCT.

**Methods:** When the app is downloaded, it displays questions about the user's age, location, education, and symptom type and severity (International Consultation on Incontinence Modular Questionnaire Urinary Incontinence Short Form, ICIQ-UI SF). Answering the questions is optional, and entered data are anonymously transferred to a research database.

**Results:** Questionnaires (n=2006) were completed by app users from all parts of Sweden during a 6-month period in 2015. Recent users had a mean age of 36.2 (SD10.4) years vs. 44.7 (SD 9.4) in the RCT ( $p < 0.001$ ), and 70% (1396/2006) had a post-secondary education compared with 87% (107/123) in the RCT ( $p < 0.001$ ). A total of 24% (484/2006) of the users reported no urinary leakage, 30% (607/2006) reported leakage  $\leq 1$ /week, and 46% (915/2006) reported leakage  $> 1$ /week. The mean ICIQ UI-SF score was 8.7 (SD3.9) for users reporting any leakage and 11.1 (SD2.8) for participants in the RCT ( $p < 0.001$ ). of those with incontinence, 86% (1309/1522) reported symptoms of SUI compared to 100% in the RCT.

**Conclusions:** Recent users of the Tät® app were younger and had lower educational levels than participants in the RCT. Two-thirds of the users reported some urinary incontinence, and the incontinence was overall less severe than in the RCT. The other third may be using the app preventively. We will continue to evaluate the efficacy of the app on symptom severity in users.

### OP22.3

#### **Mobile phone text messaging for smoking cessation. Assessment of the effectiveness as an adjuvant tool to health advice. Randomized clinical trial**

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**Background/Aim:** health advice is one of the most cost-effective interventions in smoking cessation treatment; however, changes produced don't persist over time, therefore it is necessary to implement enforcement mechanisms. Our objective was to evaluate the effectiveness at 12 months of a smoking cessation program consisted of health advice and text messaging to mobile phone.

**Methods:** randomized, single-blind, clinical trial, carried out in two primary care health centres, comparing health advice (control group-CG) with the same advice reinforced with messages to patient's mobile phone (intervention group- IG). Inclusion criteria: Smokers over 18 years with mobile phone, and score  $\geq 5$  in the Richmond scale. Endpoint: negative cooximetry at 6 months and kept at 12 months, according by levels of CO in exhaled air. Statistical analysis: bivariate analysis comparing ratios (negative -positive cooximetry) and multivariate analysis by logistic regression, adjusted for potential confounding variables. Limitations: CO has a half-life of 5 hours, which could lead to false negative results.

**Results:** 320 patients were included, of which, 40 (12.5%) performed the cooximetry at 12 months; 9 in the CG and 31 in the IG. Statistical analysis was by intention to treat, with a higher proportion of ex-smokers in the IG (26/160 = 16.25%) than in the CG (9/160 = 5.6%) at 12 months ( $p = 0.002$ ). Among those who reported NOT smoking within seven days from the beginning, the percentage of ex-smokers at 12 months was also higher in the IG (24/64 = 41%) than in the CG (7/40 = 17.5%) ( $p = 0.030$ ). Among potentially confounding variable, greater success of the intervention was observed with lower nicotine dependence ( $p=0.003$ ).

**Conclusions:** Combined program is effective to quit smoking, especially among those who show lower basal dependence. The program favors the maintenance among those who report an early abandonment (within 7 days) of habit.

## OP22.4

### **Self-triage by a smartphone application for consulting the out-of-hours primary care clinic - practical, safe and efficient?**

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**Background and Aim:** Patient consultation at out-of-hours primary care clinics has been increasing. Unnecessary consulting exerts negative pressure on the health care system. Triage plays an important role in patient selection, and by providing reassurance and information. We aim to investigate whether a smartphone Application could be a practical, safe and efficient tool to guide patient consultation at out-of-hours clinics.

**Methods:** The “Should I see a doctor?” App -a self-triage tool developed in 2012 by the Apeldoorn out-of-hours GP clinic and Van Campen Consulting in collaboration with the Dutch College of GPs- is CE approved. We used a build-in questionnaire to ask users about the App’s clarity, their satisfaction and whether they intend to follow the App’s advice (n=4456). A sub-group of users was phoned by a triage nurse to evaluate whether the App’s advice corresponded to the outcome of the triage call (n=126). Suggestions of phoned participants were recorded.

**Results:** The App was used by patients from all ages, also by parents for their children, and mostly for abdominal pain, skin disorders and cough. 58% of users received the advice to contact the clinic, 34% a self-care advice and 8% to wait-and-see; 65% of users intended to follow the App’s advice. 87% qualified the App as ‘neutral’ to ‘very clear’ and 89% were ‘neutral’ to ‘very satisfied’. For 81% of participants the App’s advice corresponded to the triage call outcome, with sensitivity, specificity, positive- and negative predictive values of 84%, 74%, 88% and 67%, respectively.

**Conclusions:** The App “Should I see a doctor?” could be a valuable tool to aid patients in their decision to contact an out-of-hours clinic. Efficiency and safety of the App could be improved by enabling patients to enter multiple symptoms and to provide more (background) information to patients receiving a wait-and-see advice.

## OP22.5

### Doctor, you've got mail: the impact of email in primary health assessment

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**Background & Aim:** Nowadays, healthcare routines are heavily dependent on new technologies and clinical information is registered in electronic format. It is crucial, therefore, to know how to use digital resources to support patient care. In addition, society is changing. With the economic crisis many people have moved from their birthplace and cannot attend consultations on a regular basis with their family doctor. In order to overcome this issue some family doctors have started using email to exchange clinical information with patients. The aim of this paper is to consider the benefits of using email for assessment and to characterize the patient who uses this tool.

**Method:** Observational cross-sectional descriptive research that analysed the use of the email in the years 2014 and 2015 in a family health centre in a Portuguese city (Coimbra). One month was selected to analyse the users of email in terms of gender, age, email subject and the kind of user (patient, relative, healthcare provider or other). The software used for this study was Microsoft Office Excel and Word.

**Results:** Between 2014 and 2015 the total number of direct or/and indirect contacts with the patient decreased by 279. In the same period, the number of appointments decreased by about 134. Regarding the number of emails, there was an annual increase of 186.

**Conclusions:** From 2014 to 2015 the number of appointments decreased and the use of email increased. The use of email enabled a significant change in access to medical care, specifically, advice and follow up, which left more time available to attend patients with acute or chronic conditions. Future studies may reveal that the use of email has a positive impact on the patient-doctor relationship and in raising patient satisfaction.

## OP22.6

### **Patients' experiences of internet mediated cognitive behavioural therapy for depression in primary care – a qualitative study**

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**Background and Aim:** Depression is a major source of human suffering and a great and growing challenge for societies worldwide. The treatment options for depression are many, and antidepressant medication is common. Only a third of patients with depression fully respond to antidepressants and patients tend to favour psychotherapy compared to antidepressants. Patients increasingly request for online solutions for communication and treatment. Internet mediated cognitive behavioural therapy (iCBT) is an online alternative to face-to-face CBT. ICBT has been used as treatment for depression for many years, but patients' experiences of iCBT are not fully understood. The objective of this study was to explore primary care patients' experiences of internet mediated behavioural therapy (iCBT) depression treatment.

**Method:** Qualitative study. Data was collected from focus group discussions and individual interviews with 13 patients having received iCBT for depression within the PRIM-NET study. Data was analysed by systematic text condensation by Malterud. Analysis presented different aspects of patients' experiences of iCBT.

**Results:** The patients described a need for face-to-face meetings with a therapist. A therapist who performed check-ups and supported the iCBT process seemed important. ICBT implies that a responsibility for the treatment is taken by the patient, and some patients felt left alone, while others felt well and secure. This was a way to work in privacy and freedom with a smoothly working technology although there was a lack of confidence and a feeling of risk regarding iCBT.

**Conclusion:** ICBT is an attractive alternative to some patients with depression in primary care, but not to all. An individual treatment design seems to be preferred, and elements of iCBT could be included as a complement when treating depression in primary care. Such a procedure could relieve the overall treatment burden of depression.

## **OP23.1**

### **Ethical dilemmas in general practice - FM - a workshop**

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**Introduction:** Since its foundation in 2000, the “Wonca Working Party on ethical issues in General Practice” regularly organizes symposia and workshops on clinical situations of everyday practice involving ethical dilemmas.

**Goals:** It is the aim of the workshop to present recent situations involving ethical dilemmas as they occur regularly in General Practice / Family Medicine and to discuss their Background and possible consequences for the patient, his/her family, the physician and the society in general,.

**Method:** The workshop will start with short presentations by the participants of situations demonstrating ethical dilemmas. The participants then democratically select specific situations out of those presented, will split into small groups and will discuss the following issues using the examples selected:

1. The patient’s history and other factors, which resulted in the development of the particular ethical problem presented
2. The possible consequences of the situation for the patient and the physician
3. Possible solutions
4. What are the basic ethical principles demonstrated and challenged by this situation?

**Expected outcome:** At the end, the results of the small group discussions will be presented to the audience. It is the goal of this workshop to increase the awareness for the relevance of ethical standards and attitudes as applicable to future medical graduates and General Practitioners and for influences upon these standards.

## **OP23.2**

### **Neglect: one of our greatest challenges in pediatric care**

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Neglect in a child carries potential medical and mental health long term problems, as significant as children of abusive injuries, such as head trauma. This group of children make up 60% of children requiring community agencies care and up to 70% of the children seen in primary care, for foster care evaluations. When we recognize the potential associated health risks in this population, we can begin to develop approaches to screen and care for them, to reduce the potential long term consequences, as well as to develop methods to work with agencies to assist families in providing a safe, nurturing, consistent environment. This presentation will focus on recognition and discussion of the multiple areas of care needed for this population of children (mental health, dental, etc) and provide a base for planning, within our own communities, for multidisciplinary care for this group of children.

### **OP23.3**

#### **Teaching quality and safety to family medicine trainees – best practice examples**

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**Background and Aim:** The Quality Improvement Competencies Framework was developed in 2012 in order to guide the development of postgraduate curricula for quality and safety in family medicine. It consists of a list of 35 competencies organized into the following domains: Patient Care & Safety, Effectiveness & Efficiency, Equity & Ethical Practice, Methods & Tools, Leadership & Management, and Continuing Professional Education.

The aim of this workshop is to identify the best practices in teaching the competencies presented in the aforementioned framework.

**Method:** The workshop will consist of three parts. In the first part, the plenary presentation will be given to present the Quality Improvement Competencies Framework. Then, the participant will be divided into small groups with the task to identify the best practices in teaching the competencies presented in the aforementioned framework from their own countries. This will be followed by a plenary presentation and discussion.

**Results:** The expected results are various best practices in teaching the competencies presented in the aforementioned framework from the participants' own countries.

**Conclusions:** Teaching quality and safety in family medicine is different in the European countries and this workshop will present a platform for the exchange of the ideas.

## OP23.4

### Teaching with heads and hearts: the ethical way of teaching

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**Background & Aim:** A lot of trainees are victims of mistreatment caused by the basic university education, and risk burn-out even before beginning their professional work. The aim of this workshop is to sensitize to the well-treatment during the education of the trainees.

**Method:** The group work during this workshop will try:

- to identify the predictive factors and the stigmas of mistreatment during medical education
- to implicate the necessary application of well-treating attitudes
- to find the means and methods of a well-treating teaching

**Results:** The results of the reflexions of each group will be confronted and discussed. To follow up, we will try to reformulate and summarize them in order to assure a system of well-treating teaching and medical education. Finally, we will confront the results with them elaborated previously in our own working group.

**Conclusions:** The medical education of the young trainees is a task engaging hard responsibilities of the teachers. Therefore, it needs a conscientious and careful action, requiring thinking and leading heads acting efficiently. A deep ethical reflexion makes it possible to associate the leading responsibility to an attentive consideration of the individual affective needs and of the respect of the personality and the dignity of the trainees. A flexible strength makes it possible to teach with heads and hearts.

## **OP23.5**

### **Cooperation of family medicine and public health on Preventive program on chronic non communicable disease in South East Europe**

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All the members of Association General Practice / Family Medicine of South East Europe will meet at Congress of the Association of Teacher of General Practice / Family Medicine from Croatia, in Zagreb from 10 till 13th of March, 2016. The topic of round table would be cooperation of family medicine with Institution of Public Health on prevention program for chronic non-communicable disease. Family physicians are doing prevention of chronic non-communicable diseases individually, while Institute of Public Health conduct special preventive programs. The round table will discuss whether such cooperation with public health in such preventive activities exist or not. As the mortality rate from cardiovascular disease are huge public, social and economic health burden all around the world and especially in South East Europe, Department of Family medicine Zagreb, Croatia proposes preventive program which would be implemented in whole family medicine in Croatia if health authorities would agree with that. For now such program does not exist, as well as politic support for such program. Briefly about methodology of the prevention program: tool for monitoring the quality of work of family physicians' was made under the name "panel for total cardiovascular risk", and family doctors would filled it in the course of daily work. The respondents are all persons older than 40 years who would come into the GP's office for any reason. Thus, for five years all population of family medicine would be covered. The cooperation will be between family medicine and Institution of Public Health in South East Europe, especially on example of Macedonia, Croatia and Serbia.

## OP23.6

### **Metabolic syndrome burden in hypertensive patients registered through the panel support tools for chronic disease surveillance in eHRs**

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**Background and Aim:** in Croatia, Information Technology System (ICT) and electronic health records (eHRs) have been established in PHC and family medicine settings for a long time and have been continuously upgraded, to improve connectivity within the healthcare system and quality of patient care. Panels for chronic disease surveillance, established in eHRs several years ago, are parts of these efforts. The aim was to show how healthdata from these panels can be integrated to produce new useful information.

**Methods:** The panels of 210 patients with hypertension, 25-90 years old, residents of the town of Osijek, eastern Croatia, were manually analysed, to assess the comorbid presence of the metabolic syndrome.

**Results:** The comorbidity of hypertension with the metabolic syndrome was found in a total of 123 hypertensive patients (58,6%), M 43,9% and F 56,1%, with prevalence increasing with age. The representation of particular components of the metabolic syndrome was as follows: visceral obesity in 98,5% of women (according to either IDF or ATP-III definition) and in 96,3% or 75,9% of men, respectively; increased fasting blood glucose in 74,1% of men and 69,6% of women; increased triglycerides in 70,4% of men and 65,2% of women and decreased HDL cholesterol in 14,3% of men and 18,3% of women. The distribution of patients having three, four or five components of the metabolic syndrome was as follows: 52,9%, 36,6% and 10,6%.

**Conclusion:** Hypertensive patients in this part of Croatia are frequently burdened with the features of the metabolic syndrome. The panels for chronic disease surveillance would be a valuable source of new information, if healthdata were integrated by appropriate statistical applications.

## **W49**

### **Challenges in the use of classifications in general practice**

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How can the various classification systems used in the health care sector be integrated into the domain of general practice to optimally describe the challenges of future expectations and content of work in general practice? Increased need to focus on multimorbidity, risk factors - individual and universal - preventive efforts, intersectorial collaboration and resource consumption increases the need for integration between the classification systems, which describes general practice domain and classification systems used in other health care domains. Based on presentations by: Diego Schrans, MD, GP, Ghent University, Department of General Practice and Primary Health, Belgium, member of WICC, Wonca International Classification Committee Kees Van Boven, MD, GP, PhD, Radboud University Nijmegen, Nijmegen, The Netherlands, member of WICC, Wonca International Classification Committee Preben Larsen, MD, GP, Senior Adviser (Health classifications), DAK-E - Danish Quality Unit of General Practice, member of WICC, Wonca International Classification Committee It will at the workshop be demonstrated how the integration between the used classification systems in primary care and other health institutions describe the subject's methodology and classification needs. The workshop will discuss how the classification systems used in general practice can optimally meet the development and future expectations of general practice including personal risk factors and multimorbidity.

## OP24.1

### Transitional patient safety from a patient's perspective: the Transitional Risk and Incidents Questionnaire (TRIQ)

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**Introduction:** When a patient transfers from one healthcare level to the other (either during referral, discharge or simultaneous care at the outpatient clinic and the general practitioner (GP)), they are at risk for incidents. To assess continuity between hospital and GP, we asked patients their recent experiences using the Transitional Risk and Incident Questionnaire (TRIQ).

**Methods:** The TRIQ contains questions on three dimensions of continuity of care: Relational continuity (9 items), Informational continuity (8 items), and Management continuity (9 items) and an overall judgement of the transition. During 6 weeks, all patients visiting the cardiology and gastroenterology outpatient clinic of three hospitals in the Netherlands were requested to fill in the digital TRIQ questionnaire. All participants' negative experiences were reassessed into an incident and non-incident experience.

**Results:** in total, 372 patients participated. Patients assessed relational continuity as "good". Patients had difficulties assessing the collaboration between the GP and hospital (management continuity), since this collaboration is often not visible for them. 51% of patients had experienced a transitional incident in the last 6 months. Main problems were (1) the timely and qualitative transfer of information between hospital and GP (17% of patients reported an incident in transfer of information at discharge, 13% in transfer of information after visit to the outpatient clinic and 13% in transfer of information at referral to hospital) and (2) redundant diagnostics (reported by 16% of patients). Especially hospital discharge was prone to incidents. The overall quality of transition was judged as "good".

**Conclusions:** Although patients judge quality of transitions as good, over half of them have recently experienced an incident. This study shows there is room for improvement in transitional patient safety, especially concerning timely and qualitative transfer of information.

## OP24.2

### Implementing an electronic medication overview in Belgium

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**Background:** An accurate medication overview is essential to reduce medication errors. Therefore, it is essential to keep the medication overview up-to-date and to exchange healthcare information between healthcare professionals and patients. Digitally shared information yields possibilities to improve communication. However, implementing a digitally shared medication overview is challenging. This article describes the development process of a secured, electronic platform designed for exchanging medication information as executed in a pilot study in Belgium, called “Vitalink”.

**Findings:** The goal of “Vitalink” is to improve the exchange of medication information between professionals working in healthcare and patients in order to achieve a more efficient cooperation and better quality of care. Healthcare professionals of primary and secondary health care and patients of four Belgian regions participated in the project. In each region project groups coordinated implementation and reported back to the steering committee supervising the pilot study. The electronic medication overview was developed based on consensus in the project groups. The steering committee agreed to establish secured and authorized access through the use of electronic identity documents (eID) and a secured, eHealth-platform conform prior governmental regulations regarding privacy and security of healthcare information.

**Discussion:** A successful implementation of an electronic medication overview strongly depends on the accessibility and usability of the tool for healthcare professionals. Coordinating teams of the project groups concluded, based on their own observations and on problems reported to them, that secured and quick access to medical data needed to be pursued. According to their observations, the identification process using the eHealth platform, crucial to ensure secured data, was very time consuming. Secondly, software packages should be adapted to daily activities of healthcare professionals. Moreover, software should be easy to install and run properly. The project would have benefited from a cost analysis executed by the national bodies prior to implementation.

### OP24.3

#### **Expectations and experiences of UK family doctors prior to European exchange placements**

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**Background and Aims:** The Vasco da Gama Movement Hippokrates exchange programme facilitates 2-week observational international exchanges for family doctors in training (Associates in Training - AiTs) and those within 5 years of completing vocational training (First5s) to encourage exchange and mobility, providing a broader perspective to the concepts of Family Medicine. Despite the increasing popularity of the scheme and the anecdotally positive support of participants, hosts and organisers, there is a paucity of research to date demonstrating the benefits of Hippokrates exchanges. We aimed to explore the experiences and expectations of Associates in Training (AITs)/First5s prior to exchanges.

**Method:** An electronic survey was sent out to all exchange participants prior to their 2-week exchange. Two reminders were sent via email to encourage participants to complete the survey.

**Results:** 38 out of 49 (77.6%) of AiTs (89.5%) and First5s (10.5%) responded to the survey. Prior to their exchanges, less than half of respondents (47%) felt that they had a good understanding of health systems including our own. Further, most respondents (86.8%) did not have good knowledge of alternative models of primary care. When asked about variety in practice, over a third of respondents (39.5%) did not feel that they had exposure to varied approaches to patient care nor did they have experience in diverse cultural environments (42.1%). However, all respondents have been inspired to learn about international primary care, with most respondents looking to improve leadership skills (89.5%), work internationally (94.7%) and aimed to learn about non-verbal communication during exchange consultations (92.1%).

**Conclusion:** AiTs/First5s have limited exposure to international primary care and the diversity in practice this brings despite being inspired to learn more about international healthcare systems. Exchange programmes have the potential to bridge this knowledge gap.

## **OP24.4**

### **Primary health care reforms: an assessment of the implementation of family medicine in Turkey**

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**Introduction:** The Family Medicine Programme (FMP) was implemented in Turkey in 2005. It aimed at strengthening the primary health care (PHC) and therefore increasing the accessibility and efficacy of its health system. This involved changes in the professional and administrative roles of the physicians, and in the provision of the service.

**Aim and Objectives:** The aim of the study is to assess the integration of PHC in the Turkish health system after the implementation of the FMP. It has two objectives: the evaluation of (1) the impact of PHC utilisation in the secondary and tertiary services; and (2) the problems encountered by family physicians (FP) and academicians in the implementation.

**Methodology:** It follows a mixed-methods design. An ecological cross-sectional analysis is performed to measure associations between health services utilisation by running correlations and hierarchical multiple regressions on secondary data covering the period of 2008 - 2013. This is followed by a qualitative analysis of data collected through semi-structured interviews conducted with 7 FPs and 8 academicians, and thematically analysed through the framework method.

**Results:** Descriptive statistics show a general increase in the utilisation of all health services. Regression analyses do not provide conclusive results, except for one year, 2010, when PHC visits significantly predict a decrease in secondary and tertiary visits. In the qualitative analysis, the themes that explain the challenges in the implementation were the inadequate planning of the reforms, insufficient political commitment to integrate PHC in the system, and implications of the market model implementation.

**Conclusion:** The integration of the PHC in the Turkish health system is still in transition. It highlights, at governance level, the importance of the proper planning of reforms including all stakeholders in the policy making, and at the process level, the importance of a referral system to allow the gatekeeping function of FPs.

## OP24.5

### Why and when do Danish medical doctors choose to become a general practitioner?

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**Background and Aim:** Continued supply of qualified general practitioners is essential for the vitality of the primary health care sector. In Denmark however we have observed a decline in the number of applicants for our family medicine specialist training program, leaving some posts vacant. The aim of study is to examine why and when Danish junior doctors choose family medicine as their future specialty.

**Method:** We carried out two focus group interviews with medical doctors from two regions. An academic employee from the Danish College of Family Medicine mediated the interviews assisted by a family medicine trainee. The interviews were recorded and transcribed. The data was analyzed independently by two researchers, who had not taken part in the interviews. The analysis was based on a ground theory approach.

**Results:** The data was categorized into themes such as; family medicine in pre-graduate training the structure of the postgraduate educational program, working conditions, respect for general practice, uncertainty about the future for general practice as a profession, when did I decide to choose family medicine.

Out of these themes we identified factors, which influenced the choice of the junior doctors. Exposure to general practice as part of the basic postgraduate training programme was important. Acceptance of the postgraduate training programme also has a positive impact. Factors with negative impact were limited awareness of family medicine during medical school and worrying expectations to the future working conditions. The time of the choice was individual but many seem to decide after basic postgraduate training.

**Conclusion:** This study indicates that exposure to general practice during basic postgraduate training has a positive impact on young doctors' choice of a career as general practitioners. But the expectations to the future working conditions in general practice do also play a role.

## **OP24.6**

### **Struggle for control: GPS in Nordic health care systems**

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**Background and Aim:** Health care in the Nordic countries of Sweden, Norway and Denmark has been regarded as an essential part of the Nordic welfare states. Health care systems in these countries have been governed by shared needs and collective responsibilities rather than on the basis of individual concerns. In the past two decades, these countries have initiated policies geared towards providing health care efficiently through the introduction of market-oriented reforms. Relatively few studies have examined the impact of these reforms on GPS.

**Method:** Using both interview and survey instruments, I assessed the impact of these measures on the medical profession in Sweden, Norway and Denmark with a focus on GPS.

**Results:** While the position of GPS has been enhanced by these changes especially in Norway and Denmark, the same cannot be said for Sweden. The structure of health care financing and the increasing role of the welfare states have worked to undermine the autonomy of physicians.

**Conclusion:** The evidence suggests that the loss of professional autonomy is happening faster in some Nordic countries than others with broader implications for doctoring in the Nordic countries.

**How can we best respond in primary care to domestic violence**

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**Background and Aim:** Domestic violence is a common hidden problem in clinical practice and we need to develop better identification and responses to women and men attending general practice.

This symposium aims to highlight key recent evidence from the UK and Australia to stimulate discussion on how best to respond in clinical practice to women and men in relationships where domestic violence is occurring.

**Method:** We will present:

- (1) The Programme of Research on Violence in Diverse Domestic Environments (PROVIDE) which aimed to improve the response of the UK National Health Service for people experiencing abuse and perpetrators of abuse. In particular, a psychological intervention delivered by advocates will be highlighted that improved mental health outcomes for women seeking help from services;
- (2) A Researching Abuse and Violence program of Australian research aimed to improve the safety and well-being of women, men and children. In particular, a trial of an online healthy relationship tool and safety decision aid will be demonstrated and preliminary outcomes discussed.
- (3) A stepped care model with family justice centre (Belgium).
- (4) Finally, sustainability of interventions in general practice aimed at women in the UK, Europe and Australia will be discussed.

This will then be followed by an interactive discussion on what are the next steps in intervention development for patients attending general practice who are in relationships where domestic violence is happening. Participants will discuss to what extent detection, counselling, risk assessment and follow up can and should be responsibilities of the primary care team whilst taking into account differences in respective country facilities and cultural differences.

## **W50**

### **Get involved with WONCA – a symposium to shape policy and advocacy for WONCA World**

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**Background & Aims:** WONCA World has a presence at most regional conferences, and conducts formal business through the regional Councils and their representation. Our working parties, special interest groups, country members and young doctor movements together provide a vibrant and diverse community where activities take place between conferences and meetings – they can feed in policy ideas and new evidence to each other and to the executive representatives. This workshop wants to try a new experiment – to open up the chance to ask direct questions and put views from the floor from participants to Executive members, who will use these to reflect on current challenges for family medicine worldwide.

**Method:** This session will be hosted by the President- Elect Professor Amanda Howe, who will open with a brief set of background slides on WONCA, its activities, and current policies. These will reflect the current priorities of advocacy, improving quality, engaging members, equity, and sustainability. We will have a minimal structure for discussion but will try to give some time to all parts of the organisation as the audience requires. Attendees will be welcome to bring ideas and concerns of their own to get panel and audience feedback – these can be about family medicine as a career or discipline, not just about ‘WONCA’ itself.

**Results:** the President Elect and others on the panel will summarise the discussion after the conference and use it for reflection and potential policy formation for the biennium 2016-2018. If the model works we may also suggest it for other regional conferences.

**Conclusions:** This is a new type of ‘future consultation’ i.e. consulting direct with members on their ideas, interests and views. Let’s see what happens!

## W51

### What do patients expect from eHealth? – let the patients tell us!

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**Background & Aim:** The draft WONCA policy statement on eHealth (<http://bit.ly/1OXsEMI>) emphasizes the role of the active patient: “Health information systems (HIS) should aim at empowerment of patients and health professionals by supporting patients’ self-management, shared decision-making, easy communication with their primary care provider, and data entry into personal health records which they can share with their care providers.”

**Method:** Types of eHealth services for patients and statistics on people’s expectations are presented on the basis of population surveys in Finland and other countries. The majority of respondents would like to view their laboratory and imaging results and their own patient record on-line. They would like to book appointments and be reminded of them, and they want to find reliable information on health, illnesses and self-care. Patients also frequently use health-related Internet resources that are not maintained by health care providers. The adoption of personal health records among EU countries is highest in Denmark. Danish patients have been invited to serve as facilitators of small group discussions in the workshop. The patients will present scenarios how they would be using eHealth services and what they expect from their GPs. The participating GPs will respond and share their views, and consensus is searched on their role as providers and users of the services.

**Results:** The participants will gain understanding on what types of eHealth services patients would benefit from and contribute to their development, and how GPs could be their partners in making the most of those services and avoiding potential risks. The conclusions from the discussions will be collected and published on EquiP and WONCA eHealth Working Party websites.

**Conclusions:** eHealth services for citizens and patients are growing rapidly. GPs should partner with patients in developing those services.

## W52

### **The consultation kit: five cards and a package**

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**Background & Aim:** We want share our experiences of an easy way to identify, train and teach the essential dimensions of patient/personcentred care. The aim is to get the patients' whole agenda in consultations. Although this point is logical and self-evident doctors have great difficulties to act patient-centred.

**Method:** On the Kalymnos courses we have developed and tested a consultation kit. The consultation is divided into three parts: the Patient's, the Doctor's and the Shared part. The Five cards are used for the Patient part, and the Package for the Shared part.

While letting the patient tell his narrative, you will have to use two cards:

1. The receipt card. When you give this card the patient will feel listened to, accepted and stimulated to go on. The receipt card relieves tension both for the patient and for you.
2. Summary card. When you summarize what the patient has told you, he will listen to you. That gives you the opportunity to control the conversation and play one of the following cards.

The patient has got three 'thought' cards, all preferably to be initiated by a receipt card:

3. The idea card. What has the patient had on his mind?
4. The concern card. Normally the concerns urges the patient to make the appointment
5. The expectation card. This card will clarify what you have to do in the consultation.

The Package focus on assuring that the doctor has:

- I) Recognised the patient's agenda regarding ideas, concerns and expectations understood as the patient's questions
- II) Answered the patient's questions and presented the doctor's explanations and clinical reasoning
- III) Checked shared understanding
- IV) Made shared decision-making.

**Results & Conclusion:** Our experience is that patients who attend a doctor using the consultation kit will assess the consultation afterwards as good.

## OP25.1

### **Survey Email Scheduling and Monitoring in eRCTs (SESAMe): a digital tool to improve data collection in clinical trials**

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**Background & Aim:** Electronic questionnaires can ease the data collection in Randomised Clinical Trials (RCTs). However, we found no existing software that could automate the sending of emails to participants in electronic surveys. Our aim was to develop such software.

**Method:** In an on-going RCT on the treatment of low back pain (the Acuback study), 270 participants are planned to be recruited and included consecutively. Each participant will be asked to fill in electronic questionnaires at 19 defined time-points. This would imply sending 5130 emails if not automated. We searched and tested many applications, but none of them could perform the task.

**Results:** We have developed the web-based application: Survey Email Scheduling and Monitoring in eRCTs (SESAMe) to be able to schedule and send emails in RCTs for the Acuback study. SESAMe monitors responses in electronic surveys and sends reminders by emails or SMS to participants. The response rate for the 19 surveys increased from 76% before we introduced reminders to 93% after the new function ( $p < 0.001$ ). Further development will aim at secure encryption and data storage.

**Conclusions:** The SESAMe software facilitates patient data collection in Randomized Controlled Trials. The application can be used to increase the quality of clinical research in general practice.

## **OP25.2**

### **Can we do clinical research in primary care? The experience of an urban primary health care center**

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**Background:** Clinical research is not widely implemented in primary care. Well-organized primary care can offer excellent conditions to implement clinical research activities, particularly in chronic and prevalent diseases.

**Method:** In 2002 a clinical research unit accredited by the Ministry of Health was opened in a teaching primary health care center (PHC) in Barcelona that covers a population of about 20,000 people. The unit is integrated by two GPs, two research nurses and one statistician. Also, residency trainees rotate periodically in the unit. All GPs and nurses of the PHC are aware of the selection criteria of the trials, and actively collaborate in the recruitment. Patients are sent to the unit where more detailed information is offered before signing the informed consent. Patients included in trials are followed in the unit and all the information collected in the different visits is recorded. Therefore GPs and nurses can see the progress of the patient in the trial in case they are visited for any other reason. If pharmaceutical industry promotes the trial, all the economic installments are invested in research, teaching and continuing medical education.

**Results:** Since the creation of the unit, 65 clinical trials have been carried out, 45 of them being international, 3% are phase II, 70% phase III and 20% phase IV trials. 57% of the trials are related to cardiovascular diseases, 12% respiratory diseases, 8% GI diseases, 8% vaccination, and 15% others. Overall, 746 patients have been recruited and 537 patients have been randomized. At the present time, 5 clinical trials are ongoing. As a result of these trials 15 papers have been published in peer-reviewed journals.

**Conclusions:** Clinical research in primary care is feasible, does not interfere with clinical practice, and contributes with scientific knowledge that can be transferred into clinical practice.

### OP25.3

#### **PBRNs - present and future of general practice research**

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**Background and Aim:** The Practice-Based Research Networks (PBRNs) are developed as coalitions of primary care (PC) practices usually affiliated with academic or professional organizations or health research institutes, sharing the commitment to improve the quality of health care conducting research. The PBRNs proliferation internationally in the last 3 decades is connected with a gradual change of their forms and their endeavours. This narrative review aims to examine the evolution of PBRNs in the PC settings regarding forms and endeavours the last two decades and to illustrate the underlying elements of that evolution in various countries.

**Methods:** The literature for this review was obtained by search conducted for the period January 1995 to October 2015. Primary resources were the databases: MEDLINE (PubMed), Embase, Scopus and Wiley. Secondary resources were used too. The studies were scrutinized according to the pre-set inclusion and exclusion criteria.

**Results:** 33 studies were found to fulfil the set inclusion and exclusion criteria. The PBRNs might be categorized into local PBRNs, networks of PBRNs, national PBRNs, and e-PBRNs. They vary regarding their setting-up processes missions and aims, the size, the community involvement, the use of EPRs (or EHRs), and the research focuses. Even though most of them report similar challenges which revolve around the clinicians' involvement and commitment, data issues, ethical and patients safety issues, study designs, structure and governance, and funding, they produce an increasing volume of research studies and research data which affects positively the PC quality.

**Conclusions:** The PBRNs independently from size, structure and locality may conduct a broad spectrum of research studies. Their expansion and success may be attributed to their unique strength to conduct responding to real life problems transferring the knowledge from research to practice effectively and their flexibility to reform in order to respond to more complicated needs with increased efficiency.

## OP25.4

### **Knowledge of and attitudes towards family medicine of Spanish medical students who completed the degree in the academic year 2014-2015**

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**Background & Aim:** The experience of students during specific courses has a significant impact on their attitudes towards specialities. The objective of this study is to determine knowledge of and attitudes towards Family Medicine (FM) of medical students, with and without previous curriculum in primary care (PC) or FM, in their last year of the degree.

**Methods:** Cross-sectional study. Three hundred and five students at the end of the 6th year of the degree in the 2014-2015 academic year, from several Spanish Medical Schools, were asked to respond the brief CAMF, a questionnaire with 21 closed response items. Students from Albacete Medical School responded a “pencil and paper” format in classrooms and the others responded on line. The students’ answers were analysed and compared in relation to having taken a course in PC/FM (Mann-Whitney U test).

**Results:** The mean age was 24.19 years (SD:3.02); 68.8% were women. Most of them (26.2%) were from Albacete, the rest belonging to other 12 medical schools; 75.2% of them took a course in PC/FM. These students showed a significant lower level of disagreement with “FM is highly regarded within the Medical School” ( $p=0.021$ ) and a higher level of agreement with “low efficiency of a health system directed exclusively to diagnosis and treatment” ( $p=0.017$ ) versus those who had not studied it. There were no differences for the other items; 56.7% of all students “would like to become a family doctor in the future”, but only 14.7% considered “FM as their first career choice”.

**Conclusion:** Medical students who take a course in PC/FM showed in general similar opinions towards them that those who do not. Spanish medical students in the last year of the degree have a little interest by FM.

## OP25.5

### Measuring the family physician's role in the health care for individual patients – results from a pilot study

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**Background & Aim:** What is the impact of primary health care and family medicine? This has been mainly researched in ecological studies so far. However, to prove the effect of primary health care on individuals' health, the family physician's role in health care provision has to be measured. The actual health care provider networks of individual patients can be derived from health care utilization data. Our approach is to measure the family physician's role in such health care networks. Therefore, we apply social network analysis to these networks of individual patients. Our goal was to assess the feasibility and validity of measures from social network analysis for the role of family physicians.

**Method:** We conducted a pilot study based on the individual networks of nine heterogeneous patient scenarios. For each patient's network, we computed seven different centrality measures for the assigned role of the family physician. These measures stem from social network analysis and measure the centrality of specific actors. Eight academic family physicians rated the centrality of the family physician in each of the networks on a scale from 0 to 1. The validity was checked by Pearson and Kendall correlation between the calculated measures and the expert ratings.

**Results:** For one case, Betweenness-Centrality could not be computed. Inter-rater-correlation was in mean 0.79. In both correlation measures, Betweenness-Centrality had the highest correlation ( $r > 0.9$ ) and Kleinberg's Hub-Centrality the lowest correlation ( $r > 0.55$ ).

**Conclusions:** Centrality measures from social network analysis show a high consistency with expert ratings on the role of family physicians in individual patients' health care provider networks. From the preliminary results, we favor Closeness-Centrality as a measure because it shows a good correlation with expert votes, is easy interpretable and can be calculated for all possible individual networks. Alternatively, a combination of Closeness and Betweenness-Centrality could be used.

## OP25.6

### **Adaptation of General Medical Council's multi source feedback questionnaire for physician to a Swedish context - Translation, qualitative - and psychometric analysis**

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**Background & Aim:** The General Medical Council's Multi Source Feedback Questionnaire (GMCMSF) is an internationally respected, validated and widely used tool to promote positive behavioral change among physicians through feedback from patient and colleagues. Sweden and several other European countries lack reliable and validated tools for such feedback. Our aim is to describe the process of translation and adaptation of the GMCMSF to Swedish conditions.

**Method:** The translation of the three GMCMSF questionnaires from English to Swedish was done by professional translators through forward and backward translation. A prerequisite for the adaptation work was that the structure of the questionnaire remained unchanged. A mixed method was used. In a first revision, the translated questionnaires were discussed by a reference group of 11 GP Directors of Studies. Recordings from 112 respondents in 17 focus groups and 33 individual interviews regarding the questionnaires were transcribed and analysed using qualitative content analysis. This resulted in a final version of the tree revised questionnaires. In the quantitative part, a total of 360 surveys have been collected and analysis is ongoing, using psychometric methods such as Chronbach alpha, item analyses and factor analysis.

**Results:** A preliminary result in the qualitative content analysis were affirmative or questioning reflections on the interpretation of questions and possible response options. Concrete proposals for change in the questions and answers were another result. The revision resulted in a total of approximately fifty changes. Preliminary results of the psychometric analysis showed good reliability but a need to change the query structure.

**Conclusions:** After amending the questionnaires grouping The Swedish adapted version of the GMCMSF questionnaires seems as an acceptable tool.

## OP26.1

### **Effects of a randomised culturally adapted lifestyle intervention on cardio-metabolic outcomes in diabetes-prone Iraqi immigrants to Sweden**

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**Background and Aim:** Middle-Eastern immigrants constitute a growing proportion of the Swedish population and run a high risk of type 2 diabetes. This calls for an even more proactive approach for dealing with diabetes risk in this group than is currently the case in Swedish primary health care. The aim was to examine changes in lifestyle habits and cardio-metabolic outcomes comparing an intervention group, participating in a culturally adapted lifestyle intervention programme, and a control group under usual care.

**Methods:** Citizens of Malmö, Sweden born in Iraq and at high risk of type 2 diabetes (n=636) were invited. Participation rate was 16.4%. 96 participants were randomised to the intervention group (n=50) or to the control group (n=46). The intervention group was offered six group sessions addressing healthy diet and physical activity habits and three cooking classes. Changes in body weight, physical activity levels and cardio-metabolic outcomes were evaluated using a linear mixed-effects model. (Trial registration number: NCT01420198).

**Results:** The mean follow-up time was 3.9 and 3.5 months in the intervention and control groups respectively. There was a significant reduction in body weight and BMI (0.4%, p=0.004) and increase in the insulin sensitivity index (10.4%, p=0.005) per month in the intervention group compared to the control group. 14.3% in the intervention group lost  $\geq 5\%$  of body weight and 85.7% were moderately active on the last visit. The drop-out rate from baseline to the last visit was 30% (n=29) in both groups.

**Conclusions:** In this first randomised intervention study for diabetes-prone Iraqi immigrants in Sweden, the efficacy of a culturally adapted lifestyle intervention was successfully tested. Participants in the intervention arm showed improvement in insulin sensitivity accompanied by a reduction in body weight. This translates into a reduced risk of progression to type 2 diabetes and a lowering of the cardiovascular risk.

## OP26.2

### **Adolescents experience with pain in daily life: a qualitative study on ways to cope and the use of over-the-counter analgesics**

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**Background & Aim:** During the last decades there has been a marked increase in the use of over-the-counter analgesics (OTCA) among adolescents. Differences in pain management strategies and attitudes towards medication might relate to each adolescent's personality and coping style. The aim was to explore different patterns among the adolescents in pain descriptions, in the management of pain, and in relationships with others.

**Method:** Semi-structured interviews with 25 adolescents from six junior high schools stratified on gender, school and foreign or native mother tongue. The main topics were their interactions with family and friends, leisure activities, pain descriptions, pain management, and their own use and attitudes to OTCA. For these topics main domains were identified and the adolescents were then grouped according to similarities on all these domains.

**Results:** We describe four ways of experiencing and approaching pain; Pain is manageable, pain is communicable, pain is inevitable, and pain is all over. In the first group pain experiences were mainly in extremities, the second and third group mainly in the head and muscles, and the last group more generalized. The first two groups had a stepwise approach to pain management, the third group had a trial and error approach, and the last group had no strategy for pain management using OTCA. The first group was autonomous, the second group had rules guiding management from their parents, the third groups involved parents when in pain, and in the last group their mothers were partners in pain. The two first groups more or less oriented their life out of the family context, while the third and especially the fourth group were heavily involved with family affairs.

**Conclusions:** When advising adolescents on the use of OTCA, one should acknowledge different ways of experiencing and approaching pain.

### OP26.3

#### **Immigrants' self-reported affiliation with the regular general practitioner scheme: Survey of an emergency outpatient clinic population in Oslo, Norway**

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**Background & Aim:** Continuity of health care provided by a regular general practitioner (RGP) is associated with prevention of illness and death, and reduced emergency department attendances and emergency hospital admissions. Undocumented immigrants, rejected asylum seekers, and short-term labour immigrants fall outside the RGP system, but they have the right to receive emergency health care. The objective of this study was to explore the self-reported affiliation with the RGP scheme in a diverse population of immigrants attending an accident and emergency outpatient clinic.

**Methods:** A multilingual anonymous survey was administered to all walk-in patients at Oslo Accident and Emergency Outpatient Clinic (OAEOC) during two weeks in September 2009. We analysed demographic data, the patients' country of origin and self-reported affiliation with the RGP scheme. We used descriptive statistics to obtain frequencies and Pearson's chi-square to test categorical variables.

**Results:** The analysis included 3,864 walk-in patients of which first- and second-generation immigrants comprised 1,364 (35%). Among first-generation immigrants only 689 (71%) reported an affiliation with the RGP system in contrast to 2,326 (96%) of Norwegians ( $p < 0.001$ ), and second-generation immigrant registrations, 336 (96%). The least frequent RGP affiliation was among immigrants, including both first- and second generation, from Sweden (32%,  $p < 0.001$ ), Poland (65%,  $p < 0.001$ ), Irak (84%,  $p < 0.001$ ) and Somalia (91%,  $p < 0.001$ ).

**Conclusion:** Subgroups of immigrants attending an accident and emergency outpatient clinic report lower affiliation with the RGP scheme than Norwegians. Disparity in access to a RGP involves inequity in continuity of primary health care.

## OP26.4

### **The migrants and refugees in Italy. EUR HUMAN: a European project to combat inequalities**

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**Background & Aim:** Every day about 1,000 migrants/refugees (MR) cross the Italian border searching for a better future. Many, temporarily, others stay in Tuscany. Primary care professionals make the first medical examination in reception centers. The Local Health Authority of Empoli (LHAE) (240.000 inhabitants, 8% of foreigners) has joined a European project, named EUR HUMAN (<http://eur-human.uoc.gr/>). It is a consortium, coordinated by the University of Crete with Netherlands, UK, Croatia, Slovenia, Austria, Italy, Hungary and experts from Turkey. Its goal is to develop and improve the skills of these professionals to reduce inequalities on health. Our aim is to analyze the most frequent diseases of MR, at their first arrival, in order to arrange the training for primary care professionals.

**Method:** We analyzed the clinical records of MR arrived in LHAE in 2014 and in 2015. Then the hospital inpatients admission for MR and their access to the emergency room of the hospital.

**Results:** In 2014 among 179 people we had 7 pediculosis, in 2015 among 487 people we had 16 scabies, 4 pediculosis, 1 hepatitis B, 1 malaria, 1 tuberculosis. Hospital inpatients admission: 9 in 2014 and 11 in 2015. Emergency room accesses: 196 in 2014 and 264 in 2015, of which 42% of people from Nigeria.

**Conclusions:** This shows that they are often healthy people and the only infectious disease which can carry are rare (4,6%) and easily curable. We have certainly more psychological disorders and the problems of adaptation. EUR HUMAN Project will help to reduce inequalities. We will have to do training for primary care professionals particularly on infectious diseases and psychosocial disorders.

## OP26.5

### **Family doctors' knowledge of and attitudes towards migrant healthcare across Europe and beyond**

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**Background & Aim:** The current refugee crisis is the biggest humanitarian emergency Europe has faced since the Second World War. WONCA Europe released a statement urging governments to take action 'so that all people living permanently or temporarily in Europe will have access to equitable, affordable and high-quality health care services'. The aim of this survey was to explore family doctors' knowledge and attitudes towards migrant health needs and access to healthcare in their own countries.

**Method:** During WONCA Istanbul conference (2015), the RCGP Junior International committee conducted a survey of family doctors. The survey consisted of seventeen questions, including demographics and questions regarding knowledge of healthcare systems and entitlement of migrant groups to healthcare, as well as personal experiences.

**Results:** There were forty-five respondents (predominantly family doctor trainees) from nineteen countries around the world. Whilst almost all claimed to have a good understanding of the healthcare system in their country, 46% were not aware of the entitlement of different migrant groups. 61% had an awareness of the health needs of migrants. Importantly, 90% of family doctors surveyed felt that vulnerable migrants should be entitled to free primary care. However, there was mixed opinion regarding how services should be delivered – 27% felt charitable organisations should be responsible, 44% disagreed. A quarter of doctors had directly experienced patients being denied healthcare because of their immigration status.

**Conclusions:** The majority of family doctors surveyed during WONCA Istanbul felt that vulnerable migrants should be entitled to free primary care. Although over 90% of respondents stated they understood their healthcare system, almost half were not aware of the current entitlement of different migrant groups. This survey demonstrates that doctors' attitudes are in line with the official WONCA statement urging governments to take responsibility for healthcare needs of migrants.

## OP26.6

### **Improving primary health services delivery in multicultural context at Hakunila Health Center in Finland. (Health Services Improvement Intervention, Pilot Project - Part.I)**

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**Background:** Global migration brings constant challenges to primary health care (PHC). Cultural disparities/misunderstandings may hinder quality of delivered services and burden PHC if not acknowledged. Hakunila´s Health Center provides services to 18000 people. Proportion of immigrants increased fast and comprises more than 20% of population. Increased cultural divergences in Finnish context started to burden quality of delivered services, decreasing efficiency of treatment and prevention of diseases. Making patient segment of immigrants vulnerable, especially when resources are limited. Whole situation is novel for Finns as well, improvement of both way communications is needed.

Aim of this project is to improve access of immigrants to provided PHC and to create/improve two-way communication channels with health professionals. To combat YPLL, DALY, improve HALE and as result - to decrease future financial burden for PHC.

**Methods:** Action team established: consists of group of Hakunila´s staff with deeper understanding of immigrants' health care needs. Specialist in multicultural communication is involved upon the need.

Processes planned: increasing understanding of cultural aspects related to disease perception among immigrants; improving communications with patients; access to personal nurses for those with multiple morbidities; staff mentoring on specifics of multicultural aspects of health care process; adaptation of exiting efficiently working practices of Finnish health care to immigrants` needs; to improve immigrants involvement in to treatment process and benefiting from cross sectional collaboration for public health purposes.

#### **Expected Results:**

- Better understanding and meeting health care needs among immigrants in Hakunila Health Center.
- Improving of adaptation and integration of immigrants within Finish community as result improving community health.
- By improving communication, integration and adapting services for immigrants´ needs decreasing existing financial burden within community and PHC as well burnout of Health Center personnel.
- Integrating pilot project into constant working process.

## OP27.1

### **Type 2 diabetes mellitus management in primary care: can Romania learn from the British system?**

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**Background & Aim:** In Romania a total of 1.5 million diabetic patients are monitored by 386 specialist diabetologists. Romania, like most other 1st world countries, is experiencing a rising prevalence of diabetes mellitus and this has led to an increase in the diabetologists' workload and limited patients' access to diabetic care, resulting in a higher prevalence of disease complications. Our aim is to find and implement a solution for better patient management by comparing the Romanian model for diabetic care with that in other European countries.

**Method:** We studied the national guidelines for care of type 2 diabetes and compared how these were implemented in Romania and the UK. In particular we compared how regulations that the respective health ministries imposed on GPs affected diabetic management.

**Results:** Both Romania and the UK have diabetes guidelines, but Romanian legislation only permits GPs to prescribe the oral antidiabetic drugs recommended by the diabetologists. The rules also limit the number of investigations available to patients under the national health insurance scheme and in particular they do not allow GPs to order HbA1c blood tests, which are generally regarded as the gold standard for evaluating diabetic patients' care. By comparison, in the UK the GP has a key role in diagnosing and monitoring the type 2 diabetes patient and initiating and adjusting oral treatment to best limit disease complications.

**Conclusions:** We suggest that Romanian GPs should be provided with the same practical facilities that are enjoyed by their British colleagues and that Romania should move towards a system where most type 2 diabetics are routinely managed in primary care. We propose a pilot project to evaluate the impact of such changes.

## **OP27.2**

### **Cost effectiveness considerations concerning Incretins in diabetes type 2**

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Diabetes type 2 is an increasing health problem worldwide and the costs a growing challenge. Estimates from WHO anticipates a rise in the prevalence of diabetes type 2 to 7,7% corresponding to 439 million persons in the year 2030. The Swedish National Board of Health recommends HbA1c (glycated hemoglobin) to be lower than 52 mmol/mol.

Our project, initiated by The Drug Committee of Sörmland County, was to evaluate the effect of incretins on HbA1c and estimate the cost of reducing HbA1c to the recommended level at the Riverside Health Care Center, Nyköping, Sweden.

**Method:** All patients treated with incretins during the period 1.1.2014-31.3.2015 were identified and extracted from the medical records data base of Sörmland County. A total of 63 patients were included. The following parameters were evaluated at the onset of the study and at the end: Age, weight, HbA1C substance, dose and price.

**Results:** Incretins showed to be effective in lowering HbA1c, mean reduction -10,0 mmol/mol ( $p < 0,001$ ). The number of patients reaching the HbA1c goal increased from 7 of 63 (11%) at the onset of the study period to 24 of 63 (38%) at the end. No significant weight reduction was observed. Age, gender and choice of incretin had no significant effect on the outcome. The drug cost related to incretin treatment was approximately 710.000 SEK.

**Conclusions:** Incretins showed to be effective drugs in reducing HbA1c in diabetic type 2 patients. At present, incretins are not on the Recommended Drugs list in Sörmland County. The cost/Defined Daily Dose, however, is still significantly higher compared to traditional anti-diabetic drugs. The Drug Committee of Sörmland County will have to take this in consideration when deciding on future anti-diabetic drug treatment strategy.

### OP27.3

#### Process and outcome indicators for the integrated care of type 2 diabetes in the Province of Reggio Emilia, Italy

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**Background & Aim:** In Italy, the increasing prevalence of diabetes, which is predominantly Type 2 (DMT2), and the high frequency and severity of the related complications have led to a shift in the management of DMT2 from Diabetes Outpatient Clinics (DOC) to a more GP-based service. The “Integrated Care Setting” (ICS) program a coordinated care model involving primary care physicians and nurses, and specialized diabetes services was launched in the Province of Reggio Emilia, Italy in 2005. This program is intended to address patients (PTs) with DMT2 who have adequate glycemic control, are not insulin users and are free from severe complications. The aim of this study was to evaluate the quality of the ICS program in Reggio Emilia by developing process and outcome indicators.

**Method:** The method involved DOCs employing a electronic data recording system that calculates process, intermediate outcome and outcome indicators.

**Results:** In 2014, 26910 PTs were reported to suffer from diabetes in Reggio Emilia, of which 9962 (35.9%) were in the ICS. That same year, 1164 (4.3%) new patients entered the program. Process indicators: among those in the ICS, 82.7% were given laboratory tests, of which 95.8% had one glyated hemoglobin test/year and 84.0% a lipid profile. 75.3% of PTs were given an assessment of renal function, and 47.3% of PTs went to two-year follow-up Diabetes Clinics. Intermediate Outcome indicators: the HbA1c average was 6.9% (52 mmol/mol); 63.1% had HbA1c < 7%, 53 mmol/mol; 49.2% had LDL < 100 mg/dl; 46.3% had AP < 130/80 mm Hg.; 17.1% of patients were of normal weight and 46.8% were obese. Outcome indicators: Diabetic retinopathy 4.8%; Diabetic nephropathy 5.7%; Foot ulcers in place 0.15%; Myocardial infarction 1.3%; Stroke 1.9%.

**Conclusion:** ICS showed good performance and provided diabetic patients with better quality care.

## OP27.4

### **Implementation of a community-based exercise program for patients with type 2 diabetes on primary care: Diabetes em Movimento® Project**

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**Background & Aim:** Portugal is one of the European countries with a higher prevalence of diabetes, around 13 % of the population. Even though physical activity is part of the type 2 diabetes treatment algorithm, the vast majority of this population does not comply with international exercise recommendations. This work aims to present the implementation protocol of Diabetes em Movimento®, a community-based exercise program for patients with type 2 diabetes, on primary care, in the city of Vila Real, Portugal.

**Methods:** A partnership between the Community Health Centre Douro I – Marão e Douro Norte, Trás-os-Montes e Alto Douro Hospital Centre, University of Trás-os-Montes e Alto Douro, Research Centre in Sports Sciences Health Sciences and Human Development, and Vila Real City Council, was established to implement a free of charge exercise program. Exercise sessions are held in cyclic seasons between October and May, in a local Sports Hall, and are supervised by sport sciences and nursing students. Each patient can engage in two or three exercise sessions per week, with 75 minutes each, in groups of 30 participants. The exercise program was prepared according to the international guidelines for physical activity to control type 2 diabetes and for the elderly population. It involves a combination of aerobic, resistance, agility, balance and flexibility exercises, within each exercise session, using low-cost material and minimum resources. High applicability exercise strategies were designed for elderly, overweight/obese, and patients with low physical fitness, taking into account the prevention of exercise-related adverse events.

**Results:** Diabetes em Movimento® is a multi-institutional and multidisciplinary community-based intervention program that has currently 100 participants with type 2 diabetes.

**Conclusions:** Community-based programs are recommended by the World Health Organization for lifestyle intervention and are cost-effective strategies to fight against physical inactivity in high-risk populations on primary care.

## OP27.5

### Level of physical activity in patients with newly diagnosed type 2 diabetes mellitus compared to controls

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**Background & Aim:** Assess the level of physical activity of patients with newly diagnosed type 2 diabetes mellitus (DM2). Compare the sample of patients with newly diagnosed DM2 with controls without DM2 according to the level of physical and sedentary activity.

**Method:** Cross-sectional descriptive study. Three urban primary care centers. Patients with newly diagnosed type 2 diabetes between 30 and 74 years, in which the level of physical activity was assessed by the International Physical Activity Questionnaire (IPAQ), short version self-administered, matched by age, gender, previous medical treatment (yes/no) for hypertension and/or dyslipidemia and current smoking (yes/no). The energy consumption index (METs/minutes/week: MMW) was calculated by IPAQ to classify the subjects into three levels of physical activity (low/moderate/vigorous). The level of physical inactivity was calculated using the rate of inactivity hours/day (h/d).

**Results:** 186 subjects (94 DM2 and 92 controls). A lower rate of energy consumption was observed in the DM2 group than the control group (2284 MMW  $\pm$  2780 MMW vs 2869 MMW  $\pm$  2692 MMW;  $p=0,03$ ). The level of physical activity classified according three qualitative categories showed no statistically significant differences between the two groups (low activity 25.5% in the DM2 group vs 20.7% in the control group, moderate activity 54.3% vs 53.3% and vigorous 20.2% vs 26.1%). The calculation of the degree of physical inactivity did not show statistically significant differences between the two groups (6,59 h/d  $\pm$  3,36 h/d vs 6,04 h/d  $\pm$  3,07 h/d).

**Conclusions:** In our study the majority of patients with newly diagnosed type 2 diabetes presented a moderate level of physical activity, higher than in other previously published studies. There were no differences between groups in the level of activity calculated by qualitative IPAQ. However there were differences in terms of energy consumption index calculated by MMW. We consider that IPAQ would discriminate levels of physical activity better with values of METS/minutes/week less extensive than those currently used.

**Keywords:** (MeSH): International Physical Activity Questionnaire (IPAQ), type 2 diabetes mellitus, physical activity.

## OP27.6

### **Can I ask you about your weight? An international collaboration to support obesity-related behaviour change education**

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**Background & Aim:** Greece is burdened by both financial austerity and some of highest levels of obesity in Europe. Health promotion is an essential component of a financially sustainable healthcare system, and the role of primary care in prevention but also in the control of obesity is undeniable. However, GP tutors may not feel confident in supporting students to acquire behaviour-change skills. The aim of this study was to empower health promotion issues and enhance behaviour change skills.

**Methods:** A long-standing association between the medical schools at King's College London(KCL) and Aristotle University of Thessaloniki(AUTH) enabled a GP tutor development session to be delivered to AUTH by KCL through 'webinar' technology. KCL has a mature obesity-related educational programme and the aim was to support the introduction of a similar programme in Greece. Training materials were sent ahead for translation. A programme, similar to that at KCL was subsequently implemented in AUTH. AUTH's academic staff supported discussions on approaches to behaviour change, and on potential barriers to teaching and learning. Students were encouraged to put behaviour change skills into practice by a requirement to write on their experiences with obese patients in practice. A qualitative analysis of these case studies was undertaken to identify both successful learning and ongoing learning needs.

**Results:** 117 final year medical students discussed obesity with more than 1100 patients in 63 GP settings in Greece during their 4-week placement. Analysis of these case studies illuminates commonalities and disparities between experiences in the UK and Greece that will be discussed in the presentation, and demonstrates a progression from paternalist/consumerist consultation patterns towards a more mutual engagement in health.

**Conclusions:** The use of internet-based technologies to support international collaboration for teacher development has the potential to reduce the cost and increase the efficiency of curricular developments such as behavioural approaches to obesity.

## OP28.1

### **Development of a tool facilitating existential communication between general practitioner and cancer patients – a multi-phased development procedure.**

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**Background and Aim:** WONCA Europe's definition of the speciality of general practice stresses the importance of integrating the existential dimension into patient care. However, GPs report substantial barriers related to communication about existential and spiritual issues. The aim of this study was to develop a tool facilitating existential communication between GPs and cancer patients.

**Methods:** A multi-phased development procedure was carried out. In phases one and two, a draft of the tool was developed on the basis of a literature review and 13 focus group interviews with GPs (n=31) and cancer patients (n=24). In phase three, 13 experts were invited to a workshop in which the tool was discussed and evaluated. An edited draft of the tool was rated for its relevance by the panel in two subsequent email-rounds. Consensus for inclusion of tool items was reached if  $\geq 75\%$  of experts scored the item  $\geq 3$  on a 5-point Likert scale, ranging from 1 (= completely disagree) to 5 (= completely agree). Furthermore, experts added explanatory free text and/or suggestions for alternative items and wording.

**Results:** On the basis of the collected data, a low-structured "question bank" was drafted comprising 24 items grouped into seven themes. Seventeen items received more than 75 % expert consensus in the first email-round. A revised version was rated in a second email round (100 % response rate was achieved), resulting in a tool containing suggestions for 10 main questions and 13 sub-questions grouped into four categories: "Introduction", "Identification of patient's problems", "Identification of patient's resources" and "Conclusion and action plans".

**Conclusion:** This study resulted in a tool serving as inspiration and help to GPs when communicating with cancer patients about existential problems and concerns. This assessment tool may qualify general practitioners' assessment of existential distress and help deepen the GP-patient relation and trust.

## OP28.2

### **GP-perceived barriers for discussing existential issues with cancer patients – a focus group study.**

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**Background and Aim:** Research studies demonstrate a wish among cancer patients to communicate with their GP about existential concerns. However, substantial GP-perceived communication barriers are reported in international studies. The aim of this study was to explore Danish GP-perceived barriers related to existential communication with cancer patients. The study forms part of a larger research study in which a training course in existential communication targeting Danish GPs is developed, implemented and evaluated.

**Method:** GPs from two Danish regions participated in seven focus group interviews. The final sample consisted of 31 GPs between 36 and 68 years of age. Data were analysed in keeping with core principles of a thematic analysis approach.

**Results:** GPs described several communication barriers related either to the GP him/herself, the patient, the GP-patient interaction or society. A vague religious or spiritual belief was perceived as constituting a barrier leading to feelings of incompetency. Patient-induced barriers comprised lack of illness acceptance, low abstraction level, being of young age, and skewed expectations towards GP competency. Barriers related to the GP-patient interaction comprised discontinuity and non-familiarity as well as poor mutual communication. Lastly, context-induced barriers comprised lack of time resources, a biomedical focus and general shyness concerning existential, religious and spiritual themes.

**Conclusion:** Findings point to multi-level barriers that hinder the communication about existential issues between GPs and cancer patients. Communication training in existential communication should incorporate a focus on individual, inter-subjective and societal factors in order to increase the efficacy of the training course.

### OP28.3

#### **Evidence of using immunochemical faecal occult blood test on symptomatic patients to detect colorectal cancer in general practice**

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**Background:** Colorectal cancer (CRC) is among the most common types of cancer in Europe, and a leading cause of cancer-related death. Early detection is a cornerstone in improving CRC outcome. However, diagnostics are challenged by complex symptomatology. Using Immunochemical faecal occult blood test (iFOBT) in general practice may be a valuable tool in the diagnostic workup of symptomatic patients in general practice.

**Aim:** To assess the evidence of using iFOBT in the diagnostic workup of symptomatic patients in general practice and for which patients it can be used.

**Methods:** Articles concerning the iFOBT use in primary care are identified from PubMed, Scopus and Cochrane databases, using the following search-terms: General practice, primary care, occult blood, immunochemical faecal occult blood test, FIT and iFOBT.

**Results:** A range of symptoms are seen at presentation in general practice and only a few with high positive predictive value. Studies on iFOBT use in general practice are few and of small scale. The test performance varies according to selected cut-off and investigated population, and some studies suggest a risk of delay in CRC diagnosis when test is negative. However, most studies agree that iFOBT could be a valuable tool for the GPs in the diagnostic workup of patients presenting with symptoms of CRC in general practice.

**Conclusion:** iFOBT may be of value in general practice. Large scale controlled studies are needed to verify and validate this.

## OP28.4

### **The effect of Continuing Medical Education in earlier cancer diagnosis on knowledge, attitude and referral behaviour among general practitioners**

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**Background & Aim:** The impact of urgent cancer referral pathways depends on how the general practitioners (GPs) interpret symptoms and refer patients. Research has provided insight on symptoms' positive predictive values for specific cancer types. In Denmark, a national cancer plan launched a CME about cancer symptoms and use of urgent referral. This study aims to measure the effect of CME on the GPs' knowledge about cancer diagnosis, attitudes towards own role in cancer detection, cancer risk assessment and referral behaviour.

**Method:** We conducted a cluster-randomised stepped-wedge study in the Central Denmark Region. All GPs were assigned to one of eight geographical clusters and invited to the CME at three-week intervals between clusters. A questionnaire about knowledge and attitude was sent to each GP one month before and seven months after the CME. GPs were also asked to assess the cancer-risk in urgently referred patients. Register data on urgently referred patients was obtained for each GP during a six-month period before and after the CME. CME-participating GPs were compared with reference (non-participating) GPs by analysing before and after differences.

**Results:** One quarter of the GPs participated in the CME; 202 GPs (24.3%) completed both questionnaires. 532/524 GPs (64.0%/63.1%) assessed the risk of cancer before and after the CME, respectively. Compared to the reference group, CME-participating GPs statistically significantly changed their attitudes towards own role in cancer detection in 2 of 7 items, increased the knowledge of cancer likelihood in a 50-year-old referred patient and lowered the assessed risk of cancer in urgently referred patients. Analyses of referral behaviour are on-going.

**Conclusions:** A standardised CME can improve GP knowledge about cancer diagnosis, attitude towards own role in cancer detection and cancer-risk assessment. Whether these improvements may prompt a change in referral behaviour will be presented at the conference.

## OP28.5

### **Evaluation of breast cancer risk levels and its relation with breast self-examination on practices in women**

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**Background & Aim:** This study was performed to determine the breast cancer risk (BCR) levels and its relation with the frequency of breast self-examination practices in women who are 20 years old and over.

**Method:** This descriptive study was conducted on the 850 women, applying to family medicine outpatient clinic for any reason. The participants fulfilled the "Breast Cancer Risk Assessment Form" which is recommended to assess the risk of breast cancer by the Ministry of Health. The participants' risk levels have been classified as; low, medium, high, and the highest risk.

**Results:** The mean age of the participating women was  $38.1 \pm 13.5$  years, 69.2% (n=588) were married, 54.8% (n=475) were housewives, 34.2% (n=291) were working, 42.4% (n=360) were graduated from primary school and lower, 17.5% (n=149) were smoking. The average risk score for breast cancer of the patients was  $130.2 \pm 43.8$  (50-290) points. As a result of this study, 87.9% of women (n=747) had a low breast cancer risk, 12.1% (n=103) medium, nobody was identified as having high risk. The data demonstrated that 75.8% of women (n=644) weren't doing breast self-examination (BSE). The rate of previous breast USG or mammography screening was 32.1% (n=273). There was no statistical relation between the breast cancer risk levels and BSE ( $p=0.274$ ). Statistically, menarche, body mass index, menopause age were related with the BCR levels ( $p<0.001$ ).

**Conclusions:** The breast cancer risk was low among the women in the study group and breast self-examination rates were insufficient. Besides training women by emphasizing the importance of breast self-examination on early diagnosis, the breast cancer risk questionnaire - an easy to implement, simple and cost effective tool - is recommended to be administered in the primary health care centers.

## OP28.6

### **Cancer survivorship – barriers encountered by general practitioners in Ireland**

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**Background & Aim:** Cancer survivors may experience a wide range of complex health issues as a result of their cancer type and treatment. Some health issues can have a lifelong impact on patients, while others related to cancer treatment can last up to five years post-treatment. Cancer survivors have increased rates of health care utilisation compared to non-cancer patients. During active cancer treatment, GPs may provide care to their patients. Post cancer treatment, patients routinely participate in follow-up care with their GPs. The transition back into the primary care setting can be difficult for both GPs and patients to navigate. What are the current barriers encountered by general practitioners in Ireland in the area of cancer survivorship?

**Method:** The study consisted of a literature review and a quantitative survey of GPs for the National Cancer Control Programme in Ireland. Postal questionnaires were sent in April 2015 to 2,822 GPs in the Republic of Ireland. A total of 514 completed surveys were analysed, a response rate of 18.2%.

**Results:** A large portion of GPs (93.5%) had never attended a survivorship course, conference or workshop. Overall, 64.7% of respondents sometimes, rarely or never share follow-up care for their patients with oncology consultants. Only 17.2% and 19.7% of GPs respectively considered that they had enough information on the 'possible long-term issues from chemotherapy' and 'possible long-term issues from radiation therapy'. Over three-quarters of GPs considered that they did not have sufficient information on 'recommended evidence based surveillance for patients with a previous cancer'.

**Conclusions:** This survey provides some insight into the current situation in Ireland with regard to cancer survivorship from a GP perspective. GPs will increasingly follow-up with patients who are living through cancer treatment and after cancer survivorship. Further education for GPs is clearly indicated as necessary in this area.

## W53

### **Doctor Avatar life lessons for health professionals: a workshop exploring failure to appraise social media outcomes**

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**Introduction:** Among Healthcare Professionals Social Media use has become increasingly ubiquitous. While many documents are available on how to stay safe, when it comes to Social Media, it can be argued that we still lack both educational resources and a scientific evidence base; educationally, we have not yet developed the resources to teach effective use of Social Media, and research has not yet answered the question as to whether Social Media is a positive or negative phenomena. This has manifested within WONCA as a push for a Social Media Interest Group.

**Objectives:** We have three objectives; firstly, to encourage participants to reflect on how and why they use Social Media, secondly, to prompt consideration of whether or not their Social Media usage is effective, and thirdly, to draft recommendations for Healthcare Professionals that promote effective use of Social Media.

**Methods:** A brief introduction will present three concepts; firstly, the general dangers that exist with Social Media usage, secondly, the specific hazards for Healthcare Professionals, and thirdly, the concept of outcome measures in assessing effective Social Media use. After dividing into groups, Facilitators will assist participants in discussing Social Media under deliberately provocative headings, e.g. “Facebook Is Evil” or “Twitter Is A Waste of Time”.

**Results:** After group work, findings and conclusions will be presented. Following the workshop, a summary will be written up for publication.

**Conclusions:** Through consideration of effective use of Social Media, we intend that participants will leave the workshop better equipped to appraise their overall Social Media engagement. This will include a clearer insight into the boundary between personal and professional use. We also hope that the workshop outcomes will provide a platform for development of recommendations, educational tools, and research within WONCA which promote the effective use of Social Media among Healthcare Professionals.

## **W54**

### **The community approach from primary care consultation**

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The aging population, immigration, unemployment, social inequalities in health ... underline the importance of primary care in community work. In Yakarta's Declaration it can be read that health promotion has a marked impact on the determinants of health so as to create the greatest health gain from people to contribute significantly to the reduction of inequities in health, to further human rights and to build social capital. However, although many of the problems we see in the consultation have a social origin, medicine practice develops into a more biological approach, focusing on the biological treatment of the disease. There're some studies that explain this fact by the alleged lack of scientific rigor of Community activities, ignorance of how to do community work or lack of time. With this workshop, we aim to provide a Community approach to primary care, so participants can understand it as a useful tool at work. We also would like to show them that there are different forms of community work and we can adjust the time that each one have. To expose the workshop in a very practical and familiar way to all participants, we are going to start with several real cases of patients who come to our consultation. Subsequently, cases are resolved through different ways of community work: community orientation in the consultation, health education, collaboration with other community resources or participation in health councils. We will emphasize the key concepts and experiences discussed in subgroups to then share it all together and make a list of conclusions. We want the workshop to be very participatory. After a brief introduction, the organizers will present the clinical cases and then, we will try not to participate to facilitate the group to get their own conclusions. The authors have no conflicts of interest.

## OP29.1

### Treatment of patients with chronic pain in general practice - results from a prospective APO audit in the North Denmark Region

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**Background and Aim:** Patients with chronic pain often report poor quality of life. Treatment entails social, psychological as well as medical aspects. The medical treatment often includes opioids, which have considerable side effects. The consumption of opioids is greater in Northern Jutland than in the rest of Denmark. The aim of this study was 1) to identify/outline how pain management in general practice takes place in the contact between the GP and the practice staff, and 2) to develop strategies to reduce opioid consumption.

**Method:** During a 4-week period each prescription for analgesics was registered on a simple A4 chart developed by APO (Audit Project Odense). The GP primarily had to register type of drug, duration of pain, side effects, possible addiction/dependence, possible abuse and planned changes of medication. Practice staff primarily had to register type of drug and whether a recent medication review was available.

**Results:** During a four-week period in the spring of 2015 a total of 41 GPs/therapists and 38 practice staff registered 1162 and 2662 prescriptions for pain killing medicine, respectively. Among GPs/therapists 34% of the prescriptions were for mild analgesics, 33% for NSAIDs, 18% for mild opioids and 10% for strong opioids. Considerable side effects were found in 25% of the cases, among 6% addiction/dependence was found, and among 2% abuse. The GP planned changes in the medication in 35% of the cases - tapering in 15%. Some 70% were repeat prescriptions issued by the staff and approved by the GP without him/her having contact with the patient. This is in conflict with the guidelines from the Danish Health Authority, requiring the patient to make an appointment/visit the doctor in order to get a prescription for dependence-creating drugs.

**Conclusion:** At a follow-up meeting with the participants and pain management specialists it was concluded that the prescribing of opioids was too high. The Danish Health Authority guidelines were found to be unrealistic, but a yearly check-up at the GP with focus on the treatment plan and modifiable factors such as somatic and psychiatric illness, family, work situation etc. was recommended as a means of improving the patient's situation and reducing the prescribing of opioids.

## OP29.2

### **Acute low back pain in primary care. A frequently presenting problem, often poorly managed**

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**Aim:** To evaluate the quality of the initial consultation for patients presenting with acute low back pain to a primary care centre (PCC).

**Method:** Retrospective, descriptive, observational study with a target population of 582 patients from our PCC, between the ages of 18 and 65 who have presented with acute low back pain during 2014. Study population of 230 patients was used, separated from the target population by simple random sampling (confidence: 95%, precision 5%).

The variables used in the analysis were age, sex and six criteria recommended by the NICE clinical practice guidelines. Two of which were given recommendation C: information about characteristics of the pain (mechanical or inflammatory) (C1); radiation of pain (C2). Four with recommendation A: not requesting an x-ray at the first consultation (C3); initial treatment with paracetamol (C4); advice on posture (C5) and on physical activity/ avoiding rest (C6).

Reliability criteria (kappa index –KI-) and compliance criteria rate (CCR: %, IC95%) were studied. Prioritized corrective actions taken using the Pareto diagram. The Mann-Witney U test was used.

**Results:** Mean age = 41, 3±12,1. 56.1% of patients presenting were female. Showed adequate reliability criteria: inter-observer concordance between moderate and very good (KI) in the range 0.40-1.00.

CCR was: C1=36.1% (30.2-42.5), C2=89.6% (84.9-92.9), C3=80.0% (74.4-84.7), C4=15.2% (11.1-20.4), C5=5.6% (3.3-9.4) and C6=8.69% (5.7-13).

From the Pareto distribution, criteria C4, C5 and C6 together accounted for 74% of the problems in quality of the consultation. As these criteria were also those with the most impact on health outcomes this highlights them as a priority for future action.

**Conclusion:** The quality of the initial consultation in the PCC studied is poor. Measures that we will focus on, to improve the quality of the consultation, include improving the initial pharmacological treatment and putting greater emphasis on advice regarding posture and physical activity.

### **OP29.3**

#### **Opioid drugs in primary care. Observational survey**

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Data on national health expenditure showed that the use of opiate drugs in Italy is still below the European average (5.2 DDD / 1000 in 2014), with noticeable regional differences between north and south of Italy (north 68%, center 26%, south 6% in 2011).

In order to understand the reason of this difference, a questionnaire was given to general practitioners and emergency medical services. The questionnaire is composed of 15 questions, structured according to a previous focus group on the topic of opiates in primary care. Morphinephobia has been for years a barrier to the use of these drugs for effective treatment of pain.

The inquiry revealed a good knowledge of the drugs and their use but also doubts on the manageability of side effects, the treatment of breakthrough pain, but mostly the fear for addiction, tolerance and severe side effects and a poor perception of the benefits of these drugs in the treatment of moderate to severe pain such as handling, no ceiling effect, indicated in breakthrough pain, absent risk of gastrointestinal side effects, renal toxicity or side effects of cardiovascular nature.

## OP29.4

### **Knowledge, attitudes and behavior of primary care physicians regarding chronic pain and its treatment**

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**Background & Aim:** Chronic pain is a widely common problem with several significant negative effects on quality of life. While most of these patients are supposed to be treated in primary care and often need narcotic analgesics and/or therapeutic interventions for effective pain control, many primary care physicians are reluctant to prescribe these medications and patients often cannot receive the appropriate treatment. The aim of this study is to determine the knowledge, attitudes and behavior regarding management of chronic pain amongst primary care physicians in Izmir.

**Method:** A cross sectional study was conducted in nine central districts of Izmir with a sample of 247 primary care physicians. Data were collected via questionnaires consisted of 74 questions about demographic characteristics and physicians' knowledge, attitudes and behavior regarding management of chronic pain management. All data analyses including Chi-square and t-tests were performed using SPSS software (ver.15).

**Results:** 38.9% (n=96) of the participants were female. Mean age was  $45.16 \pm 5.77$  and mean number of years as a physician was  $21.46 \pm 5.63$  years. 68.0% of the physicians indicated that they felt sufficient in management of chronic pain. According to the participants, NSAIDs were the most successful method for providing effective pain control. Majority of physicians stated that they do not prefer narcotic analgesics for treatment of chronic pain. Physicians who indicated that they would 'never use any narcotic medications for treatment of chronic pain' were significantly more prone to believe that there is a high risk of addiction for these medications ( $p=0.011$ ). Paracetamol was believed to be less effective; but also to have less side effects, to be easy to access and to be the most preferred by the patients.

**Conclusions:** Interventions seem to be needed in order to improve both the physicians' knowledge and their attitudes regarding management of chronic pain.

## OP29.5

### **A multifaceted implementation strategy versus passive implementation of low back pain guidelines in general practice: a cluster randomised controlled trial**

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**Background & Aim:** Guidelines are often not being used in clinical practice. However, actively supporting healthcare professionals in evidenced-based treatment may help the implementation of guidelines. Danish guidelines for low back pain (LBP) recommend an increased focus on primary care treatment of LBP, which is expected to reduce referrals to secondary care. The aim was to evaluate if a multifaceted implementation strategy in primary care (MuIS) could reduce secondary care referrals.

**Method:** in a cluster randomised design 189 general practices from the North Denmark Region were invited to participate. Practices were randomised (1:1) to MuIS or a passive implementation strategy (PaIS). Included were patients with LBP aged 18 to 65 years, without signs of serious underlying pathology, and were not pregnant. We developed a MuIS including outreach visits, quality reports, and tools for subgrouping patients with LBP. Both implementation strategies included the usual dissemination of guidelines, guideline-concordant structuring of the medical record, and a new referral opportunity for patients with psycho-social problems. Outcome measures were referral to secondary care, cost of care, functional disability, pain level, self-rated health, sick leave, employment status, and satisfaction with treatment. Patients and the assessment of outcomes were blinded.

**Results:** Between January 2013 and July 2014 (28 MuIS, 26 PaIS) included 1,101 patients (539 MuIS, 562 PaIS). Follow-up data were available on 100%. Twenty-seven patients (5.0%) in the MuIS group were referred to secondary care vs 59 patients (10.5%) in the PaIS group. The adjusted odds ratio was 0.52 [95% CI 0.30 to 0.90; p=0.020]. The MuIS was found cost-saving from a health sector perspective (£406.51 vs £499.71 per patient) after 12 weeks.

**Conclusions:** Using a MuIS reduced the referral of patients to secondary care and was cost-saving. This study supports the application of a MuIS when implementing guidelines in general practice.

## OP29.6

### Vicinity to wireless radiation sources and the prevalence of various health problems – a pilot survey

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**Background and Aim:** A rise in exposure to electromagnetic fields (EMF) in the general population in the last two decades (e.g. from wi-fi and mobile phone networks) coincides with a rise in prevalence of a broad array of health symptoms; often of allergic/asthmatic/oversensitivity character. Evidence is building up indicating that EMF exposure indeed is the cause of this increase, but possible harmful effects of EMF may present differently in different people and adaptation may occur. The aim of the present pilot study is to survey the possible associations between various common EMF exposure sources and a broad array of symptoms and signs. Moreover, this study will test the usefulness of a questionnaire constructed for the purpose and provide data to design larger future studies.

**Methods:** An electronic questionnaire asking into EMF exposure sources and subjective symptoms was posted to special interest websites. For five EMF exposure sources (mobile phone, wi-fi, occupational exposure, energy-saving lightbulbs, mobile phone towers) we assessed the association with each of seventeen health problems (e.g. sleep, cognitive, eye problems) in logistic regression models, adjusted for sex, age, urbanicity and smoking status. **Results:** Sixty people responded. Significant associations were seen for a nearby mobile phone tower (more cognitive, head, eye, body and skin problems) and for constant wi-fi presence (less cognitive, eye, mouth, skin, lung and immune system problems).

**Conclusions:** Several significant associations were found in this broad pilot survey of possibly EMF-related health problems. Mobile phone towers seem to be the most problematic of the various EMF exposure sources; this association may well be confounded by attribution bias. The counterintuitive association of fewer symptoms with increased presence of wi-fi may be explained by selection and adaptation since the questionnaire was electronic, and people can shift to cable-based internet at home when they claim wi-fi is affecting them.

## **W55**

### **How GP's attitudes influence patient's self-efficacy**

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Self-Efficacy' is related to psychologist Albert Bandura. This concept/belief is linked to the power a person has to face challenges in life. This is most interesting to Doctors when it concerns the choices a person is most likely to make concerning different health behaviours like: smoking, exercising, dieting, using condoms, sticking to treatment plans etc. Self-Efficacy is closely linked to motivation and the deeply held conviction 'I have control in my life'. Self-Efficacy is built by social learning, modelling, repeated success and feed-back i.e. 'the consistent recognition of real accomplishment'(Erik Erikson).

in our Work shop we will

- Clarify which communication skills of GP's are favorable and supporting to SE (or not so favorable)
- Clarify which GP's behaviour is supporting or jeopardising SE in the domains of prescribing, test ordering, watchful waiting.
- Clarify the difference of CE and Autonomy or Competence.

The Results of our Workshop will be summarised in a final Conclusion draft.

## S27.1

### IGRIMUP Symposium

#### Screening for potentially inappropriate prescribing in the community pharmacy: development and first results of the GheOP<sup>3</sup>S-tool –

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**Background & Aim:** Aging is associated with multimorbidity and polypharmacy. Consequently, potentially inappropriate prescribing (PIP) becomes more frequent. Screening for PIP in primary care could lead to an improvement in health outcomes. We therefore developed an explicit screening tool to systematically screen for PIP in the community pharmacy, comprising rationales, alternative treatment plans and scientific background information. Subsequently, we determined PIP-prevalence by applying this tool in both community-dwelling and institutionalized older adults ( $\geq 70$  years) with polypharmacy (chronically  $\geq 5$  drugs) in Belgium.

**Method:** A RAND/UCLA process (11 participants) including a round zero meeting, literature review, first written evaluation and second face-to-face evaluation, resulted in a list of PIP-items with high clinical relevance for primary care. An additional round on feasibility in the contemporary community pharmacy resulted in the Ghent Older People's Prescriptions community Pharmacy Screening (GheOP<sup>3</sup>S-)tool, comprising 83 PIP-items. The observational studies included 1016 community-dwelling (CD) and 400 institutionalized (INS) older adults with polypharmacy, recruited from 204 community pharmacies and 10 nursing homes, respectively.

**Results:** in the community, a median of 3 PIP-items per person (IQR=2-5) was detected, compared to a median of 4 (IQR=2-6) for institutionalized patients. Most prevalent PIP-items were long-term use of benzodiazepines (CD: 50%; INS: 58%), no Ca/VitD supplementation with elevated osteoporosis risk (CD: 54%; INS: 54%) and long-term use of antidepressant agents (CD: 21%; INS: 42%). However, for only 77 of the 3721 PIP-items detected in the community-dwelling patients, the prescribing physician was contacted. for 30 items (39%) the proposed treatment plan was (partially) accepted.

**Conclusions:** The GheOP<sup>3</sup>S-tool was developed to screen for PIPs in the community pharmacy and to support pharmacists initiating multidisciplinary medication review. The first observational studies with the GheOP<sup>3</sup>S-tool detected a high PIP-prevalence in both community-dwelling and institutionalized older adults with polypharmacy. However, interdisciplinary communication remains a hurdle.

## S27.2

### **Success rate of training programs for nursing home physicians using Garfinkel method in reducing polypharmacy in nursing homes in Istanbul**

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**Background & Aim:** Inappropriate medication use and polypharmacy (IMUP) are increasing globally. Garfinkel suggested an approach based on ethical and clinical principles and proved that excessive de-prescribing (DD) was both safe and associated with beneficial clinical outcomes.

We evaluated the effect of an educational training program (ETP) provided for nursing home (NH) physicians on reducing IMUP, and on clinical and economical outcomes, in elderly NH residents.

**Methods:** We organized ETP for health professionals working at Darulaceze Nursing Home, Istanbul. Following the ETP one physician re-evaluated and modified medications of her patients. Activities of daily living (ADL), instrumental ADL (IADL), mini-nutritional status-short form (MNA-SF), mini mental state examination (MMSE) and the rate of falls were assessed at baseline and 13 months following the ETP. We also calculated changes in cost of medications.

**Results:** All medications of 111 residents age  $\geq 60$  (mean age  $76.1 \pm 10.4$ ) have been reviewed. Eventually, 212 medications have been de-prescribed (1.9 drugs/resident); the mean number of medications was reduced from  $8.6 \pm 3$  to  $6.8 \pm 2.8$  ( $p < 0.001$ ). There were no adverse events related to DD. Only 5 residents had to restart medications that had been de-prescribed (DD failure 2%). The annual rate of falls significantly decreased from 27 to 14 ( $p = 0.001$ ); nutritional status significantly improved, MNA-SF score increased from  $10.2 \pm 2.9$  to  $10.8 \pm 3$  ( $p = 0.003$ ); ADL improved from  $11.2 \pm 4.5$  to  $11.5 \pm 4.5$  ( $p = 0.045$ ). There was no change in IADL and MMSE scores. The monthly net reduction in drug cost was \$1130 (annual saving of \$122 per resident).

**Conclusions:** Educational programs provided for nursing home physicians based on the Garfinkel method, were proven both highly effective and safe. In nursing home residents, the DD intervention was associated with significant reduction in IMUP and several beneficial clinical outcomes: decreased risk of falls, better nutritional status, and improved function. Furthermore, the intervention was associated with substantial economic benefits.

### S27.3

#### IGRIMUP Symposium

#### Assessing a training program for family physicians based on Garfinkel GPGP method as a tool for reducing inappropriate medication use/polypharmacy

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**Background and Aim:** Inappropriate medication use and Polypharmacy (IMUP) represent major health/economic problems globally. Current tools for addressing polypharmacy successfully are limited, leaving Family Physicians (FP) frustrated. The Garfinkel Palliative-Geriatric Practice (GPGP) algorithm was proven safe and effective in reducing IMUP in elderly both in nursing departments (1) and in the community (2). This study evaluates the impact of an Educational Training Program (ETP) for FP, on the quality of care given to their elderly patients.

**Methods:** 32 FP of Leumit central district received 5-hour ETP on appropriate prescribing, IMUP in elders and the GPGP method (intervention group); 15 FP of another district were not exposed to this ETP, and served as the control group. 200 community-dwelling elderly patients consuming  $\geq 7$  medications were randomly chosen. The primary outcome was the number of medications before/after 6 months of the intervention. Secondary outcomes were the success rate in de-prescribing of specific drug groups and number of hospitalizations.

**Results:** The mean $\pm$ SD age of patients was 80.5 $\pm$ 6.6 in the intervention and 80.4 $\pm$ 6.5 years in the control group (P=0.913). The follow-up period was at least six months. Patients consumed 11 $\pm$ 2.7 and 10.5 $\pm$ 2.2 medications in the control and intervention groups, respectively (P=0.149). Six months after the ETP, the number of medications were 11.2 $\pm$ 2.9 vs. 10.0 $\pm$ 2.2 in the control and intervention groups, respectively (P = 0.001). As compared to controls, in the intervention group a statistically significant reduction was shown for statins (P=0.031), thiazides (P=0.011) and Calcium Channel Blockers (P=0.032). There was no difference in the number of hospitalizations between the groups.

**Conclusion:** Our results indicate that educational programs represent a promising tool in our war against polypharmacy in the elderly, may reduce FP's frustration facing the many barriers, and encourage them to de-prescribe.

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## S27.4

### IGRIMUP Symposium

#### Trends in prescribing of potentially inappropriate medications to nursing home patients: comparison of three cohorts

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**Background & Aim:** Provision of optimal pharmacotherapy treatment to nursing home patients is a difficult task due to age-related factors, multiple chronic conditions, and polypharmacy. In order to gain insight into trends of prescribing quality, we examined trends in using potentially inappropriate medications (PIMs) in Norwegian nursing homes from 1997 to 2011.

**Method:** This is a secondary data analysis of three cross-sectional nursing home studies conducted in 1997, 2005 and 2011. Patients aged  $\geq 70$  years were included. PIMs were analyzed according to the Norwegian General Practice – Nursing Home criteria (NORGE-P-NH). Associations between cohorts and prescribing of PIMs, that is, use of “any single substances to avoid, any combinations to avoid, and any deprescribing items were examined by logistic regression, adjusted for patients’ age, gender, and type of ward. We also examined correlations between the number of drugs used and PIMs using Pearson’s  $r$ .

**Results:** Altogether, 4384 patients (mean age 85.7 years, 73.5 % women) were included. The mean number of drugs used increased from 4.7 in 1997 to 6.9 in 2011 ( $p < 0.001$ ). Use of any single substances to avoid increased from 36.8% in 1997 to 39.5% in 2011 ( $p = 0.002$ ), use of any combinations to avoid from 16.3% to 27.0% ( $p < 0.001$ ), and use of any deprescribing items from 46.0% to 55.3% ( $p < 0.001$ ). Use of codeine-analgesics, nonsteroidal anti-inflammatory drugs, tricyclic antidepressants, long-acting benzodiazepines and 1st generation antihistamines decreased significantly, while use of short-acting benzodiazepines, z-hypnotics, statins and anti-dementia drugs increased significantly. A medium correlation was detected between number of drugs used and the three above-mentioned categories of PIMs,  $r = 0.34$ ,  $r = 0.43$ ,  $r = 0.37$ , respectively, (all  $p < 0.001$ ).

**Conclusions:** Even though several PIMs were less commonly prescribed in recent years, trends of increased overall drug use and use of PIMs may suggest worsening of prescribing quality for nursing home residents in Norway.

## S27.5

### IGRIMUP Symposium

#### **The Antidepressant Cessation Trial Study: maintenance vs gradual withdrawal of Fluoxetine in stable depression**

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**Background & Aim:** SSRIs are commonly prescribed in the population and there are specific harms in older adults. A driver of the increased prevalence is their continuation long term after initiation as maintenance therapy to prevent recurrence, with no evidence from RCTS underpinning this maintenance treatment.

**Methods:** A double blinded RCT, continued treatment vs placebo masked tapered withdrawal of fluoxetine in currently well patients, prescribed fluoxetine for long term maintenance to prevent recurrence of depression. Repeated follow up evaluations up to 18 months to monitor recurrence of depressive symptoms, side effects, withdrawal effects and general social and occupational functioning.

**Results:** 419 patients contacted to participate, 92 declined, 63 were found to be ineligible (mostly MADRS scores above 12, some had other antidepressant medication and/or were alcohol dependent). 263 primary care patients with depression who had been on fluoxetine maintenance treatment for at least twelve months, who were not currently depressed were enrolled. Patients were randomized to deprescribing using taper to blinded placebo versus continuation of blinded SSRI treatment. Analysis is complete and results will be presented: the primary outcome is recurrence of depression within the 18 months of follow-up. This is primarily assessed using the interviewer administered Montgomery-Asberg Rating Scale (MADRS). Secondary outcomes include time to measured recurrence, proportion on and off antidepressants after 18 months, medication adverse events, discontinuation symptoms, functional outcomes, and hospital admissions.

**Conclusions:** The implications for approaches to treatment length and trials of deprescribing will be outlined and discussion encouraged of the implications of the results.

## S27.6

### IGRIMUP Symposium

#### **Excessive polypharmacy in patients with advanced/end-stage cancer - significant negative implications on quality of care & economic burden**

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**Background and Aim:** New chemotherapies/biological agents resulted in increased survival of cancer patients. Although in end-stage cancer patients (ESCP) they have questionable benefit/risk ratio, they are usually associated with exaggerated patient's expectations for better Quality of life (QoL). Beneficial effects of other Clinical Practice Guidelines (CPGs) for common age-related diseases were proven in relatively healthy adults with long life expectancy. Applying these CPGs to the very old, those with co-morbidity, dementia, frailty and limited life-expectancy (VOCODFLEX) is unjustified, usually associated with decreased QoL.

**Methods:** We evaluated number and types of medications and chemotherapies given to end-stage cancer patients (ESCP) upon admission to Homecare Hospice, Israel Cancer Association (HCHICA).

**Results:** A random sample of 202 ESCP, average age  $79.5 \pm 7.9$ . Average stay in HCHICA until death  $39.2 \pm 5.4$  days. "Curative" or "cancer progression slowing" interventions were continued by oncologists in 25% and 23%, 2 months and 2 weeks before death, respectively.

Average number of common medications  $9.2 \pm 3.7$ , 63% consumed 6-12, 23% 12-22 drugs.

2 months before Death: 22% ESCP were still on Aspirin for "vascular problems prevention", 60% were prescribed at least one, 17% consumed 3 or more Blood Pressure lowering drugs, 30% were still on statins "to lower serum cholesterol".

**Conclusions:** The perception of many oncologists is not "purely palliative", they continue recommending so-called "curative" interventions until death. Moreover, oncologists do not change medications prescribed by other experts and vice versa (Bystander effect). VOCODFLEX, even ESCP continue to visit family physicians and experts who continue prescribing medications based on "their CPGs" although these are completely irrelevant in this sub-population. Lowering blood pressure, cholesterol and glucose blood levels are usually harmful in ESCP, who suffer from anorexia, weight loss, sarcopenia and/or cachexia.

Adhering to "defensive medicine guidelines", we may be harming our most vulnerable patients. Is this abuse? Do we respect patient/family preferences? Who is responsible for stepping on the brakes?

## W56

### **Identifying the patients who will benefit most from care intervention programs**

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**Background & Aim:** The aim of this workshop is to provide an insight into how information gained through applications of risk stratification in the primary health care sector can help identify patients for targeted intervention.

Clinicians believe they know their patient population and can best screen which patients can best who would benefit most from early care intervention programs. However, as has been demonstrated in both public and private healthcare systems around the globe, using readily available data risk stratification contributes to improved clinical management of populations. This includes the ability to:

- Predict high-risk individuals for inclusion in population health management, pharmacy management, and disease management programs
- Identify individuals at risk of hospitalization and re-hospitalization
- Identify patients whose pharmacy expenditures are greater than what is predicted based upon their morbidity profile alone
- Identify those at risk of uncoordinated care

**Method:** The workshop will open with an introductory presentation on the numerous applications of risk stratification within the integrated and primary care sectors. The workshop will then focus on individual sessions based on three applications:

- Case Management
- Improving Coordination
- Pharmaceutical Management

Each session will be comprised of presentations illustrating real world case-mix applications. The workshop would conclude with a plenary session which would summarize the take home messages of the three sessions and include a discussion on the future of predictive modeling and its application to clinical practice.

**Results & Conclusions:** The participants will experience first-hand how to apply risk stratification methods to clinical management decisions.

**W57**

**EURIPA Workshop**

**Use of new technology in follow-up of patients with chronic diseases in rural areas**

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**Background:** As technology moves forward so does its ability to assist in monitoring patients and their chronic conditions. In rural areas where access to medical professionals can be limited by different factors, this can be a very useful tool. Health literacy has also become tied to technology as it allows patient a better overview of their condition and access to more information.

**Aim:** To explore how we use the technology available today in management of chronic disease in rural areas. Thinking about ways in which we could improve our use of these tools. As well as thinking about ways in which health literacy can be improved using new technologies.

**Methods:** Presentation of the existing use of technology in healthcare (telemedicine, SoMe, e-health). Discussion in groups: telemedicine, social media, improving health literacy, empowering patients and doctors.

**Conclusion:** Participants will learn about available technologies which they can implement in their rural practice. The outcomes of the discussion could help develop new or better ways of using technology to help us and our patients manage chronic conditions.

**S28**

**Where do WHO and WONCA meet?**

*Job FM Metsemakers*

*WONCA Europe President*

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In this symposium Dr Hans Kluge, Director of the Division of Health Systems and Public Health, WHO Region Europe, will present about the plans and activities of the WHO Region Europe. The presentation will further focus on where the WHO calls for family doctors and how WONCA Europe can contribute to a strong primary care.

After his presentation Dr Anna Stavdal, WONCA Europe Vice-President will react to his presentation. We will engage the audience in a question and answer session.

## **S28.1**

### **Where do WHO and WONCA meet?**

*Hans Kluge*

*WHO, Regional Office for Europe, Director of the Division of Health Systems and Public Health, Copenhagen, Denmark*

WHO works closely with countries across a variety of areas through the wide-ranging Health 2020 framework and policy for Europe, endorsed by all 53 of WHO's European Regional Member States. The overarching aim of Health 2020 is to significantly improve the health and well-being of populations through the reduction of health inequalities, the strengthening of public health and the strengthening of health systems in Europe. One of the key directions is through the promotion of people-centred health services. This includes the provision of technical support to improve both population as well as individual based health services. In this direction, the WHO European Regional Office has been developing a European Framework for Action on Integrated Care. It represents an action-oriented guide which lays out the conditions needed to advance people-centred health-service delivery and the process of transforming the provision of services in countries. The framework has been several years in development and will undergo its final international multi-stakeholder consultation in May this year.

A crucial platform within this is our strengthened commitment to a primary health care approach. This involves raises the prestige of primary health care and its workforce, and providing support to providers to develop the skills needed for working together and closely with patients over the life-course. For it is clear that we need services that are proactive, continuous and comprehensive, rather than being reactive and episodic or disease-specific. Moreover services must be built on lasting patient-provider relationships. The appropriate use of incentives for quality and performance are equally important considerations, as is the development of fit-for-purpose service and information and communication technologies to optimize the exchange of data and clinical information. WHO/Europe's work in supporting countries in these directions will be bolstered by the establishment in 2015 of a new WHO centre for excellence in primary health care, located in Almaty, Kazakhstan.

As Director of the Division of Health Systems and Public Health at the WHO Regional Office for Europe, Dr Hans Kluge is responsible for these areas of work, and his presentation will explain them in more detail, making clear the links between WHO's work and that of WONCA.

## W58

### **Selective prevention of cardio-metabolic diseases across Europe - current work and future perspectives**

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**Background & Aim:** The obesity epidemic with the increasing prevalence of cardio-metabolic diseases such as cardiovascular disease, diabetes mellitus, and chronic renal failure is a major health problem in developed countries. Smoking, and physical inactivity are important lifestyle related causes of morbidity and mortality, and increasing rates of obesity and physical inactivity in combination with smoking will lead to an increase in the number of patients with lifestyle-related cardio-metabolic diseases. At the same time, health care systems are faced with challenges of reducing costs while maintaining the quality of primary care services by fostering prevention and health promotion activities. This urges to set priorities in allocation of available resources for primary care prevention.

In order to reduce the burden of chronic diseases and target the patients most in need, there is a requirement to design and establish selective prevention strategies to identify and manage persons at high risk of disease. To support this, researchers from five EU member states representing various health care systems joined forces in the trans-European research project SPIMEU ([www.spimeu.org](http://www.spimeu.org)) aiming at implementing innovative evidence based selective prevention actions in European primary care.

The objective of the present workshop is to discuss selective prevention strategies against cardio-metabolic diseases in primary care with emphasis on:

- What is selective prevention; the discussion will be based on ongoing selective prevention programs and the different definitions used across Europe
- Attitudes towards selective prevention actions among general practitioners and the general population
- Existing knowledge about facilitating and hampering factors in implementing selective prevention programs

**Method:** Three short presentations (10 min) with focus on the elements listed above, each followed by group discussions with emphasis on exchange of experience, views and ideas for future initiatives. At the end of the workshop results of the discussions will be summarized.

All authors declare no conflicts of interests.

**Disclaimer:** The content of this abstract represents the views of the author only and is his/her sole responsibility; it can not be considered to reflect the views of the European Commission and/or the Consumers, Health, Agriculture and Food Executive Agency or any other body of the European Union. The European Commission and the Agency do not accept any responsibility for use that may be made of the information it contains.

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## S29

### **EPCCS State of the Science Workshop**

#### **An update on heart failure**

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**Justification:** Heart failure is a chronic disease associated with significant mortality and poor quality of life for patients. Making an accurate and timely diagnosis is crucial and requires referral for objective testing but deciding who to refer can be challenging. The symptoms of heart failure are often non-specific and include gradual onset breathlessness, fatigue and ankle swelling. But these symptoms are not unique to heart failure and can be associated with other conditions or patients may have several co-existing diseases. Patients with symptoms which may be associated with heart failure often present to primary care. Identifying the patient likely to have heart failure - therefore requiring referral for diagnostic testing - can be difficult. These issues are important because a large evidence base exists for interventions that improve prognosis, symptoms, quality of life, and healthcare utilisation in patients with heart failure. However, there is also much evidence that these treatments are systematically under-utilised.

**Format:** Plenary sessions will summarise the current evidence base by leading primary care researchers in heart failure, will further identify uncertainties in the evidence base, and raise areas for debate. The plenary debate session will encourage practitioner contributions to focus the panel response to the audience participation. Participants can apply knowledge gained from this workshop to improve both the quality and the impact of their care in heart failure. The main workshop objective will be a better understanding of the evidence base on heart failure diagnosis and management and better shared understanding of the issues facing global GPs and their patients.

EPCCS State of the Science Symposium: Update on heart failure

**Burden of heart failure**

Professor Richard Hobbs, UK, 15 +10 mins

**Diagnosis of heart failure: issues for GPs**

Professor Arno Hoes, NL, 15 +10 mins

**Management of heart failure: evidence base & recent developments**

Professor Arno Hoes, NL, 15 +10 mins

Panel & Audience Debate session

**Disclaimer**

This workshop is organized and delivered by the European Primary Care Cardiovascular Society (EPCCS), which is a Special Interest Group (SIG) of WONCA Europe.

**S29.1**

**Burden of heart failure**

*Richard Hobbs*

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Abstract not available.

**S29.2****Diagnosis of heart failure: issues for GPs**

*Arno Hoes*

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Abstract not available.

### **S29.3**

#### **Management of heart failure: evidence base & recent developments**

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Abstract not available.

## W59

### **Effects of a public website with evidence based patient information: the example of Thuisarts.nl (GPathome)**

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**Background & Aim:** Many patients seek online for health information and use this information to decide whether or not to visit a doctor. in 2012 the Dutch College of GPs (NHG) launched a non-commercial evidence based, public website, named Thuisarts.nl (GPathome). The aim was to 1) guide patients in the labyrinth of health-related information on the internet, 2) support GPs in patient education and 3) produce patient versions of the evidence-based Dutch College practice guidelines.

in 2013 a GPathome app was launched. Since its launch, the website has grown to become one of the most visited health care website in the Netherlands.

**Methods:** The content of GPathome is largely based on the evidence-based practice guidelines of the Dutch College. Guideline updates are synchronized with patient situations on Thuisarts.nl. Each Thuisarts topic consists of several 'patient situations', for example: I need to start inhalation medication. Information on what to do and when to contact the GP is given. The situations can include illustrations, short video's, patient decision aids and e-health self-management tools like a self-test on alcohol use.

**Results:** 90% of all Dutch GPs use Thuisarts.nl in their daily practice. in 2015 Thuisarts had 14 million unique (IP-adress) visitors and 44 million page views on a population of 17 million people. Patients say they feel better informed and that GPathome contributed to their self-reliance. Research shows that the primary care consultation rate in the Netherlands decreased two years after the launch of this website. in the workshop we want to demonstrate the website, and share experiences on patient education (PE) in our countries. What is the relation between PE and guidelines? What are the different levels of PE? How do GPs use PE before, during and after consultation? Tips and tricks from the GPathome team.

**Conclusions:** reliable public health information guides patients on their search through the medical internet chaos. GPathome reinforces the position of patients and primary care in health care.

## W60

### **Integrated multimorbidity management for your practice: what are enablers and barriers to effective implementation?**

*Joachim Sturmberg, Bruno Kissling(2), Rick Botelho(3)*

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*(2) GP - Bern, Switzerland*

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**Background & Aims:** Integrated multimorbidity management is advocated for addressing one of the greatest challenges facing general practice. How can we, as general practitioners, provide patients with person-centered, family-centered and community-centered care without overwhelming ourselves? Are our current practice structures and support services designed to manage the rising tide of patients with multimorbidity, now and into the future?

**Method:** This workshop will explore the nature of living with multimorbidity and disability with and without family support, social services and community care. Having identified critical issues affecting the independence of living with multi morbidity, participants will explore how current practice structures, social services family supports and community care that act as enablers or barriers to maintaining the independence of these patients.

**Results:** Learning outcomes: Participants will:

- Understand how to use integrated multimorbidity management for addressing the medical, social family, community and environmental factors affecting the vulnerability of patients with multimorbidity
- Enhance their self-efficacy in delivering integrated multimorbidity care
- Be better able to advocate for the necessary supports to implement integrated multimorbidity care.

The final part of the workshop will address how participants can develop solutions to effectively implement integrated multimorbidity management into their practice and maintain work-life balance.

## **W61**

### **Physician heal thyself!**

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**Objectives:** The aim of the workshop is to raise the awareness of how we as doctors take care for ourselves and address our own health and fragilities in professional life.

**Background:** Do you have your own doctor? Are you a doctor for your family? How do you experience to be a patient? In recent years, more focus has been addressed to the dilemma of doctors' self-care and help seeking behaviour. Doctors lack training in how to access appropriate self-care and how to treat their peers. While a doctor-patient often expect to be treated like a 'normal' patient, yet the treating doctor often fails to satisfy this expectation.

**Content:** Taking departure from our research projects and own experiences as doctor-patients we will discuss and reflect on our dilemmas as helping professionals to raise the awareness about self-care as a part of professional development.

**Method:** Group work initiated by a short presentation.

Disclosure of Interest: None Declared

Keywords: Self Care, doctor-patient relationship, professional development

## OP30.1

### Call center – an integrated healthcare system in the middle of Denmark

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**Background & Aim:** Patients recover fastest and best at home or in municipality-care-facility under care of general-practitioners(GPs). They risk fewer complications and some admissions can be avoided. Acute-care-initiatives in municipalities seem to be scarcely used. There is a need for investigations into why municipality-initiatives are not used, how they could be used more in collaboration with other stakeholders in the healthcare-system and the influence on healthcare-utilization. Thus, our aim was to reduce societal-healthcare-utilization while enhancing GPs' knowledge and use of municipalities' initiatives.

**Methods:** To provide GPs up-to-date information of the initiatives in Viborg, Silkeborg, and Skive municipalities and discuss which care-pathway would benefit patients most a Callcenter was established in the Emergency-Department's pre-evaluation-unit. To speed up collaborative care "practice-packages" were developed by emergency-medicine specialists, enhanced by GP-advisor and adjusted by the municipalities' GPs and staff to fit with offers available in each municipality. GPs prescribe a "practice-package" when patients present with well-defined symptoms, care and treatment is provided by municipalities' healthcare-staff with emergency-medicine-consultants as backup. If the patients worsen when the GP-office is closed they can get admitted without use of out-of-hours services. The implementation starts March-2016. Healthcare-utilization-data will be collected on use of services at the GP and the hospital as well as data on use of home-help or/and community-nurse and patient-attribution. Data will be collected for similar patients in the year preceding Callcenter-start. The Assessment-of-Chronic-Illness-Care-tool will be translated to Danish enabling assessment of "practice-packages".

**Results:** Successes and barriers of "practice-packages" will be evaluated after a year. We hope to improve the collaborative-culture and expect "practice-packages" to increase knowledge and use of municipality-initiatives thereby improving population-health with more use of GP-services and fewer admissions and readmissions within three and 30 days.

**Conclusions:** The experiences can be implemented across Denmark and in similar healthcare-systems with care provided from different sectors.

## OP30.2

### **Community health center (Casa della Salute) reduces healthcare costs and makes happier both the general practitioners that patients**

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**Background & Aim:** Local Health Authority (LHA) of Empoli (Florence – Italy) has 240,000 inhabitants and 7 Community Health Centres (CHC). CHC is a structural integrated and public place for primary care. It is a building in which work together general practitioners (GP) with nurses, administrative personnel, social workers, social care workers and medical specialists. Our aim is to compare the cost and savings of citizens treated by GP working in CHC (45 GP) than other GP that does not work there (125 GP).

**Method:** were examined for the year 2015 the following variables: the inpatients hospital admission rate (IHAR), pharmaceutical expenditure and spending on specialized services (visits and diagnostic tests like Rx, TAC, RMN and blood tests). We calculate respect to the LHA average the percentage of spending more or less.

**Results:** spending on inpatients hospital admission rate, valued in DRG's was 6% lower than the average of the LHA for citizens assisted by GP of 7 CHC. While spending on pharmaceuticals and specialized area (outside the hospital for outpatients) will have only little increases of 3% (drugs) and 0.8% (Specialist visits and tests). The customer satisfaction survey shows that more and more people choose to be assisted by Gps of CHC.

**Conclusions:** CHC reduces the cost of hospitalizations calculated with DRG, compensates for the slight increase in costs for medications and visits to specialists. If all GP of LHA worked in the CHC they would save per year about 4 million Euros that is 18 Euros per inhabitant for our LHA.

### OP30.3

#### **Risk of bias in model-based economic evaluations in primary care: The ECOBIAS Checklist**

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**Background:** Economic evaluations are becoming increasingly in the field of primary care. Several biases can occur when performing economic evaluations (EEs). It is therefore important for policymakers to be able to assess potential biases and for researchers to minimize them.

**Objectives:** This article aims first to identify biases that are specifically related to model-based EEs and to illustrate their potential impact on economic outcomes using examples from the literature in the field of primary care. Second, the article aims to present a checklist for assessing the risk of biases in EEs (the ECOBIAS checklist), which can be used for trial- and model-based studies.

**Methods:** Several possible sources of bias in model-based EEs were identified using the Philips guideline for good practices in modelling economic studies as a structuring framework. All biases were illustrated using publishes primary care models as an example. By combining biases that can occur in trial-based with those that can occur in model-based studies, which were identified in a previous article by the author group, a checklist for assessing biases in EEs was developed (ECOBIAS).

**Results:** Eleven model-specific biases were identified and classified. The impact of these biases could be massive, changing the outcomes from being highly cost-effective to not being cost-effective at all. The ECOBIAS checklist includes a general part (part A) and a model-specific part (part B).

**Conclusions:** in this study, we identified several biases that are related to model-based EEs and developed the ECOBIAS checklist for identifying biases in economic evaluations. Dealing also with health economics methods in primary care research is necessary and will be more important in the future. We hope that our results and the ECOBIAS checklist will help to reduce biases in future EEs and will increase faith in model-based studies in particular.

#### **OP30.4**

### **Perceptions of healthcare center professionals about the health of La-Alhóndiga District (Spain) vs perceptions of other professionals and neighbourhood associations**

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In each community, problems and needs are given by the influence of the social determinants of health. As a result, many of the demands we see in our consultations have a social origin. Understanding this, Rafael Cofiño said that the zip code is more important to health than the genetic code. According to Alma-Ata Declaration, Primary Care must bring health care as close as possible to where people live and work. However, in the twentieth century, Primary Health Care has focused on exclusive attention to disease in consultations and has forgotten the community approach. Our healthcare center is El Greco, situated in La Alhóndiga, a suburb of the city of Getafe (Spain). La Alhóndiga has very aged population whose history has been strongly influenced by drugs, large industries and social movements. We think it is important for professionals of Primary Care to be concerned with all these determinants of health, so we decided to study the perceptions of El Greco's healthcare professionals about the health of La Alhóndiga compared with the perceptions of other professionals and neighborhood associations of the district. Other objectives are to identify strengths and weaknesses in neighborhood health, understand the motivations to community work, identify personal experiences and collect suggestions to improve coordination between Primary Care and the community. These aims have not ever been approached in previous studies. To develop this project, we are carrying out a cross-sectional study with qualitative research methodology by using semistructured interviews. We are interviewing several professionals from El Greco (doctors, nurses, social workers...) and key community people (teachers, council workers, local leaders...). These interviews are being recorded and then will be transcribed, analyzed and interpreted. The project is under analysis. We will have final results in April. We have no conflict of interests.

## OP30.5

### **Diagnostic fast track for patients referred from general practice for non-specific, serious symptoms: overview and GP questionnaire**

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**Background and Aim:** The Diagnostic Center (DC), a unit at Kristianstad Hospital, was Sweden's first fast track for adult primary care patients with non-specific symptoms suggesting possible cancer. Patients are referred to the DC after an initial investigation in primary care. At the DC, a thorough investigation taking  $\leq 22$  days is performed until cancer is diagnosed or eliminated. The DC project started in October 2012 and an evaluation of the first 3 years is ongoing.

**Method:** Criteria for referral were one or more of the following: fatigue, weight loss  $>5$  kg, pain, fever, unexplained pathological lab values or suspected metastasis. Data on blood tests, examinations, lead times and diagnoses were collected. A questionnaire was sent to all GPs in the catchment area (25 primary health care units, 211 GPs).

**Results:** 290 patients were included (51% women; mean age 66.6 years (SD 13.6)). Of these, 64 (22%) were diagnosed with cancer, 185 (64%) had other diseases and 41 (14%) were considered healthy. 78% were diagnosed within 22 days. Common diagnoses other than cancer were gastro-intestinal, rheumatic, infectious and psychiatric diseases. Pathological lab values were the commonest reason for referral, followed by weight loss (all patients) or pain (cancer). 90 GPs (43%) completed the questionnaire. 88% of the responders considered the referral criteria to be adequate and 94% thought it was advantageous for patients to be referred to the DC. 92% described personal advantages, e.g. when their own investigation stalled. Targeted information to GPs and a review of the blood test routines were mentioned as possible improvements.

**Conclusions:**  $\leq 22$  days for investigations is ambitious and 100% attainment of this goal cannot be expected. We consider 78% to be acceptable. Most responding GPs appreciate the DC, which will now be made permanent and implemented in all three administrative regions of Skåne.

## OP30.6

### **Impact of beverages consumption on nocturnal leg cramps in patients over 60 years old**

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**Background and Aim:** Nocturnal Leg Cramps (NLC) are affecting almost one in two people over 60. Those spontaneous painful muscular contractions, unrelated to physical exertion, resulting quality of life alteration. Little information exists on the impact of beverage consumption on NLC. Our aim was then to evaluate if coffee or alcoholic beverage had an impact on NLC.

**Method:** Case-control study including patients over 60 consulting their Family Doctor. Matching was made on age, sex, medical history and medications known to trigger cramps. The consumption of each food was evaluated through the auto-questionnaire Institut Gustave Roussy, used in the E3N study, the French component of the European Prospective Investigation into Cancer and Nutrition study. The subjects had one month to fill in the questionnaire, in which pictures were used to evaluate the volume of liquid consumed. Statistical analysis was made under Bayesian paradigm.

**Results:** We were able to collect a full workable questionnaire for 73 matched pairs. We observed a statistical link between the global consumption of alcoholic beverage and NLC (OR=6,5; IC 95%=[1,68; 35,80]; probability =99,78%). No links were identified between the total volume of liquid consumed, and cramps, nor between the consumption of coffee or specific alcoholic beverage like white wine.

**Conclusion:** Our study shows a potential link between alcoholic beverage consumption and NLC. Our results need to be confirmed by a cohort study in order to prove causality. Cramp reduction is a new argument to use to prevent alcohol misuse among Family Doctors' patients.

## W62

### **Informed choice - in whose favour?**

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**Background & Aim:** Informed patients who make decisions about their own treatment sound ethically appealing to most of us. Combining patient preferences with the best available evidence relevant to a given clinical situation is a fundamental principle of evidence-based medicine and the importance of “informed choice” is increasingly emphasized in guidelines. But, there is a risk that this approach might actually not lead to a greater respect for the individual patient’s autonomy. In an era with a strong cultural belief that more is better when it comes to medicine, patient preferences are heavily influenced by cultural perceptions with great impact from strong market forces. Additionally, available evidence and doctor’s preferences often governs which decisions are to be made in the first place, especially so in preventive medicine. A focus on providing information to enable informed choices might consolidate a biomedical framework for the interpretation of the patient’s symptoms and divert attention from other potential underlying causes. Our good intentions may inadvertently enhance medicalization.

**Method:** Some limits and potential downsides of relying on informed choice to solve ethical dilemmas within general practice and in a screening context will be introduced through three short presentations, providing common clinical practice scenarios that GPs can easily relate to. Workshop participants will discuss in smaller groups different aspects of the role of informed choice in their practice, pros and cons, cultural and national differences. Each group will then present their findings for the other participants for further discussion.

**Results:** The aim of the workshop is for participants to discuss and identify the limits and pitfalls of relying on “informed choice” to solve ethical dilemmas associated with “too much medicine” in general practice.

## W63

### **“Being young, staying young” - how to keep scientifically and intellectually active after the training program and during GP/FM’s career**

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**Background & Aim:** During the GP/FM training program, the young doctor tries to develop aptitudes, capabilities and talents. This involves hard work and motivation to learn, process knowledge and integrate it into a working performance. What happens after? How to keep the flame alive, concerning scientific and intellectual activity and connection with colleagues? And when you are aware you are falling asleep - how to break this chain? Invest in areas like clinical activity, academic research, teaching?...

#### **Method:**

Content:

- Main temptations
- Main areas to develop
- How to do it?

Methods/session plan:

- Brief introduction to the intent of this workshop and some considerations about the main problems to solve.
- Assessment of each participant’s learning style - Small groups’ discussion in how to answer the questions made.
- Conclusions presentation, based on workshop structured discussion for posterior document preparation to be shared with WONCA Europe.

#### **Results Goals:**

- To understand the variables influencing the decrease of intellectual and scientific activity and the motivation level after the training program and during the career
- To share ideas and experiences in how to solve these problems and which areas can be developed, concerning each one’s characteristics
- To suggest ways to promote family doctors/general practitioner’s satisfaction, productivity and overall contribution to the society.

**Conclusions:** Many variables can influence the decrease of motivation and activity of general practitioners/family doctors leading to lack of satisfaction and even burnout in some cases. Sometimes it is hard to keep the enthusiasm, but in a profession so demanding like General Practice/Family Medicine we have many possibilities and solutions. It is important to emphasise and promote these working together.

## W64

### **How electronic services and automatic data collection help the practitioner save time for the patient**

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**Background & Aim:** While many services have moved to the Net, the standard of activity of the healthcare is still based on booking an appointment and face-to-face consultation. Electronic services may solve the availability problem in basic healthcare. Automatic data collection and synthesis with evidence may help applying data in right place and save time consumed in routine work. The client and the producer of a health service can meet electronically i.e. through communicating at a time that is best suited for each. Face-to-face consultations may be reserved for more complex situations requiring human interaction. The expansion of virtual services presents a challenge to our training.

**Method:** The workshop consists of three separate parts:

- a. How do we collect patient data? Traditional methods include history-taking, clinical status, test results like laboratory and radiological examinations and, measurements by the patient like blood pressure follow-up. Data may also be collected automatically by the patient from data produced by health devices and apps like fitness trackers. Social data including family, work, hobbies, and environmental factors should be included. Genetic factors will be increasingly important. Do we manage with all this data?
- b. How do we interpret and apply patient data? Individual risk analyses will be produced automatically e.g. by calculators, decision support and drug interactions. Patient examples are used to concretize these possibilities.
- c. Does virtual encounter in simple health problems save time for appointments that benefit from personal contact? Should we move towards coaching change of lifestyle in patients with chronic diseases? Do we master traditional doctor-patient-relationship and motivational interviewing? How does all this challenge our training?

Results of the discussions will be collected and reported.

**Conclusions:** How should we use modern technology wisely avoiding technocracy?

## W65

### **Movie clips to bridge doctors' heads and hearts through empathy: a faculty development workshop**

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**Justification and Interest of the Workshop:** Empathy has to do with deeply understanding of the other, and is a path to bridge scientific knowledge with compassion for better caring. Can empathy be taught? Is it possible to establish a learning process for empathy? A broad range of biographical experiences influence the development of empathy. Emotions are one of the key factors and they play a specific role in learning attitudes and behavior. Movies provide a narrative model framed in emotions and images that are also grounded in the everyday universe. They offer a quick and direct teaching scenario in which specific scenes point out important issues and emotions are presented in accessible ways.

Fostering reflection is the main goal in the cinematic teaching set. The purpose is not to show students how to incorporate a particular attitude, but rather to promote their reflection. Reflection is the necessary bridge to move from emotions to behavior. As the audiovisual resources are permeating our current culture, opportunities for teaching with cinema are well suited to the learners' environment.

The authors have developed the Movie Clip Methodology for almost twenty years and want to share their experience in this workshop. The learning goals are to understand the strategy for using movie clips for teaching empathy and reflective practice to their students. We expect an interactive discussion with the audience for exchanging experiences.

#### **Contents and Methods:**

1. Introducing presenters and asking the audience about their own experience in using cinematic teaching (20')
2. Showing movie clips (20')
3. Getting feedback from the audience. (20')
4. Showing additional clips and generate themes identified by participants(20')
5. Summarizing (10')

**Keywords:** Cinema, Empathy, Emotions, Medical Humanities, Faculty Development, Medical Education

## OP31.1

### **Personalized SMS-text messages and check-list for initiation of medication for better blood pressure control: a cluster randomized controlled protocol for check and support study**

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**Background & Aim:** This protocol describes a cluster randomized controlled study with Finnish primary care patients to test whether personalized SMS-text message support combined with a check-list for initiation of medication is more effective than usual care in controlling systolic blood pressure at first year of medication.

**Method:** The eight study centers are grouped to comparable pairs and randomized to function as intervention and control sites (2-cluster design). At least seventy participants for both groups are recruited by physicians when prescribing the first antihypertensive medication. The primary outcome of the study is the proportion of participants achieving the systolic blood pressure target at 12-months. Secondary outcomes include the proportion of patients that are evaluated to be well adherent to medication and the change in office blood pressure and home blood pressure.

**Results and Conclusion (Discussion):** Poor medication adherence is widely accepted to be the most important factor in failing to control hypertension and even 50% of hypertensive patients quit the antihypertensive medication during the first year of medication. Numerous interventions to enhance medication adherence have been developed but still majority of patients with antihypertensive medication do not achieve the blood pressure target in Finland and worldwide. To our knowledge, this is the first randomized controlled study focusing on the first year of antihypertensive medication and also the first trial combining personalized SMS-text message support with a check-list for initiation of medication. The study protocol includes obligatory factors for a modern study assessing adherence and disease management. These factors include sufficient study power, follow-up period of at least 6 months and clinically relevant outcome (blood pressure) together with subjective and objective measurement of adherence. Furthermore, the intervention is based on theoretical framework of information-motivation-behavioral skills model. If effective, the intervention is also simple and feasible enough to be carried out in wide-scale in non-research settings.

## OP31.2

### **Identifying important components for life style changes using an online complex e-health intervention in general practice – a qualitative interview study**

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**Background and Aims:** In a prospective pilot study we recently found a 7.0 kg mean weight loss within a 20 month- intervention-period using an online complex e-health approach in general practice. In order to tailor a randomized controlled trial testing an online platform with App technology, accelerometers etc. we conducted a qualitative interview study to identify important determinants for weight loss management using digital solutions by exploring: 1. What is the experience using supportive e-health solutions offered in relation to healthier life style? 2. What are the incitements and barriers for personal life style changes in general and when using e-health solutions?

**Method:** Qualitative, semi structured, individual interviews with patients in a general practice setting in the Region of Southern Denmark. Participants comprised ten overweight patients who had previously used an online complex Internet e-health intervention.

**Results:** All but one of the participants used smartphones, and the last one used a tablet. Five years after the initial intervention they all still used Internet and/or apps for benefitting their health. Everyone looked up recipes, some had joined weight loss Facebook groups and some used an app service monitoring their physical activity. The main themes for incitements were life events in closer family, the establishment of support and a trustworthy relationship to health professionals, and supportive peers, and ways to monitor the behavioral change with nudging from a reference person. The primary barriers were self-inflicted obstacles, experience of lack of self-efficacy and ways to keep up appearances when discussing personal health issues with peers. Knowledge was not an issue.

**Conclusion:** The major findings were that many of the important determinants for behavioral change addressed by the participants are supported online. E-health solutions can support healthy living, but further investigations are needed to establish e-health solutions that can be used in general practice.

### OP31.3

#### **Tele-dermatology in primary health care rural of Posadas (Córdoba)**

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**Background & Aim:** The importance of early diagnosis of pigmented lesions, especially melanoma, make the doubts raised by the diagnosis the family doctor must be resolved by a dermatologist. Tele dermatology can be defined as the clinical evaluation of skin lesions by dermatologists using telemedicine techniques, allowing diagnosis and possibly treatment of patients remotely.

We present this work aims to:

1. Provide service tele dermatology a rural health center in Andalusia
2. Facilitate remote consultation for patients with difficult access to the dermatologist.
3. Improve the screening of tumor lesions.

**Method:** It developed a descriptive cross-section study of prevalence. We used an Android Smartphone device with 13 megapixel camera to take pictures, sending the images through Gmail service to a dermatologist with an informed consent signed by patient. It is also attach a Word document with clinical data of patient and lesion characteristics.

**Results:** Of the 110 patients studied, 35 (31.82%) were men and 82 (68.18%) are women. The overall average age is 50.76 years. A total of 88 cases (80%) did not require referral to dermatology. 15 patients required dermatological tracking for the following diagnoses: 4 Basal Cell Carcinoma, 4 Actinic keratosis, 1 Bowen's disease, 2 atypical nevus, 1 pigmentosum nevus, 1 acral nevus, 1 infiltrated inflammatory plaque and 1 common wart. A total of 2 patients needed referral to surgery. Five cases had to repeat photography.

**Conclusions:** Due to the high demand for assistance with consequent waiting lists, technological innovations have enabled the creation of units tele dermatology between primary care physicians and dermatologists, to improve the quality of screening of pigmented lesions.

## OP31.4

### Eight years of tele-dermatology diagnosis of skin lesions in a rural zone

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**Background/Aim:** To evaluate the teledermatology diagnosis and management of dermatologic tumors for patients in rural areas who may not have ready access to a dermatologist by specially geographic isolate isolated

**Methods:** Teledermatology “la Sierra” System was established to screening of pigmented dermatology lesions suspected of malignity in our area, especially isolated from the Reina Sofia University Hospital with 3511 inhabitants. In that time, Since October 2007 to October 2015, 489 rural zone patients have been studied. In the first the visit the suspect diagnose has been done, some photos are taken to all of the lesions suspected of malignity and immediately they are sending by encrypted e-mail to the Reina Sofía University Hospital dermatologist. The suspect results were received by e-mail in no more three days. Only suspect malignant lesions were referrals to dermatologist

**Results:** Women 48%, men 52% . Total malignant lesions 38,79 % (basocellular carcinoma 51, 12%, epidermoid carcinoma 23, 34%, Bowen disease 12, 12%, Atypical nevus 8,9%, melanoma 3,33%, others carcinomas 1,19% ) Non malignant lesions 61, 87% (seborreic keratosis 21,83%, actinic keratosis 26, 76%, non atypical nevus 14, 47%, lentigo 5, 66%, others lesions 31, 28%). Hospital referrals avoided 61,87%

#### **Conclusions:**

1. Teledermatology system is usefully to screening of malignant skin lesions in our rural area.
2. Teledermatology system improves the screening of malignant skin lesions by its accessibility.

The most frecuente skin cancer in our area is basocelular carcinoma.

## OP31.5

### A new computerized diagnostic algorithm for performing thyroid ultrasound screening by the family doctors

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**Background:** in recent decades in Romania we observe a clear increase over ten times of thyroid diseases. The prevalence of malignant thyroid nodules are growing, mostly 80% being papillary microcarcinomas. Ultrasonography used as a screening method can diagnose both: diffuse thyroid disorders such as malformations, endemic goiter or thyroiditis and especially focal thyroid lesions such as benign and malignant tumors. Our objective was early diagnosis and treatment of the diffuse thyroid diseases or focal lesions by thyroid screening in the high risk population.

**Methods:** We report a prospective thyroid ultrasound screening performed on 2149 apparently healthy adults with oncological risk factors+, aged over 20 years, followed for two years, sex ratio 2:1. To patients aged 20-40 years, we have conducted an ultrasound screening every two years and over 40 years annually. We used the TIRADS classification by Russ and Strain Elastography scores by Rago, for standardization and accuracy of reporting for easy communication among practitioners and to show when fine-needle aspiration biopsy(FNAB) should be performed. We designed an Ultrasound Scoring System(USS) for predicting thyroid malignancy. We analyzed the angioarchitecture and stiffness of all thyroid lesions. All patients who entered study, were stored and counted into our algorithm as an electronic database.

**Results:** Prevalence of thyroid pathology was:29,6%(95%CI:26,99to32,31) with screening sensitivity:95,38% and specificity: 94,78% and a high accuracy of 94,95%, PPV:88,47%, NPV:97,99%, statistically significant  $p<0,01$ . ROC statistical analysis confirmed a higher level of diagnostic accuracy of Strain elastography compared with Doppler Triplex Ultrasound, with  $p<0.001$ , AUC=0,995,95%CI:0,97 to1.for the comparative statistical analysis-ANOVA the significant statistical methods used, was Ultrasound Scoring System, $p<0,001$ .

**Conclusions:** Performing Doppler US Screening together with Elastography, had the best accuracy in analysis of the vascular network in tumors and absence of elasticity in the nodule, for differentiating “benign versus malignant” of the thyroid tumors and for diagnosis of diffuse thyroid diseases.

## OP31.6

### **Mobile APP against gender-based violence: an innovative instrument for health professionals**

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**Background:** Gender-Based Violence (GBV) is considered to be a major public health issue. In 2014 alone, there was a total of 54 victims, this being just the tip of the iceberg. 55% of GPs declare that they have received proper training for dealing with GBV cases, while, 49,3%, admit that there is a relevant shortage of resources for assisting victims.

**Objective:** the development of the Mobile APP “Action against Gender-Based Violence” aims to:

- a. create a mobile application able to integrate the protocols that have to be followed to assist the victim of violence;
- b. improve resource accessibility for health professionals;
- c. test the App usability among GPs.

**Method:** the achievement of the aforementioned goals requires a systematic review of the updated protocols used in Andalusia for GBV cases. The development of the beta version will be entrusted to an IT Team that, apart from making it available in the “App Store“ and ”Android market”, will include useful instruments for health professionals. Furthermore, once the beta version has been completed, a seminary will be organized in order to test its usability among GPs and integrate possible improvements.

**Results:** the creation of this application brought an improvement to the battle against GBV. In this sense, health professionals have been able to offer better service to victims of violence. Thanks to this App, access to resources needed resulted faster and easier.

**Conclusion:** this new instrument is highly recommended in primary care centres since, on the one hand, it guarantees the coordination of social and sanitary activities, while on the other, it allows better management of the health service and, above all, it improves the GPs’ approach to combating gender-based violence.

## **OP32.1**

### **Shared decision making tools in clinical practice guidelines (CPGs); creating a strong connection**

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**Background & Aim:** Shared decision making (SDM) and the development of tools to facilitate it are widespread and actively encouraged. However, goals, target groups, methodologies to develop these tools and how (strong) they are connected to CPGs differ.

Our experience gives rise to several discussion themes regarding the development process of the SDM-tools and the connection between these tools and (development of) guidelines.

#### **Methods:**

1. Short introductory presentation to share experiences of the Dutch College of GPs, regarding methodologies to develop SDM-tools alongside CPG-development and the way to integrate these tools within the CPG. The pros and cons of this strategy will be discussed and several examples of these tools are presented.
2. Themes to further optimize the development of SDM-tools will be presented and discussed shortly in pairs, followed by a plenary discussion.

#### **Results:** Better insight in:

- why & how to integrate SDM-tools within GP-guidelines (versus tools as separate entities)
- whether these tools help/facilitate SDM in the patient-doctor-encounter
- the necessity to work together with patients, addressing their Frequently Asked Questions in (and consequently avoid medical language in ‘option grids’)
- the necessity to work together with medical specialists (since choice-options often go beyond medical borders)
- ways to present uncertainties in option tables/SDM-tools and ‘translate’ these uncertainties into comprehensible patient information.

**Conclusions:** Outcomes of these discussions will increase insight in how to optimize (the development process of) tools in CPGs to facilitate SDM.

## OP32.2

### Understanding the body-mind in primary care

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**Background & Aim:** Patients' experience of symptoms does not follow the body-mind divide that characterizes the classification of disease in the health care system. Therefore, understanding patients in their entirety rather than in parts demands a different theoretical approach. Attempts have been made to formulate such approaches but many of these, such as the biopsychosocial model, are still basically dualistic or reductionist. In primary care, patients often present with diffuse, poorly differentiated symptoms, making primary care the ideal environment for understanding patients' undifferentiated symptoms and disease patterns which could readily fit both bodily and mental categories.

The aim of this study is to discuss theoretical models that have attempted to bridge the gap between body and mind.

**Method:** Theoretical concept analysis and concept synthesis.

**Results:** The psychosomatic approach could be called holistic in the sense of taking an anti-dualistic stance; whereas the biopsychosocial model is still essentially reductionist. Balint formulated an integrative view and advocated the influence of psychological factors on bodily manifestations of disease and laid the foundation for the concept of patient-centeredness. Primary care theorists such as McWhinney and Rudebeck have also formulated integrative views but these have not yet gained a foothold in primary care medicine. McWhinney introduced a new metaphor, 'the body-mind', and Rudebeck advocated cultivating 'bodily empathy'. These views have much in common with both phenomenological thinking, which sees no separation between body and mind, and mentalization, which is a newer psychological concept for understanding others that encompasses much of the substance of previous primary care thinking.

**Conclusions:** Combined with phenomenological thinking and models that integrate social and cultural contexts, mentalization theory could form the basis of an approach to a more comprehensive understanding of patients.

### OP32.3

#### **Shame, honor and responsibility in clinical dialogue about lifestyle issues. A qualitative study about patients' presentations of self**

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**Aim:** To explore how patients enact presentations of self in consultations dealing with lifestyle in general practice.

**Method:** We conducted a qualitative observational study with thematic, cross-case analysis of video-recorded consultations inspired by discourse analysis.

**Results:** Patients presented themselves with an orientation toward responsibility in dialogue about lifestyle. They described how they were taking care of themselves and doing their best. In this respect, they demonstrated their achievements as matters of honor. If one lifestyle issue was considered problematic, in some cases patients shifted attention to another, of which they were more proud. In areas where they were not doing well, some patients revealed shame for not acting responsibly. In such cases, patients spoke of themselves in terms of self-deprecation or admitted not living up to expected standards.

**Conclusions:** Negotiations of shame and honor, revolving around personal responsibility, are embedded in clinical discourse about lifestyle. Patients take a proactive role in presenting and defending the self against shame. GPs should pay more attention to the tacit role of shame in consultations. Failure to do so could lead to distance and hostility while a strategy to acknowledge the impact of shame could help develop and strengthen the doctor-patient relationship.

## OP32.4

### How can GPs counsel vegetarian and vegan patients?

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**Background & Aim:** for ethical and health reasons more and more people decide to adopt a vegetarian or vegan diet. In everyday practice, GPs should have good knowledge about how to counsel vegetarian and vegan patients.

**Methods:** Literature review.

**Results:** Many studies show the benefits of these diets as long as they are well-planned. Vegetarians have a higher intake of vegetable, fruit, legumes and fibres. They consume less calories, saturated fat and cholesterol compared to non-vegetarians. As a result, vegetarians seem to have a lower risk for chronic diseases such as ischemic heart disease, type 2 diabetes and overall cancer. On the other hand the risk of Vitamin B12 deficiency increases over time of adopting a vegetarian/vegan diet. Moreover the adequate intakes of iron, iodine, calcium and zinc have to be assured especially during pregnancy, lactation and childhood.

**Conclusions:** In future consultations GPs have to be aware of the possible deficiencies and should be able to use the adequate diagnostic tests in order to advise their patients on a healthy vegetarian diet for all stages of life including pregnancy and childhood.

## OP32.5

### Patient-centred general practice – what does it mean?

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**Background & Aim:** From the mid-1960s general practitioners began to locate the basis of the intellectual autonomy of general practice as a distinct discipline. This process focused on the general practitioner's own person as the main instrument of treatment in general practice and the foremost inspiration came from Michael Balint. Patient-centredness was described as 'understanding the patient as a unique human being' or a special consultation style where the doctor used the patient's knowledge and point of view to guide the interaction. Nevertheless, it was not a well-defined term, which was described in a systematic review by Mead & Bower (2000) which identified five different dimensions of the concept. The aim of this study is to perform an update of Mead and Bower's review.

**Method:** A systematic literature review based on search in PubMed. 1563 articles were identified, 140 were included in the review.

**Results:** Patient-centredness has since 2000 developed into an even more comprehensive model identifying different interconnecting components and with different definitions. Mead and Bower's analysis focused much on dimensions of interaction with the patient in the consultation. Since then sharing power has got increased importance, and now health promotion, continuity and coordination are also seen as ingredients in patient-centredness. In addition, many different concepts are covering the same meaning but from different positions.

**Conclusion:** The lack of a universally agreed definition of the concept still hampers its usefulness and theoretical and empirical development. Nevertheless, patient-centredness has increasingly been regarded as a proxy for the quality of the interpersonal aspects of care in general practice, encompassing the generalist perspective and a generalist identity of the general practitioner. In addition, it has been shown that although general practitioners claim to follow the ideology of patient-centred care, they have increasingly adopted a biomedical approach.

## OP32.6

### **Gynecological cancer survivors' views on follow-up after cancer treatment**

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**Background and Aim:** An increasing number of cancer survivors place a significant workload on hospital outpatient clinics, and this has led to a debate on alternative follow-up regimens. It has been suggested that follow-up of selected cancer survivors could be provided by general practitioners (GPs). We aimed to explore gynecological cancer survivors' attitudes toward follow-up after cancer treatment. We focused in particular on their views on being followed up by a GP.

**Methods:** We performed a questionnaire study among gynecological cancer survivors in three Norwegian hospital outpatient clinics. Both survivors recently treated for cancer (N=94) and survivors treated at least one year ago (N=133) were included. The study was completed at the end of 2015, and analyzes will be conducted.

**Results:** We aim to present results from the study regarding the gynecological cancer survivors' views on what they considered to be the most important factors in a follow-up visit, their views on reasons for follow-up and their views on being followed up by a GP.

**Conclusion:** We intend to present results from the study that hopefully will increase our understanding of the cancer survivors' attitudes to follow-up care. Cancer survivors' views are important in the development of follow-up guidelines.

## W66

### **Benefits and harms of general health checks - lifelong learning in general practice: how to read and use scientific literature**

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**Background & Aim:** GPs often experience difficulties in keeping up-to-date, and at times feel they reach the outer boundaries of their knowledge. The practice of medicine in which the busy physician finds, assesses, and implements methods of diagnosis and treatment on the basis of the best available current research, clinical expertise, and combines this with the needs and preferences of the patient, is termed evidence-based medicine. By learning and practising the principles of evidence-based medicine, GPs will have a tool to assist life-long learning in practice. Based on the questions that arise in daily practice, we can learn by doing.

Question for workshop exercise: What are the benefits and harms of general health checks? This workshop will invite participants to read the Cochrane review about general health checks and analyse the paper using the method of critical appraisal.

**Aim:** After this workshop the participants will know the basics of how to read a systematic literature review and interpret a meta-analysis and be able to assess if:

- the research is valid?
- what are the results?
- should we apply the research in our practice?

**Method:** The didactic method used in the workshop is mostly small group activities with eight participants and two tutors in each group. The participants will receive two scientific papers: the BMJ-version of the Cochrane review about general health checks and a paper about how to read a systematic review. Furthermore, a checklist about which issues in the empirical paper to scrutinise will be posted to the participants.

#### **Program:**

Lecture: Welcome and how to work in small groups - 15 minutes (plenary room)

Small groups: critical assessment of the empirical paper - 50 minutes (smaller rooms)

Plenary: Summary and final discussion - 10 minutes (plenary room)

Other considerations: " Minimum of 8 participants, up to 56 participants (Maximum number will depend on the number of rooms available for the workshop).

## W67

### **The development of quality circles for quality improvement in Europe: a mixed methods study involving 26 European countries - Workshop**

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**Background:** Quality circles (QCs) are commonly used as a tool in primary health care in Europe to consider and improve standard practice over time. They represent a complex social intervention that occurs within the fast-changing system of primary health care. QCs were first established in Canada and the Netherlands from where they spread to other European countries. This workshop aims to increase knowledge about this tool in primary health care in Europe and adds data to the study that updates Beyer et al 2003 on this topic.

**Method:** Experts from 26 European countries, belonging to the European Society of Quality and Safety in Family Medicine (EQuiP), completed an online survey documenting the number and objectives of QCs in their country, sources of support, incentives and didactic methods used. The experts then took part in semi-structured online interviews. During the workshop at the WONCA conference, ad hoc interviews among participants will provide the study with complementary qualitative data from a variety of family physicians who are not experts in this field. These interviews will be conducted by participants on each other simultaneously under facilitation of group leaders. Descriptive statistical techniques are used to analyse quantitative data and thematic analyses are used to analyse the qualitative data.

**Results:** Findings from the quantitative and qualitative analyses are synthesized to illustrate how common QCs are, their aims, organization, type of facilitation, incentives, level of autonomy, support, use of data and didactic methods. Local projects and their further development clarify quantitative data.

**Conclusion:** Triangulation using quantitative data from the online survey and qualitative data from semi-structured online interviews as well as qualitative data from non-expert family physicians participating in interviews will validate the results of the study.

## W68

### **The (online) patient will see you now, Doc: primary health care for all through telehealth - a workshop**

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**Background & Aim:** in the last few years there have been rapid developments in secure mobile technologies and significant reductions in technology and data transfer cost. Coupled with a seemingly unstoppable and unmanageable increase in hospital visit and admission cost, Health Care Systems simply must adapt to remain viable. Telehealth offers one solution, making it possible to deliver Primary Health Care to everyone remote from traditional Primary Health Care facilities. The workshop aims to develop forward-looking competencies and comprehensive strategies to attain a desirable future implementation of telehealth delivered Primary Health Care.

**Methods:** Interactive Backcasting will be used to assess a future scenario in which Primary Health Care is made accessible to all through the provision of Health Care at a distance (telehealth). Small working groups will analyse this future scenario, each group taking one of the following perspectives: the email consultation, the “chat” consultation using instant messaging, the real-time video consultation, the virtual house call through Virtual Reality, the DIY consultation through smartphones and health wearables, and the Artificial Intelligence consultation. The following factors will be considered: feasibility with state-of-the-art technology, obstacles and opportunities along the way, the biggest challenges of implementation and how they can be overcome, and an implementation plan including milestones. At the end there will be a plenary session during which group outcomes will be presented along with discussions of the interventions, opportunities and obstacles on the way to the future scenario.

**Results:** This workshop will allow participants to gain insight into concrete present-day interventions that have the potential to shape future consultations delivered through telehealth.

**Conclusions:** Family physicians must take charge of the concept development of telehealth care, thereby making Primary Health Care accessible to all.

## **W69**

### **An evidence based approach – a help or hindrance for family doctors working abroad?**

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**Background and Aim:** There has been growing interest in international primary care from new family medicine doctors. Learning from other systems is highly valued in many curriculums across Europe as evidenced by the successful Hippocrates Exchanges, which allows young family doctors to experience an alternative primary care health system in Europe. There are also opportunities beyond Europe. This is filtering down to our trainees who are also keen to experience primary care in alternative settings. Evidence based medicine is ingrained into practicing family doctors particularly within the UK. But when working abroad it may not always be clear how to apply this way of thinking. This workshop will allow interested individuals to hear from the experiences of others before potentially embarking upon their own experiences. It will provide an avenue for discussion on what can be learnt from different systems in this context.

**Method:** The workshop will begin with a brief introduction into the history of evidence based medicine, how it is ingrained into practice in a new generation of family doctors and led to the development of the growing field of academic primary care. Reflections will then be shared by members of the panel on their experiences of time spent abroad. This will include a brief overview of successful projects and the development of resources (e.g. an audit toolkit for use in developing countries). Group discussions will then be conducted into the benefits and limitations of this approach including any challenges other members of the audience have faced and how they have overcome them.

**Conclusion:** By the end of the workshop we hope to put together a useful resource/toolkit that can be used in future experiences and consultations.

### OP33.1

#### **Reasons for persons not to participate in a cardiometabolic risk assessment and treatment program in general practice**

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**Background & Aim:** The INTEGRATE study investigates the effectiveness of a cardiometabolic risk assessment and treatment program in Dutch general practice. Through a letter from their general practitioner (GP), patients were invited to fill in an online risk assessment, followed by an advise to visit their GP in case of a high risk score. A high response rate is an important factor that influences the effectiveness. Therefore, we studied factors that are related to non-response for this prevention program.

**Method:** In 15 out of 38 participating general practices, 3013 non-responding patients received a questionnaire on paper with questions related to non-response and background characteristics, including questions about smoking habits and BMI. Patients were eligible if they did not respond to the initial invitation of their GP nor to the reminder letter.

**Results:** 331 questionnaires (11% response) were used for preliminary analyses. The most frequent reasons for non-response were “I forgot it” (30%) and “Lack of time” (14%). Compared with persons without risk factors (such as smoking or overweight), persons with risk factors expected to have a high risk score more often (OR=6.4) and they felt less often healthy (OR=0.2). Although they did not participate, 75% of the respondents wanted to change their lifestyle if that was necessary for their health. About three quarter of the people would consider to participate when another strategy was used to invite people for the program with direct invitation of the GP during a consultation (57%) as the most promising strategy.

**Conclusions:** Participation in the cardiometabolic risk assessment and treatment program can be increased. Patients with risk factors realise that they have an elevated risk and are willing to participate. For those high risk patients not responding to a first invitation by mail, inviting patients at risk during the consultation is probably a good alternative.

## OP33.2

### Validation of an abacus to optimize the dose adjustment of anticoagulants (warfarin and fluindione) among patients with an INR goal between 2 and 3

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**Aim:** To validate the use of an abacus for the dose adaptation of anticoagulants

**Background:** Vitamin K antagonists (VKA) remain well ahead in the prescriptions of oral anticoagulants. In practice, the dose adjustment by doctors remains empirical.

In France, a network named "GRANTED" offers adaptation algorithm, validated by the High Authority of Health.

We realized a dose adjustment abacus for fluindione and warfarin from this algorithm.

**Methods:** A prospective, multicenter study, in which INR from two groups of patients were compared: one group of patients whose doctors used the abacus, and another group of patients whose doctors didn't.

Doctors have been contacted by social networks.

Doctors following the abacus had information on its use.

Patients included were taking fluindione or warfarin with a INR goal between 2 and 3. They were followed for a period of three months.

**Primary endpoint:** INR Time in Therapeutic Range (TTR) for patients requiring at least one change during the course of the study.

**Results:** 31 patients from the group using the abacus (201 INR) and 27 patients in the group not using the abacus (176 INR)

TTR from the group the chart: 70.1% TTR in the other group: 65.9%. ( $p = 0.001$ )

100% of physicians using the abacus felt that the chart had been an aid in daily practice. 83.3% found it easy to use.

**Conclusion:** Using the abacus, the TTR is lengthened, compared to usual adaptation practice. This support can be validated. Currently in paper form, a website "AVKclic" is under development and may be online before June 2016.

### OP33.3

#### **Effect of multi-modal approach on obesity management at polyclinic: an interventional clinical trial**

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**Background & Aim:** Obesity is a leading preventable cause of death worldwide and accepted as one of the most serious public health problems of the 21st century. The aim of this study was to investigate the effect of reduced calorie diet restricted for only three times meal per day with combination of provision of exercise facility in clinics, providing counseling on healthy lifestyle and behavioral changes, and maintenance counseling.

**Methods:** It was non-randomized single group pre- and post-interventional clinical trial, conducted in healthy lifestyle center of Ataturk University Hospital, in Erzurum, Turkey with 70 randomly selected obese patients with a minimum body Mass Index (BMI) index of 30 kg/m<sup>2</sup>, who admitted to our obesity polyclinic between January 2011 and May 2012 were included in the study. A multi-intervention treatment plan, including changing physical activity, eating habits, decreasing daily caloric intake and daily meal number, provision of exercise facility in clinic, providing counseling on healthy lifestyle and behavioral changes was used. Paired samples t test and Pearson correlation analysis were performed.

**Results:** The results depicted that after the intervention mean body weight decreased from 92.19 ± 14.80 to 84.7±13.3 kg (p<0.001) and mean BMI decreased from 37.6 ± 5.7 to 34.6 ± 5.4 kg/ m<sup>2</sup> (p<0.001). Pearson correlation analysis showed a significant positive correlation between duration of adherence to the program, and weight and BMI differences (r=0.677, p<0.001 and r=0.692, p<0.001).

**Conclusions:** Long-term multi-intervention treatment is effective in obesity management. Keeping patients' motivation high makes adherence easy to the weight loss program. Providing clinical exercise facility, giving education and decreasing daily energy consumption by is effective in the management of obesity.

**Disclosure:** This study was supported by the Scientific Research Projects Fund of Ataturk University (project number: 2010/194), Erzurum, Turkey.

#### **OP33.4**

#### **Family practice views of managing childhood obesity in primary care: a thematic analysis**

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**Background and Aim:** UK health policy and guidelines identify primary care as an appropriate setting to manage childhood obesity with an emphasis on intervention in family practice. Some evidence shows intervention in family practice settings has a positive impact on weight and behaviour change, however some staff feel it is not an appropriate setting. To date, research examining family practice staff views of providing an intervention is limited to specific geographical areas in England, Australia and America. We aimed to explore the views of family practice staff of managing childhood obesity across England where access to services may vary.

**Method:** 34 family practices across England were invited to take part. Practices were purposively selected based on: practice population, urban/ rural setting, deprivation, and Quality and Outcomes Framework (QOF) score. A thematic analysis was conducted following a bottom up, inductive approach.

**Results:** 32 practices participated in the study with 57 staff being interviewed from 30 practices. The themes were organised into three interrelated areas: lack of contact with well children, sensitivity of the issue, and can family practice make a difference. Interviewees explained challenges of identifying overweight children because they did not attend the practice unless they were unwell. They felt ill equipped to solve the issue due to their lack of influence over the environmental, economic and lifestyle factors underpinning obesity. Interviewees described a lack of evidence to support general practice intervention and seemed unaware of other available intervention services. Raising this with families was also described as extremely sensitive.

**Conclusions:** Family practice staff were unconvinced they could have a role in childhood obesity management. Participants believed schools have greater contact with children and should be key coordinator of identification and management of overweight children. Our findings suggest policies recommending a significant role for family doctors may be unsuccessful.

### OP33.5

#### **Calcium and vitamin D supplementation: does it prevent bone fractures?**

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**Background & Aim:** There has been a great increase in the number of products, in our country, that claim to prevent bone fractures. These products are constituted mainly by calcium and vitamin D. Because these products are advertised on television and are sold over the counter, patients often buy it and take it without a medical prescription. The aim of this review is to evaluate the effectiveness of calcium and vitamin D supplementation in bone fracture prevention, on the general population over 50 years of age.

**Method:** We conducted a PubMed search, on 13/10/2015, with the MeSH terms “calcium”, “vitamin D” and “bone fractures”, for systematic reviews and meta-analysis, published in the last 5 years. We identified 107 articles of which 7 were included, after reading the abstracts. All the other articles were excluded because the fracture risk wasn't evaluated.

**Results:** Five of the 7 studies concluded that calcium and vitamin D supplementation is associated with a weak and inconsistent fracture risk reduction, in the general population over 50 years of age. They also concluded that the supplementation have an unfavorable risk-benefit profile.

The only population group that clearly benefited with the supplements are the frail elderly women in residential care with low baseline dietary calcium intake and low baseline vitamin D concentrations. There is also a benefit for those with low calcium intake in their diet.

**Conclusions:** The supplementation with calcium and vitamin D has shown a weak and inconsistent benefit in the general population over 50. Because the individuals that benefit with supplements containing this elements have such specific characteristics the decision on whether to take it or not should be debated with a doctor. In that case, the family doctor is in a privileged position to help his/her patients.

No conflict of interest declared.

## OP33.6

### **Integrating the existential dimension in general practice: Exploring the understandings and experiences of Danish general practitioners.**

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**Background & Aim:** Within the specialty of general practice an integration of the existential dimension is regarded as important in relation to patient care. However, very little empirical attention has been given to how GPs understand the existential dimension as well as to when and how it is integrated in the relationship to the patient. Thus, the aims of this study were thus to explore GPs' understanding of the existential dimension and of when and how it is perceived to be integrated in the GP-patient encounter.

**Method:** GPs from two Danish regions with accreditation and a minimum of three years GP experience participated in seven focus group interviews. The final sample consisted of 31 GPs between 36 and 68 years of age. Data were analysed in keeping with core principles of a thematic analysis approach.

**Results:** The majority of GPs stated that the existential dimension had a blurred and broad meaning to them. To several GPs the existential dimension was thought to interact and overlap with other illness dimensions, such as the physical, psychological and spiritual. General themes encountered in GPs' descriptions related to being and identity, connectedness to a place, to an environment including other people and to future perspectives. In general practice, the existential dimension was primarily integrated in connection with a life-threatening illness or towards end of life. Integration of the existential dimension was characterized as unsystematic and intuitive. Communication about religious or spiritual questions was mostly avoided by GPs due to perceived lack of expertise and GPs reported infrequent referrals of patients to chaplains.

**Conclusion:** In order to enhance the integration of the existential dimension in to patient care – and thus to enhance the implementation of health policy recommendations - it is necessary to define the concept and to make recommendations about how care that integrates the existential dimension should look like.

## **W70**

### **Learning needs for cultural competence, so to better understand the role of General Practice in the care for migrants**

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**Background:** Adoption of cultural competent behaviour is a lifelong continual process starting from sensitivity and awareness leading to knowledge and skillful practice and finally to real cultural encounter. The problem of racial and ethnic health disparities and specific barriers affecting the provision of this care are documented and well known. At the present time in European countries no universal professional training exists and the role of General Practice in the care for vulnerable migrant groups is not yet properly defined.

**Aim of the Workshop:** We give participants the opportunity to assess themselves as NOVICE, PROFICIENT, COMPETENT or EXPERT in cultural competence and to understand their own multifaceted cultural identities, their perspectives and views on the culture stereotypes and the ways in which their attitudes may influence the behavior in cross- cultural situations. We let participants to discuss their learning needs in cultural competence at Nano: [the consultation], Micro [the family - the practice], Meso [ the community / locality] and Macro [ policy ] level.

**Method:** We will shortly present the topic, Miller's pyramide model in cultural competence, participants will be split into 3 groups and we will discuss stereotypes and generalizations present in our lifes, then each group will be asked to make up summary of learning needs after discussing on case vignette we provide them.

**Results and Conclusions:** After the workshop participants are more aware of their level of cultural competence, they are more familiar with colleagues' learning needs, they are better able to define the role of General Practice in the care for vulnerable migrant groups.

## S30.1

### IGRIMUP Symposium

#### The central role of comprehensive geriatric assessment to combat IMUP - lessons from the graded FORTA A2D categories

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**Background & Aim:** Inappropriate medication use and polypharmacy are widely accepted pitfalls in medical therapy in the elderly and are discussed as a result of neglecting individual patient needs and overstressing therapeutic rules and approaches. A closer view on general and specific risks in this solely age-defined group clearly reveal a heterogenous population and a great variety of arguments in this context to start, omit or replace a given drug or not. These may range from pharmacokinetic considerations, the common shortage of appropriate data in the elderly population in general up to more specific issues e.g. fall risk along with central acting drugs and delirium risk put in by anticholinergics. Therefore definition of certain subgroups is reasonable. Also drug therapy often requires a minimum of preserved functional capacities and herby self-management abilities.

**Methods:** A qualitative review of instruments and approaches to define vulnerable elderly patients in the context of pharmacotherapy; report from the evaluation process in building up the FORTA A2D categories.

**Results:** Assessment tools out of the comprehensive geriatric assessment batteries are good candidates defining the more vulnerable elderly and identify special risks and also preserved functional capacities. Developing the FORTA A2D categories and discussing graded drug related risk-benefit ratios from a more drug-defined view brought out the significance of a complementary individualized approach on the patients' side.

**Conclusions:** Optimizing drug therapy remains a complex task and graded drug-labeling together with a closer view on patient-related aspect will put forth a more comprehensive and individualized drug therapy.

## S30.2

### IGRIMUP Symposium

#### Patient-centred management of polypharmacy: a process for practice

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**Background & Aim:** Evidence associates polypharmacy with increased adverse drug events, hospital admissions, increased healthcare costs and non-adherence. There is a paucity of evidence-based guidance around reducing and stopping medication (deprescribing) which incorporates the patient perspective. Our aim was to develop a patient-centred medication review process to encourage a collaborative (patient and clinician based) approach to inform decisions around deprescribing and address polypharmacy as part of overall strategies to optimise medicines for the patient.

**Method:** A review of UK and international literature on polypharmacy and deprescribing showed that the medication focus is from a clinician's viewpoint. Using existing resources, clinical knowledge and practical experience, a 7 step cycle was developed which encompassed the patients perspective. This is supplemented with points to consider, actions to take and questions to ask to reduce polypharmacy and undertake deprescribing safely. The process has been piloted through medication reviews by 15 UK pharmacists on 82 patients in care home and domiciliary care settings. Evidence based tools including STOPP/START and other UK guidance were used during the process.

**Results:** The 7 steps cycle, recently published in the European Journal of Hospital Pharmacy, has been cited by UK National Health Service (NHS), academic and professional bodies.

Pilot data showed the average patient age was 82 years. 60 (73%) were present during the reviews. The total number of drugs prescribed was 605 (n = 80) and 133 (22%) were stopped. There was a reduction of 1.9 drugs per patient.

54 (66%) pharmacists rated the extent to which the steps enabled them to understand the patients experience as very effective or effective.

**Conclusions:** The patient-centred approach to reviewing polypharmacy and deprescribing combines both the clinical health professionals and patient perspective. This approach is paramount to effective engagement by all parties to optimise medicines for the patient.

### **S30.3**

#### **IGRIMUP Symposium**

#### **Deprescribing – why and how to stop using probably useless or potentially harmful medications in the elderly**

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Of all activities that take place in general practice, prescribing of drugs has greatest potentials to produce health benefits. However, also for causing harm. Balancing benefits against risks is particularly challenging for elderly patients with multimorbidity, polypharmacy, frailty, and limited life expectancies. Most clinical guidelines are made for single disease management and do not commonly take comorbidity, patients' age or life expectancies into consideration. In clinical practice, a large number of patients take drugs that are either useless, contraindicated or put patients at unacceptable high risk for harm. Contributing to this is that physicians often lack everyday routines for medication reviews and for monitoring needs for continued medication use. Most general practitioners (GPs) also find it much harder to stop than to initiate a treatment. However, for a large number of long-term treatments prescribed for symptom relief, tapering down towards a "pill holiday" while monitoring the patient's illness, is a fundamental clinical procedure for substantiating the need for continued use. Deprescribing, the word used for stopping a particular treatment under the supervision and follow-up by a clinician, is only rarely addressed in guidelines and textbooks. However, in clinical practice, everyday routines for medication reviews and for deprescribing drugs no longer indicated is a prerequisite for high quality prescribing. In a large number of situations it may be useful for a GP to have some "rules of the thumb" to guide both prescribing- and deprescribing decisions. With particular emphasis on elderly patients, a simple "how-to-do-framework" with practical hints for implementing medication reviews and deprescribing routines in daily general practice will be presented.

## **S30.4**

### **IGRIMUP Symposium**

#### **How to involve patients in de-prescribing**

*Dee Mangin(1,2)*

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**Background & Aim:** Two thirds of older Canadians take five or more drugs a day. Drug side effects, polypharmacy, and the associated morbidity and mortality are major, costly healthcare problems. Patients who take more than 5 medications are likely to experience adverse drug side-effects requiring costly, preventable, health care admissions and treatments. Polypharmacy can also reduce adherence to beneficial medication due to confusion or side effects. While these problems are understood, effective solutions are not and most patients on multiple medications do not have a medication review.

**Methods:** Known barriers to addressing polypharmacy exist at system clinician and patient level. Care in complex comorbidity needs to be patient centred not disease centred. Patient preferences and goals for care are fundamental to this, yet there is no systematic approach for effectively eliciting and recording them in clinical decision making and clinical records.

**Results and Conclusions:** This presentation will describe development and data from tools for engaging patients and families with detecting and reporting medication problems, web based resources, and tools enabling and supporting patient involvement in de-prescribing and systematic development of tools for eliciting and recording patient preferences for care.

## S30.5

### IGRIMUP Symposium

#### **Clinical outcomes & mortality in community-dwelling elderly people following excessive de-prescribing using the Garfinkel method as compared to controls, 1-5 years follow-up**

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**Background:** The Garfinkel method highlights patient/family preferences and was proven safe and efficacious in both nursing departments (1) and in the community (2). This work presents clinical outcomes of elders who underwent excessive de-prescribing (DP) using the Garfinkel algorithm, as compared to controls who continued their medications with no DP. Follow-up was 1-5 years (more than 3 years in 66%).

**Methods:** The Garfinkel method involves comprehensive meetings with patient/guardian/family (PGF) to discuss pros/cons of all medications. Discontinuation of as many non "lifesaving" drugs as possible is performed simultaneously. Questionnaires used to evaluate compliance, number of medications, quality of life (QoL), functional, mental/cognitive status and family physician's (FPs) reaction to DP. Exclusion criteria were age 64 or older, less than 5 medications, life-expectancy less than 6 months.

**Results:** 204 elders followed DP recommendations and stopped 2-10 medications (Intervention group). 78 PGF and/or their FPs have not complied with DP recommendations and serves as the control group. Both groups were comparable regarding age, demographics, co-morbidity, number and type of medications. Follow-up was 1-5 years. Mortality and hospitalizations were comparable in both groups. Following DP, no mortality occurred earlier than 8 months, no severe adverse drug-events (ADEs) could be attributed to DP; as compared to controls, a significantly higher number of elderly showed improvement in functional, mental and cognitive function, in some the improved QoL was defined as remarkable. DP of different common drugs is discussed.

**Conclusions:** It is the first longitudinal controlled study that shows significantly improved clinical outcomes and QoL in elderly following excessive DP. Applying the Garfinkel method globally may significantly decrease medication burden and improve QoL. Furthermore, there is an economic triple win-win: substantial reductions in cost of drugs, hospitalizations and evaluations of ADEs related "new symptoms".

#### References

1). Garfinkel et al. IMAJ 2007;9:430-4.

2). Garfinkel, Mangin. Arch Int Med 2010;170:1648-54.

## **KA05**

### **Is there evidence on effectiveness of preventive interventions in older people?**

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Randomized controlled trial (RCT) is the king of the clinical study designs. This methodology is used to test effectiveness and safety of health care services, treatments, technologies and operations. However, older patients are often excluded from RCTs, especially from drug trials. Anyway, the past decade the evidence has slowly been accumulating and showing that preventive treatments and intervention models are beneficial even for the oldest old. Examples can be found from primary, secondary and tertiary prevention. Examples of primary preventive interventions which are beneficial for all older people irrespective of their age or disabilities are vitamin D, exercise, social activity, cognitive training and support of self-efficacy and mastery. There is evidence for effectiveness in secondary prevention in, e.g., treatment of blood pressure, prevention of falls, etc. A-class evidence of RCTs will be dealt in this presentation.

There are, however, several pitfalls when designing a trial for older patients. One has to think carefully about the target group of intervention: older people are heterogeneous population and not all benefit from all interventions. One also have to think carefully about the definition of risk factors (intervention targets). Geriatric giants can be either target of intervention or outcome measures (e.g. disability, cognitive decline, loneliness, falls and fractures, depression, vascular events). Similar outcome measures to younger populations (such as mortality) may not be relevant for the oldest old. Measures related to quality of life, disability or need for services may be better options when investigating the oldest old. Money and good planning of trials is still a big issue in geriatric clinical science.

Regarding how much money is spend on care and management of older patients, very little is still spent on investigating what kind of preventive interventions help older people to maintain their functioning, cognition and QOL.

**W71**

**Facing the challenge of multimorbidity: can family medicine create a conceptual model that is fit for purpose?**

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**Background:** Increasing numbers of people are living with multimorbidity and yet the majority of care is focussed around single diseases. There is no clearly established model for clinicians to use, to help them address the complexities and challenges of multimorbidity integrating multiple single-disease based guidelines and managing polypharmacy, while also responding to patients own priorities. There is also little established evidence for interventions (Smith et al.,BMJ 2012), to guide practice or teaching.

The ability for us to coherently conceptualise multimorbidity is critical for family doctors to remain centre stage in today's multi-disciplinary multi-team systems.

Our aim is to gather expertise in order to develop a conceptual model for generalists to use in the clinical challenges of multimorbidity. We consider person centredness, co-ordinated care and shared decision making as givens and will not focus on them.

**Method:**

1. Brief Presentation:

We will consider potential strategies for clinical thinking about multi-morbidity:

1. A care plan model based on problems lists and interventions derived from these.
2. An individualised whole person model: moving from classification by diagnoses to causally linking the 'bio', the 'psycho' and the 'social'. An exemplar based on an intervention for offenders, (the Engager Project) will be used to demonstrate this.

We will move on to consider how decision making may need to change and some tools that may help this.

2. Group discussions: reflections on these strategies and other models brought by the participants
3. Concluding discussion to identify key themes in a model of multimorbidity.

**Results and Conclusions:** The participants will learn about and contribute to the creation of a conceptual model of clinical reasoning for multimorbidity which will be written up as a report. Establishing such a model will allow primary care to contribute better to the needs of this increasing population. It will inform education for current and trainee clinicians and support patients to self care.

## S31

### **Architecture in primary health care – a symposium**

*Alec Logan(1), Andy Law(2)*

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*(2) Reiach and Hall Architects, Edinburgh, UK*

*Corresponding author: Dr Alec Logan, University of Glasgow, General Practice, Motherwell, UK. E-mail: aleclogan@dial.pipex.com*

**Background and Aim:** The Logan Practice is a large family practice in central Scotland with national and international teaching commitments. First premises in 1893, an extension out the back of a Victorian family house in Wishaw. Moved in 1977 to custom-built Health Centre. Since August 2015, from a new civic facility in the centre of Wishaw, the Houldsworth Centre.

Our new building a joint project between Lanarkshire Health Board and North Lanarkshire Council.

The role of good architecture in secondary healthcare provision has been well described - in Primary Healthcare, less so. We address challenges to architects and clinicians in designing Primary Healthcare facilities that are functional, cost-effective and aesthetically pleasing. We suggest that co-operation between architects and clinicians are beneficial, allies against "enemies of promise". Good architecture can deliver better health outcomes. Also a good and ambitious building supplies an inspiring environment for teaching and research in general practice. Will that attract more young doctors into Scottish family medicine?

#### **Method - a Conversation:**

##### **The design challenge: Logan Practice past, present, and future**

To incorporate Wishaw's primary medical and dental practitioners and extensive primary care teams. Also elements of secondary care operating within a primary care environment - psychiatry, old age medicine and psychiatry, paediatrics. Better near-patient diagnostics. Other civic functions - a replacement town library, One Stop Shop, municipal bank, local housing department, some social work presence. A café!

*Alec Logan*

##### **The architectural response**

A brief overview of architecture and healthcare. Architecture and the building of hospitals and hospices.

Then an architectural response to the Wishaw brief.

*Andy Law*

##### **The Houldsworth Centre in action**

For patients, doctors, staff, students, planners, politicians.

*Alec Logan*

##### **Reflections and what next?**

Why is good architecture important in primary health care?

*Andy Law*

Results: A tour of the Houldsworth Centre. Sumptuous architectural photography and story-telling included.

Reviews, good and bad, from users - patients and clinicians, private and public.

**Conclusions/Discussion:** We anticipate a lively discussion session.

- The role of architecture and design in primary healthcare.
- Does good architecture deliver better health outcomes?
- A new architecture for General Practice

**Critical Appraised Topics by GP-trainees**

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**Background & Aim:** The Dutch GP specialty training is a 3-year programme. In their first and third years, GP trainees work in practice under the supervision of a GP trainer. In their second year, trainees participate in 3- to 6-month clinical traineeships. One day a week, trainees meet each other at the training institute to receive education. Evidence based medicine (EBM) is part of this education. The EBM training consists of training in searching and appraising clinical evidence, performing a critically appraised topic (CAT) assignment, and journal clubs in which the focus is on integrating evidence in daily clinical practice. Curiosity is the start of critical appraisal of their own performance or of their trainers. Many subjects of the CATs are about practice variation between primary and secondary care but also between the GP-trainee and their GP trainers. The aim of this workshop is informing and inspiring GP trainers and trainees about clinical reasoning and evidence based medicine.

**Method:** In this workshop we will briefly outline the EBM teaching programme of GP- trainees and GP trainers and several GP-trainees will present a CAT in 5 minutes. There is time for the public to discuss the results with the GP trainee and to vote for the best CAT.

## **Health literacy in ageing Europe**

*Skander Essafi(1), Diogo Fernandes da Silva(2)*

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**Background & Aim:** Population ageing presents a number of challenges for health systems and public finances. As a matter of fact, EU Member States spend, on average, more than a quarter of their GDP on social protection, most of it for the benefit of older people in the form of pensions, health and long-term care.

On the other hand, it has been proved that an alarming part of the population lacks proficient knowledge on understanding instructions (such as the label of a prescribed drug) or on how to take healthy choices. Therefore, there is a lack of understanding about how health literacy and health policies should meet in order to have a healthier population in Europe.

**Method:** This proposed 90 minutes symposium aims to bring together different health literacy European actors to tackle the issue and to propose solutions through progressive plans and intersectoral and interprofessional solutions: primary healthcare providers, medical students, youth doctors, patients organizations and international stakeholders.

The proposed speakers are: WHO Europe, European Public Health Alliance (EPHA), Global Health Literacy Europe, IFMSA, with the support of WONCA Europe and the Vasco Da Gama Movement.

A press release would be developed on the day of the event.

**Results:** The symposium objectives are:

1. To address the ageing population in Europe from a multidisciplinary and interprofessional approach.
2. To discuss health literacy challenges from the primary to tertiary healthcare, as well as from a students perspective.
3. To give suggestions and recommendations for the actors and organizations present at the symposium.

**Conclusions:** This symposium comes as an opportunity to discuss a topic often neglected and worsening day by day with ageing and growing populations. While health systems have been strengthened by adopting Universal Health Coverage as a vision, health literacy still requires and deserves more attention if we aim to achieve a better health status and wellbeing for all.

### **S33.1**

#### **Prolonging life in Europe, benefits and challenges**

*Diogo Fernandes da Silva*

*IFMSA Regional Director for Europe, University of Porto, Portugal*

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There will be an introduction about Europe and its ageing population. Apart from benefits of prolonged life in Europe, several challenges are being posed with this situation, including the fact of maintaining a stable health status, from chronic diseases, mental illnesses to disability issues that would require strong action from different stakeholders.

## **S33.2**

### **Health literacy a strong weapon to improve health status**

*Skander Essafi*

*IFMSA, Public Health, University of Sousse, Tunisia*

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Evidence shows that there is a relationship between low literacy and a range of health related outcomes well established. As a consequence, there are some indirect effects related to employment and lifetime income, and some direct effects of low literacy, individuals are therefore less responsive to health education, less likely to use disease prevention services, and less likely to successfully manage chronic disease in the long term.

### **S33.3**

#### **IFMSA, Involvement of medical students and young doctors to improve health literacy in ageing Europe**

*Diogo Fernandes da Silva*

*IFMSA Regional Director for Europe, University of Porto, Portugal*

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There are different methods that can be used to improve health status of ageing population, ehealth being one of them, focusing on elderly care. Involvement of medical students and young doctors is by developing platforms (applications, technological platforms) that would enhance the monitoring of their chronic diseases and healthy lifestyle, having in mind the different limits posed by such initiatives. This would be done with support of the different european stakeholders with a proposal from IFMSA that is to be implemented.

**Empowering the role of the primary care physician in cancer care**

*Ietje Perfors(1), Charles Helsper(1), Jan Wind(2), Niek de Wit(1)*

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**Background & Aim:** The number of cancer patients and cancer survivors is increasing as a result of the ageing population and improved treatment. Therefore healthcare organisations representing GPs, specialists, patients, and policymakers advocate a larger role for primary care. This increased involvement preferably starts at diagnosis and continues throughout the cancer care continuum. To provide an evidence based framework to support substitution of cancer care tasks, several studies in primary care are currently being conducted. This symposium aims to share the findings of these studies which are relevant for current and future primary care practice.

**Method:** This symposium provides an up-to-date overview on the current knowledge and ongoing research of primary care involvement within the cancer care continuum. This includes the structured involvement in primary care in treatment decision making, guidance during treatment and survivorship care.

The symposium will feature the following subjects and speakers:

- A review of literature describing the role of primary care during cancer treatment - Josi Boeijen
- The GRIP study - the effects of structured follow-up from primary care during the cancer continuum. Ietje Perfors, MD
- The role of the GP in shared decision making in treatment selection. Charles Helsper, MD, PhD
- The I-Care study – GP-led survivorship care for colon cancer patients. Jan Wind, MD, PhD

Chair: Prof. Dr. Niek de Wit

**Results:** After the symposium, participants will have an overview of the current developments, research and possibilities for increased primary care involvement in cancer care; directly after diagnosis, during treatment and during survivorship care.

**Conclusions:** This symposium provides an overview on the current knowledge and ongoing research of primary care involvement within the cancer care continuum and aims to share the designs and findings of these studies which are relevant for current and future primary care practice.

**S34.1****A review of literature describing the role of primary care during cancer treatment**

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Abstract not available

**S34.2**

**The GRIP study - the effects of structured follow-up from primary care during the cancer continuum**

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Abstract not available.

### **S34.3**

#### **The role of the GP in shared decision making in treatment selection**

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Abstract not available.

**S34.4**

**The I-Care study – GP-led survivorship care for colon cancer patients**

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Abstract not available.

## OP34.1

### **Statin prescribing according to gender, age and indication: what about the benefit–risk balance?**

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**Background & Aim:** The increasing dispensing of statins has raised concern about the appropriateness of prescribing to various population groups. We aimed to (1) investigate incident and prevalent statin prescribing according to indication, gender and age and (2) relate prescribing patterns to evidence on beneficial and adverse effects.

**Method:** A cohort of Danish inhabitants (n = 4 424 818) was followed in nationwide registries for dispensed statin prescriptions and hospital discharge information. We calculated incidence rates (2005–2009), prevalence trends (2000–2010) and absolute numbers of statin users according to register proxies for indication, gender and age.

**Results:** In 2010, the prevalence became highest for ages 75–84 and was higher in men than women (37% and 33%, respectively). Indication-specific incidences and prevalences peaked at ages around 65–70, but in myocardial infarction, the prevalence was about 80% at ages 45–80. Particularly, incidences tended to be lower in women until ages of about 60 where after gender differences were negligible. In asymptomatic individuals (hypercholesterolaemia presumably only indication) aged 50+, dispensing was highest in women. The fraction of statin dispensing for primary prevention decreased with age: higher for incident than prevalent prescribing. Independent of age, this fraction was highest among women, e.g. 60% versus 45% of men at ages 55–64. The fraction for potential atherosclerotic condition (PAC, e.g. heart failure) increased with age.

**Conclusions:** Prevalence of statin utilization was highest for ages 75–84. Despite inconclusive evidence for a favourable risk–benefit balance, statin prescribing was high among people aged 80+, asymptomatic women and PAC patients. The findings warrant discussion on the indications of prescribing as well as deprescribing statins.

## OP34.2

### Effects of an intervention (SÄKLÄK) on prescription of potentially inappropriate medication in elderly primary health care patients

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**Background:** The population worldwide is getting older and with age comes more chronic diseases, leading to increased drug use. It is known that polypharmacy increases the risk for drug-related problems and that some drugs, like potentially inappropriate medications (PIMs), are especially troublesome.

**Aim:** This study aimed to analyse effects on medication of the SÄKLÄK project, an intervention model created to improve medication safety for elderly patients in primary care.

**Methods:** The SÄKLÄK project was a multi-professional intervention in primary care consisting of self-assessment, peer review, feedback and written agreements for change. Five Swedish primary care centres participated in the intervention and five served as control group. Data was collected from the Swedish Prescribed Drug Register on potentially inappropriate medications (NSAIDs, longacting benzodiazepines, anticholinergics, tramadol, propiomazine and antipsychotics) to patients 65 years and older. Descriptive analysis of age distribution (65-79 years and 80+) and gender. Total number of prescriptions and change in prescription of PIMs before and after intervention will be analysed as well as differences between intervention and control group.

**Results:** for all centres, a total of 32566 prescriptions of PIMs were made before the intervention, 19796 in the intervention group and 12770 in the control group. The most common PIMs before intervention were anticholinergics, antipsychotics and NSAIDs, and the largest decrease was seen for tramadol and NSAIDs. Complete analysis will be performed during spring 2016 and results will be present in time for the congress in June.

**Conclusion:** Potentially inappropriate medications are still common in elderly primary care patients. More conclusions will be added after the analyses.

Key words: elderly, primary care, potentially inappropriate medication, multi-professional collaboration

### OP34.3

#### **Polypharmacy in the elderly: medications knowledge and self-rated health**

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**Background:** Patients' understanding of their medications has major health and economic implications. Little is published regarding medication understanding, and the knowledge about levels of polypharmacy is confusing and lacks standardization.

**Objective:** To examine polypharmacy in Israel and study the relationships between self-rated health, diseases and medications, and the probability of not knowing reasons for, or erring, regarding medications.

**Methods:** Analysis of data generated from the Israeli National Health and Nutrition Survey for ages 65 and over – 2005-6, a cross-sectional study based on interviews of a random sample.

**Results:** The survey included 1799 interviewees, 53% women and 47% men: 55.9% aged 65-74, 35.9% aged 75-84 and 7.3% were 85 years and older. Daily medication numbers ranged from 0 - 15 with an average of 5.6 (SD 3.5). 60% took 3-8 drugs, and 92% at least one drug. There were 24% who did not know the reasons for taking their medications and 11.5% erred regarding at least one medication – most frequently for cardiovascular drugs. When controlling for diseases, medications number and socio-demographic factors, the probability of erring about at least one reason for taking medications was significantly increased for those who assessed their health as bad or worse compared to last year (OR=1.8, 95% CI 1.14-2.8). For every additional medication, there was a 26% increased probability of not knowing or erring regarding at least one reason.

**Conclusions and Application:** Self-rated health is a practical indirect question to help screen for patients with poor medication understanding, which in turn, may lead to wrong usage, adverse effects and hospitalizations.

## OP34.4

### **Knowledge, attitude and practices of general practitioners and physician assistants regarding vaccinations in the elderly in Germany**

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**Background and Aim:** Despite official recommendations and reimbursement by statutory health insurances, the coverage of vaccinations in persons of  $\geq 60$  years in Germany is not satisfactory. Advices of General Practitioners (GP) and Physician Assistants (PA) are known to influence vaccination uptake especially in this target group, alluding to the need to know more about possible predictors of advice-giving behavior in health care personnel to develop measures to improve it.

**Methods:** We conducted a nationwide survey, sending one questionnaire on vaccination related knowledge, attitude, and advice-giving behavior as well as other vaccination related practices for GP and one for PA to 4995 GP practices in Germany (netto-sample) to be returned by fax or prepaid mail. We performed multivariable logistic regression, defining the outcome as not advising at least one officially recommended vaccination at least once in the absence of a contraindication.

**Results:** of 4995 practices, 813 (16%) returned at least one questionnaire, equaling 774 GPs (16%) and 563 PAs (11%). Twenty-one percent of all participants stated to have at least once not advised an officially recommended vaccination to elderly patients with significantly less PAs than GPs declaring this ( $p < 0.001$ ); the most common explanation given by both professions was having forgotten to advise. Most respondents declared to know (92%) and to trust (90%) the official recommendations, with significantly more GPs stating both ( $p < 0.001/p = 0.005$ ). Multivariable predictors included the practice being located in West Germany (OR: 2.91, 1.72-4.92), and not advising routinely at regular intervals (OR: 2.8, 1.5-5.3).

**Conclusions:** in general, the subjective knowledge of and attitude towards officially recommended vaccinations for the elderly among German GPs and PAs are satisfactory. Since the main reason to not advise vaccinations among our study population is forgetting to do so rather than disagreeing with the recommendation we recommend an improved implementation of recall-systems.



## OP34.5

### **Impact of physical activity on nocturnal leg cramps in patients over 60 years old**

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**Background and Aim:** Nocturnal Leg Cramps (NLC) are affecting almost one in two person over 60. Those spontaneous painful muscular contractions, unrelated to physical exertion, are responsible of an alteration of life quality. If some medical conditions or pathologies are linked to NLC, most of the factors are unknown. Our study is aiming to determine the link between sedentary lifestyle and NLC.

**Method:** Case-control study including patients over 60 consulting their Family Doctor. Matching was made on age, sex, medical history and medications known to trigger cramps. The level of physical activity was assessed using the Dijon Physical Activity Score. Statistical analysis was made under Bayesian paradigm.

**Results:** We recruited and matched 2 groups of 138 patients, with 11,2% of sedentary persons and 59% of active to very active ones. We observed a statistical link between NLC and sedentary lifestyle (OR=2,35, IC95% [0,162 ; 1,077], probability=96,3%).

**Conclusion:** The Dijon Physical Activity Score seems to be an easy and valuable way to evaluate the activity of elderly in Family medicine and detect people at risk for NLC. A case-control study do not allow us to bring a causality link between NLC and sedentary lifestyle, a cohort study should complete our promising results. Considering the lack of effective and safe treatments, the promotion of physical activity should be the first option to offer to concerned patients.

**W72**

**Networking for early stage researchers in general practice and family medicine - a Workshop**

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**Background & Aim:** Early stage researchers in general practice are often isolated from other young colleagues in their field. Thus, the objective of this workshop is to enhance mutual exchange and feedback between early stage researchers in general practice and family medicine from all over Europe (and the world).

**Method:** An interactive workshop based on the concepts of world cafe and open space. We are going to apply different methods to introduce the participants to each other. In the second part of the workshop, all participants present their own research project or their own research idea in small groups. The other group members give feedback and the research ideas are going to be discussed. Every participant should casually present a research project or a research idea, which can be just a first sketch.

**Results:** The workshop participants are getting to know each other and add 'are' building up a network with other early stage researchers in the field of general practice and family medicine from all over Europe further above it's 'Europe (and the world)' - should this generally be adapted?. Additionally, everyone receives feedback on their research projects and research ideas.

**Conclusions:** Our long-term objective is to establish lasting exchange and peer connections leading to a community of practice of early researchers in general practice and family medicine.

## OP35.1

### **The correlations between task delegation and job satisfaction within general practice**

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**Background & Aim:** In order to respond to the shortage of general practitioners (GPs) in the Western world, it has for years been discussed whether practice staff should be involved in patient care to a higher extent. Even though in literature job satisfaction has been recognised as an important factor associated with patient satisfaction and quality of care, the evidence of relations between task delegation and job satisfaction in general practice remains sparse. Task delegation is defined as an intentional transfer of clinical tasks from the GP to a subordinate healthcare professional within the staff. Hence, the aim of the study was to investigate how task delegation is correlated with the job satisfaction of GPs and their staff.

**Method:** We used data from two online questionnaires distributed to Danish GPs and their staff in December 2013 and April 2014, respectively. The questionnaires consisted of two parts; one part concerned division of tasks within general practice regarding treatment of Chronic Obstructive Pulmonary Disease (COPD), and the other part was about the job satisfaction and motivation to work.

**Results:** The analyses of correlations between task delegation and job satisfaction showed a high overall job satisfaction regardless of the degree of task delegation among the staff. The staff was significantly more satisfied in the group with the highest degree of task delegation compared to the staff in the reference group. We found a similar pattern in the analysis of the GPs, but here the results were not significant.

**Conclusions:** The high job satisfaction among the GPs and their staff regardless of the degree of task delegation shows that delegating task does not affect the health care professionals negatively in general practice, and that the staff becomes even more satisfied when there is a high degree of task delegation.

## OP35.2

### **Efficacy and safety of an adjuvanted herpes zoster subunit vaccine candidate in adults $\geq 70$ years of age**

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**Background & Aim:** Herpes Zoster (HZ) is not uncommonly seen in daily clinical practice of family physicians/general practitioners. In the PhIII ZOE-50 trial (NCT01165177), the herpes zoster subunit (HZ/su) vaccine candidate, containing recombinant varicella-zoster virus glycoprotein E and the AS01B Adjuvant System, reduced the risk of HZ by 97.2% in  $\geq 50$  years of age (YO). We present results of the parallel ZOE-70 trial in adults  $\geq 70$  YO, and from a pre-specified pooled analysis over both studies.

**Method:** ZOE-70 (NCT01165229, GlaxoSmithKline Biologicals SA) was a randomized, observer-blind, placebo-controlled, multicountry trial to evaluate HZ/su efficacy and safety in  $\geq 70$  YO. Subjects received 2 intramuscular doses of HZ/su or saline 2 months apart. Vaccine efficacy (VE) was assessed in subjects who received both doses and did not develop confirmed HZ within 1 month post-dose 2. Safety was assessed in all subjects over the study and reactogenicity in a subset of subjects within 7 days after each vaccination. VE against postherpetic neuralgia (PHN) and HZ was assessed in  $\geq 70$  YO pooled from both studies.

**Results:** 13,900 subjects received  $\geq 1$  dose and were evaluated for safety. 13,163 were included in the primary VE analysis; 1,025 in the reactogenicity analysis. After a mean follow-up of 3.7 (SD:0.8) years, VE against HZ in ZOE-70 was 89.8% (95% CI,84.2–93.7%). HZ/su was more reactogenic than saline (79.0% and 29.5% of subjects reported any reaction, respectively). No imbalances in serious adverse events, deaths, potential immune-mediated diseases were identified between groups. In the pooled analyses (N=16596), VE was 88.8% (68.7–97.1%) against PHN and 91.3% (86.8–94.5%) against HZ.

**Conclusions:** HZ/su vaccine candidate demonstrated high efficacy in reducing risk of HZ and PHN in  $\geq 70$  YO, and has an acceptable safety profile. This highlights its potential to improve prevention in ageing population, most at risk of HZ and its complications.

### OP35.3

#### **Pneumococcal vaccine coverage in spanish elderly people**

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**Background & Aim:** Pneumococcal vaccination is currently recommended for all adults 65 years or older. There are two types of pneumococcal vaccines: the polysaccharide vaccine and the conjugate vaccine. Since 2009, in our health service, pneumococcal polysaccharide vaccine is recommended for adults aged 65 years. Our objective is to know the pneumococcal vaccine coverage in elderly from Albacete.

**Method:** Cross-sectional study. The study subjects were selected, by systematic sampling, from health care card listing of people 65 or older in the city of Albacete. The sample size was calculated for probability: 50%, accuracy: 2%, confidence level: 95%, and estimated losses: 25%. Computerized medical records were reviewed, from the January 1, 2009 until October-December 2015 (date of study preparation). Data were coded and entered into a computerized database using the SPSS 17.0 statistical programme. Ethics approval for this study was granted by the Investigation and Clinical Ethics Committee of the Albacete Health Area.

**Results:** 2916 patients were included; 56.7% were women. The median age was 77 years old, with interquartile range (IR): 70-85. The polysaccharide vaccine was administered to 44.9% of patients (95%CI: 43.03-46.7). Only 10 patients had been immunized with conjugate vaccine, 7 of whom had also received the polysaccharide vaccine. Vaccinated patients were significantly ( $p < 0.0001$ ) older: median 80 (IR 73-86) vs 75 (IR 68-84). There were differences by health center ( $p < 0.0001$ ): the percentage of vaccination was between 26.2% and 58.5%. There were no gender differences. Logistic regression analysis confirmed the independent relationship with both variables.

**Conclusions:** Vaccination coverage is reasonably acceptable, close to half of the elderly population. There were big differences among health centers, and is higher with increasing age.

## OP35.4

### Ideal cardiovascular health and psychosocial risk factors

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**Background & Aim:** The American Heart Association (AHA) has defined ideal cardiovascular health as the absence of disease and the presence of seven key health factors and behaviors, 'Life's Simple 7'. However, little is known about mental aspects associated with ideal cardiovascular health metrics. The aim of the present study is to assess the relationship of psychosocial risk factors with 'Life's Simple 7' among Finnish women at working age.

**Methods:** A cross-sectional study among 732 caucasian female employees (mean age  $48 \pm 10$  years) from ten randomly selected work units, conducted in 2014. Ideal cardiovascular health metrics were evaluated with physical examination, laboratory tests, medical history, and self-administrated questionnaires. Psychosocial risk factors, i.e. social isolation, stress, depressive symptoms, anxiety, hostility, and type D personality were assessed with core questions.

**Results:** The prevalence of having 5-7 ideal cardiovascular health metrics was 183 (25.0%). There were 272 (37.2%) women who had none of the psychosocial risk factors. Anxiety (31.3%), work stress (30.7%) and type D personality (26.1%) were the most prevalent of the psychosocial risk factors. The prevalence of depressive symptoms ( $p < 0.001$ ) and type D personality ( $p = 0.049$ ) decreased linearly according to the sum of ideal cardiovascular health metrics after adjustment with age and education years.

**Conclusions:** Psychosocial risk factors have a considerable relationship with the achievement of AHA's 'Life's Simple 7' in women at working age. Especially, screening and treating depression, and dealing with type D personality might be crucial to improve cardiovascular health in the population level.

## OP35.5

### **Transitional patient safety in The Netherlands: a qualitative study on patient participation**

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**Background and Aim:** Patient participation has been recommended as an important way to improve patient safety. Despite numerous initiatives and developed tools to enhance patient participation, evidence of their effectiveness in improving patient safety is limited. When a patient transfers between primary care and hospital the patient has an increased risk of experiencing a transitional incident. The objective of this study was to explore patient participation in transitional patient safety from a both patients' and health care providers' perspective.

**Methods:** Qualitative template analysis was used for a purposive sample of thirteen semi-structured interviews with patients who transitioned between general practice and hospital. These findings were analyzed alongside data of focus group discussions with 98 health care providers, namely hospital staff of three hospitals and their referring general practitioners on the role of the patient in transitional patient safety.

**Results:** Both patients and health care providers voice the lack of sufficient knowledge in patients of how health care providers handle the transition of care. Patients varied in the need to participate, from none to extensively. Those who want to participate expressed difficulty in how to actually participate. Health care providers confirmed the extensive differences between patients and elaborated on approaches tailored to individual patients. Health care providers expressed the need for a more shared responsibility for safety, whereas the majority of patients feel health care providers bear sole responsibility.

**Conclusion:** The lack of both sufficient knowledge and insight of patients in the way health care providers handle the transition of care may impede patient participation to improve transitional patient safety. Improvement strategies should focus on the role of health care providers to engage the individual patient to participate, tailored to their needs and capacity. Interestingly, patients and health care providers seem to differ in their opinion on who is responsible for transitional patient safety.

## OP36.1

### **Interested in migraine: Consensus on the attention to patients with migraine in Catalonia**

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**Background & Aim:** Migraine is a public health problem, in our environment affects approximately 12% of the population in the most productive ages, causing a great impact on the quality of life with socioeconomic repercussion. Migraine is the seventh cause of disability worldwide according to the WHO. Headaches are the main cause of Neurology consultation for neurologists and GP. Despite this, only 40% of patients with migraine and tension headache are diagnosed and 50% are self-medicated. The correct treatment of migraine prevents its chronicity. Approximately 25 % of patients with migraine need preventive treatment, but only a few receive it. With the intention of improving and change these facts, this consensus was developed. •

Improving migraine detection and diagnosis.

- Give specific recommendations for treating attacks and promote preventive treatment.
- Promote follow-up of patients, using headache calendar and knowledge of disability scales.
- Establish shared models of care for patients with migraine at different levels of care adapted to the realities of each country.
- Defining the referral criteria for to specialized units.

**Method:** Cross-sectional study Creation of a scientific working group, constituted for Neurologists and Family Doctors. Design of a migraine consensus. Preparation of educational materials to disseminate the project. Planning a training program for all Catalonia.

Results (preliminaries): Consensus, on different sections with clear and quick-reference diagrams. Training physicians in workshops with training material on Power Point support. Until November 2015, there have been eight workshops of 4 hours, 265 students trained as trainers, 105 peripheral workshops, with a total of 1618 professionals trained in Catalonia.

**Conclusions:** This consensus document is a useful tool for handling migraines. It reflects the need for collaboration and coordination of the different levels of care. The evaluation of the proposed indicators will allow us to evaluate the impact of the recommendations and develop improvement projects.

## OP36.2

### **TIA mimics: a systematic review and recent data from the Netherlands**

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**Background & Aim:** Diagnosing Transient Ischaemic Attack (TIA) is difficult and mainly based on history taking. Timely identification of those with true TIA is essential to enable early treatment, but multiple conditions can mimic TIA. Recognising such mimicking conditions may prevent costly additional investigations and inappropriate treatment.

We aimed to determine the proportion and distribution of alternative diagnoses in patients suspected of TIA in literature and recent own data.

**Methods:** We performed a systematic review in MEDLINE and EMBASE databases to identify studies reporting the frequency of alternative diagnoses in patients suspected of TIA. We did the same in an ongoing cohort of 171 patients suspected of TIA by their GP (originating from the Dutch MIND-TIA project). All patients were referred to rapid-access TIA services in the region of Utrecht, the Netherlands from October 2013 till May 2015. Diagnoses were categorized in TIA/minor stroke, probable TIA, possible TIA and no TIA, and alternative diagnoses were further subdivided.

**Results:** We identified 24 studies from 11 different countries, including 16,253 suspected TIA cases seen at the emergency department or TIA service. The proportion of alternative diagnoses was 37.5% on average, ranging from 10% to 78%. Most frequent alternative diagnoses were migraine, (pre)syncope, seizure and vestibular syndrome. In the Dutch cohort the distribution of diagnoses was: TIA/minor stroke 48.8%, probable TIA 12.5%, possible TIA 13.1%, no TIA 25.6%. Most frequent alternative diagnoses were migraine and (pre)syncope, but in 34 of 62 (54.8%) non- or possible TIA cases a clear alternative diagnosis was lacking.

**Conclusions:** There is a large range (10-78%) in the proportion of alternative diagnoses in suspected cases of TIA across different countries and settings. Migraine, (pre)syncope, seizure and vestibular syndrome are the most common TIA mimics. However, a clear diagnosis in those without TIA is often lacking.

### OP36.3

#### Headache and pregnancy - when the family doctor makes a difference

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**Background:** Headache is a prevalent symptom in the medical appointments of primary health care (PHC). However, it may have features that suggest a serious secondary headache. The family doctor (FD) should be aware when faced with a nonspecific symptom. FD's core competencies, should allow him, to manage uncertainty and to acknowledge various possibilities.

Case description: Female, 21 years old. Antecedents of aortic dissection background at the age of 9, without FD in health care center (HCC). On 1st September, at 12 weeks of gestation, she went to an emergency appointment because of holocranian headache, almost daily. Paracetamol was indicated on demand. Due to major cardiovascular antecedents and because the patient had no FD, she was sent to a hospital obstetric consultation. On 14th September she returned to an emergency appointment due to severe holocranian headache, pulsatile character with phonophobia, photophobia, osmophobia, without improvement with analgesics. The patient was forwarded to the hospital emergency, where she was observed by Neurology, which concluded that it was a migraine without aura. On 1st October, she had a pregnancy consultation at the hospital, mentioning severe headache and, again, was prescribed analgesics. On 7th October, she returned one more time to an emergency appointment because of persistence of the headache (17 weeks gestation). After a long period without improvement and after multiple consultations with different doctors, it was decided to telephone the emergency neurologist. At the hospital, angio magnetic resonance revealed left lateral sinus cerebral venous thrombosis. She was admitted to the intensive care unit and initiated therapy with enoxaparin.

**Conclusion:** The permanent care, the comprehensive and holistic model that characterizes family medicine are essential in the evaluation of these users and give the FD a clear advantage over other specialists. This case validates the importance of having a FD assigned to every single patient.

## OP36.4

### The role of Memantine in anxiety disorders: an evidence-based review

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**Introduction/Aim:** Anxiety and related disorders are common in community settings, in primary and secondary medical care. The personal and societal burden associated is considerable. A substantial proportion of patients with obsessive-compulsive disorder (OCD) and generalized anxiety disorder (GAD) do not respond to, or are intolerant, of standard treatments. Additional treatment strategies are therefore necessary. Review the evidence on the efficacy of memantine in the treatment of the anxiety disorders.

**Methods:** A systematic review of articles published in the last ten years, in Portuguese, English, Spanish, was performed in Medline and Index of Portuguese Databases, using the following MESH terms: memantine, treatment and anxiety disorders. We used the Strength of Recommendation Taxonomy (SORT) scale of American Family Physician to assign levels of evidence and strength of recommendations.

**Results:** A total of 131 papers were identified, and after the application of inclusion criteria, 6 papers remained, including two randomized controlled trials (RCT), one clinical guidelines (CG), two open clinical trials and one systematic review (SR). The CG does not recommend the use of memantine in the treatment of GAD (SOR C). But does recommend the use of memantine as second-line adjunctive therapy OCD and as third-line therapy for pos-traumatic stress (SOR C). The two RCT suggest that an add-on of memantine does improve the symptoms of patients suffering from severe OCD. The SR showed that the use of memantine had some benefit in relieving OCD symptoms. The two other studies showed memantine may be an effective augmentation therapy in patients with anxiety who remain symptomatic despite adequate treatment with conventional antidepressant anxiolytics.

**Conclusion:** The current available evidence suggests the benefit of memantine as an adjunctive therapy for the treatment for OCD (SOR B). Most studies does not show the benefit of use of memantine for the treatment of GAD (SOR C).

## **OP36.5**

### **Management of the patient with chest pain, between primary care practice and cardiology guidelines**

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This presentation is reviewing the major causes of chest pain, and proposing an algorithm for assessing the patient with chest pain of recent onset, in the primary practice, in association with the specialists in the hospital. The patient with chest pain is often the prisoner of the medical system, and to increasing general knowledge about medicine, most of the times incomplete and misleading, wasting precious time and delaying a proper management. As we have seen in registries from Romania, about 90% of the chest pain in the primary care is considered of non-cardiac cause, while the cardiologists in the outpatients clinics see about 90% of chest pain cases as being of cardiac cause. This increases the burden upon the family doctor for a better discrimination of the cause of chest pain. The point of utmost importance in assessing a patient with recent chest pain is to exclude the most severe and frequent causes of recent chest pain, like ischemic heart disease, lung disease. We suggest an approach by quantifying the chest pain altogether with risk factors, age, sex and medical history, in order to document or rule out any chest pain of coronary cause, as seen in the NICE guidelines. According to this quantification, patients with chest pain will be properly referred to the right outpatient clinic, or managed in the primary care accordingly. It is mainly the role of the primary medicine, as the family doctor is the first and the most important link in the chain, to assess the patient, to have a general view and to integrate the clinic and para-clinic data of the patient with chest pain, and to have proper referrals to the specialists clinics, for an accurate and precocious diagnosis and management.

## **OP37.1**

### **Palliative care and aging: how to build specific service and the role of general practitioner**

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**Background:** The aging population is a growing workload for future generations of family doctors. Recently, several scientific societies have called for an opening of palliative care to elderly patients with advanced stages of disease. W.H.O. in various documents it highlighted the need to build palliative care services for the elderly. Despite these recommendations it is not entirely clear how to transfer these tips to current practice.

**Aims:** using the existing network of palliative care in my area, I'm trying to create a more specific route for this population group, some issues remain unresolved as 1. How select patients to refer to the service? 2. What characteristics make this path specific and useful for patients and care giver? 3. What is the role of the general practitioner? 4. What are the most important barriers for GP's in this field?

**Method:** Through the methodology of focus group (or workshop) try to analyze the proposed route, reply by the most sensitive issues, to make the model proposed stronger and realistic.

#### **Conclusion:**

1. Use the experience of future young family physicians as a resource to propose new avenues of assistance where the figure of the family doctor is increasingly active
2. If the proposed model is considered interesting, create a working group to strengthen it and spread it in different contexts (cultural or socio-economical) or at least gain some positive element to be transferred to their own working context.

## OP37.2

### Risk levels among patients with chronic conditions in primary care in Madrid (Spain)

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**Background & Aim:** To describe the prevalence, risk levels and features of patients with chronic conditions (PCC) who represent a segment of population with both quantitatively and qualitatively significant impact on the Primary Healthcare. They are associated with worse health outcomes, more complex clinical management, increased costs and their level of risk determine different healthcare needs.

**Method:** Cross-sectional observational study of the 9938 PCC among the 18235 patients of a Primary Healthcare Center in Madrid. We collected socio-demographic and clinical data considering 60 chronic conditions. Their three different levels of risk (low, medium and high) were based on a stratification tool integrated in the Electronic Clinical Record used in Madrid's Public Health Centers.

**Results:** The percentage of PCC in the Health Center were 54%. Among them 77% were low risk (LRPCC), 18% medium risk (MRPCC) and 5% high risk (HRPCC). The average age was 55,78 years-old (50,6 LRPCC; 72,1 MRPCC; 77,7 HRPCC). 61.3% were female (61% LRPCC; 65,0% MRPCC; 51,8% HRPCC). The average of chronic conditions was 4,37 (3,1 LRPCC; 7,5 MRPCC; 12, 4 HRPCC). 1,6% were institutionalized (0,9% LRPCC; 2,8% MRPCC; 8,2% HRPCC).

Among LRPCC and MRPCC stand out hyperlipemia (31% and 60%) hypertension (24% and 67%), anxiety (24% and 23%), thyroid disorders (15% and 22%) obesity (13% and 26%), asthma (11% and 10%), depression (10% and 21%), osteoporosis (8% and 24%) and osteoarthritis (7% and 24%).

in addition to the previous, among HRPCC also highlights diabetes (41%), active cancer (38,4%) heart failure (27,5%), anemia (26%), coronary heart disease (24,7%), OCPD (24,1%), renal chronic failure (21,7%), stroke (20%) and dementia (13,4%). These results were statistically significant ( $p < 0.01$ ).

**Conclusions:** More than half of the patients were PCC. HRPCC were older, more institutionalized and with more quantity and severity of chronic conditions than MRPCC and LRPCC.

### OP37.3

#### Progress in GPs' confidence in end-of-life care? – a five year follow-up study

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**Background & Aim:** Most terminally ill patients prefer to die at home, and General Practitioners' (GPs) involvement is important achieving this. A questionnaire-study in 2010 among all GPs in Copenhagen revealed poor knowledge concerning subcutaneous (sc) medicine to terminally ill patients. However, since 2010 there has been an increased focus on education of GPs regarding palliative and end-of-life care.

The aim was to re-examine GPs' knowledge, confidence and experience in providing end-of-life care in 2015 and compare the results with results from 2010.

**Method:** An internet-based questionnaire was sent by e-mail to all 254 GPs in the City of Copenhagen, Denmark. Descriptive statistics were calculated and comparisons between answers from 2010 and 2015 were performed on digotomised answers testing for significant differences using two-sample test of proportion.

**Results:** The response rate was 39% (in 2010: 62%). Compared to 2010 there was a statistically significant increased confidence in using sc medicine (27% vs 68% feeling very/somewhat confident) and converting oral medicine to sc medicine (21% vs 61% feeling very/somewhat confident). 72% of the GP's felt confident being the primary doctor responsible for end-of-life care trajectories compared to 57% in 2010. However, this difference was not statistically significant. 86% of GPs agreed/totally agreed that end-of-life care is an important part of the GPs' responsibilities, but only few GPs had set procedures in providing end-of-life care.

**Conclusions:** There has been a significant positive change in attitude and confidence in end-of-life care among GPs. This change may be related to an extensive education strategy in the area. However, the low response rate may cover selection bias, and since 'positive' GPs tend to answer, the 'true picture' may be less positive. Further and continuing education is recommended for GPs in end-of-life care with a particular focus on the organization and systematic procedures.

## OP37.4

### **Doctors working with dying nursing home patients meet their own existential vulnerability**

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**Background & Aim:** Illness, loss of function, and the prospect of death make all human beings vulnerable to existential suffering. Little is known about professional palliative care providers' experiences supporting other people in existential suffering. Though intuitively a weakness, the doctor's vulnerability may be valuable in patient communication. Our aim was to explore the impact of existential vulnerability for nursing home doctors' experiences with dying patients and their families.

**Methods:** We conducted a qualitative study based on three focus group interviews with purposive samples of 17 nursing home doctors. The interviews were audio-recorded, transcribed, and analyzed with systematic text condensation.

**Results:** Nursing home doctors experienced having to balance treatment compromises in order to assist patients' and families' preparation for death, with their sense of professional conduct. This was an arduous process demanding patience and consideration. Existential vulnerability also manifested as powerlessness mastering issues of life and death and families' expectations. Standard phrases could help convey complex messages of uncertainty and graveness. Personal commitment was balanced with protective disengagement on the patient's deathbed, triggering both feelings of wonder and guilt.

**Conclusions:** Existential vulnerability is experienced as a burden of powerlessness and guilt in difficult treatment compromises and in the need for protective disengagement, but also as a resource in communication and professional coping. This implies that EOL care training for nursing home doctors should include self-reflective practice, in particular addressing treatment compromises and professional conduct in the dialogue with patient and next-of-kin.

## OP37.5

### Late-life depression is associated with an increased risk of multimorbidity and polypharmacy

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**Background & Aim:** late-life depression often coincides with chronic somatic diseases and, consequently, with polypharmacy. This may complicate medical treatment of older depressed patients. We aimed to determine the risk on multimorbidity and polypharmacy among older depressed primary care patients.

**Method:** cross-sectional study in primary care in 2012. Depressed patients aged  $\geq 60$  years were matched on age and gender to patients with other psychological diagnoses and to mentally healthy controls. Morbidity data was combined with data on medication use. We performed regression analyses to determine the association between depression, and chronic diseases and chronically used drugs.

**Results:** we included 4,477 patients; 1,512 depressed patients, 1,497 patients with other psychological diagnoses, and 1,508 mentally healthy controls. Depressed patients had a 9% (95% CI 2-16%) higher rate of chronic somatic diseases and had higher odds for multimorbidity (OR 1.33; 95% CI 1.13-1.56) compared to mentally healthy controls. No difference existed between depressed patients and patients with other psychological diagnoses. Compared to mentally healthy controls, depressed patients had a 38% (95% CI 31-45%) higher rate for the number of chronic drugs and had higher odds for polypharmacy (OR 2.42; 95% CI 2.00-2.93). Similar results were found comparing depressed patients to patients with other psychological diagnoses (IRR 1.23, 95% CI 1.18-1.29; OR 1.66, 95% CI 1.39-1.98).

**Conclusions:** depressed older patients are prone to use more chronic drugs even beyond their higher rate of comorbid somatic diseases. General practitioners should evaluate medication use of depressed older patients to reduce the existence of disproportional polypharmacy in these vulnerable patients.

**W73**

**Menopause, it's not the end of life!**

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**Background & Aim:** Menopause is a natural process as women get older. It's the end of women reproductive life, but it is not the end of a woman's life. There are many symptoms related to estrogen level decrease that cause discomfort: hot flushes, vaginal dryness, insomnia,... Today's lifestyle and traditional gender roles create and worsen the feeling that a woman going through menopause is useless and old. Because of this, menopause is treated as a chronic disease that can be early diagnosed and whose symptoms must be pharmacologically treated.

**Method:** During our workshop we will explain the natural process of menopause, the symptoms that may appear and how do we actually manage them at our office. We will discuss how women face menopause changes according to their own concept about it and if there's any difference related to the culture of the country they are from.

**Results:** We will see the different ways of addressing menopause and how close to the current literature are we doing, getting to know if there's any change we can do to improve our practice.

**W74**

**Assessing dementia risk in general practice: what does the public think and what do family doctors need to know?**

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**Background & Aim:** Reducing the prevalence of dementia is a global public health challenge. Recent research and international WHO guidance has highlighted the importance of identifying people at risk of dementia and giving tailored advice to delay onset. There has been little research exploring the views of professionals, patients and public towards dementia risk and the role of primary care. This workshop aims to present findings from focus groups with members of the public in England and explore the views of participants in terms of their knowledge of risk reduction, risk reduction tools (including genetic markers) and their use in primary care internationally.

**Method:** An interactive workshop will be used to explore this topic. Task group methodology has been chosen as participants may have different levels of knowledge about dementia, opportunities for diagnosis, and strategies for risk reduction. A brief presentation of risk reduction in dementia and results from focus groups with members of the public in England will be given followed by a facilitated group discussion. By presenting information in a standardized format to participants we can explore clinicians' knowledge and opinions of different approaches, and variation by healthcare setting.

**Results:** It is hoped the results of this workshop will identify current knowledge requirements of primary care professionals and identify barriers and facilitators to implementing dementia risk tools into primary care. It is hoped it will inform a multicentre collaborative project delivered by three UK Universities (Newcastle University, University College London and Nottingham University) exploring professionals, public and patients view of dementia risk.

**Conclusions:** Identifying and giving tailored advice to reduce personal risk of dementia is one way to help reduce the global burden of dementia. Determining barriers and facilitators to dementias risk tools being used in primary care is essential to inform dementia prevention programmes that are acceptable to family doctors.

### **Towards better post-diagnostic care of dementia in Europe**

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**Background:** Our ageing population presents many challenges to our healthcare systems. Dementia is one such challenging condition linked to age. Although there is an international push to diagnose dementia earlier, family doctors need to be able to manage the post-diagnostic phase well to ensure these individuals continue to manage in the community.

**Method:** in this symposium we will cover several aspects of post-diagnostic dementia management:

1. Introduction and The Early Post-Diagnostic Phase – What challenges do we face as family doctors? This talk will cover diagnosis of mild cognitive impairment/dementia and good practice and behavioural and psychological symptoms of dementia.
2. Dementia Care Across Europe (EGPRN PREDEM Collaborative Group) – What do family doctors think? This talk will focus on the the emotional burden and the practical difficulties encountered by the GPs and the care givers of demented patients across Europe. We will present data extracted and analysed from 144 cases of dementia in 23 European Countries collected in the European General Practice Research Network (EGPRN) PREDEM Collaborative Study.
3. “Frailty Management Optimisation through EIP AHA Commitments and Utilisation of Stakeholders - FOCUS” – How can family doctors support our dementia carers? This talk will cover the needs and expectations of caregivers and the results of international qualitative study (FOCUS) will be presented and discussed.
4. “Supporting Excellence in End of Life Care - SEED” – How can family doctors support end of life care for people with dementia and their families? This talk will cover the findings from the SEED project which aims to deliver good quality, community based end of life care for people with dementia.

We aim to provide an update on each aspect of dementia post-diagnostic care spectrum. Following each presentation, there will be opportunities for discussion.

### **S35.1**

#### **Introduction and the early post-diagnostic phase - what challenges do we face as family doctors?**

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Cognitive impairment and dementia presents many challenges to primary care. Following review by secondary care (memory clinic services), an individual may well be labelled as having 'mild cognitive impairment' or indeed dementia itself. As family doctors, we are responsible for the care and wellbeing of these patients during this early post-diagnostic phase. This talk will provide an introduction and an overview to some of the challenges facing the person with cognitive impairment/dementia and their families and what the role of family doctor should be.

## **S35.2**

### **Dementia care across Europe (EGPRN PREDEM Collaborative Group) - what do family doctors think?**

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Dementia is still a stigma in some settings. Although the majority of individuals with or without cognitive impairment may prefer to be informed about a diagnosis of dementia for reasons pertaining to autonomy, primary care physicians do not always feel comfortable in breaking the bad news. Many physicians also fear that this may harm the relationship with their patients and therefore disclosing a dementia diagnosis should align with the patient's preferences, culture, educational level, and abilities. Another problem is the contrast between the effectiveness of the treatment and the expectations of the caregivers. We will present a look inside the emotional burden and the practical difficulties encountered by the GPs and the care givers of demented patients. Data has been extracted and analyzed from the 144 cases of dementia in 23 European Countries collected in the European General Practice Research Network (EGPRN) PREDEM Collaborative Study.

### S35.3

#### **"Frailty management optimisation through EIP AHA commitments and utilisation of stakeholders - FOCUS" - how can family doctors support our dementia carers?**

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The goal of FOCUS, which stands for Frailty Management Optimisation through EIP AHA Commitments and Utilisation of Stakeholders' Input, is to reduce the burden of frailty in Europe. To that end, the partners are working on advancing knowledge of frailty detection, assessment, and management, including biological and clinical markers, in order to change the paradigm of frailty care from acute intervention to prevention.

FOCUS partners are working on ways to integrate the best available evidence from frailty-related screening tools, studies, and interventions into the care of frail people and their lifestyles. Frail citizens in Italy, Poland and the UK and their carers are being called to express their views and their experiences with treatments and interventions aimed at improving lifestyle. Outcomes from different approaches to deal with frailty is investigated to understand better the balance between prevention and treatment, including the costs involved, and then to develop tools to assist those accountable for planning and implementing care services for frail citizens. The FOCUS Consortium is developing mechanisms to leverage the knowledge available and to put it in the service of frail citizens. In order to reach out to the broadest audience possible, the FOCUS Platform for Knowledge Exchange and the platform for scaling up are being developed with the collaboration of stakeholders. The FOCUS project is a consequence of the work being done by the European Innovation Partnership on Active and Healthy Ageing (EIP AHA), which aims to increase the average healthy lifespan in Europe by 2020 while fostering sustainability of health and social care systems and innovation in Europe. The knowledge and tools developed by the FOCUS project, with input from stakeholders, will be deployed to all EIP AHA participants dealing with frail older citizens to support their activities and optimise their performance.

### S35.4

#### **Supporting Excellence in End of Life Care - SEED' - how can family doctors support end of life care for people with dementia and their families?**

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**Background:** The number of people with age-related diseases like dementia is predicted to double by 2040. People with advanced dementia experience similar symptoms to those dying with cancer yet professional carers find prognostication difficult and struggle to meet palliative care needs, with physical symptoms undetected and untreated. While elements of good practice in this area have been identified in theory, the factors which enable such good practice to be implemented in real world practice need to be better understood.

**Aim:** To determine a range of key stakeholder views on the key factors influencing the commissioning and provision of good quality care towards and at the end of life care for people with dementia.

**Design:** Semi-structured telephone and face-to-face interviews with topic guide, verbatim transcription and thematic analysis.

**Setting/Participants:** UK based study; sample comprised a range of key stakeholders in dementia care and/or palliative care (n=30 care commissioners; n=).

**Results:** Commissioners identified 4 key factors influencing good practice in end of life care for people with dementia were identified from the expert interviews: leadership and management of care, integrating clinical expertise, continuity of care, and use of existing guidelines. Care providers (n=65) identified 3 key challenges to delivering high quality end of life care in dementia: having timely, early planning discussions; identifying the dying phase and ensuring a good death with prevention of distress.

**Conclusions:** Appropriate and timely use of clinical expertise could prevent hospitalisation and ensure continuity of care; in the UK, a lack of integration between health and social care undermines the provision of continuity of care. Further work is needed to understand if, and how, existing guidelines and tools developed for generic end of life care can contribute to good quality end of life care for those with dementia.

## W75

### **Approach to lower urinary tract symptoms in men**

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**Background & Aim:** Lower urinary tract symptoms (LUTS) include storage, voiding and post-micturition symptoms, which are frequently age related and progressive. A review of the literature indicates a prevalence of up to 62% of one or more LUTS in general male population. Although not a life threatening condition, it frequently leads to a decrease in the quality of life and could reveal serious urologic diseases. The aim of this workshop is to consider and promptly identify the various causes of LUTS and manage the most frequent one - benign prostatic hyperplasia (BPH).

**Method:** Brief introduction to the definition of LUTS; anamnesis and physical examination guided by urological symptoms; search for the cause of LUTS; interpretation of urine analysis; manage the most frequent causes of LUTS, with special emphasis on BPH. Promote a brainstorm approach to clinical cases in order to organize knowledge and stimulate the debate in the audience.

**Results:** At the end, the participants shall have improved their knowledge and experience in approaching LUTS, exploring the severity of the symptoms, treating of the main cause and managing the symptoms.

**Conclusions:** Considering the ageing of European population, it is expected a rise in the prevalence of LUTS in men. In most cases, LUTS are secondary to BPH, however it's mandatory to consider the range of differential diagnosis and identify the cause of the symptoms prior to starting any treatment.

## OP38.1

### **How do young doctors' clinical experiences from nursing homes provide access to situated learning about dying? A focus group study**

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**Background & Aim:** in Norway, 48% of deaths take place in nursing homes. Doctors often find dialogues about death difficult. Newly qualified medical doctors serve in nursing homes during internship. We need knowledge about how nursing homes can become useful sites for learning about end-of-life care. We aimed at exploring newly qualified doctors' learning experiences with end-of-life care in nursing homes, with a special focus on dialogues about death.

**Method:** House officers in nursing homes (n=16) participated in three focus group interviews. The participants were invited to share experiences with end-of-life care in nursing homes, to tell about preparatory dialogues with patients and relatives, and how their experiences made an impact on their thoughts about death and their role as a doctor. The interviews were audiotaped and transcribed verbatim. Data were analyzed with systematic text condensation. We used Lave & Wenger's theory about situated learning to support our interpretations, focusing how the young doctors experienced end-of-life care through participation in the nursing home's community of practice.

**Results:** in nursing homes the newly qualified doctors experienced an acceptance of death which differed from attitudes to death in the hospital setting, and they discovered a new understanding of the doctor's role. They learned to acknowledge the importance of dialogues with patient and family about death and dying, and the impact of interdisciplinary team work on their own development of professional identity.

**Conclusions:** Participating in end-of-life care in nursing homes can give newly qualified doctors valuable insight into the needs of patient and family, training in interdisciplinary team work and a broader perspective on the doctor's role.

## OP38.2

### Sarcopenia screening in primary health

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**Background:** Few studies have evaluated the tools for screening sarcopenia in elderly people within the Primary Health Care setting. Aim To find applicable screening tools for the identification elderly people with sarcopenia in Primary Health care, with the objective of early diagnosis and intervention.

**Material and Methods:** A descriptive transversal study of 123 elderly patients (80±3.2 years) in an urban Primary Health Centre, selected from a prospective cohort study initiated in 2006. The data was gathered between April 2013 and July 2014. The diagnosis of sarcopenia, as defined by EWGSOP (European Working Group on Sarcopenia in Older People), is the presence of low muscular mass, measured using bioelectrical impedance (BIA), plus one of the next two factors: low strength (measured in deltoid of non-dominant arm with a myometer, or low performance (measured with a walking test).

**Results:** Sarcopenia prevalence is 15.4%. We compared the sarcopenia patient group with the non-sarcopenia group. The measures that showed significant differences between the two groups ( $p \leq 0.05$ ) were anthropometric tests: Body Mass Index (BMI), brachial (CB) and thigh (CT) circumferences; as measures of strength and performance: the up and go test; and in comprehensive geriatric assessment: MNA, Barthel and Pfeiffer tests.

**Conclusions:** Sarcopenia may be detected using simple tools applicable in Primary Health Care. The proposed tools are: the BMI, CB, CT, get up and go, MNA, Barthel and Pfeiffer tests, which can be used as indicators of sarcopenic patients in the elderly population in our community. These could be good screening tools for sarcopenia early detection and intervention.

Key words: Sarcopenia, Primary Care, Ageing

### OP38.3

#### **Essential competencies in end-of-life care: a cross-sectional survey**

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**Background & Aim:** Identifying essential competencies in end-of-life care, as well as GPs confidence in these competencies, is essential to guide training and quality improvement efforts in this domain. To determine which competencies in end-of-life care are considered important by GPs, and to assess GPs confidence in these competencies in a European context.

**Method:** Cross-sectional survey of 1999 GPs in Switzerland in 2014. Main outcome measures were GPs assessment of the importance of and confidence in 18 attributes of end-of-life care competencies, and reasons for transferring care of terminally-ill patients to a specialist. GP characteristics associated with main outcome measures were tested using multivariate regression models.

**Results:** The response rate was 31%. 99% of GPs considered the recognition and treatment of pain as important, 86% felt confident about it. Few GPs felt confident in cultural (16%), spiritual (38%) and legal end-of-life competencies such as handling patients seeking assisted suicide (35%) although more than half of the respondents regarded these competencies as important. Most frequent reasons to refer terminally ill patients to a specialist were lack of time (30%), better training of specialists (23%) and end-of-life care being incompatible with other duties (19%). In multiple regression analyses, confidence in end-of-life care was positively associated with GPs age, practice size, home visits and palliative training.

**Conclusions:** Although they considered them important, few GPs felt confident in cultural, spiritual and legal end-of-life competencies. Specific training in these domains, especially for younger, less experienced GPs could contribute to improving the quality of end-of-life care in general practice.

#### OP38.4

#### Challenges for general practice; complex multimorbidity patterns in patients aged 55 years and over

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**Background & Aim:** Due to the ageing of the population, the general practitioner (GP) increasingly manages older patients with multimorbidity. To support the management of these patients, more insight is needed into commonly occurring disease combinations (i.e. disease patterns). The aim of this study is to identify highly prevalent or distinctive disease patterns in older patients with heart failure, migraine, diabetes mellitus or dementia.

**Method:** Clinical data of patients ( $\geq 55$  years) were extracted from 158 Dutch general practices between 2002 and 2011. Prevalence rates of multimorbidity were analyzed using multilevel regression analyses; differentiated between patients 55-69 years and  $\geq 70$  years. To investigate multimorbidity patterns, prevalence ratios (prevalence rate index-disease group divided by that in the non-index-disease-group) were calculated for patients with heart failure, migraine, diabetes mellitus or dementia.

**Results:** The overall adjusted multimorbidity rate was 86% in patients with  $\geq 1$  chronic condition, varying from 70%(migraine) to 98%(heart failure). Numerous significant prevalence ratios were found for disease patterns in heart failure patients, ranging from 1.2 to 7.7. In patients with heart failure the combination 'chronic obstructive pulmonary disease and cardiac dysrhythmia' was almost 8 times more common than in patients without heart failure. For diabetes mellitus, dementia or migraine patients, highest ratios were for 'heart failure-visual disorder' (ratio 2.1), 'heart failure-depression' (ratio 3.9), and 'depression-back/neck disorder' (ratio 2.1), respectively (all P-values  $< 0.001$ ).

**Conclusions:** Multimorbidity is far more complicated than merely the presence of two co-occurring diseases within a person. Multimorbidity management in general practice can be reinforced by knowledge on the clinical implications of the presence of the comprehensive disease patterns among the elderly, and those between 55 and 69 years. As a consequence of the complexity of multimorbidity, it is even more important to focus on what matters to a patient with multimorbidity in general practice.

## **OP38.5**

### **Aggressiveness in the primary health care consultation: identification and management**

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The number of assaults to physicians has increased in recent years. In some countries the legislation has changed giving the doctors the category of Authority, to deter aggressive actions against professionals.

Between 2010-2015 there were more than 2,000 assaults to doctors in Spain, 344 of them in 2014.

According to the last Observatory of Aggressions of Medical College, 83% happens in the public sector, 48% in primary care.

According to WHO, 25% of health-care professionals suffer or have suffered assaults.

Although insufficient researches, we have statistical data on ratios of attacks on medical-care professionals in some countries in the EU/UK, Africa, USA and Australia.

Workshop with priority focus on: introduction to the issue and description of context in which these situations arise. Tools to identify and prevent them and promote a proper physician-patient relationship with algorithms for management by the technique of role-playing, and strategies for dissolution of these undesirable situations. Learning of key ideas of the problem and simple techniques for handling and dissolution, avoiding these situations, or at least, minimizing emotional, clinical, legal and economic consequences to keep on being great professionals.

Family medicine is one of the most complex specialties in medical practice as a result of the broad field that it includes.

Professionals engaged in it must master many subjects, but the key is not so much of scientific but human order. The relationship with each other is complicated by the idiosyncrasies of the area in which it develops: a framework of vulnerability, sometimes pain, fear of suffering, helplessness and dependency of patients in the health system. These facts can lead to difficult situations in the patient-physician relationship, among them; the most complicated is to handle the aggressiveness.

The workshop is part of an international research that we would like to carry out.

## OP39.1

### **Long-term risk of dementia after traumatic brain injury - a population-based cohort study**

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**Background and Aim:** Traumatic brain injury (TBI) is common in accidents, sports and military operations. It has been suggested that TBI may increase the risk of dementia, but previous studies have been few, small and limited by short follow-up time. We aimed at evaluating the risk of dementia after TBI in a large cohort with up to 37 years of follow-up.

**Methods:** We established a population-based cohort consisting of all persons who were living in Denmark on January 1, 1995 and who were at least 50 years of age at some point between 1999 and 2013 using information from Danish nationwide registries (the Civil Registration System, the National Patient Register, the Psychiatric Central Register, and the National Prescription Registry). Information on TBI and Dementia was available from 1977 to 2013. Hazard ratios (HRs) and corresponding 95% confidence intervals were estimated using Cox proportional hazards regression models.

**Results:** We followed a cohort of 2,794,852 individuals for a total of 27.6 million person-years of whom 132,093 had at least one hospital contact for TBI, and 126,734 were diagnosed with dementia. The HRs of dementia were highest during the first six months following TBI (HR: 4.06; 95%CI: 3.79-4.34) and decreased thereafter consistently with time since the TBI; the HR was 1.17 (1.13-1.21) 14 years or more after the TBI. The HR of dementia increased with increasing number of TBIs from 1.22 (1.19-1.25) for individuals with one TBI to 2.83 (2.14-3.75) for those with five or more TBIs. The estimates did not change much when we used a reference group of persons who have had a fracture but no TBI.

**Conclusion:** TBI was associated with an increased risk of dementia and the risk increased with increasing number and severity of the TBI.

## **OP39.2**

### **Leadership: competency assessment with a focus on advancement of women in medicine**

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**Background:** Although the number of women in academic medicine has continued to increase, women remain underrepresented at the highest organizational levels and women leave academics at somewhat higher rates than men. The underrepresentation of women in leadership positions worldwide in industry and medicine continues even though the proportion of women in the workplace has increased. Recruitment, mentorship and advancement within academic medicine is challenging. The literature suggests that women may experience a number of gender-related individual challenges that impact their promotion and path to leadership, including gender differences in approaches to career and life goals.

**Aims:** (1) Delineate issues related to gender discrepancies in academic medicine leadership (2) Identify gaps in personal leadership competencies (3) Develop an action plan to enhance leadership skills

**Method:** After providing a framework of the current literature, participants will complete a series of exercises to elucidate gaps in personal leadership competencies.

**Conclusion:** Participants will develop a personal action plan to approach identified gaps in leadership skills.

### OP39.3

#### **Risk factors and consequences of decreased kidney function in nursing home residents – a longitudinal study**

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**Background and Aim:** Renal function declines with ageing and loss of renal function is associated with many adverse outcomes. Elucidating the role of decline in renal function outcomes for the elderly is challenging, and data on the performance of formulae for renal function estimation in very elderly patients are limited.

The aim of this study was to study the renal function and the relationship of deterioration in renal function with major outcomes in elderly nursing home residents. A second aim was to compare the internationally recommended formulae for estimated glomerular filtration rate (eGFR) consisting both creatinine and cystatin C in a nursing home population.

**Methods:** 429 patients from 11 nursing homes were included during 2008-2011. GFR was estimated, from formulae based on both creatinine and cystatin C, at baseline and after 1 and 2 years. The patients were divided into groups based on CKD (chronic kidney disease) level, and comparisons were made for mortality, morbidity, the use of medications and between the different formulae for eGFR.

**Results:** Survival was significantly lower in the groups with lower renal function ( $p < 0.001$ ). Over 60 % of the residents had impaired renal function. Those with impaired renal function were older, had a higher number of medications and a higher prevalence of heart failure. Higher numbers of medications, were associated with a greater risk of rapid decline in renal function with an OR of 1.2 (95% CI 1.06-1.36,  $p = 0.003$ ). The compared eGFR formulae were in excellent concordance.

**Conclusions:** Decreases in renal function were associated with increased mortality. A majority of nursing home residents had declining renal function which should be considered when prescribing medications. The more medications, the higher the risk for rapidly declining renal function. The equations for eGFR, recommended by national Swedish guidelines were in excellent agreement with CKD-EPI formula.

## OP39.4

### Use of anxiolytics, hypnotics and antidepressants in elderly Oslo residents, Norway – differences between nursing home residents and home-dwelling elderly

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**Background & Aim:** Drug consumption increases with age and whether home-dwelling elderly are treated differently than those living at nursing homes is not known. We compared the use of anxiolytics, hypnotics and antidepressants of Oslo residents > 80 years living at nursing homes or at home.

**Method:** Medication use for nursing home residents was recorded as part of a medication review in 2012 (n=1346 residents > 80 years). The Norwegian Prescription Database (NorPD) covers prescriptions to all persons living outside institutions. Prevalence rates in nursing homes were compared with prevalence data retrieved from the NorPD for persons  $\geq 80$  years living in Oslo in 2012 (n=23670).

**Results:** The prevalence rates in nursing homes residents as compared to home-dwelling elderly were 48.9% vs. 16.6% ( $p < 0.01$ ) for anxiolytics, 51.9% vs. 31.6% ( $p < 0.01$ ) for hypnotics-sedatives and 30.2% vs. 11.6% ( $p < 0.01$ ) for antidepressants.

of the twelve most frequently used drugs, elderly living at nursing homes had significant higher use of oxazepam (42.1% vs. 8.3%), zopiclone (39.2% vs. 26.2%), clomethiazole (10.4 vs. 0.2%), escitalopram (8.5% vs. 3.6%), citalopram (7.5% vs. 1.6%) and mirtazapine (9.2% vs. 2.5%) than those living at home (P-values < 0.05).

The prevalence rates of diazepam (7.7% vs 7.9%), mianserin (4.8% vs. 1.8%), melatonin (2.5% vs. 1.1%), zolpidem (2.6% vs. 3.7%) and venlafaxine (1.9% vs 0.4%) were comparable in the two settings.

**Conclusions:** The use of anxiolytics, hypnotics and antidepressants of elderly > 80 years is high. Nursing home residents are more likely to use all the three drug groups than their home-dwelling peers. Especially the use of oxazepam, zopiclone, mirtazapine, citalopram and escitalopram is higher in elderly nursing home residents. Clomethiazole is still used in the nursing home setting. Further research is needed on the appropriateness of therapy according to comorbidity.

## OP39.5

### **Educational intervention in primary care to reduce drug-drug interactions in elderly patients - a cluster randomised controlled trial**

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**Background & Aim:** At least every tenth elderly primary care patient is treated with interacting drugs with potentially severe outcomes. This is problematic as drug-drug interactions (DDIs) may cause potentially severe side effects. The aim of this educational intervention was to reduce the number of DDIs among elderly patients.

**Method:** This was a cluster randomized controlled trial of an educational intervention performed in 68 general practices in Stockholm, Sweden. The tutors, two pharmacists, gave two lectures within 4 months to general practitioners and nurses. The lectures comprised theoretical knowledge on inappropriate drug use according to National guidelines and feedback on prescribing. One of several outcomes was the number of patients aged  $\geq 65$  with at least one DDI. Only 21 DDIs possibly leading to severe side effects potentially leading to the need of hospital care were considered. DDIs were assessed in an administrative database during a 4-month interval after the first educational lecture.

**Results:** The mean age in the total population ( $n=118\ 210$  registered at 68 practices) was 74.5 (SD 7.7) years, and 55.7% were female. Every second patient had  $\geq 2$  chronic diseases. Every third patient received 5 to 9 drugs, every tenth patient  $\geq 10$  drugs. The most common DDIs were those causing bleeding (8.2% of the total population). After the intervention, there was no significant difference between the percentage of elderly patients having at least one DDI in intervention (12.0%) and control practices (11.6%).

**Conclusions:** The content of the educational lectures may have been too unspecific regarding DDIs, as only feedback on prescribing at county but not practice level was available. Future educational interventions should include high-quality “feedback on prescribing” data at practice level.

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**Young doctor movements engaging in rural health policy**

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**Background and Aims:** Many family doctors will find themselves working in a rural area at some point during their career. This can be a daunting concept, especially for newly qualified family doctors, as many countries in Europe do not have the infrastructure in place to provide adequate healthcare in rural areas or a support network for new colleagues. An important part of this issue is engaging with policy makers to improve working conditions and health outcomes in rural areas. Doctors play a crucial role in rural communities and should be patient advocates, however, they often do not have an idea how to do this. The aim is to encourage young doctors to start thinking about how they can get involved with informing policy making regarding rural healthcare.

**Methods:** We will first reflect on some positive examples of engaging policy makers to improve rural healthcare (20 min). This will be followed by a group discussion (50 min) on recognizing rural health issues in your community, what you as an individual or organization can do and how to approach policy makers locally and at a European level. The workshop will conclude with a review of our discussion (10 min).

**Conclusion:** Ideas and suggestions expressed during the discussion may help to form a strategy for approaching local leaders and learning what key points we should focus on.

**Key words:** Rural policy, Rural Practice, Young Doctor Movement, Patient advocacy

## OP40.1

### **Decision-making of general practitioners and practice nurses in providing self-management support to chronically ill patients: a clinical vignette based study**

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**Background and Aim:** Self-management support is nowadays an integral part of chronic care. However, response to self-management interventions varies between individual patients, suggesting the need for tailored self-management interventions. Understanding what role certain patient characteristics play in decision-making of care providers can support future tailoring of interventions.

The aim of this study is to identify the importance of certain patient factors in the decision-making process of providing self-management support.

**Method:** A factorial survey was presented to primary care providers (general practitioners and practice nurses). The survey consisted of clinical vignettes (case descriptions) in which 11 patient factors were systematically varied and each care provider received a set of 12 vignettes which they evaluated on whether or not to provide self-management support and whether they thought self-management support would be successful in that patient.

**Results:** The survey was completed by 60 general practitioners (GPs) and 80 practice nurses (PNs). Self-management support is not likely provided in 30% of the cases. The most important patient factor in providing self-management support and thinking that self-management support will be successful was motivation, followed by patient-provider relationship. Other factors, such as having a depression or anxiety disorder, education level, self-efficacy and social support, played a minor role in decision-making. Disease, disease severity, knowledge of disease, and age were relatively unimportant factors. Few differences were seen between GPs and nurses, however GPs considered illness perception of more importance than nurses.

**Conclusion:** This is the first study that explored the relative importance of several patient factors in decisions regarding the provision of self-management support. By far, the most important factor is motivation. Unmotivated patients are unlikely to receive self-management support. Future tailored interventions should incorporate behavior change techniques enhancing motivation in unmotivated patients. Furthermore, care providers should be better equipped in stimulating motivational change.

## OP40.2

### Health education in COPD patients at a primary care area in Pontevedra

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**Background and Aim:** COPD Prevalence in our Primary Care Area is 16% in the mid-aged population. Hospitalizations due to exacerbations is the main limitation to their quality of life (QoL). In order to guarantee a Healthy and Active Aging, GPs should coordinate health educational programmes (HEP) aimed to reduce hospitalizations and to improve the quality of life. We initiated a HEP in 2014 and in this study we show the impact of our HEP after one year of its implementation.

**Method:** Before and after study. During the first year interventions were focused on (i) improve basic COPD knowledge, (ii) self-management of early symptoms, (iii) use of inhalers, and (iv) smoking counselling. We measured before and after the HEP the following variables: body mass index, smoking habit, visits to GP and emergency departments, hospitalizations, COPD Assessment Test (CAT), spirometry parameters and appropriate use of inhalers. Statistical analyses were performed using Stata14®.

**Results:** 65 COPD patients were included in our HEP, 16 women (24.62%), mean age 69 years old. After one year of implementation, exacerbations in a natural year requiring medical intervention decreased from 61 to 38 ( $p=0.02$ ), visits to their GP went from 107 to 66 a year ( $p<0.01$ ), and ER attendances declined from 16 to 7 a year in this population ( $p=0.06$ ). Mean CAT values decreased from 12.37 (mild impact on life activities) to 9.79 (low impact,  $p<0.01$ ). The percentage of patients that know how to use of their inhalers increased from 75.43% to 90.89% ( $p<0.01$ ). From the initial 21 smokers, 5 quit smoking; whereas 1 non-smoker began to do it.

**Conclusions:** HEP interventions are quite effective in our population. HEP not only reduce costs to the health system, but do facilitate the healthy and active aging of COPD patients.

**Funding:** Costs of this study have been funded by Almirall

### OP40.3

#### **Disease-specific clinical pathways – are they feasible and sustainable in primary care? A mixed-methods study**

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**Background and Aim:** Health authorities in several countries have searched for ways to shift more responsibility and tasks into primary care, to shorten hospital stays and thereby reduce costs. Two cases of collaboration between specialist and primary care to implement clinical pathways for specific diagnoses have previously been examined separately, using process evaluation. The objectives of the two cases were the same, but the progress and results were very different. The aim of the study presented in this paper was to compare the two cases to explore the feasibility of using disease-specific clinical pathways in primary care.

**Methods:** We used a mixed-method sequential explanatory design. First, we merged and compared interview data across the two cases. We then collected quantitative data covering a population of 214,700 to validate the qualitative findings.

**Results:** Primary care representatives were unfamiliar with the use of clinical pathways as a timeline, and with focusing only on single diseases in integrated care. Most of their patients had several additional health problems that pathways guidelines did not take into consideration. They experienced that chronic diagnoses frequently seen in hospitals like chronic obstructive pulmonary disease (COPD), heart failure, stroke and hip fracture, appeared in low numbers when disseminated into primary care. The quantitative study confirmed the low frequencies of the selected diagnoses among home healthcare nursing patients, and that these patients were characterised by extensive multimorbidity. There were very few patients with only one chronic disease.

**Conclusions:** The findings question the sustainability of disease-specific pathways in primary care, both from a clinical and organisational perspective, for patients in need of care coordination. Deploying diagnosis specific pathways into primary care can also lead to more fragmented services for persons with multiple chronic conditions. Generic pathways are likely to be more feasible and efficient for patients in this setting.

## OP40.4

### **How universities of applied sciences could support public health services in the realization of their mission?**

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**Background & Aim:** The ageing of the population makes pressure on the public health services to plan and anticipate the health resources which will be required in a few years. But generally, these services don't have access to the decision support systems required to realize efficiently their mission. In this context, our university of applied sciences can be a partner to make evidences available in their daily operations.

**Method:** The Cochrane initiative provides us a useful and rigorous methodology to implement evidence based practices (EBP). But the resources required to make it "by the book" are rarely available in the true life. In addition, the EBP are traditionally applied in the clinical field, but not so frequently in the public health and healthcare organization. Our approach is more applied and simpler than the Cochrane methodology, but it may be useful to support the health deciders in their daily work.

**Results:** Our team is currently involved in different projects in collaboration with the public health and government services. In this conference, we will report our findings but also the successes and the difficulties we encountered in these collaborations.

**Conclusions:** One of the missions of the universities of applied sciences should be the development of new knowledge transfer methodologies in order to improve the implementation of scientific results into the practice. This aim requires the development of innovative approaches which maximize the scientific rigor, but simultaneously stay accessible to the practitioners. For example, the development of a partnership with non-scientific stakeholders involved in the health policy development and its implementation, is one of these challenges which should be considered.

## OP40.5

### Evaluating effect of activity levels and socio-demographical characteristics of individuals over 65 years of age on social relations

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**Background & Aim:** Evaluating effect of activity levels and socio-demographical characteristics of individuals over 65 years of age on social relations.

**Method:** Our study was made in Ministry of Health Ankara Education and Research Hospital-Family Physician Polyclinics between February-April 2015. 176 individuals over 65 years of age were given socio-demographical data questions, International Physical Activity Questionnaire, Lubben Social Network Scale. SPSS 20.00 statistical programme was used in data-analysis. Average general-factor score and total scale-scores were calculated. Mutual factorial-effects were analyzed by FACTORIAL ANOVA test. Gender-related distribution of study group, etc. were analyzed descriptively (number, percentage, average, etc.).

**Results:** 176 people over 65 years-of-age participated, 74 males (42%)-102 females (58%). Average age was  $73.6 \pm 5.85$ . Female BMI, widow and spinster rates and male education time and marital rates were higher. in Lubben General Scores, Family Score was highest and neighbour score was lowest. Male Friend Score was higher. Participants (64.8%) were mostly minimally active in IPAQ score. Male over-activity ratio and female inactivity-ratio were high. There was positive correlation between male gender, FA level, number of children and Lubben Family Score. Married and high FA scored participants had high Lubben Neighbour Scores. Married participants had highest and single participants had lowest scores. No significant difference between married/single participant Lubben Neighbour Scores. Lift presence, FA level and Lubben Friend Score were positively-correlated.

**Conclusions:** It would be more effective to consider the socio-demographical factors and physical activity levels and plan counselling-services and projects for elder people. Increasing social relations is very important for their health; increasing physical activity may also be useful. Physical activity should be encouraged to increase social relations and education programs and plans made to provide appropriate activity, place and time.

## OP41.1

### **Multimorbidity in the light of biography – results from the Norwegian HUNT 2 and 3 Studies**

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**Background and Aim:** Multimorbidity has been termed one of the biggest medical challenges of our century. Research indicates that chronic dysregulation of major adaptive systems caused by accumulated stress, allostatic overload, may represent a common underlying etiological factor. In light of this we looked at difficult circumstances both in childhood and adulthood with regard to development of adult multimorbidity.

**Methods:** Our data come from the Nord-Trøndelag Health Study, phase 2 (1995-7) and 3 (2006-8). In total 37 071 participants took part in both phases. Multimorbidity was defined as two or more chronic conditions of 21 available from the questionnaires. Assessment of difficult childhood was made from HUNT 3 and odds ratios of multimorbidity generated with logistic regressions. Difficult circumstances in adulthood were analysed for non-multimorbid adults in HUNT 2 looking at fourteen factors indicative of stress. Relative risk of developing multimorbidity ten years later was then estimated with logistic regression.

**Results:** In total, 44.8% of participants with a very good childhood had multimorbidity compared to 77.1% of those with a very difficult childhood (Odds ratio: 5.08; 95% CI: 3.63– 7.11), similar for both genders. The same trend was seen for all but two of the chronic conditions. Development of multimorbidity with regard to stressful or demanding circumstances showed a significant relationship for twelve of the fourteen factors chosen for the evaluation. The prevalence of multimorbidity increased as well with increasing number of stressful factors, from 26.3% to 42.5% for 6+ factors.

**Conclusion:** Our results indicate a correlation between demanding circumstances in childhood and multimorbidity later on. The correlation becomes stronger with increasingly difficult circumstances. The results could reflect increased allostatic load as a possible underlying mechanism in development of multimorbidity.

## OP41.2

### Problem solving therapy – treating multimorbidity in general practice

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**Background and Aim:** Multimorbidity is an increasing challenge in general practice. Clinical guidelines tend to target individual diseases and do not cover the complexity of problems handled by general practitioners (GP) in daily clinical practice. The aim of this pilot study is to examine the feasibility and effectiveness of teaching Danish GPs problem solving techniques.

**Method:** Twenty general practices volunteered for a course on problem solving. Clinics were matched two and two with regard to population size and number of referrals for psychological treatment and were randomized to either “problem solving therapy” or “treatment as usual”. Outcome measures: changes in problem-solving attitudes among GPs, changes in the patients’ assessment of benefits of problem solving therapy, and changes in the use of health services at the clinic, i.e. referral for psychological treatment, use of psychopharmacological medications and total costs.

**Results:** Fifteen GPs (10 female and 5 male; mean age: 52.4 years) participated in the course on problem solving. Problem solving attitude was assessed before study entry. A standardized self-report instrument for assessment of problem solving attitude (PSA) was used. The PSA included 10 items (all scored 0-4), with 40 being the optimal problem solving attitude. The initial testing revealed a mean score of 26 (SD: 4, range: 26-35).

**Conclusions:** Included GPs demonstrated room for improvement in problem solving attitude. Changes in PSA scores will be presented at the conference. Preliminary results on changes in patient reported outcomes will also be presented.

### OP41.3

#### **Is family physician a member of the family? Physician's aspect**

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**Background & Aim:** Patient-physician relationship is the basis of medical practice. Family practice is identified as based on relationship which is not limited with the consultation room. A family physician should know his/her patients as well as their home life, environment and relationships.

Our aim was to research how much physicians know about their patients beyond the consultation room.

**Method:** A cross-sectional analytic study was planned and conducted in Bornova, Izmir. 113 face to face interviews were done with family physicians. The survey included questions about the demographic features as well as questions about level of acquaintance and medical history knowledge with his/her patients of the physicians besides patient-physician communication and patients' trust. The data was analyzed using the SPSS version 16.0 program and besides descriptive analysis; chi-square test, student's T test and correlation tests were used.

**Results:** The acquaintance level, knowledge of medical conditions, opinions about communication and social relations of physicians with their patients are 2.40, 2.89, 2.70 (minimum 1, maximum 4) and 2.00 (minimum 1, maximum 5), respectively. Physicians who had 3500 or less registered patients had higher ratings regarding social relations and communication. Physicians who have never moved had higher ratings in social relations, communication, acquaintanceship and general mean points. Social relations and communication were better at socio-economically improved areas. Women's ratings on trust, medical features, acquaintanceship and general mean points were higher than men's.

**Conclusions:** Family physicians do not consider themselves confident regarding their knowing of their patients.

#### OP41.4

### **“Deprescribing”: assessing the attitude of patients with chronic diseases towards this concept in public primary healthcare clinics in Singapore**

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**Background & Aim:** Public primary healthcare clinics (polyclinics) in Singapore manage almost half of the patients with chronic diseases. Inappropriate medication prescription and polypharmacy amongst this group of patients are common. As such practices are associated with adverse outcomes such as increased risk of fall, adverse drugs events, hospitalisations and death, they should be curtailed. However, it is unknown whether these patients are receptive to the reduction of medications. An approach coined “deprescribing” has been used to describe a patient-centred process of optimising medication regimens.

The study aimed to determine the attitudes of patients towards their medication regimens and to identify factors that might influence acceptance of “deprescribing”.

**Method:** A questionnaire survey using the validated Patients’ Attitudes Towards Deprescribing (PATD) and the Wake Forest Physician Trust Score (WFPTS) was conducted at 2 polyclinics in Singapore. The target participants were multi-ethnic Asian patients on at least 5 medications for their chronic diseases treatment. Mann-Whitney U test was used to compare ordinal items in demographics groups, while correlation analysis for the willingness to stop medication (outcome) and Spearman Correlation was used to test the other 5-point ordinal items. A  $p < 0.05$  was considered statistically significant.

**Results:** The study population comprised 136 patients, 41.2% females, Chinese(69.9%), Malay(8.8%) and Indians(15.4%), with median age of 68 years, 4 chronic medical conditions and 6 prescription medications. 93.4% of patients were willing to stop one of their medications if advised by the doctor. Factors in favour of “deprescribing” included younger age (<65 years old), non-possession of medication-discount card and increased physician trust scores (WFPTS). The number of regular medications and number of co-morbidities were not associated with patients’ willingness to stop a medication.

**Conclusions:** Majority of the patients were willing to cease a non-essential medication. Age, social privilege and physician trust influenced their acceptance of “deprescribing”.

## OP41.5

### **Experience of implementation of the integrated care process for pluripathologic chronic patient care access (PCPPC) in a regional health service**

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**Justification:** A region with 2.5 M/h, with a high rate of aging (23% > 65 and 9.4% > 80 years) large, with a dispersed population and high number of elderly patients with multiple diseases, in need of joint social and health responses Under of the Regional Strategy Patient Care Chronic<sup>1</sup> it was consider a priority to design and implement an Integrated Process of Care PCPPC<sup>2</sup>, that integrates Primary Care, Hospital Care and Social Services, with the participation of patients and caregivers.

**Objective:** To provide an integrated health and social response to PCPPC with greater needs for services and resources Population Diana: Patients CPPC(G3) identified by stratification of the population by GRC adapted system (5.2% of the population) Key elements in the process. Accessibility, ease of communication between professionals, agility in the management of the patients, primary care leadership, importance of the role of nursing, stable clinical references in the hospital, proactive detection and early treatment of decompensations, close cooperation with the specialists and emergency services. Incorporation of patients and families in the process. The patient flows and pathways in health and social services are clearly defined. Specific functional structures are created in the hospital, Units of Continuity of Care and Units of Convalescence in Social Services.

**Results:** Implementation. Piloting the process in two health areas (2014-2015). Spread to all the 11 areas.

**Conclusions:** Although the level of development is not homogeneous, the results in the areas most advanced are promising: Improving communication PC-Hospital, increased telephone consultations, improved continuity of care, fewer hospitalizations of PCPPC and specialists consultations. Analyzed the factors that foster and the obstacles for the implementation, thereof is pending to evaluate the satisfaction of users and professionals. Although we are at an early stage of the process of development, initial results are encouraging supporting the appropriateness of the model.

## OP42.1

### Resolution of pigmented lesions of the skin by teledermatology in primary care

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**Background & Aim:** To evaluate the use of teledermatology in pigmented skin lesions in primary care.

**Methods:** A descriptive study was done on a sample of 200 patients diagnosed by teledermatology deferred. The photographs of pigmented lesions of the skin were emailed to specialist in dermatology, who confirms the diagnosis and need for referral and / or most appropriate treatment. The measured variables were age, sex, primary care clinical judgment, response time dermatologist, diagnostic by dermatologist, concordance, treatment, the total time to skin problem resolution . Descriptive statistics and SPSS for medium frequencies and kappa for concordance.

**Results:** Patients mean age: 57 years (+/- 22), 61% female, the average waiting time in obtaining dermatological response 1.3 (+/- 1.8) days. The diagnoses most frequently encountered is that of nevi in 23.7% of patients, basal 21.1%, seborrheic keratoses and squamous 16.5% 14.5% 2.1% melanoma. Given diagnoses matching has obtained a kappa index of 0.7. It was specified referral dermatology at 55.7% of patients. Surgical treatment 33%. The average for the resolution of the total time were about 61 (+/- 80) days.

**Conclusion:** Using teledermatology in primary care is a very useful tool for quickly diagnosing borderline or malignant pigmented lesions, serving to reduce unnecessary referrals to dermatologist.

## **OP42.2**

### **Alopecia areata in children**

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Alopecia areata (AA) is a immuno-mediated cronic disorder, characterized by the interruption of the hair cycle, targeting anagen hair follicles and causing non-scarring hair loss. The most commonly affected area is the scalp, but other hair-bearing areas can be affected, showing from discrete to large patches of alopecia or a total body hair loss. It targets 1 in 1000 peoples and onset is usually under 30 years of age. AA is associated with other immune-mediated disorders such as vitiligo and thyroiditis, so these conditions must be searched for. Recovery within a year and spontaneous hair grow are usual, even though almost all will relapse. Childhood AA and duration of more than a year are both worst prognosis factors. Generally, examination is enough for the diagnosis: discrete and smooth alopecia patches, 'exclamation mark' hairs limiting the patch and occasional red skin. The 'hair pull test' is positive (if active alopecia). Differential must include tinea capitis, trichotillomania, cicatricial alopecia, androgenic alopecia, secondary sifilis, telogen effluvium and triangular alopecia.

**Objective:** highlight the difference on management of AA in children.

**Method:** search on UpToDate and Pubmed with MeSH Alopecia. The management of AA in Children is more limited because of this age group's intolerance to some treatments (cutaneous reaction of anthralin and pain upon intra-lesional glucocorticoids (GC) administration) and possible serious side effects from systemic GC including adrenal suppression, growth retardation and loss of bone density. Topical potent GC are the first approach. Other therapies such as Minoxidil and topical immunotherapy are to consider.

### OP42.3

#### **Diabetic foot risk assessment on primary care: results of a simplified clinical protocol**

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**Background & Aim:** The diabetic foot is one of the most serious and costly complications of diabetes mellitus. Identifying patients at risk and preventing such complications are essential tasks of primary care. However, many of the assessing protocols are too intricate, which hampers its implementation on the daily practice. This study aimed to present the assessment of diabetic foot risk, using a simplified clinical protocol designed for primary care practice.

**Methods:** Forty-nine patients with type 2 diabetes candidates to Diabetes em Movimento® (NCT02631902), a community-based lifestyle intervention program (28 women; caucasian; non-smokers;  $63.31 \pm 8.42$  years of age;  $5.73 \pm 4.71$  years of diabetes; HbA1c  $6.62 \pm 0.91\%$ ), were assessed. This protocol includes: questions about relevant patient history; clinical foot examination (observation of structural and dermatological characteristics; 10-g Semmes-Weinstein monofilament test; 128-Hz tuning fork test; and palpation of peripheral arterial pulses); and evaluation of the difficulties in taking care of the feet (ability to see the plantar surfaces). These data allows the classification of the diabetic foot type (without complications; neuropathic; ischemic; or neuroischemic) and ulcer risk stratification (grade 0 – without risk factors; grade 1 – at least one risk factor; grade 2 – neuropathy; grade 3 – with signs of ischemia OR neuropathy with foot deformities OR previous ulcer OR previous amputation). The average application time of this protocol is 5 minutes per patient.

**Results:** Diabetic foot type: without complications 38.8%; neuropathic 57.1%; Ischemic 4.1%; neuroischemic 0%. Risk grade 0: 0%; risk grade 1: 36.7%; risk grade 2: 26.5%; and risk grade 3: 36.7%.

**Conclusions:** Neuropathic feet was the most prevalent type. No patient was exempt of risk factors and around one-third had grade 3 risk classification. Moreover, 36.7% presented risk factors without complications that could be managed and modified in primary care.

## OP42.4

### Can we improve our low back pain tackling in our surgery?

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**Introduction:** Low Back pain (LBP) is, after respiratory infections, the most frequent cause of consultation in primary health care. It is also one of the most common diseases of Family Doctors (FD) since computerisation.

Multidisciplinary and multinational evidence-based Guidelines (G) for the prevention and treatment of acute and chronic LBP were issued by a European project launched in 1999 by the European-Commission (COST B13 Action). In Spain and other countries, multidisciplinary national Working Groups adapted COST B13 guidelines to their own setting.

Since 2013 we are implementing the G we produced in our (Sub-Regional) Cartagena-Health-Area (CHA) (250.000 patients registered). Our Working Group is chaired by a Family Doctor (FD) and composed of specialists in Traumatology-Rheumatology-Rehabilitation-Anaesthesiology-Radiology-Internal Medicine and Family Medicine as well as Physiotherapists-Informatics and Health Authorities.

Prevention and treatment of chronic LBP should be multidisciplinary and include exercise and health education focusing on active management. The doctor could produce either placebo or nocebo effect.

Some related procedures have been included in the Choosing wisely initiative

Since 1995 we have run more than 60 Back-School Workshops in National and Regional Spanish Conferences. We would like to share with you our experience.

**Goals:** FD should (1) acquaint with COST B13 LBP guidelines and our CHAG; (2) learn the possibilities of prescribing therapeutical exercises (TE) and postural hygiene (PH) to their patients with LBP; (3) acquaint with the abilities to help the patient to learn and carry out TE-PH as part of his treatment; (4) Change attitudes about TE-PH prescription in their daily work; (5) learn exercises to be carried out during their surgery and at home.

**Methodology:** Interactive. Each FD will have a facilitator. Role-playing followed by group discussion of LBP tackling in daily consultation. G will be discussed. All TE-PH recommended for the patient will performed by FD supervised by their facilitator.

## OP42.5

### Information and advice about place of birth - what GPs in training say

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**Background & Aim:** A Cochrane review, the recognised British National Institute for Clinical Evidence (NICE), and the international professional organisations for obstetricians and midwives agree that there is good evidence that out of hospital birth supported by a registered midwife is safe. Low-risk pregnant women should be offered information about the evidence and the possible choices. In Denmark it is the obligation of the general practitioner to tell pregnant women about the option but this rarely happens. The aim is to investigate the spontaneous comments among Danish, first year, general practice residents' on the topic: "How should we inform our pregnant women about place of birth?"

**Method:** First year general practice residents were observed and audio-recorded at seven half-day courses in antenatal care held in Copenhagen 2014-2015. Each class had around 25 participants. The lecturer opened up for comments when the topic place of birth was reached and she left 6-10 minutes open for participants to speak about their thoughts and practice. The audio-recorded comments and dialogues were transcribed, and analysed by Systematic Text Condensation inspired by Giorgi's approach, searching for issues describing themes of importance for the participants' information practice. The analysis was conducted as collaborative negotiations between the two presenters.

**Results:** The study is on-going and results will be presented at the conference. Reactions ranged from fierce resistance against the idea of planned home birth, to comments from female doctors who had either considered or actually had a planned home birth themselves. Challenges in relation to giving neutral and balanced information often came up as did the influence of hospital experiences.

**Conclusions:** Danish GPs in training cover a wide range of opinions about place of birth and giving neutral evidence-based information seems to be a challenge.

## The role of research in specialty training for family medicine: perspectives from EGPRN, EURACT and Vasco da Gama

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**Background and Aim:** The importance of building research capacity in GP/FM has been highlighted as important for ensuring that the evidence base for current clinical practice is relevant to the patients seen in primary care. However many Family Physicians regard research as being a field reserved for colleagues with academic expertise. Involving all trainees in a research project during their training may help to alter this perception and develop an understanding in the next generation of the role of primary care in research. A recent survey of 28 European countries identified that approximately 50% of training programmes currently contain a mandatory research module.

### **Aims:**

1. To describe the different approaches taken to this topic
2. To provide specific examples of projects done by specialty trainees
3. To explore a possible approach to training for this topic
4. To explore the challenges of introducing research in to ST.

**Method:** This seminar will consist of the following teaching methods: presentations from EGPRN/EURACT and Vasco da Gama on the above topics and plenary discussion. These presentations will include examples of projects completed and some qualitative data, gathered via social media, on young doctors' experiences of participating in research in specialty training.

**Results:** The expected results from this seminar include the collection of experiences, opinions and challenges in introducing research in specialty training curriculum. Best practice will be identified.

**Conclusion:** This seminar will bring together expertise from three of WONCA Europe's networks to explore this important topic.

**W77**

**IGRIMUP Workshop**

**"We should treat the patients - Not their numbers..." - how to fight polypharmacy and reduce IMU in your own practice/clinic?**

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In this interactive workshop, IGRIMUP members will present real case reports of elderly people with comorbidity and excessive polypharmacy in whom extensive de-prescribing has been performed. Follow up of several years will highlight beneficial clinical outcomes of de-prescribing.

We encourage Interactive participation of all the audience throughout the whole sessions, stopping at many points to let professionals from the audience to contribute from their experience/knowledge and discuss different angles of the dilemma.

We concentrate on common preventive drug-groups prescribed in an attempt to avoid/postpone vascular target organ damage and complications related to hypertension, hyperlipidemia, diabetes and increased coagulability. We stress the lack of EBM regarding optimal target goals for blood pressure, lipids & glucose levels in the Very Old, those with CO-morbidity, Dementia, Frailty and Limited life-EXpectancy (VOCODFLEX). We challenge the rational of current clinical guidelines that seem to disregard the age related decrease/inversion of the positive benefit/risk ratio for most drugs (particularly in VOCODFLEX), while recommending infinitely prescribing of all these medications until death. The main question for discussion is what, when and how should we discontinue medications (de-prescribe)? This workshop is appropriate for Family Physicians and other health professionals working in the community, Long-Term Care facilities, hospitals and hospices, caring for independent, frail and disabled elderly people with comorbidity, including patients with limited life expectancy.

**W78**

**The strength of Family Medicine Research in Europe**

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**Background & Aim:** Research is a key pillar of a clinical discipline, thus the variation in the strength of primary care in different countries could be partly explained by the differences in the research strength in the subject in each country. The objective of this project was to determine the strength of research and compare it with measures of the strength of primary care. The aim of the workshop will be to refine the findings of the Delphi process and quantitative analysis.

**Method:** A two-phase Delphi process involving 20 Family physicians drawn from each WONCA region was conducted in order to identify the most relevant variables in assessing primary care research strength. The final variables selected and available were (Number of publications in peer reviewed journals per year over past 5 years; Number of FM researchers; Numbers of departments of FM with research methodological support posts; Whether training in research methods is part of postgraduate training in FM; Numbers of departments of Family Medicine (FM). Descriptive and bibliometric analyses were conducted in order to describe and analyze the research strength of each country. Cross tabulations, adjusted for population size and GDP, were completed to make international comparisons on a scale from 0-50. Inferential analyses were used to assess the association between research strength and the strength of family practice by country. **Results:** Overall, there was significant variability in research strength within categories of family medicine strength across Europe from 12-50 (GDP adjusted 0.7-1.4). The correlations between research strength and primary care strength were moderate. Weaker primary care systems had a mean unadjusted research strength of and strong primary care had a mean unadjusted research strength of 35.2.

**Conclusions:** Although these data are preliminary there is some support for McWhinney's assertion that research is the fourth pillar of our profession.

## W79

### **Multimorbidity in family practice – patient unmet needs and doctor educational needs**

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**Background:** Approximately 70-80% of patients aged 50 years and older in the primary care setting have multiple health problems. Despite the increasing numbers of patients with multimorbidity, the delivery of care is usually built around one single disease. Guidelines are derived from studies that often exclude patients with multimorbidities. The studies highlight difficulties of managing multimorbidity in family practice. The amount of educational literature about patients with multimorbidities is very limited. However, findings indicate that recognition of the significance of multimorbidity in family practice is growing. Clinicians need a management approach that considers the challenges particular to each individual, including patient preferences, goals and prognosis.

**Aim of the Workshop:** To identify the most challenging areas of clinical practice in patients with multimorbidity.

**Methods of the Workshop:** The workshop will start with a small presentation about clarification of the terms and importance of multimorbidity in primary care setting. After this participants will be divided into small groups (5-6 people) to discuss on a case-vignette on a preestablished structured way. Groups will be asked to identify the most important problems of the patient, possible unmet needs of the patient and own educational needs related to the patient problems.

**Results and Conclusion:** At the end of the workshop the participants are more aware about the complexity of the multimorbidity and know more about their personal educational needs related to this challenging topic.

## **W80**

### **Benzodiazepines in clinical practice: how to avoid and stop them? A workshop for early career doctors**

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To manage anxiety and insomnia, GPs prescribe benzodiazepines which have proven to be very helpful in the short term. However, in the longer term, their use in clinical practice can cause many difficulties. Memory problems or falls, especially in older adults, are a concern. In addition, misuse and dependency often appear after a few weeks/months. Clinicians and patients therefore end up with a prescription difficult to stop, and that doesn't help any more with the initial complaint. There are other non-pharmacological ways to cope with anxiety and insomnia, and teaching these techniques to clinicians and patients has proven to be efficient. The aim of this workshop is provide GPs with techniques to avoid prescribing benzodiazepines and to stop them in patients already using and addicted. We will use an interactive approach. Presenters will alternate clinical vignettes and theoretical points to keep the workshop close to clinical practice. In addition, exercises will be held during the workshop to make participants practice with each other the techniques explained. We expect to provide clinicians with skills that can translate directly into their clinical practice. Basic CBT and motivational interviewing techniques will be taught and they will have the opportunity to practice during the workshop. General knowledge of the benefits and risks of benzodiazepines will help clinicians prescribe based on evidence. This workshop, specifically designed to suit early career doctors' needs will contribute to decrease unnecessary prescriptions of benzodiazepines in the community. A balanced view of risks and benefits and a very pragmatic and practical approach will ensure the knowledge and skills learnt will be translated into clinical practice.

**S37**

**PCDE Symposium**

**Pearls for clinical practice; management of elderly people with diabetes**

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This symposium will address the care of diabetes in the elderly. It is expected that discussing primary care needs of frail people with diabetes will benefit quality in provision of care for this group. The session is aiming to enhance the understanding about multidimensional, integrated approach to the comprehensive management of diabetes in elderly people.

The issue of frailty will be addressed. Frail individuals are characterized by a combination of recent weight loss, significant fatigue, severe restriction in mobility and strength, increased propensity to falls, and increased risk of institutionalization.

A consideration will be given to the management of medications in elderly people. Like with all diabetes patients, there is a need to individualize the medication regimen so as to maintain an optimum balance between control of diabetes and other cardiovascular risk factors and the minimization of drug related adverse events such as drug interactions, falls and admission to hospital or emergency departments.

## **W81**

### **A future vision for development of and enhanced collaboration between the Networks of WONCA Europe**

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**Justification:** WONCA Europe is a relatively young organisation. It is comprised of six Networks; EGPRN, EQuIP, EURIPA, EURACT, EUROPREV and VdGM. While the Networks each have unique aims and objectives they also share many common goals. These include a desire for high quality education and research, for vibrant engaging conferences, and to inspire life-long involvement in WONCA. WONCA Europe also has as a key aim the promotion of Network collaboration yielding meaningful and tangible outcomes; however, as yet, we do not have a common process or mechanism that provides robust funded support for Network collaboration.

**Aims:** The aims of this workshop are:

- 1) to enhance understanding of the WONCA Networks,
- 2) to identify a roadmap for development of a common platform for Network collaboration,
- 3) to identify sources of funding that support Network collaboration, and
- 4) to inspire increased involvement in Network activity.

**Methods:** Following a brief presentation about the Networks and their goals, we will outline examples of successful collaboration and our shared vision for development of enhanced Network collaboration. Participants will then break into facilitated groups to discuss the current challenges in Network collaboration. At the end of the workshop, group outcomes will be presented. Afterwards, the findings will be summarised and contribute to a proposal document to be submitted jointly by the Networks to the WONCA Europe Board and Council.

**Conclusion:** At the end of the workshop the audience should have an enhanced and clear understanding of each of the WONCA Europe Networks; their aims, objectives and future vision. We also aim to inspire the audience to become more involved in Network activity. The workshop will also provide the ingredients and raw materials necessary for creation and development of a plan for a cohesive funded system and process that underpins inter-Network collaboration and Liaison activity.

## **OP43.1**

### **Medical care for homeless families and migrants: Scandinavian and American approaches**

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**Background and Aim:** During 2014, the US homeless rate again decreased for both families and individuals (State of Homelessness, 2015). Our state, Massachusetts, however, witnessed a rise in the number of homeless families in shelter or supported housing, as did three Scandinavian countries (Finland, Sweden, and Denmark). Norway, however, saw a leveling rate of homelessness. Our Center's Homeless Medical Team aims to provide easy-to-reach-and-start care to homeless patients throughout their housing transitions.

**Method:** Our program strives to provide urgent medical and preventative care to the homeless in the field and at our conventional center. We will measure our success in meeting these needs by monthly counts of non-critical emergency room visits and by looking at monthly occurrences of preventative interventions like vaccinations or screening mammograms among our homeless patients during the first half of 2016. Our coldest months might decrease the effectiveness of outreach efforts. We will compare how our Nordic family-medicine colleagues reach their homeless patients and meet their pressing needs.

**Results:** We expect our qualitative review of these programs for health care for the homeless to reveal differences between special population programming and funding (as in the US) versus integration into a universal health care system. Although our state, with over 97% of its population insured, is a mixture of these health delivery systems, medical providers to the homeless here still struggle to meet the transportation, prescription, and specialist requirements of one of our sickest, most marginalized populations. We hope to examine and then adopt how Scandinavian doctors manage full medical care and a care safety net.

**Conclusions:** What might family doctors from these five different countries learn from each other about day-to-day medical care of homeless people and families? Perhaps, pooling solutions from medical practitioners across national borders will enhance "under-housed" medicine around the globe.

## OP43.2

### **Formative evaluation and feasibility trial of a collaborative care intervention for prison leavers with common mental health problems**

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**Introduction:** The Engager intervention aims to improve the mental health of men being released from prison who have anxiety or depression, and often substance misuse as well as markers of personality disorder. The collaborative care intervention includes joint working with primary care, engagement to develop trust, mentalisation-based approach to work with rapid changes in emotion, development of a ‘shared understanding and plan’, and through the (prison) gate working.

**Aims:** To understand whether the Engager intervention is working and why, and to refine the intervention and its delivery (manual, training, supervision) for a subsequent RCT.

**Methods:** The latest guidelines in intervention process evaluation (MRC 2014) were used to refine the intervention. We used a realist approach to understand what works, for whom, and in what context. Of 60 recruited 40 prison leavers were randomised to the intervention. Data included: interviews (practitioners=9, participants=30), audio recordings, practitioner records, and health records.

**Results:** Engagement post release was high. Practitioners believed in the Engager model, and felt empowered to work in new ways. Role uncertainty, greater familiarity with practised ways of behaving in challenging situations, and local cultural/practical difficulties, meant practitioner behaviour was at times slow to change. Offenders trusted and engaged with Engager practitioners, against the expectations of some other services, describing their practitioner as a ‘mate with good contacts’. Refinements following evaluation included clarification of roles, development of the supervisor team leader role, changes to timings for shared understanding and goal-setting, practitioner self-care, crisis management to develop the ‘shared understanding’, and improving ‘good endings’.

**Conclusions:** The realist formative evaluation of Engager provided rich information about what was and was not working in the Engager intervention, who it was or was not working for, and in what context/s. This fed in to refinements of the Engager manual, training, and supervision for the main Engager RCT.

### OP43.3

#### **Care, communication and educational needs of primary care nurses to treat disabled patients.**

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**Background & Aim:** 129 021 disabled patients (DP) are living in the northern part of Belgium of which 21 518 were waiting to receive residential care (in 2013). Due to the waiting lists for DP, Belgian government promotes a shift towards primary care. However, this shift results in specific needs for primary care professionals (general practitioners, primary care nurses (PCN) and informal caregivers). The objective of this research is to detect nursing care, communication and educational needs of PCN to treat their DP and take care of their informal caregivers.

**Method:** A questionnaire was constructed by a multidisciplinary team of primary care professionals (4 general practitioners and 20 PCN). Disabilities are defined as a physical and/or intellectual impairment. Sensory disabilities and impairments attributed to the normal ageing process are excluded. The questionnaire was sent electronically to participants. Analysis is performed using SPSS 22.0.

**Results:** in total, 1547 questionnaires were mailed, 617 PCN responded, representing a response rate of 40%. PCN are delivering daily care to on average 16 patients (+/-10) with a mean of 5 DP (+/-6). Most PCN (n= 582) experience an overburdening in significant percentage of informal caregivers mostly due to an overload of tasks (72%). Hygienically care and administering medication (+/-injections) are most frequently administered care. The communication with the DP and other primary healthcare professionals is evaluated as very good. Most reported educational needs are dealing with behavioral problems (84%), functional loss (84%) and acquired brain injury (74%). There is no significant difference in educational need for PCN nursing exclusively at home versus both at home and in residential care facilities.

**Conclusion:** There is a significant need for education of PCN to nurse DP. Findings will be used to design educational programs to provide PCN with skills to provide high quality care to DP.

#### OP43.4

### **How do general practitioners assess self-care in patients with multimorbidity and difficulties in disease management?**

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**Background and Aim:** Disease Management Programs (DMPs) have been developed for the major chronic diseases in Denmark. A cornerstone of the DMPs is stratification of the patients upon disease complexity and self-care ability. It is mostly performed by the patient's General Practitioner (GP), who thereby determines how and where the treatment should take place. There is only sparse knowledge about the GPs perceptions and assessment of self-care according to the DMPs and how it is managed in patients with multimorbidity. The aim of the study is to explore GPs' perceptions of and experiences with assessment of self-care ability in patients with multimorbidity and difficulties in disease management in relation to stratification.

**Method:** 12 GPs were individually interviewed regarding their experiences with assessment of self-care ability in patients with multimorbidity. A semi-structured guide was used and followed by data driven analyses.

**Results:** Preliminary results point towards that GPs understand health-related self-care ability as patients' recognition of their health problems and the willingness to put time and effort in adjusting their lives to their disease. The GPs stress that health-related self-care ability depends upon the patients' overall circumstances such as:

- 1) Other somatic conditions,
- 2) Mental disorders,
- 3) Few mental resources,
- 4) The current social situation.

**Conclusions:** This study formulates GPs' specific understanding of self-care which can be a starting point for a more professional work with self-care in General Practice.

**Points for Discussion:** How should GPs assess self-care in patients with multimorbidity and low ability of self-care? What could primary caregivers do to improve disease management in patients with multimorbidity and low self-care?

## OP43.5

### **An exploration of infant feeding practices among Western African mothers living in the community in Ireland**

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**Background and Aim:** Breastfeeding is seen as an unequalled infant nutrition method. Interestingly international evidence shows that migration has a detrimental effect on breastfeeding. In the past 20 years Ireland has experienced significant inward migration. Little is known about how 'new' ethnic minority communities experience breastfeeding in their new Irish community setting. This 'gap' reduces the scope for health care providers to optimally promote, protect and support breastfeeding among these minority communities. This study aims to explore infant feeding practices of Western African women with objectives to examine levers and barriers to breastfeeding practices in an Irish community context.

**Methods:** This is a qualitative study. A narrative approach to data collection and analysis was adopted which suited the cross-cultural nature of the research. The study participants were 9 women from West Africa. Each interview consisted of two sub-sessions based on Wengraf's Biographic-Narrative Interpretive Method (BNIM), an initial sub-session with an open-ended question aimed at inducing narrative and a second sub-session using particular questions aimed at inducing narrative generated from the responses in sub-session one. This paper presents an in-depth analysis of 2 cases and thematic analyses of all 9 participants. Techniques were employed to enhance reliability and validity.

**Results:** Jemma's case illustrates the ways in which 'superior' breast feeding practices may deteriorate in the Irish community setting due to mitigating socio-cultural circumstances. In contrast, Sara's case shows that breastfeeding practices can also flourish with positive breastfeeding experiences building on subsequent successful breastfeeding practices. Thematic analyse of all participants lead to the development of a Circles of Experiences framework for understanding how different experiences can have a positive and negative effect on the optimal practicing of Breastfeeding.

**Conclusion:** Migration can have a detrimental effect on breastfeeding practices. However, breastfeeding may flourish. General practitioners AND Health Care Professionals should be aware of the experiences that promote or inhibit breastfeeding practices for mothers from ethnic minority communities so that they can discuss practices and options with the mothers in culturally appropriate ways.

## **W82**

### **Getting more knowledge and awareness of alcohol abuse in elderly patients**

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General practitioners think that alcohol abuse is less common in elderly people, however alcohol problems in elderly people are underestimated. In the Netherlands in 2008 71% of 65+ have been drinking more than one glass of alcohol (1,4 glas) a day and 8% more than three glasses a day. The amount of elderly patient with strong alcohol abuse changed from 3% to 5%. Elderly people are drinking more frequent and on daily bases compared to younger people. With the growing population of elderly people it is important to have more knowledge and awareness of the upcoming problems of alcohol abuse.

Elderly patients do not talk about the subject. Mostly the family members are reporting the problems of alcohol abuse. General practitioners have difficulties remarking the problems in elderly people. Why do we find it difficult to recognise the alcohol abuse? What kind of tools are there to remark the problem? Why is it so important to have knowledge about the drinking problems in elderly people?

The session will start with group discussion about why it is so important to have knowledge of alcohol abuse in elderly people? In the next part there will be a few slides of introduction of the problem. At the end of this session we will discuss in groups the different way of screening elderly people. How and when do we ask patient about alcohol drinking. What kind of questions do we use to recognise the problem?

## W83

### **Chest pain patient management, two ways-ticket. From family doctor to hospital and back, between guidelines and clinical practice**

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**Background & Aim:** This workshop with panelists specialised both in primary medicine and hospital specialities, is reviewing the major causes of chest pain, and proposing an algorithm for assessing the patient with chest pain of recent onset, in the primary practice, in association with the specialists in the hospital. The patient with chest pain is often the prisoner of the medical system, and to increasing general knowledge about medicine, most of the times incomplete and misleading, wasting precious time and delaying a proper management. As we have seen in registries from Romania, about 90% of the chest pain in the primary care is considered of non-cardiac cause, while the cardiologists in the outpatients clinics see about 90% of chest pain cases as being of cardiac cause. This increases the burden upon the family doctor for a better discrimination of the cause of chest pain.

**Method:** It is mainly the role of the primary medicine, as the family doctor is the first and the most important link in the chain, to assess the patient, to have a general view and to integrate the clinics and paraclinics of the patient with chest pain, and to have proper referrals to the specialists clinics, for an accurate and precocious diagnosis and management. The point of utmost importance in assessing a patient with recent chest pain is to exclude the most severe and frequent causes of recent chest pain, like ischaemic heart disease, lung disease. We suggest an approach by quantifying the chest pain altogether with risk factors, age, sex and medical history, in order to document or rule out any chest pain of coronary cause, as seen in the NICE guidelines. According to this quantification, patients with chest pain will be properly referred to the right outpatient clinic, or managed in the primary care accordingly.

## OP44.1

### **Non-drug and drug therapies of nocturnal leg cramps in patients over 60 years old**

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**Background and Aim:** Nocturnal leg cramps (NLC) are involuntary painful muscle contractions affecting older people, occurring mainly during the night. NLC may cause severe pain, quality of life alteration and sleep disturbance. NLC affect almost one in two people over 60. To our knowledge, no study evaluated patients' symptomatic treatment of this common symptom. Our aim was thus to describe non-drug and drug therapies for NLC in patients over 60.

**Method:** We realized a cross sectional study including patients over 60, suffering from NLC consulting their Family Doctor. We collected prospectively the non-drug and drug therapies used to relieve the symptoms of NLC.

**Results:** We included 632 patients with 56% of women. Median age was 70 years (60-92). Among the 80 participants using drug therapies, 24 were using magnesium, 20 quinine, and 14 homeopathies. Sixteen different drug treatments were described. Among the 55 participants using non-drug therapies, 18 laid soap in their bed, 9 were practicing stretching exercises and 8 were applying cold or hot on their legs. Thirteen different non-drug therapies were described.

**Conclusion:** With 29 different strategies used to relieve NLC symptoms, our results identify an important need for clinical research of non-drug or drug therapies for NLC.

## **OP44.2**

### **Establishing a Balint Group at University of Luxembourg: a pilot project with trainees in General Practice**

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**Background & Aim:** Some years ago I assisted at my first Balint group at Wonca congress in Paris. I was immediately infected by the « Balint-Virus » and for the next years attended different congresses because Luxembourg does not have until now a Balint Society. A continuous group led by a German Psychiatrist ran for 2 years, but stopped because of low attendency.

Being teacher at University of Luxembourg, I did leadership courses for Balint work and decided to introduce Balint groups in the training programm for GP trainees.

**Method:** Starting in the 1st semester 2015/2016, two Balint groups per semester will be held in form of seminaires in GP training at University of Luxembourg. Trainees have to register to the seminaire, but they a free to choose between two different themes, so that the participation in the Balint seminaires can be considered as voluntary.

After each group, the participants are asked to fill in an evaluation form resuming general data like age and sex, the motivation to participate in the group but also the experiences they made in the Balint Group.

**Expected Results:** We will be able to collect data about the participation in the group, the motivation and the experiences of GP trainees in a Balint group. By running the groups we hope recruiting young doctors to start their own Balint-group.

**Conclusions:** Balint groups have shown in different studies that participants enhance their capacity of self-reflection and that the participation in a group can prevent burnout. We think it is important to integrate the groups in GP training because it can facilitate doctor-patient relationship and is part of taking care of oneself.

### OP44.3

#### **How is selective prevention of cardiometabolic diseases organized in the EU member states?**

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**Background and Aim:** There is an urgent need for strategies to identify citizens at high risk of cardiometabolic disease (CMD) (cardiovascular disease, diabetes mellitus and chronic renal failure) and to develop and implement interventions to prevent or delay the onset of CMD. Prevention in a defined subgroup of people with an increased risk to develop a disease is called selective prevention. If widely implemented across Europe, selective prevention strategies for CMD may contribute to the fight against the current epidemic of CMDs. Selective prevention can be organized in different ways. We aim to give an overview of how selective prevention of CMD is organized in all 28 European Union (EU) member states. Data were collected within the European SPIMEU research project ([www.spimeu.org](http://www.spimeu.org)) and will be used to develop a tailored implementation toolbox for selective prevention of CMD across Europe.

**Method:** The SPIMEU research team developed an online questionnaire regarding the presence and organization of selective prevention of CMD. This questionnaire was sent to the expert in the field of prevention of CMDs in each of all 28 EU member states.

**Results and Conclusions:** In order to look for opportunities to improve selective prevention of CMDs we will compare how this prevention is currently organized across the different EU member states. So far, 27 of the 28 experts completed the questionnaire and we are currently analyzing the results. We will take different factors into account by comparing the organization of selective prevention of CMD between the EU member states, for example organization of health care, strength of primary care, gatekeeper system, health insurance system and gross domestic product. By June a complete overview of how selective prevention of CMDs is organized in the different EU member states will be available.

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## OP44.4

### Role of primary care in diagnosis and monitoring of non-valvular atrial fibrillation over 5 years

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**Background & Aim:** Non-valvular Atrial Fibrillation (NVAf) management is complex and requires increased involvement of Family Doctor (FD). Our objective was to evaluate the role of FD in diagnosis, treatment and monitoring of patients with NVAf.

**Method:** We reviewed electronic medical records of patients diagnosed of FANV in our Health Centre from 2010 to 2014 and collected comorbidity, existence and type of stroke, FD visits for AF, and cardiologist, INR controls, treatment and level of prescription, bleedings, hospital emergency department attendances and hospital admissions.

**Results:** We included 224 patients, mean age 79.5 years (SD 10.14), 58.0% of women. 87.9% had hypertension, 43.3% heart failure, 39.3% diabetes, 20.5% ischemic heart disease, 8.9% severe chronic renal failure.

- Who diagnosed the FA: FD 37.5%, 24.6% emergency, 12.1% cardiology, 7.1% during hospitalization and 1.3% others.
- Level of care that prescribes treatment for MF/cardiology/emergency/others:  
Antiplatelet: 13.8%/5.4%/2.8%/6.3% (71.9% no antiplatelet)  
VKA: 22.8%/25%/20.5%/13.8% (17.9% no VKA)  
NAO: 0.9%/5.4%/0.4%/3.1% (90.2% no NAO) Antiarrhythmics: 24.6%/32.1%/15.2%/12.9% (15.2% no antiarrhythmic)  
Digoxin: 9.8%/6.3%/4%/2.2% (77.7% no digital)
- 6.6% of anticoagulated patients had major bleeding and 20.6% minor.
- Average annual visits to FD and cardiology: 1.3 and 0.98 respectively.
- Patients with unstable INR were between 17% and 31%.
- Emergency attendances according to unstable INR / nonunstable within 5 years: 1.92/0.67 (p=0.05), 1.15/0.76 (p=0.13), 2/0.99 (p=0.005), 1.1/0.95 (p=0.62), y 1.07/0.96 (p=0.78).
- Hospital admissions according to unstable INR / nonunstable within 5 years: 0.69/0.08 (p=0.038), 0.21/0.15 (p=0.55), 0.46/0.18 (p=0.068), 0.57/0.25 (p=0.26), 0.36/0.33 (p=0.56).

**Conclusions:** The level of care that diagnosed greater proportion of AF is the FD, with high involvement in treatment prescription, although not particularly involved in monitoring respect the cardiologist. Patients with unstable INR originate more hospitalizations and emergency attendances.

## OP44.5

### Early detection of atrial fibrillation in primary care: a multicenter study

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**Objective:** To evaluate the usefulness of a program for early detection of atrial fibrillation in patients without atrial fibrillation (AF) but with risk factors to develop it, attended in 8 urban primary health care centers (PHCC).

**Methods:** Open, parallel, controlled multicenter clinical trial. Patients with risk factors for AF were allocated to 2 groups according to their PHCC:

1) Intervention Group (IG): patients belonging to 4 PHCC participated in an Intervention Program consisting in health education plus electrocardiogram at inclusion and every 6 months; and

2) Control Group (CG): patients belonging to the other 4 PHCC received the routine clinical practice.

After one year follow-up we analyzed the number of patients diagnosed with AF according to a survival scheme (Kaplan Meier curve and Log rank test), and clinical manifestations at the time of diagnosis.

**Results:** We included 2243 patients aged 70.9 years ( $\pm$  21 years). 1,261 (56.23%) were women. The main risks factors in both groups were age  $\geq$ 65 years (76.2% in the IG versus 75.7% in the CG,  $p=ns$ ), hypertension (73.1% vs 76.5%,  $p=ns$ ), and diabetes mellitus (29.1% vs 26.4%,  $p=ns$ ). After one year follow-up, 22 patients presented with AF, with significant differences between groups (2.2% in the IG, 0.4% in the CG,  $p=0.005$ ). In a multivariate analysis, the only factor associated to the diagnosis of the AF was the Intervention Program ( $p < 0.001$ ). More than a third of patients in the IG (40%) were diagnosed through to the program. There more patients in the CG who were diagnosed of AF because of a complication (heart failure, 20% vs 6,7% of diagnosed patients) but the difference was not significant.

**Conclusions:** An intervention program consisting in health education and systematic electrocardiogram is associated with more diagnoses of AF in primary health care users. This can help prevent complications.

## **W84**

### **Managing plantar fasciitis in primary care - the role of patient education and exercises**

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**Background:** Plantar fasciitis is the most commonly reported cause of inferior heel pain. It is characterised by severe and sharp heel pain. It is one of the most prevalent musculoskeletal conditions and the lifetime prevalence is 10%. The majority of patients will have pain for more than 12 months and 25% of patients will lose workdays because of their heel pain. Plantar fasciitis is usually treated in primary care using a combination of patient education and exercises.

The question is how do we educate our patients and offer them sound advice on exercises to help them manage their heel pain? And how do we offer an individualised treatment that is based on patient preferences and best available evidence? The purpose of this workshop is to provide the participants with up-to-date evidence on managing plantar fasciitis in primary care and learn how to apply this in primary care.

**Methods:** This workshop will be practically oriented. It will start with a short update on recent research findings related to treating plantar fasciitis. Afterwards there will be mix of cases related to the diagnosis and treatment of plantar fasciitis and group discussions of the cases. The workshop will be centred around the role of self-management, exercises and individualised treatment.

After the workshop, it will be possible to download a copy of the patient education material (leaflet and video) that is presented during the workshop and receive a link to further educational material that can be used for continued learning.

## W85

### **The elderly muscle: from muscle soreness to sarcopenia and how to diagnose or treat it in general medicine?**

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**Background and Aim:** As member of the European Geriatrics Society (EUGMS), this organization has edited a white paper on sarcopenia over the last years, more specifically in use for geriatricians. A lot of other publications are dealing more and more with muscle training for cardiac myopathy in the elderly. Our National medical sport society in association with a Luxembourgish institute on nutrition for GP has elaborated recently a report on muscle lesions, cardiomyopathy and sarcopenia in senior citizens. Finally I recently achieved a course called Total Nutrition Therapy Geri, also in collaboration with the EUGMS and including guide-lines for nutrition in specific pathological situations.

**Method:** in a symposium session we propose to present our national contribution elaborated with GP's specificity to a larger audience of GP from all Europe. We intend to discuss and edit a possible flow-chart for assessment and treatment options for three muscle lesions (muscle soreness; cardiomyopathy and sarcopenia). The focus should be on very easy applicable tests and examinations, which all general practitioners can handle either in the office or as bed-side testing in nursing homes. Three groups will reflect on the 3 major topics using the standardized method of: a) presentation of a definition; b) discussion on the possible assessment instruments applicable in general medicine and c) treatment options including all evidence based techniques and medications.

**Result:** We would like to integrate different approaches from GP over Europe in order to propose at the end of the session simplified, easy and low time-consuming guide-lines for general practitioners facing muscle pathologies.

W86

**EFPC Workshop**

**European Forum for Primary Care**

**Position paper - palliative approach in primary care from European perspective**

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European Forum for Primary Care (EFPC)*

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**Background and Aim:** To develop the palliative approach in primary care from European perspective and to give direction to primary care practitioners and health workers to develop this dimension of palliative approach in their own country.

Specific objectives:

- The identification of functions and resources of patient care chain
- Sharing knowledge of effective multi-professional co-operation
- Increase the awareness about the essential competences to palliative care
- Assess the role of family-based palliative care approach and the role of self-care and self-support
- Exchange the information about undergraduate and postgraduate education in palliative care in primary care setting.

**Method:** After the introduction, the Forum will organise the small group discussion to explore the facilitators and barriers of effective palliative care with the audience and to exchange examples of best practices.

**Results:** Primary care workers value palliative care as part of their work. Most of the time, patients appreciate the contribution of the GPs, district nurses, physiotherapists, social workers, hospices and lay support, especially if they accessible, take time to listen, allow patient and carers to ventilate their feelings, and make efforts made regarding symptom relief. However, reports from bereaved relatives suggest that palliative care is performed less well in the community than in other settings. GPs express discomfort about their competence to perform palliative care adequately. They tend to miss symptoms which are not treatable by them, or which are less common. However, with appropriate specialist support and facilities, GPs have been shown to deliver sound and effective care.

**Conclusions:** Formal arrangements engaging primary care workers to work with specialist teams have been shown to improve functional outcomes, patient satisfaction, improve effective use of resources and improve effective behavior in other areas of medicine.

## W87

### Medication management in the last phase of life

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Patients in the last phase of life are prone to inappropriate medication use. These medications might have potentially harmful profiles, increasing patient's adverse drug events, medication burden and costs. Professionals experience cessation of inappropriate medication in end-of life situations as a complicated process because of interaction of medical, emotional and ethical factors. There is little insight in medication decision-making processes in end-of-life situations. An empirical study was designed, to gain insight into norms and valuations, and into practices of decision-making regarding inappropriate medication from the perspectives of patients, relatives, nurses, specialists and general practitioners. We found that although involved parties hold the opinion that patients should not use unnecessary medication, and medication management should be personalized, medication reviews were not matter of course. Striking differences had to do with settings and professionals and limited understanding of needs and expectations of patients.

**Aim:** To gain insight into norms and valuations regarding deprescribing inappropriate medication and into decision-making process about medication in the last phase of life.

#### Workshop

1. Plenary: Introduction on state of the art research of medication management in the last phase of life.
2. Small group discussions: insight into norms and valuations of participants on cessation inappropriate medication.
3. Plenary: interactive presentation of the results of the group discussions to come to an understanding of the perspectives of the participants.
4. Small group discussions: perspectives of participants on decision-making about inappropriate medication.
5. Plenary: conclusions of research will be presented and an effort will be made to formulate recommendations to optimize medication management in the last phase of life.

Impact for daily practice: Participants will be motivated to use a systematic, proactive, patient centred, multi-disciplinary and transmural approach aimed to a medication-use that is in line with patients' wishes.

## W88

### **Introducing desirable system-wide quality indicators to incentivise integration across and beyond the health system, using alliances led by primary care**

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**Background and Aim:** Traditional quality accountability frameworks often involve activity and measurement of only one part of health systems, measure inputs and outputs rather than outcomes and involve single disease focus. Measurability generally trumps meaningfulness.

Development of a framework of system level indicators necessitates collaborative working between many parts of and beyond the health system and thereby encourages increased integration of care. Such a framework based on an adapted triple aim model is being developed in New Zealand. The workshop will explore the benefits and practicability of such an approach in other settings

**Method:** An expert working group in New Zealand have developed a model for an integrated performance incentive programme (IPIF). This is being further developed by a national group with primary care clinical leadership. IPIF replaces the previous traditional pay for performance programme.

([hiirc.org.nz/section/35484/integrated-performance-and-incentive-framework/?tab=7380](http://hiirc.org.nz/section/35484/integrated-performance-and-incentive-framework/?tab=7380))

The framework for developing the national system level indicators, underlying locally worked quality improvement (management of variation) contributory measures will be outlined as background for the workshop. Implementation of such a framework requires regional and district clinical governance, set up in alliance frameworks, to bring together clinicians and others from across and beyond the health system. The example of the Canterbury clinical network in New Zealand ([ccn.health.nz/](http://ccn.health.nz/)) will be used to demonstrate the potential for such alliances to radically alter the delivery of care and as an example achieve measurably increased care closer to home (reduced hospitalization attendance and admission). Workshop discussion will focus on the merits, feasibility and relevance to other health systems of introducing similar system level quality improvement approaches which incentivise integration and which are based on high trust, minimal bureaucracy and achieved through the formation and work of district alliances.

**Results:** Participants will gain an improved understanding of the benefits of cross-sector alliancing, working toward system level quality improvement outcomes.

## OP45.1

### **Pain-related emergency care presentations by patients with terminal cancer**

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**Background & Aim:** Patients with cancer often experience complex pain and symptom control issues that can cause them to presentation to Accident and Emergency [A&E]. We aim to understand the patterns, nature and magnitude of these attendances in A&E for patients with cancer in their last 12 months of life, with a particular emphasis on pain-related presentations.

**Method:** This analysis is a retrospective cohort study of NHS Tayside residents who died from cancer in a three-year period, from 2011-2014. The cohort will be identified using General Register Office 'Cause of Death' Data. Routinely collected clinical data from all unscheduled care during their last year of life was collected and linked to demographic and prescribing datasets using patient Community Health Index (CHI) numbers. The CHI is a unique patient identification number used in all clinical encounters in both general practice and hospital services.

**Results:** From the 4,407 patients in the cohort, 1,668 patients (38%) used A&E in their last year of life. Of these, 797 (18%) presented more than once, with a range of 0-21 attendances. Attendances increased in the weeks immediately before death. There were 197 different presenting complaints (PCs) recorded during these attendances, 4 of the 10 most commonly used 'read codes' were for pain-related presentations. The majority (71.1%) of patients were admitted to hospital following presentation to A&E.

**Conclusion:** Patients with cancer commonly present to A&E in their last year of life. Such presentations become more common in the weeks before death. Presentations are commonly due to uncontrolled pain. Adequate pain relief is an important factor in improving patient journey and minimizing unscheduled care use. This research can potentially identify factors associated with unscheduled care use and suggest clinical and service provision changes that could be made to improve the patient journey in patients with cancer.

## OP45.2

### **Social inequality in awareness and beliefs about cancer in the Danish population**

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**Background and Aim:** Survival rates vary much between patients with the same type of cancer, and for most cancers people with lower socio-economic position have poorer outcomes than their socioeconomically more affluent counterparts. Differences in awareness and beliefs about cancer between individuals may explain variations in healthcare seeking behaviour and ultimately also variations in cancer survival. The aim was to assess awareness of cancer symptoms and beliefs about cancer in a Danish population sample and to analyse the association with socio-economic position indicators.

**Method:** A population-based telephone survey was carried out among 3,000 randomly sampled persons aged 30 years and older using the Awareness and Beliefs about Cancer measure. Information on socio-economic position was obtained by data linkage through Statistics Denmark. Prevalence ratios were used to determine the association between socio-economic position and awareness and beliefs about cancer.

**Results:** A strong socio-economic gradient in cancer awareness was found. People with a low educational level and a low household income were more likely to have a lower awareness of cancer symptoms. Having a low educational level and a low household income were also strongly associated with having negative beliefs about cancer.

**Conclusions:** Awareness and beliefs about cancer was associated with socio-economic position. Consideration must be given to tackle inequalities in awareness and beliefs about cancer. It is important that the intended recipient groups are targeted in order not to unintentionally increase the social inequality.

### OP45.3

#### **Differences in cervical cancer screening between immigrants and non-immigrants in Norway – a primary health care register-based study**

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**Objective:** Low rates of cervical cancer screening among immigrants have been reported from several Western countries. Despite the growing number of migrants to Norway, no study on cervical cancer screening attendance among immigrants has been conducted in Norway to date. The aim of our study was to compare the proportion of different groups of immigrant women with non-immigrants attending primary health care for cervical cancer screening in Norway.

**Methods:** Register based study using merged data from four national registries. All Norwegian born women (1,168,832) and immigrant women (152,800) in screening age for cervical cancer (25-69 years) registered in Norway in 2008 were included. Immigrants were grouped by world's geographic region. Descriptive analyses and several logistic regression models were conducted. Our main outcome variable was whether the woman had been registered with a Pap smear in 2008 or not.

**Results:** Immigrant women had lower rates of participation compared to Norwegian-born women; Western Europe (Adjusted Odds Ratio (AOR), 95% confidence interval (CI): 0.84, 0.81-0.88), Eastern Europe (AOR 0.64, 95% CI: 0.60-0.67), Asia (AOR 0.74, 95% CI: 0.71-0.77), Africa (AOR 0.61, 95% CI: 0.56-0.67) and South America (AOR 0.87, 95% CI: 0.79-0.96). Younger age, higher income, living in rural areas and having a female General Practitioner were positively associated with Pap-smear. Longer residential time in Norway and having a non-immigrant doctor were positively associated with screening for some immigrant groups.

**Conclusion:** Our next research step will be developing and evaluating intervention methods to close the disparity in cervical cancer screening between immigrants and non-immigrants.

**Main message:** There is lower participation rate in cervical cancer screening among immigrants in Norway. Younger age, higher income, living in rural areas and having a female provider are the main factors positively associated with screening.

## OP45.4

### Psychological distress in caregivers to terminally ill patients in a nation-wide population-based study.

#### What is the role of pre-loss grief symptoms?

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**Background:** Psychological distress in caregiver to terminally ill patients has been associated with complicated grief and depressive symptoms. The role of severe grief symptoms during caregiving has been sparsely investigated. We aimed to explore caregivers' grief symptoms and analyse the associations with socio-demographic factors, psychological distress and situational factors in palliative caregiving.

**Method:** We conducted a population-based prospective study of caregivers to patients registered with drug reimbursement due to terminal illness. In total, 3,113 caregivers completed a pre-loss version of the PG-13 scale measuring grief symptoms. Associations with socio-economic factors, depressive symptoms (BDI-II), caregiver burden (BSFC), preparedness for death, communication about dying (CCID) and information about prognosis were analysed using logistic regression.

**Results:** Severe pre-loss grief symptoms were reported by 487 caregivers (15.6%). These symptoms were associated with depressive symptoms (adj. OR=12.4, 95% CI: 9.8-15.7), high caregiver burden (adj. OR=8.4, 95% CI: 6.5-10.8), low preparedness for death (adj. OR=2.9, 95% CI: 2.3-3.7), low communication about dying (adj. OR=3.3, 95% CI: 2.5-4.5) and perception of the information of the prognosis as inadequate. Spousal relation (adj. OR=2.6, 95% CI: 2.0-3.4) and low education (adj. OR=1.8, 95% CI: 1.3-2.4) were socio-economic factors associated with severe pre-loss grief symptoms.

**Conclusions:** Severe pre-loss grief symptoms were associated with situational factors in palliative care, depressive symptoms, spousal relation and low educational level. These factors seem to interplay in a complex process. Attention towards severe pre-loss grief symptoms in caregivers to terminally ill patients is needed to support these caregivers.

## OP45.5

### **A trainee in the office for a month: what are the challenges for the new clinical teacher?**

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**Background & Aim:** The predictable shortage of primary care physicians emphasizes the need to increase workforce in family medicine. Therefore, Swiss universities develop clerkships in primary care private practice. The aim of our study was to identify difficulties met by clinical teachers who supervised final year students from Geneva Medical School in their private practice during a one-month pilot rotation in primary care.

**Method:** We used a purposeful sampling strategy to recruit our participants. Data was collected in January 2015 via a focus group using a semi-structured interview guide based on literature and developed by the researchers of our Primary Care Unit. Participants were asked about their role as a supervisor, their difficulties and positive experiences. The focus group was transcribed and analyzed qualitatively using content analysis, with a deductive and inductive approach.

**Results:** Our results show the nature of pressures felt by clinical teachers who are torn between conflicting demands. First, the participants realized they had two different roles to play at the same time: the more familiar role of clinician in charge of the patient, and the new challenging role of teacher in charge of a trainee. Second, they felt compelled to fill the gap between the trainees' almost exclusively academic training and the specific knowledge and skills needed in the ambulatory setting. The clinical teachers also claimed that cognitive, but also emotional and organizational loads were at play, much more than they suspected.

**Conclusions:** These findings show that future training programs will have to address the specific needs of clinical teachers who feel pressurized to accomplish different roles as well as bridge the gap between students' academic training and skills needed for outpatient care. Professionalizing the role of clinical teachers will contribute to avoid work overload.

## **OP46.1**

### **Robots for the elderly - a possibility?**

Ana Nunes Barata

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**Background & Aim:** The current demographics show that the world's population is rapidly growing older, mainly because of the global drop of birth rates. Populations live on average 20 years longer than 50 years ago, what increases the prevalence of noncommunicable diseases. As such, the need for long term care rises exponentially, as many elderly lose the ability to live independently and look after themselves.

Technology has been evolving fast, exploring new ways to make daily lives of elderly, easier. This includes the development of robots, namely of social robots.

The presentation will consist in a brief presentation on social robots, some results of their application and make participants familiar with this area of robotics.

**Method:** Review of the literature published in PubMed, from 2013 to 2016 on the keywords "Robot assisted therapy", "Human-Robot interactions" and "social robots".

**Results:** Some robot prototypes that have already been submitted to clinical trials and have shown positive results, not only in terms of providing support regarding mobility and memory-loss associated problems, but they are also showing an important role as human companions. Robots that are inspired in animal assisted therapy have shown results in reducing the level of aggressiveness and agitation, promoting more social behavior in elderly people suffering from dementia.

**Conclusions:** The inclusion of robots in our daily lives is not far to become a reality. The development of robotics, namely of the social robots, show that they are able to provide solutions to improve patient's quality of life and the caretaker's task when caring for a patient with long term supportive care needs. This presentation should motivate participants to reflect on possible applications for social robots and to brainstorm on possibilities to conduct research in health with the application of robots.

## OP46.2

### **The longitudinal effect of stroke on cognition**

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**Background/Aims:** With advancements in medicine and improved chronic disease management in primary care, the numbers of stroke-survivors are increasing alongside our ageing population. Stroke is known to increase an individual's risk of cognitive impairment and dementia. Further, family doctors are often the first point of contact if stroke-survivors develop cognitive impairment. However, it is not currently known what factors influence the longitudinal effect of stroke on cognition. The aim of this systematic review was to assess the longitudinal pattern of cognitive function in stroke patients.

**Methods:** Three comprehensive medical databases (MEDLINE, EMBASE and PSYCHInfo) were searched from inception to July 2014. The following search terms were used: "stroke", "(cognit\* or neuropsych\*)" and "(progress\* or longitudinal or decline or prospective)". Longitudinal studies (retrospective or prospective and published in English) with two or more time points of cognitive assessment post-stroke, in subjects over 50 years was included. The review was registered with PROSPERO (CRD42014015018).

**Results:** The search identified 7617 articles with 2841 duplicates removed. Twenty-three articles fulfilled inclusion criteria and were retained. In included studies, cognitive decline is a frequent sequelae following stroke but this was not the usual outcome. Several factors had been shown to increase the risk of prolonged cognitive impairment in stroke populations, namely: diabetes, medial temporal atrophy on imaging studies, recurrent stroke events, APoE-e4, vascular risk burden and apathy.

**Conclusions:** There is currently no single memory test that family doctors can use to accurately assess which stroke-survivors will go on to develop dementia. However, there is now evidence of a number of independent risk factors specific to stroke-survivors that increase the individual's risk of developing dementia. There may yet be a role in combining these risk factor variables in a risk assessment calculator to predict future dementia, which could be of clinical use in primary care.

### OP46.3

#### **Insomnia: how to deal with it without falling asleep. Concepts, diagnostic and treatment approaches**

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The sleep is a vital physiological function to which we dedicate approximately a third of our life. It is essential for the mental and physical balance of the individual, and the fundamental activity of children's brain until the age of two years. Is influenced by stress, bad habits, inadequate sleep hygiene and any organic disorder. Sleep deprivation has a negative effect on the frame of mind, is associated with impaired ability to calculation and logical reasoning, memory problems and keeping attention. Sleep disorders are of global concern by the high frequency in the general population, with a prevalence of diagnosed cases between 6-40 %. On a global scale, different studies demonstrate that their important impact in the mental and physical health is increasingly evident in all medical specialties, due not only to the economic costs that they suppose, but for their association with the increasing comorbidities and a worse perception of the patient's health status.

**Method:** We propose a workshop with the key ideas of insomnia, its main definitions, etiologies, rating scales, algorithms for correct diagnosis and various strategies of approach in our daily practice (health education, sleep hygiene, psychological interventions and pharmacological treatment). We want to emphasize that primary care physicians are able to resolve more than 80% of cases.

**Results:** After finishing the workshop we intend that the attendees have a deep understanding of the physiopathological bases of the sleep, can correctly identify different types of insomnia and learn techniques for an individualized treatment approach.

**Conclusions:** 'It should never be a matter of urgency' to give a sleeping-pill in a chronic insomnia. We want to emphasize the holistic approach to the patient, analysing individually the causes of its sleep disorder to improve its quality of life.

#### **OP46.4**

#### **The WONCA Europe Book of Titles**

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When experts in family medicine meet together, we never have trouble discussing our problems. Most of them are universal and we know them. But the problem often arises when we try to agree on formalities, especially titles. When we enter the world of academic titles, we enter the world of words, their meaning, their use, the rules and exceptions. New, sometimes confusing and traditionally rooted words emerge.

Confronted with such a variety of confusing concepts, words and titles, our patients that seek care throughout Europe and policymakers try to make sense of it, usually without success. One wonders: isn't there a simple way out?

We have decided to start addressing this issue by writing a book about the way that we get titles in different European countries. There are many of them: doctor, general practitioner, family doctor, family physician, medical doctor, specialist in general practice, basic doctor, specialist in family medicine, Huisarts, Hausarzt, Praktisches Arzt ...

We have decided to tackle this issue by:

1. describing the situation by asking some key colleagues in Europe the same set of questions
2. asking people who are wise and daring enough (Genius Forecasters) to give their opinion about the subject and its potential solution

The ambition of this workshop is to make the move towards better understanding of our position in the academic and professional arena that we would hopefully make it easier for all of us to struggle for recognition. The workshop will be aimed at discussing the first results of this activity.

## OP46.5

### **(Cost)-effectiveness of antivirals for influenza-like-illness in primary care: Set-up and progress of the ALIC4E trial in 17 European Countries.**

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**Background and Aim:** Neuraminidase inhibitors decrease illness duration in patients with influenza. However, there has never been a large-scale, publically funded trial assessing clinical and cost-effectiveness of antivirals in routine primary care. We therefore aim to investigate overall benefits and costs of treating patients with influenza-like-illness with antivirals. Secondly, we aim to identify subgroups of patients receiving more, or a particular benefit from antiviral treatment.

**Methods:** ALIC4E is an open, platform, response-adaptive randomised trial aiming to recruit 4500 patients with influenza-like-illness from 21 primary care Networks in 17 European countries, during three successive influenza seasons. Patients will be treated according to usual primary care practice in their country, with or without Oseltamivir in the first season. In subsequent seasons, a new antiviral might be added resulting in a 3-arm trial. The composite primary outcome will be: return to normal daily activity, with fever, head/muscle ache reduced to a minor problem, or less.

ALIC4E is part of the PREPARE consortium ([www.prepare-europe.eu](http://www.prepare-europe.eu)).

**Results:** In the first year, the Networks were established, approvals have been obtained from local ethical boards and national competent authorities, and patient insurance, medication distribution and all trial logistics and contracts were arranged in the 17 countries: Norway, Sweden, Denmark, Ireland, United Kingdom, Netherlands, Belgium, Switzerland, Lithuania, Poland, France, Spain, Hungary, Romania, Czech Republic, Croatia and Greece. We have found considerable variation in focus and legal, ethical and procedural requirements between these countries. At the start of the influenza season 2016, 12 countries had all requirements in place and started including patients.

**Conclusions:** The opportunities, barriers and challenges of large-scale, innovative primary care trials in 17 countries, and the trial progress will be further highlighted and discussed.

## **W89**

### **Do old people have sex?**

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The population in Europe is ageing and people are living longer and healthy lives for longer. Therefore, there are also people over 65 years old who are interested in having healthy sexual lives. Many people want to and need to be close to others as they grow older. This includes the desire to continue an active, satisfying sex life. But, with aging, there may be changes that can cause problems. Normal aging brings physical changes in both men and women. These changes sometimes affect the ability to have and enjoy sex. Some illnesses, disabilities, medicines, and surgeries can affect the ability to have and enjoy sex. Age does not protect one from sexually transmitted diseases. Older people who are sexually active may be at risk for diseases such as chlamydial infection, gonorrhea, genital herpes, syphilis, hepatitis B, genital warts, and trichomoniasis. Therefore, it is especially important for GP-s to be able to discuss sexual health topics with elderly patients. This workshop aims to provide tools to open a dialogue between a patient and their GP through group work. The session will start with a group discussion about why is it so important to talk about sexuality among the elderly and about healthy sexual life in later life. Afterwards, there will be a short presentation about the current situation and the factors that can influence different aspects of healthy sexual life. At the end of the workshop we will provide different tools to open a dialogue between a patient and their GP through group work.

## W90

### **Do you talk with your patients about their wishes and expectations around the end of their life?**

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**Background and Aim:** A majority of the Dutch population thinks about their end-of-life wishes but only 30-40 % talks about this important subject with relatives.

A recent survey in the Dutch population showed that for the elderly patients the GP can play an important role to discuss this subject. Results from another study showed that only 4% of the patients had actually discussed their end-of-life wishes with a doctor.

We consider it to be very important for a patient that he can share his wishes and expectations about the end of life with family and his GP, even though such a conversation can be difficult.

in a dialogue between patient and doctor about end-of-life wishes and expectations several important topics can be discussed:

- Worries and fears of the patient
- To continue or to stop treatment
- Possibilities of palliative care
- Preferred place of dying

The result of the dialogue is to realize optimal end-of-life care that meets the wishes of the patient.

The aim of this workshop is to discuss how GP's can fulfil this important but difficult task. Ideas and solutions from different countries will be shared.

Organisation of the workshop:

- Introduction video and personal experiences
- Interactive questionnaire
- Presentation of the results of Dutch questionnaires about end-of-life wishes of patients and doctors
- Working in small groups on case histories
- Discussion

**Results:** The participating GPs are aware of the possibilities and importance of their role and feel more prepared to start the dialogue with their patients about their end-of-life wishes.

**OP47.1**

**Paper No.: 104**

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**Main Abstract Theme: 03 - FUTURE CONSULTATIONS,04 - DIAGNOSING – A VITAL TASK FOR FAMILY MEDICINE**

**Medication management strategy for older people with polypharmacy: the GP's perspective**

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**Background & Aim:** for older patients with polypharmacy medication management is a process of careful deliberation that needs periodic adjustment based on treatment effects and changing conditions. The aim of this study is to gain insight into the GP's medication management strategy for patients with polypharmacy, and to explore the GP's perspectives and needs on decision making support to facilitate this medication management.

**Method:** for this qualitative study, two focus group meetings were organized with experienced Dutch GPs. Questions about medication management of four representative clinical case vignettes with multimorbidity and polypharmacy were answered individually. The strategy chosen in each case was discussed plenary. Analysis followed a Framework approach.

**Results:** Twelve GPs described a similar strategy regarding the patients' management, namely 1) defining treatment goals; 2) determining the primary goal(s); 3) adjusting medications based on the treatment effect, GP's and patient's preferences, and patient characteristics. There was variation in the execution of this strategy between the GPs. for example, GPs differed in their focus on clinical values versus the reason for encounter, and some GPs determined one primary goal while others focused on several goals simultaneously. The GPs liked to discuss their choices with the other professionals. Furthermore, they valued structured medication reviews with the patient, and quick and practical tools that worked on demand.

**Conclusions:** To facilitate decision making a more extensive and structured collaboration between health care professionals is desired, as well as support to execute structured medication reviews with eligible patients.

## OP47.2

### **Improving safe storage of methadone in the home. An initiative augmenting the effectiveness of information provision, to keep children safe**

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**Background:** Safe storage of oral methadone at home is an important issue given the risk of accidental paediatric consumption.

**Aim:** The study aimed to review the effectiveness of current provision of information on safety of methadone consumption and storage in the home. Then to develop and pilot health promotion material regarding safe storage of methadone in the home, through involvement of the service user and dispensing pharmacist opinions, and to look at novel ways to augment this information.

**Methods:** The study involved patient awareness of general dangers of methadone use and paediatric risks, patient information recall on safe storage of methadone in the home; take home methadone dispensing in child resistant containers and safe and secured storage of methadone. Information was collected using a survey of adult patients attending a specialist primary care clinic (n=94), and interviews with dispensing pharmacists (n=43).

**Conclusions:** Safe storage of methadone warrants regular and proactive pharmacy provision of information around harms associated with methadone. We have developed a health promotion solution, packaging the information in different ways, thus that the information transfer would become ingrained both in the providers of that information, and those dispensed methadone. These include an A3 waiting room poster, an A5 information booklet, and six interchangeable neck tags for the medicine bottles. The issue presented potential for novel innovations to support the stabilised methadone patient in better self-management. This was achieved by the provision of actual Safe Boxes as an adjunct to the provision of information. This initiative improved communication between the service and its users, as they felt that they were involved from the outset. It fostered a better partnership with primary care pharmacies. It has brought everyone to the table and outlined that we all have a role to play.

[http://www.forza.ie/client\\_area/hse-methadone-child-safety-campaign/](http://www.forza.ie/client_area/hse-methadone-child-safety-campaign/)

### OP47.3

#### **Transitional patient safety: characteristics of transitional incidents, solutions and challenges**

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**Background:** Transitional care has been widely recognized as an aspect of health care that has an inherent increased risk for patient safety. Hospital discharge, medication continuity and referrals have been identified as high-risk scenarios. A transitional incident can be defined as an unintentional event in patient care between primary care and hospital that has harmed, could have harmed, or (still) can harm a patient. Important causes are inaccurate, delayed or absent communication and coordination between general practitioners and hospital as well as logistic, administrative and IT problems.

**Aim:** This workshop will present reported transitional incidents in the Netherlands, followed by an analysis of the underlying causes and mitigating factors to identify their characteristics and a discussion of possible solutions and challenges. This is followed by an engaged discussion on the differences in transitional patient safety between countries and their approaches to improve this aspect of health care. We will conclude with various suggestions to improve transitional patient safety, which can be tailored to the own specific characteristics of each health care system.

**Organization:** Plenary, interactive presentations, discussion and exercises in small groups will be the didactics of this workshop.

**Learning Objectives:** At the end of the workshop participants will have knowledge about:

- Transitional patient safety in The Netherlands
- Causes, mitigating factors, characteristics and main risks of transitional incidents
- Different approaches to manage and improve transitional patient safety in their own health care system.

**Expected impact on daily practice:** We expect that the workshop will augment the knowledge of transitional patient safety in general. After this workshop participants are able to identify the causes, mitigating factors and main risks of transitional incidents and will have increased awareness about both their actual and potential harm. We hope to engage them in improvement activities in their own communication and coordination with hospital staff in their country to enhance transitional patient safety.

## OP47.4

### **Implementing evidence - based tools to improve patient safety: creating a plan for your primary care office**

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**Background:** Patient safety is a serious global public health issue. Hundreds of millions of patients are affected by this worldwide each year. Countries have increasingly recognized the importance of improving patient safety. Although the initial focus had been on patients in facilities such as hospitals, the patient safety initiatives have extended to office settings. The World Health Organization (WHO) has developed a patient safety curriculum guide designed to be integrated into existing healthcare educational curricula but there are barriers to its implementation. In the United States, The evidence-based TeamSTEPPS® (Team Strategies and Tools to Enhance Performance and Patient Safety) program developed in collaboration between the Agency for Healthcare Quality and Research (AHRQ) and the Department of Defense Patient Safety Program aims at optimizing patient care by improving communication and teamwork skills among health care professionals, including frontline staff. In 2014, AHRQ launched a TeamSTEPPS® for Office-Based Care for which the Department of Family and Community Medicine-Las Vegas of the University of Nevada School of Medicine was selected as a national pilot site due to their prior efforts in bringing TeamSTEPPS® to Nevada.

**Method:** The workshop has interactive discussion, a quiz to assess readiness of their practice environment and demonstration of tools available (at no cost) leading participants to be able to create a plan to address patient safety.

#### **Aims:**

- (1) Delineate global efforts in patient safety
- (2) Compare resources available
- (3) Discuss the TeamSTEPPS® framework and key principles (office based)
- (4) Define techniques involving leadership, teamwork, conflict management and communication
- (5) Apply principles discussed to have participants identify barriers and create a plan to implement patient safety techniques.

Competing Interests: none for the author

## **OP47.5**

### **Potential rabies exposure incidents & vaccination prevalence amongst tourists and expatriates in Phnom Penh, Cambodia**

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My aim is to determine the prevalence and characteristics of rabies vaccination and potential rabies exposure incidents amongst foreigners in Phnom Penh, Cambodia. Data collection was done on a convenience sample population outside main tourist sites in Phnom Penh during August 2014 through a questionnaire-based survey. A total of 57 questionnaires were completed. 63% of participants were tourists with the remainder being expatriate workers. The prevalence of rabies vaccination was 44% in tourists and 55% in expatriates. Half of those questioned reported coming into close contact with a possible rabies host animal. 25% of these had a potentially significant rabies exposure incident - defined as a lick, bite or scratch - most commonly from a dog, cat or rodent. These incidents most frequently occurred whilst outdoors, followed by home, hostels and restaurants. Only one participant reports seeking medical attention post-exposure which was after a serious dog bite. There was no difference in the rate of exposure incidents between unvaccinated and vaccinated groups. Tourists were less likely to report a significant potential rabies exposure incident than expatriates (16% vs 38%). There is little data on potential rabies exposure incidents amongst travellers and expatriates in the tropics. Compared to other studies, Cambodia has a high prevalence of rabies vaccination amongst foreigners. This study highlights a high potential rabies exposure prevalence amongst foreigners, especially expatriates. It seems likely this would be replicated across SE Asia. This should be considered when counselling travellers on appropriate vaccination regimen.

## **W91**

### **Decision aid - a tool for a patient and for a doctor?**

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**Aim:** After the workshop the participants:

- 1) will be aware of their own decision making process
- 2) will be able to help their patients with hypertension to choose between different treatment options

Improved patient knowledge of hypertension does not always contribute to behavioural change in health related activities. While the general knowledge of hypertension may be good, patients do not yet have a comprehensive understanding of their own condition and personal health risks. To improve patient health awareness and understanding of treatment goals, there is a need for effective methods to promote active patient involvement in the decision-making process.

It has been found that patients who can use additional decision aids for making treatment decisions have improved knowledge of options, fewer difficulties with decision-making and reduced anxiety. Decision aids are tools designed to help people understand the treatment options, consider the personal importance of possible benefits and harms, improve the knowledge of personal health and facilitate behaviour change towards better adherence to medical treatment. They are used when there is more than one medically reasonable option.

in the interactive workshop participants can share the experiences with decision aids and practice decision making without and with decision aid.

## OP48.1

### **Vast majority of elderly people with multiple diseases can be treated at home, thanks to the mobile home visit team**

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**Background:** 15–30% of elderly people with multiple diseases are re-hospitalised within 30 days of leaving hospital. The purpose of this study at SUS (Skåne University Healthcare) was to evaluate the effects of a mobile home-visit team, a collaboration between primary health care, inpatient care and the municipality.

**Method:** A team, consisting of nurse, occupational therapist and administrator from the municipality, and doctors from inpatient care or primary health care, started in 2013. Criteria were set up for home visits. The regular care provider, generally a nurse working in home care or at a care home, could call the team for an urgent home visit. The number of visits, their reason, taken measures, and follow-up were continuously registered. When the project came to an end, patients, relatives and care staff were interviewed.

**Results:** The project ran for 101 days. During this time, the team made 223 primary home visits and 50 return visits. The most common reasons for contacting the team were worsened general condition, breathing difficulties, swollen legs, pain, infections, falls and confusion. The most common measure taken was assessment and prescription of drugs/cessation of or changes to drugs prescribed. Home treatments included injections, infusions, inhalations, blood transfusions and dressings. In 93% of the cases, the visits could offer measures that did not include the patient being hospitalised or visiting the emergency room. When hospitalisation was necessary (7%), this was generally an immediate hospitalisation that did not go through the emergency room. 25% of the cases required increased assistance from the municipality. Both patients and their relatives were very satisfied with the emergency team's work.

**Conclusion:** An overwhelming majority of the elderly people with multiple diseases could be assessed and treated in their homes. Directly comparative studies, as well as health-financial evaluations, are needed.

## **OP48.2**

### **'It's in God's hands...'**

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**Introduction:** The elderly are especially vulnerable to loneliness by loss of family, friends and the emergence of comorbidities. Loneliness is one of the reasons which make elderly a group of main consumers of consultation in primary care. The family physician is often someone who listens and gives a word of comfort. Case Description: The patient is an 80 year-old Caucasian female, widowed, retired, living in their own home. Closest relative was a migrant daughter in Canada.

**Background:** of dyslipidemia, diabetes and multiple arthrosis. She presented to the facility complaining of asthenia and anorexia. Laboratory tests showed an iron deficiency anemia. It was proposal endoscopy and colonoscopy that she refused. This consultation was followed by 21 more in the space of two years. Multiple query reasons, but keeping asthenia, with progressive worsening of iron deficiency anemia. She was treated with iron and folic acid, always refusing the study of digestive tract arguing 'it's in God's hands...' One day the patient went to the emergency room with nausea and vomiting and it was diagnosed a stenosing neoplasm of the colon requiring colostomy. At the hospital leaving day there was no family to support her. The only daughter of the patient refused to provide any support. The whole process of integration of the patient in a unit of long-term care, where she is now, was the family doctor who arranged.

**Discussion:** With this clinical case, the author seeks to portray the severe dropout problem older people face. This is no doubt the reality of the community where we are inserted, where health professionals are sometimes the only company and support they have left.

### OP48.3

#### **Experience of the set-up of an integrated care process for pluripathological, chronic, complex patients (CPPCP) in a healthcare area in Castilla y León**

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**Antecedents:** The increase in elderly, pluripathological patients with a high consumption of healthcare resources, and with not-covered sociosanitary needs, has generated the development of continuity care programmes. Within the framework of the Regional Strategy for Chronic Care, an integrated process of care for CPPCP was designed. It was implemented, creating the Continuity of Care Unit (CCU) formed by Primary Care (PC) professionals and a hospital team with immediate telephonic access to the family doctors. Social services will take part too, managing the Sociosanitary Convalescence Units.

**Objective:** To describe the results of the process of CPPCP care after one year.

**Population:** CPPCP patients, referred by their family doctors, emergency services, identified by stratification system as CRG, as G3.

**Method:** Activity register analysis

**Results:** 1256 telephonic enquiries were received, mostly from PC. 61.2% of those were solved by phone, and the remaining 38.8% were dealt with in face-to-face consultation in less than 48h.

Among the patients who attended through Emergency Services, 227 were placed in CCU beds (maximum 72h/ stay). 69% were discharged and 31% were referred to Internal Care services, with a total average stay of 7 days.

Among admissions of G3 patients in the medical services, there was a decrease of 56% and 58.4% in readmissions during one year and the decrease of hospitalization days was.

**Discussion and Conclusions:** The integrated care process for CPPCP, which allows for a joint patient management by PC professionals and the hospital, shows a high resolution level, admissions and readmissions decrease, as well as the days in hospital. Telephonic enquiries give immediate access to the hospital CCU, it is a key element.

The role of family doctors and nurses is crucial in the follow-up of the patient. The integration of Social Services is an important element in order to avoid hospitalizations extended due only to social reasons.

#### **OP48.4**

### **Frailty indicators and preventive GP home visits to elderly patients. Result of an audit in Danish general practice**

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**Background:** in Denmark, GPs have provided preventive home visits to frail elderly patients since 2006.

**Aim:** To investigate associations between elderly patients' frailty and reception of preventive home visits.

**Methods:** Identical audits were carried out by GPs in three areas of Denmark. During a four-week study period, the GPs filled in a questionnaire for each patient aged 75 years or older, who came to the clinic or received a home visit.

**Results:** 73 GPs and 41 members of staff (3.72 % of the eligible practices) recorded a total of 3133 patients. Within one year before their audit date, a preventive home visit had been provided to 332 patients (10.7 %). Reception of a preventive home visit was associated with old age, reduced walking distance, fall within one year (adjusted odds ratio (aOR) 1.68: 95% CI 1.18, 2.39), hospitalisation within one year (aOR 1.69: 95% CI 1.23, 2.32), home care (aOR 3.37: 95% CI 2.42, 4.69), dementia, depression, diabetes, COPD, and prescription of pain killers. It was negatively associated with polypharmacy (aOR 0.5: 95% CI 0.47, 0.88). Patients more often had received a preventive home visit if their GP provided preventive visits to a high proportion of his other patients recorded in the audit. Hearing and visual impairment, feeling lonely, living alone, antidepressive and anxiolytic medication were not associated with having a preventive visit.

**Conclusions:** Impaired mobility and chronic diseases are associated with preventive home visits. Home visits may prevent overmedication. GP home visit tendency vary considerably.

## OP48.5

### **Dementia management in the primary care setting across Europe: the EGPRN PREDEM study."EGPRN connected"**

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**Background:** The growing burden of dementia has been extensively shown in the literature and the GP is often the first health professional that patients or their families consult about memory loss. General practice is the cornerstone of European health care systems which however differ considerably in many characteristics of the management of chronic diseases. The European General Practice Research Network (EGPRN) therefore wanted to find out more about the management of dementia in primary care in Europe. Research question: How is dementia managed in primary care in Europe?

**Methods:** A key informant survey to primary care practices in 25 European countries was designed. Among other issues we wanted to explore who is responsible for establishing the diagnosis of dementia and initiating drug treatment; which specific tests for cognitive dysfunction are used; and what could be done to improve in this field. A systems mapping of dementia management in health care in the participating countries has been performed and will be presented.

**Results:** The results of our survey show considerable differences in the way dementia is managed across Europe. In some countries GPs are entitled to start and manage most of the dementia workup while in others this is only done by secondary care specialists.

**Conclusion:** This study has highlighted large differences in dementia management in the primary care setting across Europe.

## W92

### **New evidence – change of practice? A workshop about patient information, patient values and shared decision making; with place of birth as case**

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**Background & Aim:** GPs often experience difficulties keeping up-to-date, implement new evidence and share decision making with patients. Shared decision making has lately been described as the biggest single remaining barrier to the implementation of evidence based medicine. The idea is that by learning and practicing this last step of evidence-based medicine GPs will get a tool to assist life-long patient centered evidence based practice. However, GPs in many countries have already been requested to practice shared decision making for quite a while. On the other hand, it has increasingly become clear that the route from research evidence to changes in health care delivery is a tortuous one. One important lesson from research on knowledge distribution and change in professional behavior is that discussions among peers seem to be crucial for negotiating the role of new evidence vis-à-vis the internalized, collectively reinforced, tacit guidelines that clinicians apply in their day-to-day work. The aim of the workshop is to facilitate such a discussion among GPs about reception of new challenging evidence, about how to provide proper patient information, elicit patient values, and lay the ground for shared decision making.

**Method:** The didactic method used in the workshop is mostly small group activities with eight participants and one or two facilitator(s) in each group.

- Lecture: Welcome and introduction to evidence and challenges – 15 minutes (plenary room)
- Small groups: Structured discussion of evidence and implementation – 50 minutes (smaller rooms or corners)
- Plenary: Summary and final discussion – 10 minutes (plenary room)

Other considerations: Between 8 and 32 participants; room with space for three groups.

## EP13.01

Paper No.: 1340

Presentation Type Preference: Poster Presentation

Main Abstract Theme: 04 - DIAGNOSING – A VITAL TASK FOR FAMILY MEDICINE

### Chronic pain in primary health care – how do we diagnose and treat our patients?

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**Background:** Chronic pain is a major challenge in primary health care (PHC); a complaint in every 5th visit and a common cause of disablement. Diagnosing and treating these patients is challenging, improvement is wanted. Studies on chronic pain in PHC are lacking but needed to improve the care of tomorrow.

**Aim:** to describe chronic pain in PHC regarding diagnostics and treatment.

**Method:** Descriptive study of electronic medical records from seven Swedish PHC centres during 2011-2012. Adult patients with possible chronic pain were identified searching diagnoses and free-text (MedRave4 software). Records were read through in a random order until 700 patients with chronic pain primarily diagnosed and treated at the PCH centre were included.

**Results:** Patients were 60,1% women, mean age 50 years (SD 18,1). Mean number of pain-related visits was 2,5 (SD 2,2, range 1-20). Common pain sites were upper leg (41,5%), lower leg (37,1%) and lower back (37,2%). Mean duration of pain at first visit was 12 months (SD 26,1). Pain type was described in 50,6% of cases: nociceptive 42,8%, neuropathic 4,0%, mixed 3,9%. Clinical examination included palpation of painful area in 90,9%, general examination in 32,7%, local neurological examination in 28,1% and general neurological examination in 8,9% of cases. X-ray was performed in 37,2%, laboratory workup in 32,8%, MRI in 16,2%, CT-scan in 3,9%, ultrasonography in 6,2%, structured pain analysis (VAS or pain drawing) in 2,6% of cases. Referrals were commonly made to physiotherapist (52,3%) and orthopaedist (20,4%). Pharmacological treatment was prescribed in 68,3% of cases, commonly NSAIDs (41,8%), paracetamol (17,7%) and opioids (16,3%).

**Conclusions:** Our study confirms that chronic pain in PHC is a heterogeneous condition. No gold standard management exists for the group as a whole, however neurological status and structured pain analysis are recommended. We show that they are not routinely used.

## EP13.02

### Accuracy of three different point-of-care test in general practice (GP) in Denmark – preliminary results

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**Background & Aim:** Symptoms of urinary tract infection (UTI) are common in general practice. Point-of-care testing (POCT) can aid the doctors in finding the patients with significant bacteriuria, who could benefit from antibiotics. More knowledge about precise diagnosis of infectious disease is essential to reduce the use of inappropriate antibiotics. In Denmark, dip-stick, microscopy and urine culture are used however, few studies have been made. The aim of this study is to determine the accuracy of urine dipstick, microscopy and culture in general practice.

**Method:** 125 adult, non-pregnant women with symptoms of UTI, are asked to deliver a mid-stream urine sample. Immediately after, the same primary investigator analyze the urine by; 1) Urine dipstick using a Combur5 stick analyzed at Urisys1100, 2) Microscopy using a Olympus CX31 microscopy with 400x magnification, 3) Urine culture with 10 µl urine spread out using a three-step technic on a ID Flexicult™ and incubated 24 hours. A parallel sample from the same urine is sent to the microbiological department as reference. Both the outcome assessor of the index tests and the reference is blinded to the result of the other. Accuracy will be calculated and results presented in 2x2 tables.

**Results:** The study is conducted in 1 practice in Copenhagen and is ongoing. Presently, 35 patients are included and we expect to present results from 60 patients.

**Conclusions:** This study will determine the accuracy of urine dipstick, microscopy and culture in general practice. POCT microscopy and culture is uncommon outside of Scandinavia and studies are lacking. Adding to the knowledge about precise diagnostics for UTI can hopefully aid in reducing inappropriate antibiotics prescriptions.

### EP13.03

#### **Children's pain and use of pain killers - association with mother's health**

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**Background:** Recurrent headache, abdominal pain and musculo-skeletal pain are common in healthy school children. This may have substantial impact on the child's everyday life and represents a risk for decreased health and wellbeing also in adulthood. Children are dependent on their parents' appraisal of their health complaints in order to get medical attention or other kind of help. The aim with this study was to investigate children from 6-11 years' report of recurrent pain associated with their mothers' report of pain in the child, the child's general health and mother's health and pain conditions.

**Methods:** A cross-sectional questionnaire-based survey was conducted with 131 6- 11 years old school children and their mothers regarding pain prevalence, intensity, location, frequency and duration as well as medication and socio- economic parameters. Furthermore maternal chronic health complaints and use of medication were registered. The sample was community-based in both urban and rural areas.

**Results:** 40/131 children reported recurrent pain, and 40/131 mothers reported recurrent pain in their child, but in 25 % of cases with pain, the child and the mother disagreed. Additionally, there was 33 % disagreement about frequency and duration of pain. Children with recurrent pain lived in less advantaged families than children without pain. Mothers with pain themselves were five times more likely to report pain in their child than mothers without pain. Maternal frequent use of over-the-counter analgesics was significantly associated with their child's use of analgesics. There was a non-significant association between the child's use of analgesics and child's report of recurrent pain.

**Conclusions:** When assessing pain in children it is necessary to take as well the mother as the child's report into account. Maternal health and use of analgesics is necessary to consider when a child is presenting with recurrent pain. Use of analgesics is often not indicated.

## EP13.04

### Even the children could be seriously ill!

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**Background & Aims:** The most general practitioners (GP) responsible for the children's health are confronted with acute, minor, mostly self-limited conditions, and rarely with serious illnesses. The aim of this presentation is to point out a role of GP in the recognition and in the continuity of care for a child suffering from serious illness.

**Case Description:** It was 9-years old boy, well known to the GP from his early childhood, because of difficulties in psycho-motor development and long lasting constipation; no organic reasons were found. One day, the boy and his mother, appeared at the surgery, because of ten-day frequent defecations (2-3 times a day); stools were soft and with blood. Last two-days, increased body temperature (38°C) are recorded. Several facts were unusual for GP; frequent defecation, blood in the stool and seriously-ill looking boy's, with no other pathology in physical examination. Blood tests were performed and the signs of anaemia and liver-lesion were found. The boy was referred to hospital for further investigations.

During the hospitalisation, two serious diseases were diagnosed: primary sclerosing cholangitis and ulcerative colitis, both in rather advanced stages. Very soon after the introduction of pharmacotherapy with azathioprim, mesalasin, ursodeoxycholic-acid and corticosteroids, the boy subjectively felt much better. He was discharged in a good condition, with the significant improvement in all lab-tests.

**Conclusions:** This child is challenging for the GP for several reasons. Firstly, he and especially his parents need support in facing and accepting such serious diagnoses. They also need support in keeping on with the medication as well as in life-styles changes. But, the most important for GP, who knows them the best, is to prepare on possible outcomes; it is well known, that primary sclerosing cholangitis, usually finishing with liver-transplantations within 10-16 years after diagnosis.

## **EP13.05**

### **Climate change and health, what's the role for the family doctor?**

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The WHO and the Lancet Commission have both identified climate change as the biggest medical challenge in the 21. century. At the same time the transition from fossil fuels represents the biggest health opportunity of our time as particulate pollution from burning fossil fuels account for an estimated 7 million deaths worldwide. The workshop will discuss the health implications associated with climate change and what strategies Family Doctors can apply to promote the transition towards clean energy. As a basis for the discussion there will be a short powerpoint presentation of material from WHO, The Lancet Commission and 'the Climate Reality Project' on the subject.

## EP13.06

### Is it useful taking arterial pulse to detect asymptomatic atrial fibrillation in primary care?

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**Background & Aim:** Atrial fibrillation (AF) is the most common cardiac arrhythmia. AF leads to a large number of embolic events and whose presentation is often oligo symptomatic, it is being detected in a high proportion of casual way: Detecting of AF by taking of arterial pulse(TAP).To know Sensitivity Specificity Reliability of TAP, with or without symptoms of AF.

**Methods:** 6990 patients elder than 65 years from 48 Health Care Primary Centers have been studied by 218 doctors and 101 nurses. Cluster randomized trial was done in two groups: Experimental group (EG): TAP in patients elder than 65 years seeking any consultation and Control group (CG): patients with cardiac symptoms (disnea, weakness, palpitations and chest pain). ECG was done in both groups to confirm the diagnosis. Centralized randomization, stratified by professional (doctor / nurse), ensuring that the cluster effect was not influenced by a multilevel logistic regression analysis. Patients selected by consecutive sampling. An analysis of the comparability of the groups (Chi-square, calculating the relative risk (RR) Absolute Risk Reduction (ARR) and number needed to treat (NNT) for detecting an FA) was performed. Multivariate analysis to adjust the dependent variable (AF) for the prognosis or predictor variables and / or confounding.

**Results:** EG 5465patients Mean age 75.61 years, GC 1525 patients mean age74.07 years. Women 58,6% and men 51,4%. Irregular arterial pulse: EG 4.3% GC 15.0% ( $p < 0.001$ ). 165 new cases of AF (2.3%) EG: 1.1%, CG6.7% (OR: 0.29; 95% CI: 0.18 to 0.45). RR 0.16 (95% CI: 0.11 to 0.21). RAR 5.70% (95% CI: 4.77 to 6.49%) by GC, and the NNT: 17.7 (95% CI 14.4 to 23.0). CG and EG symptoms were detected in 12.1%.s: TAP sensitivity: 99.4% (95% CI 97.9 to 100.0), specificity 30.7 (26.1 to 35.3).

#### **Conclusions:**

1. The case finding for early detection of AF in patients 65 years with cardiac symptoms in Primary Care, it is more cost-effective than opportunistic screening by TAP in asymptomatic patients.
2. The opportunistic search by TAP in asymptomatic patients presenting to primary care, it not an advisable strategy of screening for AF in over 65 years.

## EP13.07

### A streak of bad luck

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**Background and Aim:** Graves' disease is the most common cause of persistent hyperthyroidism in adults, accounting for 60-80% of all cases. Approximately 3% of women and 0.5% of men will develop Graves' disease during their lifetime. An infiltrative ophthalmopathy is present in about 50% of patients and may not improve following treatment.

**Objective:** Primary care physicians are usually the point of first medical contact within the healthcare system, therefore we aim to discuss their role in the recognition of signs and symptoms of hyperthyroidism and in ascertaining its etiology (as it influences treatment and prognosis). This case also emphasizes the relevance of the holistic modelling and person-centred approach.

**Case Description:** A 28-year-old female patient presented to the family physician with complaints of weight loss and postprandial diarrhea, without mucus or blood. She had lost 10kg in a month, despite good appetite and food intake. Bilateral exophthalmos was self-evident and the patient mentioned retro-ocular pain and diplopia, which severely affected her daily life. The results of thyroid function tests and ultrasound suggested Graves' disease as the diagnosis. Despite her thyroid function improved with antithyroid drugs, the bilateral exophthalmia progressed. She underwent surgery without no clear improvement. She then developed a body image distortion associated with insomnia, depressed mood and lost interest in most activities. Depression was aggravated when she got divorced, having attempted suicide twice.

**Discussion:** Graves' disease is a common cause of hyperthyroidism and is usually associated with a good prognosis. In this patient however, the disfiguring proptosis and diplopia were responsible for severe impairment in daily functioning and high psychosocial morbidity. This case emphasizes the central role played by primary care physicians in managing organic disease as well as its social and psychiatric consequences.

## EP13.08

### **Varicella pneumonia in immunocompetent adult.**

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**Background & Aim:** 55 year old man comes to our consultation with fever, cough, chest discomfort, and rash blemishes type and vesicles predominantly in trunk, but respecting scalp, palms and soles. His medical history: allergic to penicillin, smoker and did not suffer chickenpox in childhood. Not suffering from diseases, or taking regular treatment.

**Method:** On physical examination, the patient presented hypotension and fever. On inspection we see a rash with vesicular-papular lesions in different developmental stage that respects palms and soles. In cardiorespiratory auscultation: inspiratory crackles in both lung bases. The rest of the exploration without findings. We performed an electrocardiogram (sinus rhythm at 97 bpm, with J-point elevation in I-aVL, and decreased PR interval) and a chest X-ray, where we see an increase in interstitial infiltrates in both lung bases. Suspecting a complication of chickenpox, we refer him to Emergency Service for additional tests and treatment. The analytical results were leukocytosis and neutrophilia, C-reactive protein 20 mg/dl (0-0,5mg/dl), without other changes. VZV serology IgM and IgG positive, other serologies negative. Tzanck tests positive. The patient was treated with intravenous acyclovir and levofloxacin to prevent secondary infections associated with favorable outcome and resolution of symptoms after 7 days.

**Results:** Varicella pneumonia.

**Conclusions:** In immunocompetent children with varicella, pneumonia remains an uncommon complication; in contrast, pneumonia accounts for the majority of morbidity and mortality seen in adults with varicella, although it is infrequently seen since the introduction of vaccine. In immunocompetent adults, varicella pneumonia has a reported incidence of about one in 400 cases and carries an overall mortality of between 10 and 30 percent. Risk factors linked to the development of varicella pneumonia include cigarette smoking, male sex, pregnancy and immunosuppression. Early intravenous acyclovir administration has been associated with clinical improvement and resolution of pneumonia.

## EP13.09

### The impact of smoking on rheumatoid arthritis activity

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**Background and Aim:** The Rheumatoid arthritis (RA) is a chronic, inflammatory, systemic disease that is usually the most evident and commonly manifested on diarthrosis joints. The initial etiological factors that trigger the immuneinflammatory response still remains unknown. RA is result of the simultaneous influence of genetic risk factors, external factors and changes in immune system. The goal of this study was to determine the mutual correlation between smoking and RA activities expressed by the quantitative values of laboratory and disease activity parameters.

**Method:** The open clinical retrospective study included 100 RA patients stages from I to IV aged from 21 to 77 ys. There were 85 (85%) females and 15 (15%) males selected by randomization. The study analysed: age, gender, smoking, duration of smoking, sedimentation rate (ESR), rheumatoid factor (RF), C-Reactive Protein (CRP) anti-cyclic citrullinated peptide (anti-CCP) antibodies and X-ray. Statistical analyses was done with SPSS software, Student's t-test and chi-square test.

**Results:** The quantitative values of laboratory parameters are directly related with the smoking period. All inflammatory markers were increased in both groups, but more elevated in smoker's group. The only statistical significance was found in anti-CCP where this test was significantly higher compared to non-smokers. There was no statistical significance in the onset of disease, gender, ESR, CRP, RF, and radiological changes between two groups, although smokers had some more higher values.

**Conclusions:** Smoking plays significant role in RA activity and leads to longer duration of symptoms and increased disability. All inflammatory markers were increased in both groups, but more elevated in smoker's group, with the only significancy in anti-CCP level. The cessation of smoking should be part of disease management process.

## **EP13.10**

### **The use of complementary and alternative medicine for cancer patients in primary care**

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**Background & Aim:** With an ageing population and modern diagnostic techniques, cancer is an increasing bio-psycho-social morbidity in primary care populations. For alleviation of this burden, patients are increasingly turning to Complementary and Alternative Medicines (CAMs). With mainstream acceptance and easier access, it is important for Primary Care practitioners to familiarise themselves with this growing field. This poster promotes the awareness of CAM in cancer patients in order to facilitate fully informed decision making.

**Method:** We present a review of key studies on CAM for cancer patients based on literature relating to Primary Care Oncology in the UK, with lessons for all practitioners managing the global burden of malignancy.

**Results:** We highlight the core principles, therapies, popularity in different malignancies, advantages, disadvantages and some general guidance for the conscientious integration of CAM into Primary Care Oncology.

**Conclusions:** With limited objective evidence but growing subjective benefits, primary care practitioners should be more aware of CAMs. This poster supports an informed, ethical and sensitive approach to this increasingly popular field.

## EP14.01

### Is a good relationship with primary care associated with decreased need for hospitalisation?

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**Background:** Importance of primary care increase when health care focuses more on complex health problems than single diseases. Hospitalisation increase when multimorbidity increases. Psychiatric disease is a major factor of impaired health in the population. Active listing could be regarded as a measure of the strength of the relation between patients and primary care. Our objective was to study hospitalisation as an outcome of primary care, exploring the associations with active listing and psychiatric disorders.

**Methods:** Cross-sectional study of hospitalisation using clustered zero-inflated negative binomial regression. Study population was Blekinge county (n=151 731) in Sweden, in 2007. Main outcome was number of days hospitalised. Independent variables were listed actively or passively in primary care on 31st December 2007 and psychiatric disorders, adjusting for multimorbidity, age and sex.

**Results:** Active listing was associated with a lower risk of being hospitalised and reduced mean days hospitalised by 19%. In mean actively listed patients were hospitalised 0.86 days (95%CI 0.80-0.92) and passively listed patients 1.34 days (95%CI 1.19-1.50). Psychiatric disorders contributed to multimorbidity level and increased hospitalisation for persons with equal multimorbidity level. Persons without psychiatric disorder were in mean hospitalised 0.76 days (95%CI 0.72-0.81). Patients with psychoses were in mean hospitalised 5.07 days (95%CI 2.98-7.17). The reduction of days hospitalised when actively listed was preserved for persons with psychiatric disorders.

**Conclusions:** Patients with a good relation with primary care decrease their need for hospitalisation. Active listing reduces average length of hospitalisation. Detailed analyses show that this mainly is due to a lower risk of being hospitalised. Psychiatric disorders increase hospitalisation both by increasing multimorbidity level and within the same level. Active listing decrease need for hospitalisation both for patients with psychiatric disorders and for patients without.

## EP14.02

### “The top five” list The Italian project for appropriateness in General Practice

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**Background & Aim:** In the 2012 ABIM Foundation and Consumer Report promoted the project Choosing Wisely with the aim of encouraging dialogue between clinicians and patients on avoiding wasteful or unnecessary medical tests, treatments and procedures . This campaign was launched with the release of “Top five”: many medical specialty societies joined into the project and identified five tests/treatments overused in their contest even if did not provide meaningful benefit for patients.

**Method:** In 2012 Slow Medicine promoted the same project in Italy: “Doing more doesn’t mean doing better”. The section of Turin of Italian Scientific Society of Family Doctors (SIMG) joined this cause and released the list. A group of family doctors identified five diagnostic tests /treatments very commonly prescribed.

**Results:** The “Top five” list in Italian General Practice included:

1. Don’t prescribe imaging for low back pain unless red flags are present
2. Don’t routinely prescribe antibiotics for acute upper respiratory tract infections
3. Don’t routinely prescribe protonic pump inhibitors to patients without risk factors for peptic ulcer
4. Don’t prescribe NSAID without initial and periodical evaluation of clinical indication and side effects risk in every patient
5. Don’t routinely prescribe at first benzodiazepines and Z-drugs in elderly for insomnia

**Conclusions:** Developing appropriate use of medical tests and procedures promotes a better use of the health care resources, assure the correct care and reduces risks for patients. Every item has a synthetic explanation for a proper indication of the procedure and a list of main bibliographic sources. “Doing more doesn’t mean doing better” is a work-in-progress project, SIMG and Slow Medicine created up-to-date courses for doctors to discuss procedures and develop communication skill in doctor-patient relationship.

### EP14.03

#### **A teaching experience: keep calm and train minor surgery**

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**Background & Aim:** Minor Surgery (MS) procedures are important for General Practitioners (GPs) and GP Trainees (GPTs). Hereby, a team (3 GP tutors and 2 nurses) from an urban Primary Care Center (PCC) implemented a structured MS training project for GPTs to improve GPs' resoluteness and GPTs' proficiency.

**Method:** From January 2015, operations were performed twice a month by the MS team and 5 GPTs. A cross-sectional, descriptive study analyzed with SPSS: lesions characteristics, evolution of procedures, techniques and patient and GPTs satisfaction. All patients signed previously informed consent and answered a satisfaction questionnaire after discharge.

**Results:** until December 2015, 81 patients attended pre-surgical visits (36% were not properly vaccinated for tetanus). The mean waiting time for surgery was 26 days. Finally, 75 patients were operated, 46 (61.3%) male, average age 45. Main conditions treated were: 38 (50.7%) epidermal cysts, 12 (16%) ingrowing toenails, 7 (9.3%) trichilemmal cysts, 6 (8%) lipomas, 4 (5.3%) compound nevi, 2 (2.7%) dermatofibromas, 2 (2.7%) angiomas, 4 (5.3%) other. Most frequent locations were: 33 (40.8%) back and thorax, 20 (24.7%) limbs, 11 (13.6%) head and 6 (7.4%) abdomen. Main techniques: total resection (85.3%) and complete or partial matricectomy (5.3%, 8%). Mepivacain 1% was used as local anesthesia, men needed more than women (9.6ml vs 8ml,  $p < 0,004$ ). Kappa index between GPs' diagnoses and histological findings was 0.82. There were 5% post-surgery complications and 6 patients required additional nursing attention. GPTs' satisfaction with the training content and practices was 90%. The information and treatment received were the major determinants of patients' satisfaction.

**Conclusions:** a teaching PCC team could effectively develop MS including GPTs, with high agreement between GPs' diagnoses and histological findings. Patient satisfaction was excellent. According the results and the low rate of complications, an increase in the number of interventions is planned.

## EP14.04

### Quality of care in a primary care practice: use of quality indicators in patient with COPD

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**Background & Aim:** Study on the quality of clinical care provided to patients with COPD assigned to a medical practice (during the period 2014).

#### **Method:**

Design: Longitudinal evaluation: Palmer's Quality Cycle.

Setting: An urban health care center.

Population and Sample: Patients > 40 years (total according to inclusion criteria, year 2014) with Chronic Obstructive Pulmonary

Disease (COPD) (year 2014) (n=21).

Interventions:

Internal evaluation, dimensions: scientific-technical quality, adequacy, accessibility, continuity of care; data related to the care process and intermediate results; explicit, evidence-based procedural criteria.

Subjects: analysis of coverage. Analysis on the evolution of treatment compliance. The Z statistical test for comparing proportions,  $\alpha$  0,05.

- Patients with COPD should be assessed by annual spirometry.
- COPD patients smokers should quit smoking.
- COPD patients who are smokers should receive anti-smoking advice.

**Results:** Compliance criteria (year 2014):

- COPD prevalence: 1,56% (21 patients)
- COPD annual spirometry, 4,76% (1 patients).
- anti-tobacco interventions, 0% (0 patients).
- active smokers: 47,60% (10 patients).
- patient with COPD and with influenza vaccination: 52,38% (11 patients)

**Conclusions:** The COPD prevalence is 1,56 %, and COPD prevalence in health center is 1,46%, lower than those of the community, which are 1,93% . This represents an underdiagnosis of 80%. Results largely in line with IBERPOC Study (COPD prevalence in Spain, 1997) and the EPI-SCAN study (COPD prevalence in people 40 to 80 years in Spain, 2007) in which Underdiagnosis record of 78% and 73 % respectively.

The percentage of current smokers COPD is high.

The frequency of smoking in our COPD is maintained.

Improving care for COPD should focus on the recruitment, especially considering women smokers, and improved diagnostics and monitoring by conducting annual spirometry and active smoking intervention and individualized.

**EP14.05**

**Paper No.: 1342**

**Presentation Type Preference: Poster Presentation**

**Main Abstract Theme: 03 - FUTURE CONSULTATIONS**

**Reflecting on UK primary care: what can be learned from our international neighbours?**

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**Background:** General Practice in the United Kingdom (UK) is faced with mounting challenges comprising funding cuts, an ever-increasing workload, high levels of bureaucracy and General Practitioner (GP) burnout. Given these pressures, it can prove difficult to reflect on our working practices. Exchanges with primary care physicians across Europe and beyond provide an opportunity for fresh perspectives by exploring how General Practice functions in another country. Our aim was to obtain insights from conference exchange participants on how our systems compared.

**Methods:** We carried out a workshop on 1st October 2015 at RCGP Annual Conference exchange, Glasgow and asked 16 European and 3 Japanese exchange participants (GPs and GP trainees) to discuss:

- One positive feature learned from the UK health system they would like to introduce to their own country
  - One positive feature from their country which they felt UK primary care could benefit from
- Participants were asked to vote on the most popular feature.

**Results:** The most popular aspect of UK General Practice was GP career flexibility, with the option to develop a portfolio career- a rare prospect in many European Countries. Other popular facets included free prescriptions in Scotland, the telephone triage system and our patient centred approach. Features suggested by our international colleagues which may benefit UK General practice included a slick electronic prescribing system in Spain, direct availability of specialists in the primary care centre such as paediatricians and gynaecologists in Spain and the favourite feature was the robust GP/Patient continuity which exists in Spain and Portugal.

**Conclusions:** The workshop forum provided an excellent opportunity for GPs and trainees to reflect on our primary care systems. In times of increasing workload and GP burnout, perhaps we should look to our European and international neighbours to develop new innovations to improve general practice in the UK.

## EP14.06

### **Development of a valid and reliable quality measurement tool for general practitioner and nurse-led telephone triage in out-of-hours care**

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**Background & Aim:** The organisation of Danish out-of-hours (OOH) healthcare services has in recent years changed. Hence, regional differences exist regarding the type of healthcare professional performing the telephone triage. Comparative studies on quality of telephone triage performed by general practitioners (GP's) and nurses are sparse and no measurement tool exists in Denmark to assess quality. Thus, we aim to develop a valid and reliable quality measurement tool which can be used for assessing quality of communication, safety and efficiency applicable both in GP and nurse-led telephone triage in Danish OOH care.

**Methods:** The development of the measurement tool will be based on a validated Dutch tool that will be forward-backward translated. Next, a semi-structured internet-based Delphi process will be performed, aiming to secure face and content validity, applicability in Danish settings and validate added items. The panel will consist of 20-25 experts including representatives from both settings, experienced nurses and GP triage professionals, patients and communicative and linguistic experts. Additionally, a Dutch comprehensive scoring guide will be translated and validated. Reliability and clinimetric analysis will be tested in a pilot study.

**Results:** The Delphi process is expected in April 2016. At WONCA 2016 we expect to present the results of the translation and Delphi process. We aim the final tool to consist of 20-25 items. Items will represent quality of communication, medical content and appropriateness of triage outcome of telephone consultation (i.e. under- and overtriage).

**Conclusion:** This study will develop a valid and reliable measurement tool in assessment of quality of telephone triage. The measurement tool can be used in quality assurance and enhancement of telephone triage, and will be used in a PhD study comparing quality of GP-led and nurse-led telephone triage in real life patient contacts in Danish acute care settings.

## EP14.07

### Follow-up consultation through healthcare kiosk - a new way to deliver care for stable chronic disease patients in primary care

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**Background & Aim:** The global healthcare kiosk market is growing and kiosks are projected to be a larger part of healthcare delivery in the coming decade. We developed an unmanned healthcare kiosk (SEEK KIOSK) that automates the management of stable chronic patients to complement face-to-face doctor visit.

**Aim:** This study aims to show that healthcare kiosk as a care delivery tool 1) is not inferior to current way of delivering care for stable chronic patients 2) can reduce face-to-face doctor visits 3) and examines patient's satisfaction with using the kiosk as a care delivery tool.

**Methods:** Currently, patients with well-controlled cardiovascular related chronic diseases visit the polyclinic doctor once in 3 months for review and medication refill. 100 of such patients that was on follow-up at SingHealth Polyclinic Bedok (SHP-BD) was recruited into this study. During their subsequent appointments for chronic disease management at 3 and 6 months intervals, these patients used the kiosk instead of consulting a physician. Algorithms was built into the kiosk. Through a series of risk assessment questionnaires, physiological monitoring and retrieval of patient's relevant laboratory results, kiosk then advises patient to collect medication directly if the patient was well-controlled, consult a nurse clinician if the patient was sub-optimally controlled, or consult a doctor if the patient was poorly controlled.

**Results:** Kiosk was able to produce the correct decision algorithm to manage these patients in 100% of the cases. 64 out of 100 patients was managed by the kiosk, both at 3 months and 6 months interval, thus reducing 128 face-to-face doctor visits. Almost 100% of patients that used the kiosk was satisfied with the kiosk.

**Outcome:** SEEK KIOSK appears to be a feasible and effective alternative care delivery option for managing patients with stable chronic disease.

## EP14.08

### Video consultation in general practice - patients' perspective

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**Background & Aim:** Telemedicine and specifically video consultations represent a new frontier in the delivery of care in family medicine. This research aimed to assess the level of interest, preferences, perceived advantages and concerns of patients in relation to video consultations with General Practitioners.

**Method:** A questionnaire was distributed at a single primary care centre, located in rural Ireland. 214 questionnaires were completed. A literature review was also completed in relation to telemedicine and specifically video consultations in family medicine.

**Results:** Patient interest in video consultations to consult with General Practitioners is very high. 59.6% of all patients (n=214) want to use video consultations and amongst those patients who own a smartphone and use Skype it increases to 89% (n=100), with 28.8% of this group being very interested. 91.3% of patients who want video consultations are aged 18 - 55. Younger patients find it more difficult to find time to attend their GP (p=0.003). Patients who find it difficult to attend their GP more frequently use internet search engines for information on symptoms and management (p=0.001). 23.4% of patients have concerns in relation to video consultations, with the main categories of concern being 1) Data and/or Privacy, 2) Diagnosis Accuracy and 3) Lack of physical examination. The advantages from patients' perspectives were 1) Convenience, 2) Time saving and 3) No need to travel. Finally, patients would prefer to see their own regular GP via video consultation over a video consultation with a GP they had never met before and not from their usual primary care centre (p=0.000).

**Conclusions:** Video consultations in family medicine are likely in the future to become an important aspect of delivery of care. Patients interest in this service is very high. Patient preference is for their own regular General Practitioner to deliver this service.

## EP14.09

### Investigation in primary care: how to act before an inspection by the European Medicines Agency (EMA)

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**Background and Aim:** General Practitioners (GP) involved for years in clinical trials of medicines in primary care. The European Medicines Agency (EMA) and US Food and Drug Administration (FDA) conducted inspections to verify whether the data is reliable and whether the Guide to Good Clinical Practices (GGCP) has been applied in order to gain for marketing approval of the study drug. GP should remember the importance of doing a clinical trial properly.

**Method and Results:** All documents should be reviewed (informed consent form, analysis, patient clinical history, clinical trial history, temperature records, calibration certificates of all instruments used, compliance with the timetable of the visits, registration of adverse effects, ...).

**Conclusions:** GP researchers have to be very careful, organized and disciplined to properly conduct a clinical trial. Training courses, good organization and adequate monitoring equipment provided by the sponsor are critical to extrapolate the results to the population and be approved. With our experience we believe it is important to be updated each year, check that all the documents are in the study file and have a study coordinator, who could be a team member to oversee all procedures.

## EP14.10

### Electronic patient information: a log file study of its use by citizens and health care providers in Finland

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**Background and Aim:** Electronic patient versions of guidelines are one way to improve health care practices. In Finland, the patient versions can be reached either by the citizens' health portal Terveyskirjasto or by the portal for health care providers Terveysportti. The Medical Society Duodecim produces both of these portals. The aim of this study was to document the use of patient information in the Duodecim databases from 2010 to 2014.

**Methods:** In the portal system of Duodecim, it is possible to survey the opened articles in each database. We studied the log files and compared which patient information articles were hit in the citizens' and professionals' portals and also which patient versions were printed out. Our outcome measure was the actual use of the systems by citizens and health care providers.

**Results:** There were 1147 patient information articles that could be accessed. The monthly searches in the open access citizens' health portal grew more than three fold during the observation period: from approximately 690,000 openings per month in January 2010 to 2.2 million hits on average per month in 2014 (in a country with 5.3 million inhabitants). In the health care providers closed database, the use of patient version was steady: approximately 100,000 patient versions were accessed monthly (in a country with 20,000 working age doctors) a fifth of which were printed out. In the citizens' portal, the most frequently opened articles dealt with sensitive issues (for example sexually transmitted diseases and haemorrhoids), while health care providers mostly accessed articles where self-management had a major role (gout, irritable bowel syndrome, anticoagulant medication etc).

**Conclusions:** The use of electronic patient versions has grown fast in the open access citizens' health portal in Finland. Health care providers also access and print patient versions, however, only a minority of professionals follow this practice.

## EP15.01

### **Promoting continuity of care: enablers and barriers for new family physicians to work in regular family practice**

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**Background & Aim:** Continuity of care is the core of family practice and is a component of quality patient care. However, newly licensed family physicians in Quebec are less likely to work in a regular family practice (providing long-term follow-up to a defined panel of patients) than their more experienced counterparts. This contributes to a relative shortage of medical staff in primary care in Quebec. This study aimed to analyze the factors that influence whether newly licensed family physicians work in regular family practice.

**Method:** A mixed-methods study was conducted, consisting of a self-administered questionnaire followed by in-depth interviews. A web-based survey was sent to all family physicians working in the Monteregie region of Quebec that had 10 or fewer years of working experience (n=370). in-depth follow-up interviews were then conducted with 10 respondents working in diverse family practice settings.

**Results:** The response rate was 32.2% (118/370). Enablers included the doctor-patient relationship, interest in clinical activities in family practice, positive role models, collaboration with a nurse, and access to technical and human resources. Barriers included administrative workloads, interest in hospital work, negative training experiences in regular family practice, and lack of support in the first years of practice.

**Conclusion:** The following strategies may attract newly licensed family physicians to regular family practice:

- 1) Improving training experiences in regular family practice,
- 2) reduce administrative workloads,
- 3) improve access to diagnostic and specialized resources,
- 4) support interprofessional collaboration in primary care, and
- 5) support mentorship in the first years of practice

## EP15.02

### **Reinforcing partnership between cancer patient, general practitioner and oncologist during chemotherapy –a randomised controlled trial**

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**Background & Aim:** International guidelines underline the importance of strengthening the coordination and continuity of cancer care. The different roles of general practitioners and oncologists with regard to treatment, follow-up and rehabilitation during and after cancer treatment are often obscure to cancer patients. Parallel courses of healthcare are often taking place instead of coordinated care characterised by continuity and partnership between care providers. Patients may feel uncertain about the health professionals' skills and area of responsibility. Healthcare seeking and support during and after cancer treatment may, therefore, be inappropriate, leaving patients feeling insecure and lost between care providers. The study aims to design and evaluate a new way of communication and shared decision-making that brings the patient, the oncologist and general practitioner together in a shared video consultation in the early phase of chemotherapeutic treatment. This presentation focuses on study design phase and experiences from the pilot study with acceptability of study participation of GPs and patients.

**Method:** The effect of the intervention in addition to usual care will be tested in a randomised controlled trial at Vejle Hospital, Denmark. Based on sample size calculation, we intent to include 300 patients at the Department of Oncology and their general practitioners. Results and process outcomes will be evaluated qualitatively and quantitatively, using footage of the consultations, questionnaires to patients, general practitioners and oncologists, and data from registers. The quantitative outcomes at patient level will include shared-care (primary outcome), health-related quality of life, continuity, illness intrusiveness, depression and anxiety.

**Results:** Data collection for the pilot study is completed, and inclusion for the main study will start March 2016. Status and perspectives Experiences from the pilot study and the final study design will be presented at the Wonca Europa Conference 2016 meeting.

### EP15.03

#### Hormonal war: menopause 51.4

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**Background:** Perimenopause is an ill-defined phase in the live of the women: from the first alterations in the menstrual cycle until the year after termination of menstruation (menopause). 51.4 years is the average in our country, although the transition occurs between 47 and 48 years, with a duration between 2 and 5 years, accompanied by cycle disturbances characteristic of this stage.

**Objectives:** 1. Quantify the knowledge women between 48 and 52 years have about menopause, both on symptoms such as prevention or healthy lifestyle. 2. Rate compliance with such knowledge, especially in prevention.

**Method:** Cross-sectional study with a sufficient sample of women between 48 and 52 years of the Health Centre of San Javier, using a questionnaire of 24 items. Statistical Analysis T-student, G-STAT 2.0 software, considered significant at  $P < 0.05$ .

**Results:** Average age of 49.99 years, and 55.26% menopausal .What's more known are hot flashes (94.74%), followed by body fat and obesity as a cardiovascular risk factor and for diabetes (86.84%). The 71.05% know that menopause is reached when it has been more than twelve months from the last period. They know that lowering estrogen affects vaginal lubrication producing dyspareunia. Regarding prevention: 100% of surveyed know mammography and cytology. To the lifestyle consider the 97.37% real need to quit smoking and drinking alcohol, and 94.74% increase exercise. The 86.84% knew the pelvic floor exercises. Personally performs cytology 71.05%, 65.79% mammogram, the 60.53% do not smoke, do not drink alcohol 78.95%, 63.18% heart-healthy diet, and only 23.68% performed pelvic floor exercises.

**Conclusions:** It's necessary to promote before menopause knowledge and practice of pelvic floor exercises, as well as identification of emotional and hormonal changes that occur at this stage. Including early menopause ( $< 40$ ) and induced or artificial menopause (any age).

## EP15.04

### Mirabegron in the treatment of BPH – an evidence-based review

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**Background/Aim:** Benign prostatic hyperplasia (BPH) is a common condition in men over 50 years, often resulting in lower urinary tract symptoms (LUTS), which are characterized by a combination of irritative and obstructive symptoms. Medical treatment is the first option to improve the quality of life and prevent complications. The range of drugs available for treating LUTS has been expanding, and the most recently introduced class was beta3-adrenoceptors, which belongs Mirabegron. This drug is useful for the treatment of the symptoms of overactive bladder (OAB) therefore represents a promising new therapeutic class. Analyze the available evidence on the usefulness of Mirabegron in the treatment of irritative symptoms of BPH.

**Methodology:** One research articles published was carried out between January 2006 and December 2015, in databases, including Systematic Reviews (SR), Clinical Practice Guidelines, Meta-analyzis and Randomized Controlled Trials (RCTs) in Portuguese and English, using MesH terms 'Mirabegron' and 'prostatic hyperplasia'. The Evidence Level (EL) and Strength-of-Recommendation was held from the SORT of American Family Physician.

**Results:** Research led to 20 articles: 5 were repeated and 11 were excluded; 4 articles, including 3 RCTs and 1 SR were admitted. The studies are in agreement as treatment with Mirabegron is effective and well tolerated and can be safely added to antimuscarinics and alpha-blockers if OAB symptoms (EL 1). It is associated with a decreasing in IPSS and OABSS-QoL scores, reducing the episodes of urgency and urinary incontinence as well as increasing the volume of the urinary stream and the interval between micturition (EL 1).

**Conclusions:** This review shows that Mirabegron is as effective as antimuscarinics for OAB, improving symptoms in those who antimuscarinic are insufficient. Therefore, combined treatment of an alpha-blocker and beta3-adrenoceptor is effective and safe for patients with BPH having obstructive symptoms that do not respond to treatment with monotherapy (SORT A).



## EP15.06

### **Deciding if lifestyle is a problem: GP risk assessments or patient evaluations? A conversation analytic study of preventive consultations in general practice**

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**Aim:** The aim of our study is to analyze the interaction between patients and GPs in preventive consultations with an emphasis on how patients answer GPs' questions about lifestyle, and the conditions these answers impose on the process of establishing agreement about lifestyle as a problem or not.

**Method:** Six general practitioners (GPs) video-recorded 15 annual preventive consultations. From these, 32 excerpts of discussions about lifestyle were analysed using Conversation Analysis (CA).

**Results:** GPs used an interview format to assess risk in patients' lifestyles. In some cases patients adhered to this format and answered the GPs' questions, but in many cases patients gave what we have termed "anticipatory answers". These answers indicate that the patients anticipate a response from their GPs that would highlight problems with their lifestyle. Typically, in an anticipatory answer, patients bypass the interview format to give their own evaluation of their lifestyle and GPs accept this evaluation. In cases of "no-problem" answers from patients, GPs usually encouraged patients by adding support for current habits.

**Conclusions:** Patients anticipated that GPs might assess their lifestyles as problematic and they incorporated this possibility into their responses. They thereby controlled the definition of their lifestyle as a problem or not. GPs generally did not use the information provided in these answers as a resource for further discussion, but rather relied on standard interview procedures. Staying within the patients' frame of reference and using the patients' anticipatory answers might provide GPs with a better point of departure for discussion about lifestyle.

## EP15.07

### **Teledermatology: application of new technologies in primary care**

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**Background & Aim:** In dermatology, the diagnosis and the decision-making process is always based on the clinical information of the anamnesis of the patient and on the morphological description of the skin lesion. Many times, working as a team with the dermatologist may allow a quick and efficient resolution of the lesions.

Using new technologies can provide us a better accessibility to the specialist and help us to solve more cases from the primary care where there are a lot of factors that can make the access to the specialist difficult (hospital in another city, long waiting lists...)

In our primary care center, we have decided to implement a teledermatology circuit. Our objectives are: To improve the diagnosis and clinical decisions in primary care, the accessibility of our patients to a reliable diagnosis, to get an early diagnosis of the suspicious lesions of malignancy, to reduce unnecessary travels and to decrease the long waiting lists.

**Method:** We use a deferred teledermatology method. The General Practitioner (GP) takes a picture of the lesion (with camera and dermatoscope). The GP uploads the picture and the clinical information into a form and they are sent to the reference dermatologist. The dermatologist writes a little report with the diagnosis or the treatment and he sends it back to the GP.

The image is added into the patient's documents and it can be useful to monitorise the lesion.

**Results:** One year after the beginning of the circuit, we will make a review of the interconsults done and the results obtained.

**Conclusions:** To implant a circuit of teledermatology can be interesting to improve the accessibility of the patients to a clinical diagnosis and to the appropriate treatment. This circuit can decrease the waiting list to the specialist and avoid unnecessary travels to the hospital.

## EP15.08

### A general look at pharmacogenetic and its future

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**Background:** Pharmacogenetic examines the contribution of genetic factors in the formation of the differences observed among individuals or different societies in the responsiveness to drug or development of toxicity. Genetic factors demonstrate their effect with the changes in the genes encoding enzymes or proteins which play a part in the pharmacokinetic or pharmacodynamic of the drug.

**Method:** Today, pharmacogenetic science classifies a group of enzymes belonging to "Cytochrome P450 (CYP) enzyme system working in the metabolism of most of the drugs and materials taken from the outside and their elimination from the body are classified according to the structural differences in the genes which form them.

Defining the changes in genetic structures is very important for the application of required strategies and development of treatment providing methods. In the studies made, presence of genetic areas providing the regulation of enzymes effective in eliminating the drugs used for treatment from the body was presented.

Patients can be protected from the undesired side effects by making dose adjustments for drugs determined to cause toxicity or preferring alternative drugs.

Assessing the clinical and economic value of pharmacogenetic testing for reimbursement has been described as challenging because research methods applied to traditional medicines have to adapt in order to evaluate the scope and complexity of personalized medicine. Yet the requirement of clinical evidence and value is beginning to favor reimbursement for testing

**Results/Conclusion:** Collaborating with the pharmacogenomic laboratories working on individual medicine, the doctors may present a more effective treatment to their patients and prevent poisoning and deaths occurring due to drug dosage mistakes.

## EP15.09

### **No time to lose': costs of determination with capillary method of glycohemoglobin A1c in primary care**

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**Aim:** To analyze the efficiency of a circuit for determining capillary HbA1c versus the traditional circuit (extraction and laboratory determination).

**Methods:** 3-months before-after study. Inclusion criteria: poor metabolic control, lack of regular checks (>1 year without HbA1c). We registered: age, sex, time of evolution, anthropometry, glycemia and HbA1c (baseline/3 months). The assessment is based on: time spent per patient and the level of achievement of the main objective (HbA1c) and suitability recommendations, based on Student's t test or nonparametric test, as appropriate.

**Results:** We recruited 40 patients, 24 (60%) men, mean age 68.7+11.9 years. Average time of diabetes' evolution: 8.9 +5.5 years. Lost only 6 patients (15%). Initial HbA1c: 7.82+1.35%; at 3 months: 7.61+1.17% (p<0.001).

**Measurements:** 42.5% nothing, 20% increased dose of insulin/oral hypoglycemic drugs, 10% treatment step change, insulinization 7.5% and 7.5% others. The appropriateness was positive in 26/34 cases (76.5%). Recent published cost for a single determination of HbA1c is 6.13€. Obviously, it is not counted costs of extraction, transportation, nor time lost by professionals (appointment, nurse, doctor) than in similar reviews ranged from 3-8, 18-20 and 13-15 minutes, respectively, and time lost by patients (72-118'). The new capillary method consumes an average of 5 minutes per patient, each reagent kit cost 7.20€, with the advantage that the result is delivered immediately to the physician, who can make appropriate changes (2 minutes). If we consider two doctor visits (7' each one) to request a test, another to read the result, the new circuit for capillary sample is an important opportunity for improvement and saves almost 50% time, approximately.

**Conclusions:** Performance of capillary HbA1c test is useful, provides better metabolic control and prevents therapeutic inertia. Additionally, this strategy saves time to professionals and patients, with a reasonable price.

## EP15.10

### **Connecting the national electronic prescription system with an electronic medical records system: targets and potentials within the period of austerity**

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**Background & Aim:** An Electronic Medical Records (EMR) System was used for research purposes in general practice offices in Crete as a joint effort of the Medical Faculty, University of Crete and the Cretan Primary Care based Research Network. Its connection and interaction with the National Electronic Prescription System (NEPS) has been achieved since the end of 2015. Information from prescriptions and orders can be used to provide decision support and training to the physicians that use the EMR.

**Method:** A connection to the NEPS through the Application Programming Interface (API) was developed. The information from prescriptions and orders is processed by the EMR. An API connection to a widely used website -[www.galinos.gr](http://www.galinos.gr)- that offers drugs' information and interactions evaluation was developed. A web browser was embedded in the EMR with the aim to offer to the users (general practitioners) screening questionnaires, relevant medical information, national guidelines and assistance for decision support for selected chronic diseases. Problems encountered on the use of this EMR system and doctors' performance were recorded and analyzed.

**Results:** The time needed to perform prescriptions and examination orders was decreased. Adoption of the EMR was greater when prescribing staff was included. The use of medical questionnaires was facilitated and increased the available data in the Cretan research network. Drugs' interactions information was less used than other forms of decision support based on national guidelines. Software for querying the NEPS data was the most demanded feature. Different requests were also recorded for future implementation among similar health units.

**Conclusions:** Incorporating the prescription process in the available EMR system can improve adoption of the EMR and seems to be an important source of information for decision support tools, while the updated EMR is anticipated to improve quality of health care services and have an impact of physicians' performance.

## EP16.01

### Evaluation of women having pap smear test by health belief model scale

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**Objective:** Cervical cancer is a common disease with high mortality, back-breaking and expensive treatment, an important public health problem as well. The aim of this study was to evaluate the women's beliefs about having Pap Smear test.

**Method:** This study was planned as a descriptive cross-sectional research and conducted between the dates of June and September 2015 at a Family Medicine Health Center in Izmir. The survey has been carried out by 266 women who were over 30 years and accepted participating in the study. The data were collected with a questionnaire developed by the researcher including the Health Belief Model Scale for Pap Smear Test. The analysis was performed with SPSS 15.0 software program. The significance p value <0.05 was accepted.

**Results:** Participants (n = 266) mean age was  $40.00 \pm 8.10$  (min 30-max-70). Of the participants 82.0% (218) were married, 2.6% (n = 7) single, 13.5% (n = 36) had no children.

The average age of first intercourse was  $21.67 \pm 4.53$  (min: 13-max: 45). First intercourse age under 20 years mentioned by 49.2% of participants (n = 131) and 59.0% (157) had PAP smear before. When smear frequency were asked 58 (21.8%) of them answered per year. In 13.5%, there was more than one partner. There was no relation between the education level, working status and having a Pap test ( $p > 0.05$ ). It was found that the average points of subgroups (seriousness and health motivation) of Health Belief Model Scale were higher ( $p < 0.05$ ).

**Conclusion:** The rate of making Pap Smear test has been still in medium-level and there are barriers. It is an important issue to planning initiatives for the elimination of barriers taking Smear test for family physicians.

**Key words:** Pap Smear Test, Cervical Cancer, Health Belief Model

## EP16.02

### **Prenatal exposure to antiepileptic drugs and use of primary healthcare in childhood: a population-based cohort study in Denmark**

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**Background:** Prenatal exposure to antiepileptic drugs has been associated with several health outcomes like impaired neurodevelopment, cognitive problems, behavioural problems and childhood autism in preschool children. Little is, however, known about the physical health of children prenatally exposed to antiepileptic drugs.

**Aim:** To investigate whether prenatal exposure to antiepileptic drugs is associated with future health measured as use of primary healthcare in childhood.

**Method:** All live born children in Denmark 1997-2012 were identified in the Danish National Patient Register and followed until 31 December 2013 (n= 1,012,192). Information on the mother's use of antiepileptic drugs during pregnancy was obtained from the Danish Register of Medicinal Product Statistics. The outcome of interest was the children's use of general practice after birth. This information was obtained from the Danish National Health Service Register which also included information on specific services provided by the general practitioner. Incidence rate ratios (IRR) and corresponding 95% confidence intervals (CI) were estimated using negative binomial regression model.

**Results:** A total of 6,155 children were exposed to antiepileptic drugs during fetal life. Overall exposed children had more contacts to general practice (IRR=1.13, 95 % CI: 1.11-1.16) but after adjusting for maternal factors the difference attenuated substantially (IRR=1.03, 1.00-1.05). Exposed children more often had a CRP-test and urinary stix taken compared to unexposed children, but the difference was not statistically significant after adjustment. When stratifying on maternal epilepsy status, there were no difference in the use of general practice for exposed and un-exposed children among children with mother having epilepsy, while exposed children more often had a telephone contact compared to unexposed children among mother without epilepsy.

**Conclusions:** Prenatally exposure to antiepileptic drugs was associated with a small increase in the use of general practice during childhood but not with indicators of physical health.

### EP16.03

#### **Doctor: why does my face swell? Should I take it seriously?**

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**Background & Aim:** Facial swelling (FS) is a common sign in Primary Care Centers (PPC) attention. Some FS etiologies can be alarming and an early, accurate differential diagnosis is needed: dermatological (allergic reaction, urticaria), infectious (sinusitis, odontogenic process), immunological (hereditary angioedema, connectivopathy), thoracic compression (superior vena cava syndrome (SVCS), tumors, aortic aneurysm). We aim to describe a special case of FS.

**Methods:** 57-year-old Caucasian male, former smoker 110 pack-years, previous history of hypertension, long-term type 2 diabetes, dyslipidemia and 2 myocardial ischemic events, following pharmacological treatment (PT) for each condition. Patient attended in our PCC because of a sudden onset of low-facial edema, pruritic erythematous rash on face and neck. No trauma or suspicious food/topical substances contact. Five days before, his regular dyslipidemia PT, producing a gynecomastia second-side effect for 6 months, was changed. Oriented as an allergic drug reaction, symptomatic PT was prescribed. Few days later, state of patient became worse: minor effort dyspnea appeared, edema and tightness anterior cervical increasing, oriented as a case of goiter by palpation.

**Results:** Despite ultrasound presented hypoechoogenic nodules, thyroid disorder was quickly ruled out by blood test. Patient showed worsening of dyspnea, facial edema progression and recent thorax venous collateral circulation on a new examination, then referred to the hospital under suspicion of SVCS. There, urgent computed tomography revealed right paratracheal mass causing SVCS, and lung adenocarcinoma final diagnosis confirmed by adenopathy biopsy and positron emission tomography; both treatment of cancer and relief of obstruction symptoms were immediately adopted.

**Conclusions:** Precise anamnesis and exploration in FS in Primary Care is essential to provide an early vital diagnosis and treatment. Among them, SVCS is a medical emergency. Intrathoracic malignancies are responsible for 60–85% of SVCS cases, small cell lung cancer the most common. Management is guided by severity of symptoms and the underlying malignancy.

## EP16.04

### Low back pain during pregnancy

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**Background & Aim:** Pregnancy is a time of many physical and physiological changes. These changes impact the musculoskeletal system, which can develop a variety of problems (and pain in different locations). One of the most common is low back pain (LBP). Thus, the aim of this study is to review the pregnancy low back pain and its management.

**Method:** We conducted a PubMed and Cochrane search, on 25/05/2015, with the terms “lumbar/low back pain” and “pregnancy”, for systematic reviews and meta-analysis, published in the last 10 years. We identified 53 articles of which 8 were included, after reading the abstracts.

**Results:** Different studies found that LBP, in most cases, is due to mechanical factors, including altered posture, muscle weakness, joint laxity, and/or vertebral facet joint irritation. Disc herniation is a rare cause of LBP during pregnancy. LBP can occur at any time during the gestation, but is most prevalent in the second half of pregnancy. Usually, women describe pain that is aggravated by activity and relieved by rest. Physical examination is important to locate the pain and in differential diagnosis. Imaging study (magnetic resonance) should be performed only in particular cases. A multimodal approach is required and pharmacological intervention is only one of many different options to manage LBP.

**Conclusions:** LBP is a common cause of pain during pregnancy that interfere with the pregnant quality of life. Usually it's a benign condition but family doctors should be aware of this disorder so they can decide wisely and manage it appropriately.

No conflict of interest declared

## EP16.05

### **Actinomyces infection in women using copper intrauterine device (IUD) in a primary care health center**

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**Introduction:** It is important to evaluate the Actinomyces infection and its associated elements in women of our area using copper IUD, to know the magnitude of this problem and know how to handle it.

**Objectives:** Knowing the prevalence of Actinomyces detection on Pap smear, as well as the treatment used, relapse after treatment and existence of co-infections in women using copper IUDs in our area.

**Method:** Observational descriptive study of women using copper IUD attending Pap smear screening during the period 2013-2015.

**Results:** We have a sample of 640 women using copper IUD. It is observed that the prevalence of Actinomyces detection is 5'6%, being a 3% of them asymptomatics. A 27'7% of them received no treatment, 66'6% were treated with amoxicillin-clavulanate and 5'5% used doxycycline, getting a negative Pap smear control in the 65'4% of women. A 16.6% showed some added coinfection. The copper IUD was removed in 8'3% because of menopause in women where Actynomices was detected and 11'1% because of gestational desire.

**Conclusions:** The prevalence of women with copper IUD in our area that associates Actinomyces infection stood at 5'6% in the past two years, the majority of them were asymptomatic and used amoxicillin-clavulanate as the first choice of treatment with good control. The copper IUD removal in our patients was not conditioned by infection, having other reasons for its removal. Coinfections were detected caused by Gardnerella vaginalis, Trichomonas vaginalis, Herpes simplex, Chlamydia and Candida The use of copper IUD is an important risk factor for Actinomyces infection, so periodic reviews should be done to allow diagnosis and proper treatment to avoid possible complications arising. It would be relevant to adjust the antibiotic treatment to the existence of signs and symptoms of infection, as well as educate patients on the symptoms that should be communicated early.

## EP16.06

### “Cervical cancer screening: how we do it, to whom and when”

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**Background and Aim:** Cervical cancer screening has the potential to prevent cancer and its mortality. The liquid-based cytology (LBC) has several advantages and allows testing for human papillomavirus (HPV) infection. Based on this, Portugal has an organized screening model, in which all eligible women are called to an appointment with their family physician in order to do the LBC. These women are asked several questions, data is recorded in a database and all samples are analysed in a reference laboratory. The aim of this study was to characterize a sample of women submitted to this screening.

**Methods:** Women who attended to the appointment between August and October 2015 were submitted to a questionnaire and LBC. Descriptive and inferential analysis was performed to characterize them and evaluate association between variables.

**Results:** 79 women were screened. Their mean age was 41,5 years and 64,6% had family cancer history. The majority were on estroprogestative contraceptives (53,2%), had 1 or more pregnancies (73,4%) and only 10,1% had anti-HPV vaccination. From all, 96,2% had 2 or more previous cytologies, mostly done within the past 3 years. Cervix was visualized in 94,9% women, with macroscopic abnormalities in 44,3% of them. All tests were satisfactory and negative for intraepithelial lesion. However, inflammation was detected in 40,5%, atrophy in 5,1% and parakeratosis in 3,8%. There were no significant differences between family cancer history ( $p=0,306$ ), anti-HPV vaccination ( $p=0,146$ ), number of pregnancies ( $p=0,486$ ), macroscopic abnormalities ( $p=0,053$ ) and an abnormal cytology.

**Conclusions:** This study showed no relation between family history of cancer or gynaecological examination and abnormal LBC. It also showed a high frequency of minor abnormalities which can lead to unnecessary retesting and elevated costs. However, the sample of this study is small to make effective conclusions, so this study is still running in order to achieve more reliable results.

## EP16.07

### “ Now I will stop using my intuition and only follow checklists” - healthcare professionals’ experiences with drug utilization reviews

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**Background & Aim:** Inappropriate drug use is assumed to explain 5-15% of unplanned hospital admissions in elderly people. Interventions to reduce inappropriate drug use have shown inconclusive results.

The aim of the present study was to describe general practitioners (GPs) and nurses’ experiences with drug utilization reviews (DURs) in elderly patients.

**Method:** This was a qualitative study based on material collected during an educational intervention directed to GPs and nurses working in 33 general practices in Stockholm, Sweden. The intervention consisted of two lectures within four months during the year 2013. It comprised theoretical knowledge on inappropriate drug use according to National guidelines, feedback on prescribing, and the development of a local consensus procedure on how to work with DURs. The tutors, two pharmacists, documented GPs’ and nurses’ quotes after each lecture as well as their own reflections in an unstructured format. The material was explored using thematic analysis.

**Results:** Healthcare professionals perceived the work with DURs as complicated and challenging in many ways. Five themes could be identified.

1. Complexity in 3 ”P” (Patients, primary care, pharmacology);
2. Uncertainties and questionmarks;
3. The dead soul of a GP;
4. Guidelines versus clinical practice; and
5. Eureka! New experiences with DURs.

**Conclusions:** Health care professionals working in primary care described many challenges in connection with the performance of DURs in elderly patients. It is important to consider their experiences when designing future educational interventions in the field of inappropriate drug use.

## EP16.08

### **Cytomegalovirus in pregnancy: should family doctors order this serological test?**

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**Background & Aim:** Cytomegalovirus (CMV) infection is usually asymptomatic and transmissible to the fetus. Some experts suggest that all women of childbearing age should know their CMV serostatus, although there is no consensus. In Portugal there are also different approaches used. The aim of this work is to review the most recent information about CMV screening during pregnancy.

**Method:** Literature review in textbooks, published review in scientific databases and clinical standards websites, using the term “pregnancy cytomegalovirus”.

**Results:** CMV is a common infection associated with fetal and infant complications when acquired congenitally. The risk of transmission is approximately 30% to 40% and 0.15% to 2% with maternal primary and recurrent infections, respectively. There are three strategies of screening: 1) universal screening of women; 2) screening only women at increased risk; 3) pregnant ultrasound screening for congenital CMV features and secondary track with serology. The studies show that the universal screening for seroconversion is the most reliable means of identifying primary infection in pregnancy. The defenders of universal screening argue this is supported by the proven reduction in maternal primary infection following institution of simple hygiene measures (primary prevention). Further data is awaited from randomized trials currently underway to better estimate the reduction in fetal infection achieved with CMV hyperimmune globulin (HIG) among recently seroconverted women (secondary prevention). Treatment appears to reduce clinical sequelae among fetuses confirmed to be infected (tertiary prevention).

**Conclusions:** The strategie of universal screening with the intention to treat seems to be the most cost-effective but it depends on the studies about CMV HIG. Repeated serological screening during pregnancy to detect seroconversion is not commonly performed because of cost, lack of effective treatment in the present, and generally poor ability of positive serology to predict the fetus long-term outcome.

## EP16.09

### Symptoms and signs of ovarian cancer in women presenting to primary care

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**Background & Aim:** Ovarian cancer (OC) is the seventh most common cancer in women worldwide. OC is a disease with a poor prognosis due to late stage diagnosis. In Denmark, 74% are diagnosed in FIGO stages III- IV with a 5-year survival of 40% and 20%, respectively, compared to 85% in FIGO stage I. Thus, early diagnosis is crucial, and failure to recognise early symptoms may result in stage progression. We aim to identify symptoms, in particular early-stage symptoms, and signs of OC presented in primary care.

**Method:** A narrative literature review of studies on symptoms of OC in primary care will be conducted. Cohort and case-control studies with data on types of symptoms and symptom complexes will be included together with information on positive likelihood ratio and/or positive predictive value. Studies that do not use histopathology to confirm OC diagnosis and studies of patients with known OC will be excluded.

**Results:** Studies show that 95% of women with OC have symptoms. These symptoms are frequently reported in early-stage disease although they may not be of gynaecological nature. Early-stage OC typically presents with non-specific and vague symptoms that may mimic more frequent non-malignant conditions, e.g. irritable bowel syndrome. The literature review is ongoing, and detailed results will be presented.

**Conclusions:** The vagueness of the symptoms associated with OC in primary care has important clinical implications for the primary care physicians in terms of when to offer further diagnostics; transvaginal ultrasound. This study will provide an evidence base for selection of women for investigation.

## EP16.10

### **Prevalence of symptoms of depression and anxiety in patients with chronic obstructive pulmonary disease: cross-sectional study in primary health care**

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**Background and Aim:** Symptoms of anxiety and depression in Chronic Obstructive Pulmonary Disease (COPD) is associated with reduced quality of life, greater number of consultations and hospitalizations. This study aims to compare the prevalence of depression and anxiety in patients with and without COPD in primary health care.

**Methods:** Patients with COPD from two Family Health Units, in Braga, Portugal, were invited to perform spirometry and to complete a questionnaire including demographic data, the Hospital Anxiety and Depression Scale (HADS), the St. George Respiratory Questionnaire (SGRQ), and the Graffar scale. Patients without COPD completed a similar questionnaire.

**Results:** The study sample consisted of 130 participants, 65 with COPD. The prevalence of depression in COPD patients was 16.9% (CI 95%: 9.7% to 27.8%) and 9.2% (CI: 4.3 % to 18.7%) in participants without COPD (NS). The prevalence of anxiety was 27.7% (CI 95%: 18.3% to 39.6%) among COPD patients and 16.9% (CI: 9.7% to 27.8%) in participants without COPD (NS). The mean HADS depression score for COPD patients in GOLD stages II-IV (7.6) was higher than the mean depression score (5.4) for subjects without COPD ( $p=0.021$ ). In a multiple linear regression model we found that respiratory symptoms, socioeconomic status, and marital status are significant predictors of symptoms of depression. Respiratory symptoms were the only significant predictors of anxiety symptoms

**Conclusion:** Symptoms of depression were more prevalent in patients with COPD GOLD stages II-IV when compared with patients without COPD. Marital status and social class are associated with symptoms of depression in COPD patients. Respiratory symptoms are an important predictor of depression and anxiety symptoms in COPD patients.

## EP17.01

### Evaluation of renal function in home care patients

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**Introduction:** In this research, we aim to evaluate urea, creatinine and gfr levels and in addition to that undiagnosed renal failure for registered patients in Istanbul Sislili Hamidiye Etfal EAH Home Care Unit.

**Methodology:** Within the time frame of January – December 2015, during our retrospective complementary research we examine laboratuary results in home care patients. Urea, creatinine ve gfr levels, daily intake of water, hypertension, diabetes mellitus ,existing renal diseases examined. GFR were calculated with the formula approved by turkish nephrology society. According to this formulation, the results were grouped as mild renal failure(RF)(GFR=89-60), moderate RF (GFR=59-30) and severe RF (GFR=29-15). We used SPSS20.0 version ; frequency, chi-square ve T test evaluated.

**Results:** Totally 119 patients included in the study of which 82 (%68.9) were women, and 37 (%31.1) were men. According to GFR levels %3 (n:4) were grouped as severe RF, %44.5 (n:53) were mild and %30.3 (n:36) were moderate RF. 68 of the patients who answered the question about “Daily water intake” %29.4(n:35) were less than 1 liter/day, %21.0(n:25) were between 1-2 liter/day, %6(n:8) were above 2 liter/day. Renal failure were %82.9 in patients whose water intake were less than 1 liter/day, and this ratio was %50 in patients whose intake were above 2 liter/day (p=0.364). In women, high GFR levels and related RF were more than men(p=0.014).

**Conclusion:** We observed that mostly for patients with home care have high levels of Creatin, while their gfr levels were low. In most patients there was no prior knowledge of Kidney failure; but in laboratory results it was found that patients had mid- stage renal failure. We have to evaluate not only creatinine levels but also age for calculate gfr in order to diagnose renal failure. For home care patients, we have to give right treatment in order to avoid end-stage renal failure and prevent dialysis need.

## EP17.02

### **Potentially inappropriate prescriptions of chronic consumption of Proton Pump Inhibitors: Are we doing it right?**

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**Background & Aim:** Proton Pump Inhibitors (PPIs) are among the most commonly prescribed drugs worldwide. Multiple scientific publications have reported an abuse in the consumption of PPIs. The aim of this study was to identify potentially inappropriate prescriptions of Proton Pump Inhibitors in primary health care. In order to have a closer approach to the magnitude and growing importance of this public health problem.

**Material and Methods:** Cross-sectional descriptive study. We retrospectively recruited patients who were chronic users of PPIs in an urban primary care centre in Barcelona that provides coverage to 32,000 patients. A simple random sampling of patients PPIs prescriptions between January 2013- december 2013. Main variables were: sex, age, type of PPI, concomitant intake of nonsteroidal anti-inflammatory drugs (NSAID), oral corticoids, acetylsalicylic acid (ASA), Clopidogrel, number of drugs prescribed per patient and clinical episodes in which the use of PPIs is approved. The study was conducted by the audit of computerized medical history. For the statistical analysis we used package SPSS/PC 19.0.

**Results:** Total patients included were 261, 157 (60.2%) women, mean age 69 (14.8SD). The most prescribed type of PPI was omeprazole (86.6%), followed by pantoprazole (7.7%) and esomeprazole (3.1%). Regarding gastrolesive drugs, 76 patients were taking ASA (29.1%), 55 were taking NSAID (21.1%), 17 were taking Cloridrogel (6.5%) and 5.4% were taking oral corticoids. The most frequently associated pathology was hiatal hernia, present in 26 cases (37.7%), followed by gastroesophageal reflux disease, present in 12 patients (17.4%). The prescription of chronic consumption of PPIs was appropriate in 191 patients (73.2%) and potentially inappropriate in 70 patients (26.8%).

**Conclusion:** The frequency of inappropriate prescription found in this study is lower than that observed in other studies. In spite of this, rationalizing the use of PPIs continues to be a pending subject.

### EP17.03

#### Evaluation of vitamin D levels in home care patients

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**Introduction:** Vitamin D deficiency has become epidemic for all age groups in the United States and Europe. The aim of this research is to evaluate the vitamin D deficiency and related lifestyle reasons.

**Method:** This research is done in Home Care patients registered to Istanbul Sisli Hamidiye Etfal Training and Research Hospital between January – December 2015. After getting the patients' vitamin D records retrospectively, we have inquired patients if they have regular exposure to sun light, if they actively or passively excersized, whether they have a history of fracture or osteoporosis and other related life styles. D vitamin deficiency were grouped as; normal(>30ng/ml),insufficiency(20-30ng/ml),deficiency(lower than 20ng/ml)and severe deficiency(lower than <10ng/ml). We used SPSS20.0 program; frequency, chi-square and T test evaluated.

**Results:** Totally 119 patients included in this study. There were 82(%68.9) women and 37 (%31.1) men. We defined %82.4(n=98)Vitamin D deficiency in all group of which %60.5(n=72) were severe, %21.9(n=26) were lower than normal value. 68 patients answered the question about “exposure to sunlight” and 58 of them %85,3 didn't have regular exposure to sunlight, %64.71 (n:44) didn't had vitamin D treatment.%80.5 of women (n=66) and %86.5 (n=32) of men had vitamin D deficiency (p=0.791). %61.0(n:50) of women, %59.5 (n=22) of men had severe deficiency. Vitamin d deficiency evaluated mostly in 75-84 years age group (p=0.310).

**Conclusion:** In our study we have found that most homecare patients have low levels of Vitamin D, do not have regular exposure to sunlight, not do excercize regularly or mostly do excercize passively. But in a larger sample size, low vitamin D levels have to lead to fractures for older immobile patients. To assist in eliminating fractures and to make higher the qualityof life, it is very crucial for patients with limited exposure to sunlight, to measure vitamin D levels and and to replace it.

## EP17.04

### What is the relationship between vitamin D and obesity?

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**Background & Aim:** Obesity is a serious public health issue and it is imperative to identify their modifiable risk factors, particularly those that can be easily treated. According to the literature, there seems to be an association between vitamin D deficiency and obesity.

**Aims:** Assess the relationship between vitamin D deficiency and obesity; measure the possible effects of vitamin D supplementation on body weight reduction.

**Method:** We performed a literature search using the Mesh terms: 'Vitamin D deficiency' and 'obesity' in the main bases of scientific data, between 2000 and 2015. We excluded articles that did not meet the objectives of the study or whose theme was repeated.

**Results:** In the studies found it was agreed that obese individuals tend to have low levels of vitamin D, however, the reason is controversial. Some studies suggest the captation of vitamin D by a person's own adipose tissue, since it expresses several receptors for vitamin D. Other studies, on the other hand, suggest that vitamin D deficiency promotes obesity by inhibiting weight loss, showing a benefit in vitamin supplements for weight reduction. But, since vitamin D is essential in the metabolism of calcium, it becomes difficult to separate the effects due to the own vitamin and calcium-mediated effects. In the studies reviewed the supplementation with vitamin D was included among participants without vitamin deficit, demonstrating that supplementation has no effect on them.

**Conclusions:** The association between vitamin D deficiency and obesity is well established, although the mechanisms involved are not clear and there is no certainty regarding the health consequences. There is a need for prospective studies development that include prior measurements involving vitamin D and appropriate doses of supplementation. So, for now, the role of vitamin D supplementation on obesity remains unclear.

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## EP17.05

### Prevalence of risk factors and incidence of cardiovascular disease recurring cases in primary care

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**Aim:** To evaluate the incidence of recurrent cases in patients who had already suffered a cardiovascular disease (CVD), and to analyze the most prevalent risk factors (RF) associated with the occurrence of these events, comparing only recurring cases, and assess whether there is poor control on these factors as possible causes.

**Methods:** Descriptive observational study in primary care (14,500 inhabitants). Adult population who had had at least one CVD (stroke, transient ischemic attack, acute myocardial infarction (AMI) or angina pectoris), between 2005-2013 were selected. We evaluated the degree of control of RF, applying the objectives of the American Heart Association/American College of Cardiology (AHA/ACC) and the European Society of Cardiology.

**Results:** of the 186 individuals included, 112 (60.2%) men with average age 71.6+10.6 y., 33 suffered a recurrence of CVD (incidence rate=17.7%). 63.6% of recurrence were men (age 66.3 +11.7 y.; women 76+7.9 y. (p=0.016)). 119 patients had ischemic heart disease, recurrence being 21.8%; 65.4% of them AMI and 34.6% angina pectoris. 67 patients were cerebrovascular cases, with 10.4% being recurring. There is higher prevalence of various RF in patients were recurring cases compared to those who were a single case, the following remained significant: - HDL cholesterol (50.4±15.7 vs 42.6±10.2 mg/dL in recurrent, p<0.01) - Poor glycemic control (20.9% vs 36.4% of events recurring, p<0.01).

**Conclusions:** Poor control of HDL seems to indicate a higher prevalence of recurrent CVD, added to deficiency in the strict control of the LDL figures. Poor control of blood pressure was significantly associated with stroke. The study allowed us to compare changes in our scope. Controls have improved but have remain poor, so that should be more focused on the application of clinical practice guidelines to improve the quality of life and functional prognosis of patients.

## **EP17.06**

### **How ICT can describes frailty**

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Frailty is usually known as “geriatric condition” that seems to be clearly defined in the accademic context; the limit of this definition appears to be its tendency to simplify a such complex concept with that of multimorbidity. The definition becomes much more complex when we consider the concept of frailty also through other health determinants, such as environment and socio-economic conditions. We compared some experiences of collecting data for frailty evaluation, using different tools (ICT) and observational points. We examined five different systems, interviewing key informants, asking them to describe the strength and weakness of their system. Veneto region has adopted a system that collects clinical information by hospitals and pharmacies (hospital admissions, access to ER, use of drugs); through a complex algorithm it tries to estimate the risk of population frailty. Trentino region has used a similar algorithm, less accurate in weighing the clinical elements, but more advanced in order to collect social information (place of residence, use of social services, use of medical aid ...) Puglia region has invested in a ICT evaluating clinical data which are inserted and weighed from a territorial nurse. Friuli has tested a similar ICT system, in which the 'data entry' is implemented by the General Practitioners, who is supposed to enter both clinical and social information. Scotland is experimenting a data collection system which expect the patients submit directly the health information, so that they can focus on their own priorities and needs. The ICT merges this information with the clinical diagnosis. Our study shows the lack of an univocal definition of frailty; therefore it is necessary to conceive a research project which, starting from what was observed in this preliminary study, allows to build and validate a new multivariable schema, in order to share an efficient frailty definition.

## **EP17.07**

### **How to apply experiences for a healthy lifestyle - a Pilot Project**

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**Background and Aim:** The aim of the study was to ascertain the level of knowledge of various age groups of the population and possibilities for the prevention of senior-age pathologies. In the case of adolescents and younger adults developing positive and humanistic approach towards older inhabitants was taught using simulation methods.

**Methods:** A group of 30 listeners was familiarized with the subject matter through age-adapted lectures. For pupils and adolescents a lecture with emphasis on osteoporosis and arteriosclerosis was prepared, whereas for adults and younger senior citizens a lecture providing basic information about metabolic syndrome, dementia, depression, incontinence, and the possibilities for its prevention was done. At the start and at the end of the lecture the audience answered a questionnaire. Then they underwent training in the form of a competition/game using simulation models of ageing syndromes.

**Results:** A total of 1463 people followed the lecture, the largest age group of 1259 respondents consisted of pupils of the final year at primary and secondary-school ranging from 12 to 18 years of age, 69 students of the faculty of education aged 20 to 26, the adult group included 78 respondents 27 to 55, and the senior citizen group consisted of 57 respondents ranging from 64 to 83. The best results in long-term effect of the educational event were performed in the students' groups questioning prevention of early stages of osteoporosis 47% and food containing highest amounts of calcium 48%.

**Conclusions:** Low level of awareness amongst the population of the necessity of lifelong prevention of arteriosclerosis and osteoporosis was found. The positive change in attitude and behavior caused by the education event with simulation was evident in both the groups questioned - pupils from primary and secondary schools and the group of students of the faculty of education.

## EP17.08

### **Debunking myths and misbeliefs in medicine: educating patients to take evidence-based health choices**

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**Background & Aim:** for centuries the field of medicine has been filled with myths shared between doctors and patients, mostly due to lack of knowledge.

With time a better understanding of physiology and biochemistry about how the body and diseases work put a huge gap between the two groups, therefore facilitating the opportunities for quacks to spread misunderstandings and false information.

With the digital era and especially after the exponential growth of social media, although an easier access to medical information, health-related myths instead of disappearing kept spreading among the public.

Because of movements (ex. anti vaccination/ vegan movements) very active on the web with blogs, dedicated websites or through groups on social networks, myths managed to get more visibility than facts, despite being based on clearly wrong and non-scientific bases or on conspirational theories.

People who believe in these kind of myths can make health-related choices that could expose them and/or the community to different levels of danger.

The role of the GP is therefore crucial in educating the patient to distinguish myths from facts using reliable online sources.

**Method:** After handing participants a survey to investigate which myths are common across their Country, a presentation will show what kind of, how and why common misbeliefs can spread among the population. Then participants will be split in groups to debunk some common articles that could be found on the web by patients; after sharing their results, tools and effective methods to engage patients in recognising reliable sources will be presented and discussed.

**Results:** Participants will learn how to address the most common myths in medicine and what their impact is. They will also learn and discuss new strategies to change patients attitude toward non-evidence-based practices.

## EP17.09

### Prevalence of depression in patients with hypothyroidism in Health Care Center Mostar

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**Background & Aim:** Thyreoid dysfunction, especially hypothyroidism, if it's not treated could lead to a severe depression and demention. Although hypothyroidism and depression are two interrelated illnesses with intertwined symptomatology, there is relatively small amount of studies which point to the frequent occurrence of depression in patients with hypothyroidism compared to a general population. The main goal was to investigate the prevalence of depression in patients with hypothyroidism.

**Method:** The study included 53 patients with hypothyroidism who were treated in HCC Mostar. The study was conducted in the period of 3 months. Diagnosis and types of depression were set based on MINI questionnaire and depression severity was based on Hamilton rating scales. Including parameters were: age, gender, marital and employment status, place of residence, smoking, alcohol, family history of depressive disorder, TSH and FT4.

**Results:** The prevalence of depression in patients with hypothyroidism was 56,6%. 52,8% of them had mild depression type, and 3,8% had moderate form of depression. Furthermore, research has found that 66,7% older than 50 years have some degree of depression. Given the habit of drinking alcohol, 80,0% of respondents who don't drink alcohol had some degree of depression. Moderate depressive episode occurs in 100% patients older than 50 years. A statistically significant difference was found in relation to marital status. Minor depression occurs in 64,3% patients who are married and 7,1% of bachelors. In this study, melancholic depression occurs in 81,8% older then 50 years and nonmelancholic depression in 46,2 % those under the age of 50.

**Conclusion:** Prevalence of depression in patients with hypothyroidism was significantly higher compared to data relating with the occurrence of depression in general population. There was no statistically significant difference in severity of depressive episode and type of depression, compared to the history of depression, TSH and FT4.

## EP17.10

### **New roles in primary care practices; a solution for future healthcare challenges?**

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**Background & Aim:** There is an increasing demand on primary care with ageing population and reforms that shift care from hospitals to the community. These developments fuel the need for new healthcare delivery models. Although care provided by Nurse Practitioners (NPs) has proven to be both effective and safe, the integration of NPs into primary care practice is still challenging. The implementation differs between countries. In countries like the USA, the NP role in primary care is well developed. On the contrary, the role of the NP is relatively new or non-existent in the majority of countries. To facilitate the introduction of NPs in general practices we need more insight in the factors influencing the implementation, and the needs of practice in terms of tasks and responsibilities of NP.

**Method:** A qualitative design to explore GPs' perspectives on employing and educating NPs within their organization. In 2015, 37 GPs and managers were interviewed. Three main topic areas were covered in the interviews: the decision-making process, arguments to train and employ an NP, and NPs' tasks.

**Results:** There were three main goals for the GPs to deploy an NP. The primary goal was substitution of care in which GPs want the NP to take over -parts of- their surgery hours. Second, they expect to improve the quality of care due to more monitoring and more time for patients. Lastly, they want to offer more services, most often aimed at prevention or offering specialised care in their practice. Main determinants influencing the implementation include lack of knowledge about the profession and uncertainty about political decisions (including financial systems) regarding the NP.

**Conclusion:** Results give insight in GPs' perspectives about the implementation of the NP in primary care practices and the required preconditions.

## **EP18.01**

### **Team work in primary care: managing personalities with enneagram**

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**Background & Aim:** The primary care doctor is also a manager of a health care team. Different personalities in a team can be challenging to balance in order to achieve higher standards. The enneagram is a useful tool to understand motivations and behaviours and helps relationship improvement. This knowledge and skills are essential for team building and conflict solving in the primary care setting.

**Method Content:** - Enneagram basis as a useful tool to understand personalities, motivations and behaviours of team members - Motivation and conflict solving within a health care team.

#### **Methods/Session Plan:**

- Brief introduction to enneagram and brief analysis of personality types
- Case-study of different typical personalities of people in a working team and discussion of ways of dealing with them and motivating them
- Conclusions presentation based on workshop discussion and enneagram theory

**Results:** Goals: - To understand the enneagram as a useful tool to understand motivations and behaviours of team workers - To understand different perspectives on how to deal with different personality co-workers within a health care team and ways of motivating them in order to improve relationships and work performance.

**Conclusions:** People have different motivation, personalities and perspectives and it influences them largely when they relate to other team workers. Enneagram can be a powerful tool on General Practise/Family Medicine daily management of team members in order to facilitate interactions and improve health care quality.

## **EP18.02**

### **How can we overcome the challenges of being a GP woman in Romania**

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**Objectives:** The symposium aims to identify the main resources and strategies to cope with risk factors affecting women GPs in Romania.

#### **Methods:**

- Reviewing and describing the data about the magnitude of burnout syndrome among health care providers;
- Reviewing and describing the data regarding the prevention and recovering from the burnout syndrome among health care providers with special target on GPs and primary care doctors;
- Exploring the actual health and well-being services available in Romania for the burnout syndrome prevention and treatment for GPs women;

#### **Results:**

- GPs women are more prone to burnout syndrome than men;
- Lack of women health care providers organizations or dedicated department for women in the already existing health professional associations to promote women's health and well-being;
- Lack of the data reports about the standardized medical and non-medical aid for women healthcare providers or women GPs in distress; imbalance in between the urban and rural resources for prevention and treatment of the burnout syndrome;

**Conclusions:** Romanian GP women need to open the discussion about the challenges of their profession. They should start to reflect on the impact these factors have on their health and professional life. They have to find strategies which can promote the specific help in order to prevent and overcome the negative impact of these challenges to be fruitful both in their personal and professional lives..

#### **Scientific References:**

1.<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3929077/>

2.<http://www.globalfamilydoctor.com/site/DefaultSite/filesystem/documents/Groups/wwpwfm/monograph%202008.pdf>

3.[http://www.researchgate.net/publication/222495735\\_Prevention\\_of\\_burnout\\_New\\_perspectives](http://www.researchgate.net/publication/222495735_Prevention_of_burnout_New_perspectives)

### **EP18.03**

#### **ASPIRE global leader program**

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**Background & Aim:** The World Organization of Family Doctors (WONCA) recently published that “leadership training has a direct impact on the ability of physicians to make continual system improvements.” This literature goes on to call for “new programs are needed to develop ... leadership and management” by “working through the fundamentals.”

With this goal in mind, the ASPIRE Global Leader Program has been developed to augment medical student, resident, and junior GP/FP staff all-around skills while simultaneously increasing their involvement within their national organizations and WONCA. The name ASPIRE is a mnemonic with the letters representing its foundation: Academics, Students, Pre-conferences, International Collaboration, Research/Residents, Exchanges.

This program aims to improve each participant’s individual capabilities and then use these newly forged skills to help others. The goal is that each participant becomes personally invested in the program for the improvement of junior WONCA members and beyond.

**Method:** We propose a tiered program, with ASPIRE levels 1-3, as well as an ASPIRE-Instructor level available to any participant meeting the proposed criteria. This step-wise progression serves to guide participants through achievement of desired goals of the program, the creation of a more enriched experience, and the potential to progress to the next tier.

The recommended ASPIRE team will consist of 1 ASPIRE World Chair, separate from WONCA Junior Physician Executive, and 7 Chairs representing each regional level. Each position will serve up to a 3 years for a single term. In addition to approving projects and guiding participants up the ASPIRE tiers, the chairs will continually evaluate and make adjustments in order to improve the overall experience.

**Conclusion:** After completing all steps, qualified individuals will have accomplished a groundwork that will help them guide and lead others in multiple aspects of family medicine in the global setting.

## EP18.04

### The possibilities of the organising an international course on the development of research capacities in GP/FM? Workshop

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**Background & Aim:** Research in family medicine has a long tradition fostering the development of family medicine as specific scientific discipline. But, there are only a few countries in Europe incorporating research skills training in specialty training programs. As the results, many generations of family physicians (FP) have gained the feelings of not being prepared for research. Therefore, the Foundation for the Development of Family Medicine in Croatia was established with the main aims of supporting research and international collaboration. Facing the lack of opportunities, the Foundation and other international stakeholders are developing an idea to organise one-week, basic research course. It will be an opportunity to all young/experienced FP around Europe to develop their research and publishing capacities. It is planned to be at Zagreb, because of the readiness of the Foundation to cover the course material cost, teacher's involvement on voluntary basis, and availability of cheap university accommodation.

**Method:** The content, methods and the conditions of the course will be presented, giving the possibilities to potential stakeholders, teachers and participant, to take part actively.

**Results:** During the WONCA Workshop the colleagues all around Europe will be invited in the discussion on the needs, contents and possibilities to carry on such a course. The following questions are expected to be answered: What is the potential target population; trainees, young or more experienced FPs? Is the proposed research course appropriate to cover their needs? What are the conditions and needed resources? How to overcome the obstacles in conducting it? What should be done in promoting the course?

**Conclusions:** A draft proposal of the course programme is expected to be created as the results of the discussion.

## **EP18.05**

### **Why do we drink?**

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Excessive alcohol consumption can lead to different health related, psychological and socioeconomic problems. As family doctors it is our job to screen people's alcohol consumption, inform them about the health risks related to excessive alcohol consumption and help them drink less or quit for good. But how often do we ask ourselves why do we drink? Why do our patients drink? Understanding why we consume alcohol can help us as doctors understand our patients better and help people to be healthier. We can also use this knowledge to influence the health policy in our countries to create an environment which supports better choices.

The session will start with group work, each group will get a sentence to finish or a question to answer; for example "Alcohol makes people feel...", "Why people drink?", "in which occasions people drink?" etc. in the next part there will be a short presentation about the psychology of drinking and the theory of planned behavior. At the end of this session we will practice on each others using motivational interviewing how to talk with our patients about alcohol consumption, how to find out the reasons why they drink and their motivation to change their behaviour.

## EP18.06

### Patient safety in primary care, GPs can come aboard!

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Patient safety is now a major dimension of Quality in Primary Care as well as in Hospitals. General Practitioners can develop their Safety culture and deliver safer care by getting used with reporting and analysing adverse events. Clarifying the safety concepts and models and experience their handling seems a good start.

#### Learning goals:

- 5) Clarify some définitions: incident, error, adverse event, contributing factors, preventing barriers
- 6) Experiment reporting Adverse Events
- 7) Get more familiar with the cheese swiss model of James reason

#### Method:

- Presentation: «Patient safety, what are we talking about?»
- Short stroll (walk) Participants are invited to recall an adverse event occurred in their own practice.
- The participants are split into groups of 2 or 3 depending on the number of participants. Each participant tells his/her story. The other 2 participants listen. After discussion, participant writes on a post-it note:
  - What was the adverse event, what was the risk for the patient in the story?
  - What were active and/or latent errors?
  - What could be a preventive barrier?

**Report:** large group Each group choose one of the 3 story and explain the case in large groupe.

The group try to represent the case with the swiss cheese model: What is the arrow? What are the holes? What are the cheese slices?

**Conclusion:** The EQuIP project on patient safety – Dublin 2017 Expected impact on the participants:

- Discover that it is not so difficult to tell and discuss adverse event stories
- Motivate to enter in a current practice of sharing and analysing
- Engage into positive safety culture

## EP18.07

### **Multi-PAP trial: How can we improve drug prescription in patients with multimorbidity and polypharmacy in primary care?. Study protocol**

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**Background & Aim:** Objective: The Multi-PAP project aims to determine whether the use of a complex intervention in young-old patients with multimorbidity and polypharmacy is more effective than usual care in improving physician drug prescription in primary care, measured by means of the Medication Appropriateness Index (MAI)-score at six 6 and 12 months. Potential improvements in health services utilization, quality of life, and drug safety and adherence will also be assessed.

**Methods:** Design: pragmatic randomized clinical trial by clusters with 12 months follow-up (0, 6 and 12 months). Unit of randomization: general practitioner, Unit of analysis: patient. Setting: Health Centres in three different Spanish Autonomous Communities (Aragón, Madrid, Andalucía). Population: patients 65-74 years of age with multimorbidity ( $\geq 3$  chronic diseases) and polypharmacy ( $\geq 5$  drugs taken for at least three months). Sample size: 500 patients (250 in each arm, 7 patients per physician) will be recruited by 120 general practitioners before randomization. Intervention: complex intervention based on the ARIADNE principles with two main components: 1) training of physicians, 2) shared decision-making with patients. Variables: MAI, health care utilization, quality of life (EuroQol 5D-5L), drug therapy and adherence (Morisky-Green, Haynes-Sackett), clinical and socio-demographic factors. Primary outcome: difference in MAI-Score 6 months from baseline with its corresponding 95%CI. Analysis: adjustment by main confounding and prognostic factors will be performed through a multilevel analysis. All analyses will be carried out adhering to the intention-to-treat principle. A cost-utility analysis will also be performed. Funding: Instituto de Salud Carlos III, Madrid, Spain (PI15/00572, PI15/00276, PI15/00996). Project co-financed with fundings FEDER. This proposal is integrated in the 'Red Temática de Investigación Cooperativa de Investigación en Servicios y Enfermedades Crónicas (REDISSEC)' from Instituto de Salud Carlos III (<http://redisecc.com/es/>).

## EP18.08

### Therapeutic approach of Gouty arthropathy

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**Background:** Gout is one of the most common inflammatory arthropathies. About 90 % of gout patients are being managed in Primary Health Care, so the General Practitioner plays a key role in their treatment. Management of gout focuses on solving the acute stage and preventing the occurrence of subsequent crises and chronic arthropathy. However, this clinical entity is still poorly managed, having a significant impact on morbidity.

**Aim:** Systematize the most appropriate treatment of gouty arthropathy.

**Method:** A review of medical literature published between 2011 and 2016 was conducted, using several databases, with the keywords 'gout' and 'treatment'.

**Results:** In the early management of acute gout, low dose of oral colchicine or non-steroidal anti-inflammatory drugs (NSAIDs) are recommended. In case of intolerance, inefficacy or contraindication systemic glucocorticoids may also be considered. Interleukin-1 inhibitors and intra-articular glucocorticoids are useful in certain cases. Urate lowering treatment (ULT) is indicated in the presence of tophi, two or more attacks of acute gout per year, arthropathy, chronic kidney disease stage 2-5 and a history of urolithiasis. Allopurinol is the first line treatment; febuxostat, pegloticase, benzbromarone and probenecid are also effective. When starting ULT, prophylaxis with colchicine for at least 6 months should be done. The therapeutic goal should be a reduction in serum uric acid to < 6 mg/dL or < 5mg/dL in patients with tophaceous gout. A diet low in purines, alcohol, sugary drinks and fructose is also recommended in the treatment of gout.

**Conclusions:** Proper treatment of gout is associated with a better prognosis. However its management is far from optimal in both primary care and rheumatology clinics. This can be explained by the lack of information, so the dissemination of national evidence based recommendations proves to be of great utility.

## EP18.09

### Practice support for patients with chronic conditions

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**Background:** In February 2012, the Wonca Europe Network EQuIP was announced as the winner of the WONCA Anniversary Research Fund. The project, known as PECC-WE (Patient Empowerment in Chronic Conditions - WONCA Europe), was launched during the WONCA Europe 2015 conference in Istanbul.

**Aim:** The PECC-WE project aims to improve the quality of patient care by developing evidence based education and training for European GPs and Practice Nurses so that they can effectively and efficiently empower patients to improve their own self management of chronic conditions (non-communicable disease) in the context of general practice/primary care.

**Method:** Work Package 1a: Systematic review Work Package 1b: Create an Online Repository of Information for Education, Research, and Exploration of the Concept of Patient Empowerment Work Package 1c: EQuIP Working Group on Patient Empowerment for Self-Management in Chronic Conditions. Work Package 2: Development of the Evidence Based Summaries and Educational Framework Work Package 3: Evaluation of the online course for Patient Empowerment for Patient Self-Management of Chronic Conditions.

**Results:** 99% (570 out of 576 respondents) stated that the course helped to improve their skills and competence. 97% (557 out of 575 respondents) found that the course motivated them to learn and reflect upon the topic. 88% (505 out of 575 respondents) found the applicability of skills and knowledge obtained from the course in clinical practice to be either 'Excellent' or 'Good'.

**Conclusions:** GPs must be trained to help patients to identify their own goals for their health, and support them in finding ways to make the necessary changes. It is crucial to develop an understanding of why unhealthy habits are hard to change. And it is equally important to develop tools for how to start the process, and how to support the patient along the road.

## EP18.10

### The effect of lifestyle change in blood pressure control among hypertensive patients

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**Background:** Hypertension is one of the most prevalent conditions among patients who visit primary care clinic. Various factors are associated with effective blood pressure control including sex, age, education, income, marital status, obesity, alcohol consumption, regular blood pressure check and so on. The objective of this study is to identify factors and lifestyle modification associated with blood pressure control among patients who were prescribed hypertension medication at primary care clinic.

**Method:** This survey was conducted at 15 family medicine outpatient clinic in hospitals located at South Korea from July 2008 to June 2010. We prospectively recruited and retrospectively assessed 1,453 patients with hypertension who were prescribed candesartan. Initial evaluation about patients' lifestyle including smoking, alcohol consumption, salt intake and physical activity were made by individual questions followed by same survey questionnaires at 12 weeks follow up visit. We defined successful blood pressure control as less than 140 mmHg systolic and 90 mmHg diastolic at 12 weeks from the initial treatment.

**Result:** of the 1,453 patients, 1,139 with available measurement of initial and final blood pressure were included. in univariate analysis of change in performance index, BMI(OR 2.18(1.52-3.11),  $P < .001$ ), physical activity(OR 0.50(0.30-0.85),  $P = 0.011$ ) and salt intake(OR 0.68(0.48-0.97),  $P = 0.034$ ) were related with effective blood pressure control. in addition, three questions on salt usage behaviors showed significant association. Multivariate odds ratios were calculated by adjusting age, sex, BMI, education, income, alcohol, smoking, habit of salt intake, comorbidity and family. in multivariate analysis, sex (OR 3.55(2.02-6.26),  $P < .001$ ), habit of salt intake(OR 0.64(0.43-0.97),  $P = 0.034$ ) and comorbidity(OR 1.82(1.23-2.69),  $P = 0.003$ ) were associated with successful blood pressure control.

**Conclusion:** in this study, increased physical activity and reduced salt intake showed significant positive effect on the management of hypertension.

## EP19.01

### Late-life depression: a diagnostic challenge

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**Background & Aims:** Late-life depression is a serious health problem that reduces quality of life, increases mortality and causes excessive use of healthcare resources. In Europe, about 12.3% of the elderly are depressed. However, it seems to be underdiagnosed and incorrectly treated. The aim of this paper is to review the diagnostic approach in late-life depression.

**Methods:** ; Narrative review, with research in PubMed and UpToDate websites, of reviews and systematic reviews published in the last 10 years in English, Portuguese and Spanish. MeSH terms “depressive disorder/diagnosis” and “aged” were used.

**Results:** The diagnosis criteria in late-life depression are also applied for other life stages. It is recommend to pay special attention to changes of humor or interests, with at least 2 weeks of duration and involvement of social relations, associated with disproportionate physical symptoms. Elderly patients with major depression usually have somatization, anorexia, weight loss, psychomotor abnormalities, anxiety and suicidal ideation. There are several factors that difficult the diagnosis of depression in the elderly, mainly, coexistent medical illness with overlapping depression symptoms, drugs adverse effects, several somatic complaints, weak communication ability and lack of time during consultations to evaluate mental health disorders in patients with complex health problems.

**Conclusions:** Depression isn't a normal consequence of ageing. It should be borne in mind that somatic complaints are often the first manifestation of depression in the elderly. Suicidal rates are higher in the elderly than in others age groups, strengthening the role of family doctors in early diagnosis and treatment of late-life depression.

Keywords: Depression Diagnosis; Elderly; Late-life Depression

## EP19.02

### Priority setting in patients with cancer and comorbidities

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**Background:** The cancer incidence in Denmark has increased during the past ten years from 28.187 in 2002 to 39.253 in 2014. This increase parallels a more general increase in the number of patients diagnosed with a chronic disease. As the population is ageing, an increasing number of patients will therefore have chronic diseases in addition to their cancer. Studies have demonstrated increased overall mortality in patients with comorbidity, and therefore the comorbidities may play a significant role. Several studies show that participation in regular follow-up consultations concerning e.g. diabetes, chronic obstructive pulmonary disease and lifestyle are low among patients who have survived cancer. There is very little research about priority setting in patients with cancer and comorbidities.

**Aim:** The overall purpose is to explore patients' and physicians' experiences of and perspectives on the care of comorbidities and the priority settings in patients who have recently finished primary cancer treatment.

**Method:** The study will use qualitative methods and consists of three datasets:

- 1) video recordings of consultations in general practice,
- 2) semi-structured interviews with patients who have a chronic disease and who have recently finished primary treatment for a non-metastatic cancer,
- 3) semi-structured interviews with general practitioners. Video recordings will be analyzed with a focus on processes of understanding and implicit and explicit priority setting in the interaction between physician and patient. The interviews will focus on priority settings of and perspectives on different diseases.

**Results:** The data-collection has started and results will be come up during the next months.

**Conclusion:** This project will illuminate priority setting in patients with cancer and comorbidities, the doctor's role, the patient-doctor relationship and contribute with suggestions on how to improve health and quality of life for patients with cancer and comorbidities.

### **EP19.03**

#### **The GP's role with the terminally ill patients**

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The number of patients requiring palliative care is constantly increasing as the population ages. Primary care doctors play the key role in the whole process and should be an integral part of the care team.

The purpose of this study is to identify the weak points and barriers that are GPs facing in relation to their terminally ill patients and to propose appropriate strategies that may be of use in encouraging more effective delivery of palliative care by GPs.

This case study uses an online questionnaire that was designed for general practitioners in Czech Republic. Total number of respondents was 160. All respondents were able to express their personal opinion and experience via email.

The results of the study indicate that the key organisers in the management of terminally ill patients are considered to be family and general practitioner. The core barriers are time constraints, lack of information among society, need of postgraduate training curricula and lack of specialist teams and their support.

The outcome of this study indicates a series of options for improving the engagement of GPs in palliative care, e.g. workshops for GPs, strengthening of inter-professional collaboration, undergraduate curriculum for medical students, educative campaigns for patients and financial support for palliative teams.

## EP19.04

### Home blood transfusions - a feasible trans-sectoral collaboration

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**Background & Aim:** The Danish public healthcare system includes services provided by the hospitals, the general practitioners (GPs) and the municipalities. Initiatives have been made to strengthen communication and collaboration between these sectors leading to improved patient treatment, reduced rate of admissions and shorten length of stay at hospital.

The Emergency Department at Viborg Regional Hospital is collaborating with a group of specially trained nurses from Viborg Municipality (Viborg Acute Team, VAT), to perform more advanced treatment for patients after discharge from hospital. In December 2014 this collaboration was expanded to include home blood transfusion. This study was conducted to evaluate the quality of the home blood transfusions.

**Method:** The referring GP discussed anaemic patients suitable for home blood transfusion, with the emergency physician on duty. If the patients met the inclusion criteria, VAT was contacted.

VAT performed a pretransfusion visit at the patient's home, to insure informed consent and a blood sample for compatibility testing. The next day VAT brought the blood from the Immunology Department. Thorough identification was made using scanners. VAT stayed during the transfusion, monitoring the patient's vital signs. The Immunology and Emergency physicians were available on-call, in case of complications.

**Results:** In a one year period 65 home blood transfusions were conducted on 31 patients aged 64-97 years. The patients were mainly diagnosed with chronic anemia and serious co-morbidity, which compromised their ability to come to the hospital.

No complications to the procedure emerged and no admissions to hospital followed.

**Conclusions:** Home blood transfusion was implemented as a trans-sectoral collaboration between GPs, VAT and the Immunology and Emergency Departments, as an example of providing health care service for old, disabled or seriously ill patients in their home. The communication and the working procedures were comprehensive, but feasible.

## EP19.05

### Family mobile phone otoscopy in diagnostics of otitis media (Family mOTO -Study)

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**Background and Aim:** Otitis media in young children is one of the most frequent causes for families to seek medical care resulting in great burden to both families and primary health care systems worldwide. Our aim was to study the diagnostic quality of parentally obtained tympanic membrane videos with a new and innovative consumer targeted iPhone enabled otoscope (OTO).

**Method:** We recruited families with day care children from 6 to 35 months of age, with an AOM diagnosed within 90 preceding days and parental possessed iPhone 5, 5s or 6. Study physician taught parents the basic anatomy of the tympanic membrane; the principals of acute otitis media (AOM); how to conduct the OTO-examination on their child and; removed cerumen from the child's ear canal at the teaching visit. Parents were instructed to conduct bilateral OTO-examination on their child during the 60 days follow-up at predefined time points and to send the OTO-videos to the study physician by e-mail or by iMessage (= OTO-message) with detailed symptom information. Parents took their child to their own physician if needed, and we did not participate in the diagnosis of treatment of the study children. In this study, we analyzed the diagnostic quality of parentally obtained OTO-videos by using a structured analysis method.

**Results:** Forty-one families participated in this study, and only 3 families have discontinued after the first study week. The data collection is continuing until April 2016. At this point, we already have over 1000 OTO-videos to analyze and over half of families have already finished the study.

**Conclusions:** Parents are motivated and able to conduct middle ear examinations with a smartphone-enabled otoscope at home.

## EP19.06

### Heart failure's comorbidities and polypharmacy in patients over 65 years

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**Background and Aim:** Heart Failure (HF) affects a large percentage of the population in developed countries, especially elderly people (prevalence increases with age) and with many associated diseases.

The aim of this study is to determine the pharmacological profile and comorbidity associated with HF, in elderly population.

**Method:** Observational, descriptive study in Primary Care. The study population were patients diagnosed with HF over 65 years of all health centers of the Ribera's hospital (Alzira, Valencia, Spain). Patient's data were obtained thanks to the clinical records of primary care; recording demographic data, cardiovascular risk factors, comorbidities and pharmacological treatments.

**Results:** A sample of 300 patients were included, of whom 54% were men and with a mean age of 80 years. The mean years of the evolution of disease were 6 years (range 5-15). The comorbidities were: hypertension (86%), hyperlipidemia (54%), atrial fibrillation (48%), diabetes mellitus (46%), valvular disease (39%), anxiety / depression (33%), ischemic heart disease (31%), obesity (29%), chronic renal failure (26%), COPD (23%) and neurological disorders (23%). Patients were prescribed a median of 5 different therapeutic subgroups (range 0-9); 86% were taking diuretics, 58% anxiolytics/antidepressants and 47% lipid lowering agents. Other drugs were: oral anticoagulants (41%) angiotensin II receptors antagonists (40%), beta blockers (39%), calcium antagonists (27%), nitrates (24%), ACE inhibitors (23%) and digoxin (18%).

**Conclusions:** Heart failure patients in primary care are elderly, with a large number of comorbidities and treated with a high number of drugs. The most prevalent comorbidities were hypertension and dyslipidemia. More than 80% consumed diuretics and near 50% antidepressants/anxiolytics or lipid-lowering agents. The studies that examine comorbidity and treatments in HF are important in order to know the real situation of these patients and then improve the quality of care and health of them.

## **EP19.07**

### **Early detection of cognitive deficits in general practice setting**

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**Background:** It is known that the period that passes between the onset of symptoms and the diagnosis of dementia is from several months to several years. Cognitive impairments identified with one or more neuropsychological tests do not confirm the diagnosis directly. The currently existing tests have their strengths and weaknesses, which is the reason why most authors recommend combining different tests in batteries.

**Research question:** The aim of this study was to examine the feasibility of a battery of tests to detect cognitive impairments in a general practice.

**Methodology:** A cross-sectional study among 575 patients over 60 years, using a battery of three neurophysiological tests, which evaluate different cognitive functions – The Trail Making Test (TMT); The Mini-Cog Test (MCT) and Isaaks Set Test (IST), was conducted.

The results were processed by SPSS 17.0 version, using descriptive statistics.

**Results:** The research was done in 23 general practices among patients over 60 years, randomly selected. Differences were obtained in reporting the results of the three tests. In regard to TMT - 271/48.30% were positive for cognitive deficits. Significant influence was found in terms of education. The smallest share positive results were established in the MCT -49/8.76%, without significant influence of gender, age and education. Approximately 1/5 of the participants showed changes in IST, with a significant influence of age. Overall, in the study group 177/31.66% had at least one positive test; 91/16.27% were positive in two tests; 25/4.47% of the studied patients had abnormalities in all three tests.

**Conclusions:** Each one of the used tests has proven its value, but it is the combination of tests that improves their predictive function. However, positive tests suggest the diagnosis of dementia as a possible one, but not as definitely proven. General practice is a suitable environment for a widespread use of a battery of tests for early detection of cognitive deficits.

## **EP19.08**

### **Chronic use of benzodiazepines in the elderly and strategies for its discontinuation**

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**Background & Aim:** Benzodiazepines are drugs frequently used in the elderly. If some authors consider them good anxiolytics and hypnotics, many others point their risks and question whether these overlap to the benefits, particularly in the elderly. This paper aims to point the most effective strategies fighting chronic consumption of benzodiazepines in the elderly population and to propose a scheme for the discontinuation of benzodiazepines in these patients.

**Method:** Search in the Medline and EBSCOhost databases and evidence-based medicine sites, review articles, research and clinical guidelines, published between 2005 and 2015, in English, Portuguese and Spanish. The keywords used were 'benzodiazepines and 'withdrawal '.

**Results:** The literature is almost unanimous in stating that it is possible to discontinue the consumption of benzodiazepines in patients with chronic use. The reduction of consumption of benzodiazepines can largely be achieved by simple interventions implemented by the family doctor. There are no recommendations based on evidence regarding the general principles of the process of discontinuation of benzodiazepines. Several schemes are proposed that can be used by the family doctor as a way to avoid withdrawal symptoms and, consequently, the failure of the discontinuance process. We propose to replace the total amount of benzodiazepines in use by Diazepam in their equivalent dose. The dose should be reduced later, slowly and gradually until its discontinuation is successful.

**Conclusions:** There is strong evidence regarding the possible deleterious effects of chronic use of benzodiazepines. Therefore, until the safety of long term use of these drugs is proven, they must not be prescribed chronically. The family physician should be careful with the chronic prescription of benzodiazepines specially in the older population. Physicians should alarm these patients about the possible harm that are caused by these drugs. Physicians should also know how to initiate a discontinuance scheme successfully without the appearance of the withdrawal symptoms.

## **EP19.09**

### **The invisible enemy**

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**Background & Aim:** The incidence of stroke in younger age groups is not uncommon. Its etiology is vast and diverse requiring a thorough diagnostic investigation, and includes extracranial arterial dissection, thromboembolic heart disease, premature atherosclerosis, migraine, hematological or immunological disorders and drug abuse. The increase in risk for stroke with the intake of oral contraceptives is a subject of controversy; recent studies suggest that, in general, this risk is not substantially increased and the cause of the stroke should not be attributed to these drugs until other causes are eliminated. The aim of this clinical case is to raise awareness to the risks of stroke in young patients and the importance of their follow-up.

**Method:** We present the case of a 17 year-old female with no relevant past history and a family history of cardiovascular disease. She's medicated with a combined oral contraceptive pill (since three months before), montelukast and desloratadine. On April 6th she presents with sudden right faciobrachial paresis and hypoesthesia, nominal aphasia and difficulty concentrating.

**Results:** A brain CT scan confirmed the diagnostic hypothesis of an ischemic stroke. A transesophageal echocardiogram was later performed: initially normal, upon confirmation a patent foramen ovale was revealed. She recovered without sequels, awaits the results of thrombophilia studies and is under antiplatelet therapy. She's currently being evaluated by a Neuropediatrician and also by a Gynecologist.

**Conclusion:** Stroke in the young is potentially tragic due to its eventual long term consequences. The Family Doctor plays an important role monitoring their patients' health status and articulating with Secondary Health Care consultations. While the follow-up is strictly carried out, a clear etiology sought and the therapeutic compliance supervised in order to avoid future nefarious consequences, the Family Doctor acts as the patients' watchful guide throughout this process assuring the continuity of care.

## EP19.10

### Analysis of the participation in psychoeducational groups in primary health care

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**Background:** Depression is one of the most prevalent diseases in primary health care (PHC). Psychoeducational interventions are designed to help educate patients about their particular conditions such as psychological or physical disorders. These therapy groups are usually easy to implement in PHC. There is scientific evidence which supports the effectiveness in treatment and prevention of mental disorders.

**Aim:** The main objective was to improve the quality of life through therapy groups. Specific aims were:

- To increase participants self-esteem.
- To learn about mixed anxiety-depressive disorder. To encourage patient's autonomy and decision making in front of certain critical situations.
- To reduce anxiolytic and antidepressant medication, if possible.

**Method:** - Descriptive, cross-sectional study. - Group activity were 12 sessions, one per week, with 10-12 patients. Each session lasted 90 minutes. It was performed in the room designed for health education of the primary health center. - Sessions were supervised by health professionals acting as leaders and observers (doctors, nurses and social worker). - The main topics treated were: healthy life style, knowledge about depression/anxiety and group skills, among others.

**Results:** Most of the subjects were women (92%) with ages ranging from 38 to 77 years old. The average age was 58 years old. 60% of the participants suffered from mild depression, 10% from moderate depression and 30% from anxiety. 90% of individuals were taking antidepressants medication. After one year of assistance to the groups, the consumption of antidepressants reduced to 80% and anxiolytics consumption reduced to 90%. Assistance to sessions was 80%.

**Conclusions:** Patients improved their self-esteem and showed more resources and autonomy to face difficult situations. Reduction of medication also showed the effectiveness of the intervention. Health professionals evaluation was very satisfactory.

## EP20.01

### Quality indicators for diagnosis and treatment of respiratory tract infections in general practice: a RAND appropriateness method

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**Background:** Antimicrobial resistance is currently one of the most important public health problems in the world and it is closely related to inappropriate use of antibiotics. In Denmark, primary care accounts for 90% of antibiotic prescriptions. Respiratory tract infections (RTIs) represent about 2/3 of all infections seen by the general practitioners (GPs) and they are responsible for the majority of antibiotics prescribed. In order to improve the use of antibiotics in Denmark valid and specific instruments are necessary to assess the quality of care provided. Quality indicators (QIs) can approach and point out quality problems, and they have proved to be an important stimulus for quality improvement. During the last five years Danish GPs have been using QIs in their daily work with different chronic diseases, however, no Danish QIs for antibiotic prescribing exist. **Aim.** To develop QIs for diagnosis and treatment of respiratory tract infections, tailored Danish general practice setting.

**Method:** A RAND/UCLA Appropriateness Method (RAM) was used. Sixty-four QIs for diagnosis and treatment of RTI were carried out based on clinical evidence and national guidelines. A survey was created and mailed to 9 experts comprising mainly GPs, asking them to rate the relevance of each QI using a 9-point Likert scale. Distribution of the Likert scores was generated and given to the experts at a face-to-face meeting which was held to solve misinterpretations and assess consensus.

**Results:** A total of 50 of the proposed 64 QIs attained consensus.

**Conclusions:** This study resulted in a final set of 50 QIs tailored setting in Danish General Practice. These QIs may be used to strengthen the Danish GPs focus on their management of patients with RTI and to identify where it is needed to make quality improvements.

## EP20.02

### Physicians' attitudes and perceptions about Benzodiazepines: Portuguese National Survey

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**Background & Aim:** The chronic use of benzodiazepines (BZDs) is a relevant problem in primary care. In Portugal, BZDs consumption is up to three times higher when compared with other European countries. This study aims to characterize attitudes and perceptions of Portuguese physicians regarding the prescription, chronic use and withdrawal of BZDs.

**Method:** Cross-sectional survey, anonymous self-administered online questionnaires sent to all physicians registered in the Portuguese Medical Association. We collected information about physicians' demographics, clinical experience, and their agreement (5-points Likert scale) regarding benefits/risks of BZDs in the management of insomnia and anxiety, attitudes about prescription, chronic use and alternative non-pharmacologic approaches. Descriptive statistics were used and groups compared through Chi-square and Kruskal-Wallis tests ( $\alpha < 0.05$ ).

**Results:** A total of 359 physicians (56% GPs) participated, with a mean age of  $44.10 \pm 15.2$  years,  $19.03 \pm 14.9$  years of clinical experience, and 58% were female. Physicians were aware of BZDs' negative impact on cognitive function (89%), road traffic collisions (88%) and falls (79%). Only 42% disagree that chronic use is justified if the patient feels better, without having adverse events. Although 68% felt capable of helping patients to reduce/stop BZDs, 55% recognized difficulties on motivating them. Compared to other physicians, GPs were significantly more aware of BZDs impact on cognitive function and falls though more GPs consider that chronic use may be justified ( $p < 0.001$ ). Also, more GPs disagree about being capable to support patient withdrawal ( $p = 0.007$ ) and agree having difficulty on patients' motivation ( $p < 0.001$ ).

**Conclusions:** Physicians' awareness about risks of BZDs chronic use is high but their attitudes and perceived skills towards promoting BZDs withdrawal can be improved. Interventions in primary care are needed to capacitate GPs to better motivate patients on BZDs withdrawal.

**Keywords:** Benzodiazepines, long-term use, withdrawal, attitudes, physicians.

**Competing Interest:** The authors have no conflict of interest regarding the present study.

### EP20.03

#### The importance of the survivorship care plans for cancer in primary care

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**Background & Aim:** For cancer survivors, healthcare needs include surveillance for recurrence, screening of secondary cancers, monitoring for the long-term physical and psychological effects of cancer, management of comorbid medical conditions and preventive measures in primary care. The aim of this work is to review the guidelines of National Comprehensive Cancer Network for the most common cancer types among survivors (breast, prostate and colon or rectum cancer, melanoma, Hodgkin and non-Hodgkin lymphomas, acute leukemia).

**Method:** This work is based in a literature review using the term “cancer survivor follow-up” and “cancer survivorship” carried out using textbooks, published review articles in scientific databases and clinical standards websites.

**Results:** The number of individuals diagnosed with cancer has increased dramatically. Most cancer survivors are older individuals. Only 5 percent are younger than age 40, although this is a growing part of the population of cancer survivors. Following the initial treatment, more than 60 percent of adults diagnosed with cancer are expected to become long-term cancer survivors, living five years or more following diagnosis. A committee established at the Institute of Medicine identified the components of survivorship care for patients who have completed primary therapy: 1-Prevention of recurrent and new cancers, and other late effects; 2-Surveillance for cancer spread, recurrence, or second cancers; 3-Assessment of medical and psychosocial late effects; 4-Intervention for consequences of cancer and its treatment; 5-Evaluation of concerns related to employment, insurance, and disability; 6-Coordination between primary and secondary care.

**Conclusions:** A number of models for cancer survivorship care have been described. The follow-up of cancer survivors can be shared among the primary care provider, medical oncologist and other specialists. Coordination with primary care, particularly for prevention, management of comorbid medical conditions, and psychosocial care may be helpful. Survivorship care plans are a tool to communicate and guide survivorship care.

## EP20.04

### Metamizole-induced agranulocytosis

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**Background and Aim:** A 61 year-old English man attends his general practitioner for ongoing fever for 3 days, with no other symptomatology. Refers a healthy life style, although two respiratory infections in the last month (pneumonia and pharyngitis) treated with antibiotics and analgesics, the last one with a couple of weeks before. No medical history. Clinical examination: malaise, tachypnea, tachycardia, fever, hypotension, hypoxemia. Cardiopulmonary auscultation is normal. Abdominal exploration is normal.

**Method:** Blood analysis: severe leukopenia, the rest being normal. Serology is negative. Cultures: positive for E.coli Abdominal ultrasound found no alteration. Bone marrow examination: no malignant cell, hypercellular bone marrow with immature neutrophils and monocytes.

**Results:** Diagnosis: Metamizole-induced agranulocytosis Differential diagnosis: Neutropenia induced by viral infection, bacterial infection, hemopathies (leukemia, myelodysplasia), toxics, nutritional deficiencies.

**Conclusions:** Agranulocytosis can be a deadly complication (mortality: between 3-25%) of the pharmaceutical drugs use. Metamizole is an analgesic, antipyretic and antispasmodic, originated in Germany in the early 20's. It is estimated that around 10000 tons of this pharmaceutical drug is used around the world, but its haematologic toxicity made that it would be banned in more than 20 countries. It is estimated there is an incidence rate of agranulocytosis while taking metamizole of 0.6-1.2 cases per million persons per week. The importance of this case for the general practitioner is that he always has to think about the potential side effects of the most common drugs that are used nearly every day.

## EP20.05

### **Depression, anxiety and stress in children with attention deficit hyperactivity disorder**

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**Introduction:** Attention Deficit Hyperactivity Disorder is a condition characterized by the triad of inattention, hyperactivity and impulsivity whom affect ominously academic performance, parent-child relationships and social and psychosocial adjustment. More than 50% have comorbidity with learning difficulties, mood disorder, anxiety disorder, substance abuse and alcohol and is therefore associated with a worse prognosis.

**Aim:** This research aims to contribute to the study of depression, anxiety and stress in children with Attention Deficit Hyperactivity Disorder.

**Methods:** Cross-sectional study where clinical assessment was made to a group of hyperactive children aged between 8 and 15 years, followed in Paediatric Outpatient Unit and in Child Psychiatry Service. The assessment of children included filling out demographic data and application of the Portuguese version of the Depression, Anxiety and Stress Scales for Children. This group was compared with a control group composed of children selected at Paediatrics consultation.

**Results:** Median age in clinical group was 10 years and 12 years in the control group. Depression and stress levels are higher in the clinical group. The occurrence of at least one life event in the last year obtains high scores of depression, anxiety and stress. The Attention Deficit Hyperactivity Disorder is more frequent in males. The disorder is associated with greater academic failure. Children in the clinical group have a family history of psychiatric illness.

**Conclusion:** Attention Deficit Hyperactivity Disorder may be due to multifactorial causes and may be associated with several aggravating factors. Depression and stress revealed higher levels in the clinical group compared to the control group. Levels of depression, anxiety and stress were higher in children who reported at least one life event in the last year. This study provides an incentive for future research and it is considered important to alert health professionals to these comorbidities associated with Attention Deficit Hyperactivity Disorder.

## EP20.06

### Metabolic syndrome prevalence among the elderly: secondary data analysis from annual health check-ups

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**Background and Aim:** The aging population is growing at an incredibly fast rate along with a dramatically increasing prevalence of overweight and obesity because of changes in dietary habits and more sedentary lifestyles in the Thai population. The aim of this study was to describe the prevalence of metabolic syndrome (MetS) among Thai elders.

**Method:** The data from the annual health check-ups of 432 elders (aged  $\geq 60$  years) from January to December 2014 was analyzed. The data included was waist circumference, systolic and diastolic blood pressure, lipids, and fasting plasma glucose. MetS was defined according to the National Cholesterol Educational Program for Adult Treatment Panel III (NCEP-ATP III) criteria. The statistical data analyzed in this study were percentage and chi square.

**Results:** Of the 432 elders included in the study 211 elders (48.8%) were male and 221 elders (51.2%) were female. The mean age was 65.8 years old (min-max = 60-90 years old) The prevalence of abdominal obesity, hypertension, low high-density lipoprotein cholesterol, hypertriglyceridemia, and hyperglycemia were 47%, 69.9%, 48%, 36.9% and 32% respectively. According to NCEP-ATP III criteria, the prevalence of MetS among Thai elders aged  $\geq 60$  years was 35.9%. This prevalence was higher in women (40.3%) than in men (31.3%) but the difference did not reach statistical significance (p-value  $> 0.05$ ).

**Conclusions:** The prevalence of MetS was high among Thai elders, especially in women. These findings indicate the need for early detection and prevention of individual risk factors such as hypertension, hyperlipidemia and hyperglycemia. Moreover we have to manage these risk factors before the development of metabolic syndrome in the elderly.

## EP20.07

### Systematic review evaluating patients' adherence to life-style modifications, disease prevention and management

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**Background & Aim:** Prevention and treatment of chronic diseases requires strong motivation and will-power from patients to succeed over illness or unhealthy styles of living. The aim of the study was to evaluate available information about various aspects of patients' adherence in case of various health conditions.

**Methods:** All available research data were gathered and analyzed in a systematic review from PubMed and Cochrane Databases, publicized in the time period from 2012 to 2015. Words like 'patients' adherence', 'patients' compliance', 'compliance' and 'adherence' were entered in the search window of databases, thereafter analyzing „full text” studies and their quality. Systematic review was carried out according to PRISMA guidelines. The data were analyzed by two, independent researchers. No conflicts of interest.

**Results:** 26 studies about adherence complied with the aim. In the research analyses four cohort studies, two meta-analyses, eight review reports, four systematic reviews and eight systematic reviews with meta-analyses were analyzed, whereof, 75 randomized controlled trials and 1459 non-randomized controlled trials were evaluated [n=2263822]. Data about the number of participants were not provided in 18 studies. 22 studies, mainly concerning chronic conditions, showed low patients' adherence in life-style modification, disease prevention, management and health promotion. Four studies, including meta-analyses and three systematic reviews, approved that adherence results can be improved by providing safe environment for the patient, higher level of education, coordinated care of nurses and necessity and concern beliefs about medicines.

**Conclusions:** Overall prevalence of patients' adherence to life-style modifications, disease prevention, management and health promotion is low, however, four indicators have been found to improve it. More research is needed to find the ways, how to maintain and strengthen patients' motivation in bettering their quality of life and treatment, especially, while having chronic disease.

**Diagnosing heart failure with NT-proBNP in general practice: Lower costs and higher precision**

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**Background & Aim:** Afflicting 1-2% of the adult population, heart failure is a serious condition with considerable morbidity and mortality. While echocardiography may be considered the gold standard diagnostic test, GPs have relied on symptoms and clinical findings. Increasingly, quantification of serum natriuretic peptides (BNP/NT-proBNP) is recommended as a more precise test. The aim of this study was to estimate one year health outcome and costs of three diagnostic strategies: History and clinical findings (“clinical diagnosis”); clinical diagnosis supplemented with NT-proBNP point-of-care test in the GP’s surgery (“POC-test”) or in hospital laboratory (“hospital-test”).

**Method:** We developed a decision tree model to simulate one year patient courses with each of the strategies. Sensitivity and specificity of clinical diagnosis (56% and 68%) and of NT-proBNP test (90% and 65%) were based on published literature. The probabilities of referral to hospital given a test outcome were based on a survey of Norwegian GPs (n=103). The costs were based on various Norwegian fee schedules.

**Results:** The one-year societal costs were NOK4,897, NOK 4,544 and NOK5,467 for clinical diagnosis, PC-test and hospital test, respectively (€1.00≈NOK9.00). Even though POC-testing entails higher laboratory costs than the other test modalities, the total primary care costs are lower with such testing because of fewer re-consultations with the GP and less use of spirometry. POC-testing also entails lower hospital costs because of fewer false positive heart failure tests. Finally, patients’ travel costs are lower with POC-test because of fewer re-consultations and fewer unnecessary referrals to hospital. While 38% of patients had a delayed correct diagnosis with clinical diagnosis, the proportions were 22% with PC-test and hospital-test.

**Conclusions:** Clinical diagnosis in combination with NT-proBNP-tests has higher sensitivity and specificity than clinical diagnosis alone and is consequently more accurate. POC-testing results in earlier diagnosis and lower costs than the other diagnosis modalities.

## EP20.09

### **Antibiotic prophylaxis in intra-uterine device insertion: is there any evidence?**

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**Background & Aim:** The intrauterine device (IUD) is nowadays the most widely used reversible contraceptive method in the world, particularly in developing countries. IUDs are an extremely safe and effective contraceptive option for women. However, studies have demonstrated an increased risk for pelvic inflammatory disease (PID) in the first few days after IUD insertion. Thus, antibiotic administration before IUD insertion might reduce the risk of PID from passive introduction of bacteria at insertion. The aim of this study is to review the evidence on the effectiveness of prophylactic antibiotic administration before IUD insertion in order to decrease the risk of PID.

**Method:** A search was performed between January 2000 and January 2015, in Portuguese and English, using 'Intra-uterine devices' and 'Antibiotic prophylaxis' as MeSH terms in data sources National Guideline Clearinghouse, Guidelines Finder, Canadian Medical Association Practice Guidelines, Cochrane Library, Clinical Evidence, Pubmed and Bandolier. The Strenght of Recommendation Taxonomy (SORT) scale was used to assess level of evidence and strength of recommendation.

**Results:** Fifty articles were found. Six met the inclusion criteria (5 guidelines and 1 meta-analysis). Three guidelines did not recommend the use of antibiotic prophylaxis before insertion of an intrauterine device (strength of recommendation B) like as the Cochrane meta-analysis (level of evidence 1). Two guidelines demonstrated that routine use of prophylactic antibiotics is not recommended prior to IUD insertion, although it may be used in certain high-risk situations (strength of recommendation C).

**Conclusions:** Routine antibiotic prophylaxis to prevent PID is not recommended before IUD insertion (strength of recommendation B). More studies are needed for PID high risk populations.

## EP20.10

### Can impedance cardiography replace echocardiography in assessment of left ventricular function in patients with heart failure?

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**Background:** An early and accurate diagnosis of chronic heart failure is a big challenge for a general practitioner. Assessment of left ventricular function is essential for the diagnosis of heart failure and the prognosis. A gold standard for identifying left ventricular function is echocardiography. Echocardiography requires input from specialized care and has a limited access in Swedish primary health care. Impedance cardiography (ICG) is a noninvasive and low-cost method of examination. The survey technique is simple and ICG measurement can be performed by a general practitioner. ICG has been suggested for assessment of left ventricular function in patients with heart failure. We aimed to study the association between hemodynamic parameters measured by ICG and the value of ejection fraction (EF) as a determinant of reduced left ventricular systolic function in echocardiography.

**Methods:** A non-interventional, observational study conducted in the outpatients heart failure unit. Thirty-six patients with the established diagnosis of chronic heart failure were simultaneously examined by echocardiography and ICG. EF in echocardiography was compared with ICG parameters. Kruskal-Wallis test was used to compare variables and show differences between the groups.

**Results:** We found that three of four ICG parameters which describe the systolic function of the left ventricle: pre-ejection fraction, left ventricular ejection time and systolic time ratio were significantly associated with ejection fraction measured by echocardiography.

**Conclusions:** The association which we found between EF and ICG parameters was not reported in previous studies. We found no associations between EF and ICG parameters which were suggested previously as the determinants of reduced left ventricular systolic function. Although the knowledge concerning explanation of hemodynamic parameters measured by ICG is not sufficient, the method remains attractive for future studies and application in patients with heart failure in primary health care due to its simplicity.

## EP21.01

### Portuguese Community Engagement Project's Survey – understanding the health and cultural needs of a marginalised immigrant community in London

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**Background & Aim:** The Portuguese Community Engagement Project (PCEP) started from a Hippocrates Exchange organized in Lambeth, London, where a Portuguese Family Medicine trainee visited a General Practitioner (GP) interested in health inequalities. 1 in 6 people in Lambeth speak Portuguese as their native tongue. This immigrant community is facing some difficulties in understanding and accessing the National Health Service (NHS) mainly because of language barrier and other socioeconomic factors. We decided to prepare a survey to understand better the community needs and involve the community in the project from the start.

**Method:** A survey was designed based on the findings from focus groups with Portuguese immigrants. The survey was distributed throughout the Portuguese community between August and November 2015.

**Results:** The survey had 240 respondents. The average age was 43 years and the average time living in the UK was 7,5 years. 82% were registered with a GP. Of those, 81% were satisfied with the service provided by their GP but 79% considered their health status could improve if their GP provided more written information in Portuguese. 67% needed a Portuguese translator to fully discuss their health problems with the GP. When their GP is closed the respondents were more likely to go to the Accident and Emergency (A&E) Department (34%), pharmacy (30%) or private Portuguese GP (21%). Only 6% referred the Out of Hours GP Service. 35% agreed that the lack of a Portuguese translator had stopped them from using other NHS health services (apart from their GP).

**Conclusions:** The PCEP aims to bridge the gap between NHS Lambeth and the marginalised Portuguese community by tailoring patient education to their cultural and linguistic needs. We need to educate the community about other acute medical NHS services, apart from the A&E, and provided more health information in Portuguese.

## EP21.02

### Prevalence of tobacco use and profile of tobacco users in primary care practices in Greece

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**Background & Aim:** Rates of tobacco use in Greece are amongst the highest in Europe (38%). Primary care providers are very well positioned to motivate a quit attempt and support cessation in patients. However, little is known about the characteristics of tobacco users in primary care settings in Greece. The aim of this study is to report on the prevalence of tobacco use and characteristics of tobacco users identified in primary care practices sampled.

**Method:** We conducted a cross-sectional survey of patients from 15 general practitioners from the Primary Care Research Network (Heraklion, Greece). The study took place from June and September 2015. Consecutive patients from participating primary care practices were screened and individuals reporting current tobacco use completed a brief exit survey to document demographic, brief medical history, and smoking related characteristics.

**Results:** Tobacco use prevalence was 38% among patients screened in the primary care clinics sampled. A total of 524 eligible patients participated in the survey (mean age 47.6 years, SD 14.3; 59.5% male; 22% with less than high school education). Tobacco users smoked an average of 26.0 (SD 13.7) cigarettes per day for an average of 22.3 (SD 11.6) years. The majority (64.1%) of tobacco users reported a readiness to quit smoking in the next 6-months, with 24.7% of patients reporting an interest in quitting in the next 30-days. However the majority (63.4%) of tobacco users reported not having made a quit attempt in the past year.

**Conclusions:** We found similar rates of tobacco use and daily tobacco consumption among patients screened in primary care practice settings as that reported by national surveys. This study provides new information on the characteristics of tobacco users identified in primary care practices in Greece, which can be used to inform the design of future intervention programs within general practice settings.

### EP21.03

#### **Impact of socioeconomic position and geography on the use of mental health services - for patients with common mental disorders**

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**Background:** Anxiety and depression are the most common mental disorders in Europe and seem to be increasing. 1/3 of early retirements were due to affective disorders in Denmark in 2013.

The social inequalities in incidence and prevalence of the common mental disorders are well documented. Lack of treatment is still a problem. Repeating population studies have identified up to 50% of individuals in need of mental health care are without health care contact.

Specialist health services are increasingly centralized and rural areas often underserved. In The Region of Zealand it has been documented, that citizens from the most deprived municipalities receive least specialized mental health services. We wonder why?

The study objectives are to determine the impact of 1) distance and 2) socioeconomic position - on the use of health care services, in patients who have initiated antidepressant treatment.

**Method:** This register based cohort study includes all citizens between 18 and 64 years of age residing in Denmark in 2013 who initiated treatment with antidepressants the same year, and was not treated with antidepressants in 2012. We have followed the type of treatments they received the following 12 months, and have related this to their socioeconomic position (SEP) and the distance to nearest: GP, psychologist, psychiatrist and outpatient mental health care services.

**Results:** (by spring 2016)

64,308 individuals are included. We will present how distance to mental health care services affects the use, when controlled for extrinsic factors. Likewise how SEP affects the use of these services.

Finally by multiple logistic regressions we will analyze the impact of distance and SEP on mental health care use, when controlled for a variety of extrinsic factors including car ownership.

**Conclusions:** We will demonstrate if distance to mental health care services has an adverse effect on socially equal access to care.

## EP21.04

### Preventing gender violence, a community experience

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**Background & Aim:** Gender violence is a global pandemic and can take various forms: physical, sexual and psychological. It must be a political and social priority to eradicate gender violence. One out of three women worldwide has experienced domestic violence, mostly by an intimate partner. In our country more than 60 women have died at the hands of their partners in 2015. There is ample evidence that prevention is the solution to this major problem and should be fought through education media.

**Method:** The international day against gender violence is celebrated worldwide on 25th November and the slogan in 2015 was "Prevention". We've proposed a community intervention program on young people aged from 12 to 16 years. The program, which is offered at the four high schools in the town, includes activities about prevention of violence against women and gender stereotypes. Teachers treated those topics in class and after that health professionals went to their centers to inform, work and teach about it. Each teenager made a poster with a representative message on it. On 25th November, all together, take part on a demonstration to show the rest of the population their point of view against gender violence. This work will be presented as a poster.

**Results:** We achieved the involvement of local politicians, health managers, teachers and health professionals in this task. Community activities are essentials to get efficient interventions.

**Conclusion:** Based on the evidence, we are convinced that start training young people against gender violence is very necessary today. How we educate and socialize kids is really important for a healthy future population. Community activities based on joining efforts between politicians, health services and population are the key to success in the prevention of violence against women. All authors declare no competing interests.

## EP21.05

### Training researchers in general practice; experiences from the The Norwegian Research School of General Practice

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**Background & Aim:** In Norway, general practice is the foundation of the public health care system. Still, most of the research money goes to the hospital-based health care. In 2013 the Norwegian Research School in General Practice (NAFALM) was established, funded by the Research Council of Norway. The aim was to develop and strengthen capacity for research training for PhD- candidates in general practice. All four Norwegian universities with medical faculties and one research institute are partners of NAFALM. The students follow a three years course of study with yearly seminars and webinars. NAFALM gives three mandatory courses and voluntary courses and workshops. Since most of the students are part time general practitioners and settled outside the university cities, they have monthly webinars where they discuss their projects. The students also get training on how to present their research orally and written, and they gain knowledge of literature important for the development of general practice as a scientific subject. We endeavour that the students use their own projects when working with exercises at the courses. NAFALM was planned with ten students annually. Today 50 students are enrolled, which constitute almost all new PhD-students in general practice. The aim of this study is to evaluate the research school.

**Method:** An anonymous questionnaire were sent to all students and their supervisors exploring their participation in the research school's activities and to what extent the school had contributed to the research training. The participants were also requested to propose new courses in the curriculum.

**Results:** Three in four students were general practitioners. The other students came from pharmacy, nursing, anthropology and social sciences. Preliminary data from the survey will be presented at WONCA.

**Conclusion:** Almost all new PhD-candidates in general practice in Norway attend the Norwegian Research School of General Practice.

## EP21.06

### Chronotherapy of the combined antihypertensive therapy - which the evidence?

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**Background & Aim:** Hypertension is a risk factor for other diseases and it is a very common disease in Portugal. Given its high prevalence and insufficient control, different therapeutic strategies have been studied, as the combined use of antihypertensive agents, drugs or taking them at night, as a possible influence of circadian rhythm in blood pressure modulators systems (BP) – Chronotherapy. Objective: Evaluate the evidence of Chronotherapy applied to anti-hypertensive combined therapy in the control of BP and in reduction of cardiovascular events.

**Method:** Systematic search in Medline and Evidence-based medicine websites of clinical guidelines, systematic reviews (SR), meta-analysis and randomised clinical trials (RCT), published between 2005 and 2015, in Portuguese, English and Spanish, using the MeSH terms: 'chronotherapy', 'hypertension', 'drug therapy, combination'. Assessment of levels of evidence (LE) and allocation of strength of recommendation (FR) through the Strength Range of Recommendation Taxonomy (SORT).

**Results:** Obtained 34 articles; the subsequent application of the selection criteria resulted in 2 articles: 1 SR and 1 RCT. The SR presented a significant reduction of BP, especially in non-dipper patients, with normalization of the BP circadian rhythm (LE 3). The RCT had demonstrated a greater reduction of BP and also of albuminuria with nocturnal versus diurnal intake. (LE 3). None of these articles studied outcomes of cardiovascular events.

**Conclusions:** Although the results showed a reduction of BP with the combined chronotherapy, the evidence found is insufficient to support or contradict its institution (FR C). Thus, studies of best quality are needed, with longer follow-up and patient-oriented, and not only to disease outcomes. The authors have no conflict interests.

## EP21.07

### **Are the adolescents who sleep the least more or less active compared to their peers? A Cross-sectional study among 15-year olds**

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**Background and Aim:** Sleep duration has declined markedly during the last century. Short sleep in adolescents has been associated with obesity, increased insulin resistance, and cardiovascular risk. It has been proposed that a decline in habitual physical activity (PA) due to fatigue induced by the lack of sleep could be contributing to the detrimental effects of inadequate sleep. Therefore, the aim of this study is to test whether short sleep duration is linked to low amount of PA.

**Methods:** This investigation is a part of the CRO-PALS study which is an on-going longitudinal study conducted in a representative sample of urban youth in Zagreb (Croatia). CRO-PALS involves 903 adolescents and for the purpose of this study data from 843 participants (mean age [SD]=15.6[0.3] years) with information on PA and sleep were analysed. Duration of moderate and vigorous PA during the last week was collected using the SHAPES questionnaire while sleep duration was calculated from self-reported usual bedtimes and awakenings. After participants were divided into sex-specific quartiles according to sleep duration, differences in PA across quartiles of sleep time was evaluated using one-way ANOVA by sex.

**Results:** More than half of the adolescents reported inadequate sleep time during the school week. Nevertheless, in boys no differences in PA were found across quartiles of sleep time (p for linear trend = 0.55). In contrast, among girls shorter sleep was actually linked with more PA (p for linear trend = 0.005). Specifically, girls who slept less than 7,5h on an average school night reported getting 24-33 min more PA compared to their peers who slept longer (p=0.006).

**Conclusion:** Although the majority of adolescents reported inadequate amounts of sleep, this was not accompanied with lower levels of PA in this group. Moreover, girls who slept the least were the most active ones.

## EP21.08

### Vaccination as an example of unequal access to health care and medicalization of women's health

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**Background & Aim:** Existing biological differences between men and women lead to differences in health determinants and the need to create strategies to improve women's health. There are specific requirements relating to women's health that arise from biological differences, but also from unequal gender relations. Ubiquitous embedded in social structures, as well as standardized by institutions and everyday experience, structural violence against women is often invisible to our eyes and its effects considered normal. The understanding how gender differences affects women's access to health care matters to create strategies in order to minimize these outcomes. Vaccination, a fundamental strategy to improve global health, is an example how gender inequality can underpin unequal access to health care. This poster aims to provide background knowledge about the relation between gender inequality and distinctions based on gender regarding health care access and over medicalization.

**Method:** Following a review of the most recent literature and guidelines on vaccination and women's health, this poster will discuss how gender inequalities play a role in vaccination programs' access but also in medicalization of women, especially when pregnant.

**Results:** The immunizations' politicization manipulates women through fear regarding the health of the newborn. These pressures throw women into authoritarian family planning strategies and immunization programs instead of a constructive engagement from patients, doctors and health police makers. Several studies indicate that children of less educated and poorer women are less likely to be successfully vaccinated. This reality is most evident in developing countries and highly patriarchal societies. Not getting proper vaccination becomes normative as the woman herself accepts this fact as her 'failure', perpetuating the low status and their subordinate position in society.

**Conclusions:** Health providers should be aware of the different variables concerning women vaccination, so they could minimize lack in access and excessive medicalization of women's health.

## EP21.09

### Andalusian public health system general practitioner trainees' knowledge of gender based violence

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**Background:** Gender-Based Violence (GBV) is considered to be a major public health issue. General Practitioner Trainees (GPT) are often the earliest point of contact for abused women and play an essential role in assisting them and preventing future violence. In this sense, support and training approaches are continuously increasing within the health system.

**Objective:** the purpose of this study is to: a) assess GPT's knowledge level for the identification of gender-based violence victims; b) evaluate the need to develop instruments to enhance protocol accessibility.

**Method:** in May 2015 a cross-section study was conducted among GPT working in Córdoba (Andalusia). A "Google Form" was used in order to analyse: age and sex of the respondent, their knowledge level related to the mentioned topic, the attitude when dealing with a real case of GBV and the need to develop instruments that allow easier access to information.

**Results:** the total participants were 54, 58% of whom were women with an average age of 27. 84,5% think that GBV is a frequent issue and only 13% faced a real case of gender-based violence. With regards to their knowledge level, most of them (86%) had a lack of information or have not received proper training (77%). Access to the protocol is low (54% do not have any access) and all those who were interviewed believe that new instruments must be developed in order to allow easier access to information (94%).

**Conclusion:** the participants recognize Gender- Based Violence as a major health problem. Therefore, in order to guarantee a substantial improvement in their service, the introduction of training programs is considered to be essential. In the same way, easier access to information needs to be guaranteed through enhancement of available instruments. They believe that only in this way the battle against Gender-Based Violence can be won.

## EP21.10

### **Anxiety level and its relationship with socio-demographic features and dependency level of the individuals who applied to smoking cessation clinics**

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**Background & Aim:** in this study, we aimed to determine the level of anxiety in people who seek treatment for smoking cessation; to investigate the relationship between the existing anxiety with addiction levels and sociodemographic factors.

**Method:** This study was planned as a two centered, prospective and cross-sectional research. It was conducted between 01.06.2015–30.07.2015 in Smoking Cessation Polyclinics of Sisli Hamidiye Etfal Training & Research Hospital Family Medicine Clinic, Nisantasi Family Medicine Polyclinic, Gaziosmanpasa Taksim Training & Research Hospital Aliya Izzet Begovic Polyclinic among the individuals over the age of 18. Socio-demographic data and smoking history were questioned via face to face interview technic. Fagerstrom Test for Nicotine Dependence (FTND), Beck Anxiety Scale (BAS), State and Trait Anxiety Scales (SAS, TAS) were performed and analyzed.

**Results:** Most of the participants of 214 people in the study, were male (68,2%;n=146). The mean age of the total participants were 39,9±11,6. The average amount of smoking was found to be 23±11,5 cigarette/day. Nicotine dependence level was found “medium” in 58.4% of respondents (n=125). The mean score of BAS was 11.4±10.3. Levels of anxiety were “medium” in 13.6% (n=29) and “high” in 10.7% (n=23). The average score received from SAS was 37.1±10.3, from TAS was 43.1±8.5. SAS scores were higher in people who were married, who had low education level and who had long smoking period (p=0.033, p= 0,000, p=0.026).

**Conclusion:** This study showed that nearly half percent of individuals who applied to smoking cessation clinics to quit smoking, had anxiety. Female gender, low level of education and being single are the risk factors for the presence of anxiety in smokers. This is important for the success of attempts and maintenance of smoking cessation, the management of potential benefits and risks of the treatment which is considered to begin.

**Key words:** Cigarette, Anxiety, Fagerstrom, Smoking cessation

## EP22.01

### What the hell am I doing here?: Financing and Neuropsychiatric disease

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**Background & Aim:** To Know the profile of the institutionalized patients in our environment and the relevance of financing and Neuropsychiatric disease.

**Method:** Retirement home in a rural environment. We study all the patients collecting data of gender, age of entry, current age, average stay, marital status, children, reason for admission, financing, degree of dependence (Barthel's scale) at entry and current, limiting associated pathologies: Dementia, Alzheimer, psychiatric disorders, cerebrovascular disease (ECV), use of diapers and psychotropic drugs. We use the G-Stat statistical program with Excel as a database. The statistical significance of the differences we have performed using the Student t test for quantitative variables and the Chi-square with Fisher exact test to compare qualitative variables.

**Results:** Financing: Age of entry: No difference in public or private funding. Current Age: The difference is not significant. Average stay: Public funding 3.67±0.38 years. Private funding 2.12±0.56 years. Significant. p=0.0481. Sons: no difference. Daughters 96% public funding has 1/0 80% private funding has 1/0 80. No significant. Attending financing there's no difference in Barthel's Scale or associated disease. Age of Entry. 80.8±1.35 years (Alzheimer) 73.9±1.63 (No Alzheimer). Significant. p=0.0139. 80.78±1.03 (Dementia) 71.8±1.96 (No dementia). Significant. p=0.003. 70.05±2.6 (Psychiatric disease) 77.8±1.37 (No psychiatric disease). Significant. p=0.011. Current age: 84.4±1.47 (Alzheimer) 76.84±1.63 (No Alzheimer) Significant. p=0.0081. 84.2±1.11 (Dementia) 74.6±1.93 (No dementia) Significant. p=0.001. 74.36±2.5 (Psychiatric disease) 80.6±1.45 (No psychiatric disease) (Average stay: No difference in Alzheimer, Dementia or Psychiatric disease. Barthel at entry: 63.4±8.6 (Psychiatric disease) 41.63±4.4 (No psychiatric disease). Significant. p=0.0178. Current Barthel: No significant difference.

**Conclusions:** Average stay is longer in public funding patients. People with Alzheimer, Dementia or Psychiatric disease enter before than the rest. People with Psychiatric disease enter with better results in Barthel's Scale, but then the values are similar.

## EP22.02

### Ten-year mortality after a breast cancer diagnosis in women with severe mental illness: a Danish population-based cohort study

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**Background & Aim:** Although breast cancer is the leading cause of cancer death in women worldwide, research has not yet shown whether higher mortality after a breast cancer diagnosis contributes to the life-expectancy gap of 15 years in women with severe mental illness (SMI) (i.e., schizophrenia and bipolar affective disorder). We aimed to study the all-cause and breast-cancer-specific ten-year mortality for women with SMI compared to women without SMI, while taking age, tumor stage of the breast cancer and comorbidity into account.

**Method:** We evaluated all-cause and breast-cancer-specific ten-year mortality rate ratios (MRRs) for women with SMI compared to those without, using data from nationwide registers in Denmark.

**Results:** The cohort consisted of 105,448 women with incident breast cancer of whom 1,106 had SMI. Within 10 years after a breast cancer diagnosis, 648 (58.6%) women with SMI and 41,771 (40.0%) women without SMI died, which corresponded to a ten-year MRR of 1.60 (95% CI: 1.48-1.73). The MRR was lower for women with bipolar affective disorder (MRR: 1.39, 95% CI: 1.22-1.59) than for women with schizophrenia (MRR: 1.73, 95% CI: 1.57-1.90). The estimates did not change much after adjusting for tumor stage and comorbidity. The risk of a breast-cancer-specific death was 38% higher (MRR: 1.38, 95% CI: 1.24-1.54) for women with SMI compared to those without.

**Conclusions:** Women with SMI have a high risk of dying within ten years after a breast cancer diagnosis compared to women without SMI. More information is needed to determine which factors could explain this excess mortality, such as differences between women with and without SMI in access to diagnostics and screening, provision of care for breast cancer or physical comorbidity, health-seeking behavior or adherence to treatments.

### EP22.03

#### **Implementation research in general practice – an example. Introducing a tool for systematic assessment of depression in nursing home patients**

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**Background and Aim:** The challenging end point of medical research is sustainable implementation in clinical practice. While sleeping evidence makes no difference, interventions adjusted to and implemented in the everyday context may offer quality care and evidence based practice.

Implementation research takes existing research knowledge as a point of departure, exploring how it can be transformed to action in a real life context. In this project, the introduction of a tool for systematic exploration of mood in nursing home patients serves as an example of implementation research in general practice.

Antidepressant medication is frequently used in nursing homes, even without systematic diagnostics. Cornell Scale for Depression in Dementia (CSDD) is a validated and simple tool for assessment of depression among patients living in nursing homes with or without dementia. The aim of this project is to introduce systematic use of CSDD by doctors and nurses in Norwegian nursing homes, and to explore preconditions and experiences related to implementation.

**Method:** The process is stepwise, starting with group discussions about potential facilitators and obstructions for the process, as well as piloting the concrete details of the intervention. Qualitative methods are used to study the staff's acceptability for the implementation, as well as the relevance and feasibility of the improvement action.

**Results:** We intend to adjust and develop a manual for use of CSDD in this context. In this presentation, we shall therefore focus on the first steps of implementation, serving as a starting point for planning.

**Conclusions:** Introducing systematic use of CSDD to a number of nursing homes, including the study of coverage and fidelity, will be organized with these experiences as the point of departure.

## EP22.04

### Which respiratory conditions are most frequent in elderly patients? Is there any correlation with sex?

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**Purpose:** Describe most frequent respiratory conditions in patients of 75 years old or more and if there is any relation with their sex.

**Materials and Methods:** Observational transversal descriptive study performed in the Health Centre of Malaga, Rincon de la Victoria. The sample size of patients of 75 years old or more coming from the 5 different quotas of the Basic Sanitary Zone was calculated on the assumption of simple random sampling. Data collected: sex, age and any respiratory condition as: Asthma, Chronic Obstructive Pulmonary Disease (COPD) and Obstructive Sleep Apnea Syndrome (OSAS). Used for the study: means ( $\bar{x}$ ), standard deviations ( $s$ ), confidence intervals at 95% (IC), tests for independent samplings, Chi square test for qualitative variances and ANOVA test.

**Results:** There were 270 patients included with the mean age ( $\bar{x}$ ) of 81,1074, standard deviation ( $s$ ) 5,1642, confidence interval (IC)  $\pm 0,6187$ . 112 patients (41,48 %) were men with  $\bar{x} = 79,9464$  years and 158 were women (58,52%) with  $\bar{x} = 81,9304$  years, with statistically significant age difference with  $p < 0,05$ . There were 58 patients with respiratory condition (21,48%), and 212 (78,52%) without it. There was no significant age difference between both groups. 8 patients had asthma (2,96%), 45 COPD (16,67%) and 5 of them OSAS (1,87%). There was a correlation between respiratory condition (COPD) and sex (men) with  $p < 0,05$ .

**Conclusions:** There exists a statistically significant correlation between sex and respiratory condition. According to our study COPD is most frequent in men. Another study in the future would be useful to show a possible relation between smoking habit in men and developing COPD that would explain why men suffer from this condition more than women.

## EP22.05

### **Hypertensive patients: the reality of a primary care doctor's patient list**

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**Background & Aim:** The prevalence of hypertension among adult population in Portugal was, in 2013, around 27%, with a slightly higher prevalence in females. About 40% of the hypertensive patients had also type 2 diabetes and 50% had dyslipidemia. Our objective it's characterize the hypertensive patients of a primary care doctor's patient list.

**Methods:** It was conducted a cross-sectional study of a random sample of 312 users from the 1642 users of a primary care doctor's patient list.

**Results:** In the sample analysed, there were 29,5% hypertensive patients, of which 51% were women. There was a higher prevalence of hypertension in the age group of 60 to 79 years, with an average age of 64 years. Hypertensive patients had other cardiovascular risk factors, such as: dyslipidemia (65,25%), obesity (40,2%) and smoking (14,1%). The classification of cardiovascular risk assessed by SCORE was: 13% with a low risk, 29,3% with a moderate risk and 4,3% with a high risk. About 98% of hypertensive patients were receiving pharmacological treatment, most of them with 2 drugs associated (44,6%). The most common pharmacological classes were angiotensin-converting-enzyme inhibitor (50%) and diuretics (43,3%). High blood pressure was controlled in 63,3 % of the cases evaluated.

**Conclusions:** This study reinforces the need of correction of cardiovascular risk factors in hypertensive patients, in particular obesity/ overweight. It is crucial the adoption of modifying measures of lifestyle, such as diet measures (not forget the salt intake reduction) and physical exercise, as well a larger awareness of the general public about this disease, complications associated and respective preventive measures.

## EP22.06

### **Morbidity trends of dementia registered in Croatian family practice and anti-dementia drug utilisation, 2005 – 2014**

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**Background & Aim:** Dementia is a syndrome of a global decline in cognitive abilities, usually affecting older people. Croatia's population is ageing and an increased incidence of the disease is expected. The aim of the paper was to investigate the morbidity trends of dementia in family practice (FP) in Croatia and the trends in the anti-dementia drug use in the period 2005 – 2014.

**Method:** Morbidity data for dementia and other mental illnesses in the reference period were obtained from the Croatian Health Service yearbooks and were based on electronic records of all Croatian FPs. The collected data included diagnoses F00-F03 and R54 (International Classification of Diseases, version 10) and the age. The data on anti-dementia drug utilisation (group N06D, expressed in DDD/10000/day (DDD/TID) and, financially, in Croatian kunas) were obtained from the Annual Report of the Croatian Agency for Medicinal Products and Medical Devices and compared to the total drug utilisation and the utilisation of drugs acting on the nervous system (group N).

**Results:** Dementia morbidity accounts for between 1.65% and 2.59% of the total mental illness morbidity and shows a downward trend. It is mostly present in the 65+ age group. The pharmacological utilisation grew until 2007 (2.01 DDD/TID), when it began to drop. Financial expenses reached a peak in 2009, having decreased since. In 2014, the financial expenses for anti-dementia drugs accounted for 0.18% of the total drug use and 1.14% of the drugs acting on the nervous system. Most commonly used drugs were ginkgo biloba and memantine. The use of ginkgo was the highest in 2007, having decreased since. The use of memantine has been growing, especially in 2013 and 2014.

**Conclusions:** Unexpectedly, the number of registered dementia diagnoses and the utilisation of anti-dementia drugs show a downward trend. This phenomenon should be further investigated.

## EP22.07

### Quality of anticoagulation control in patients within the Taonet program: the experience in our local health center

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**Background:** Atrial fibrillation (AF) is the most common type of chronic cardiac arrhythmia. It bears a risk of stroke and systemic embolism which is five times higher than that of the general population, and its diagnosis represents the main reason for prescribing anticoagulation drugs in primary care. The administration of anticoagulation drugs with vitamin K antagonist (VKA) has been shown to reduce the incidence of strokes, but it requires a careful monitoring of the international normalized ratio (INR). The variability in clinical response and potential risk of interactions often displace the INR outside the defined range, with the result that VKA tends to be underused in patients with FA due to the fear of severe bleeding. In recent years new oral anticoagulants (NOAC) have come to the market. Our Ministry of Health has published a report establishing the criteria for the use of NOAC, and one of them precisely aims at “patients who have started treatment with VKA where it is not possible to maintain control of INR within range (2-3) despite good adherence”. AIM 1. Knowing the quality of control of the patients in our health center treated with VKA 2. Calculate the percentage of poorly controlled patients who could benefit from the NOAC method S It is a cross-sectional study, including all patients on treatment with oral anticoagulation with VKA included in the TAONET program. It is considered that the monitoring of INR is not suitable when the time in therapeutic range (TTR) is less than 65%, calculated by the Rosendaal method. The universe of the study, about 400 people, is the total number of patients undergoing treatment with AVK. In poorly controlled patients, we will study whether they meet the above mentioned criterion of the Ministry of Health describing the adequacy of starting the prescription of a NOAC.

## EP22.08

### Very elderly hypertensive patients: management and control in primary health care

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**Background & Aim:** High blood pressure is the most important albeit modifiable risk factor for cardiovascular disease. Data are sparse regarding current patterns of treatment and control of hypertension among very elderly persons but it is known these are often suboptimal. The objectives of the present study were to determine prevalence, treatment and control of hypertension in very elderly patients followed in a Family Health Unit (FHU).

**Method:** We conducted an observational study in which were included all patients 80 years old and older who had been diagnosed hypertension and were followed in our FHU. Sample: 95% confidence interval and 5% significance level. Variables studied: age, sex, number of years since diagnosis, BMI, waist circumference, blood pressure levels, cholesterol levels, habits (smoking, alcoholism, salt intake), comorbidities (diabetes mellitus, dyslipidemia, depression), complications (nephropathy, retinopathy, cardiopathy, peripheral artery disease, previous stroke), antihypertensive agents and other medications used. The data was collected by accessing the patients' electronic medical records. Microsoft Excel® was used for quantitative analysis. No personally identifiable information was disclosed.

**Results:** 58% (n=346) of very elderly patients had hypertension. In the study sample: 39,3% were men and 60,7% women. Average time since diagnosis was 13,0 years and average age at the time of diagnosis was 71,8 years. On average each patient was taking 2,0 antihypertensive agents: 73,8% were taking diuretics, 46,4% ARA, 32,2% ACEi, 28,4% CCB and 16,4% beta-blockers. 62,8% had blood pressure levels <140/90 mmHg and 83,1% <150/90 mmHg. 8,7% had a history of previous stroke and 6,6% of myocardial infarction.

**Conclusions:** Hypertension is highly prevalent in the very elderly. Although keeping low blood pressure levels is not advised in these age groups, primary care physicians should strive to ensure proper monitoring and management of these patients in order to prevent complications and improve quality of life.

## EP22.09

### Chronic facial skin lesions

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**Background & Aim:** An 80 year-old man consults his general practitioner for ulcerated facial and cranial lesions that occur for more than 20 years. In the last months the lesions had grown and didn't improved with local ointments. Medical history: homosexual orientation, with a stable relationship in the last 35 years, iron deficiency anemia, which required blood transfusions in two different occasions, colonic polyps. Clinical examination: Ulcerated lesion that affects the left frontal and temporal areas. Also affects the left periorbital and preauricular regions that caused the enucleation of the left eye and loss of the auricular cartilage of the left ear. He denies pain or other symptoms.

**Method:** Complementary tests: - Serology blood test: Hepatitis B surface antigen (HBs Ag): negative, Hepatitis C Virus (HCV) Antibody, IgG: positive, Human immunodeficiency virus (HIV) antibodies: negative, TP-RPR (Syphilis): negative, TP-TPHA (Syphilis): positive 1/160, TP-FTA-ABS (Syphilis): positive (++++) - Skin lesion biopsy: chronic dermatitis with intense plasma cell infiltrates. - Lumbar puncture: the patient denies the procedure

**Results:** Diagnosis: Gumma – tertiary syphilis Differential diagnosis: other types of Treponematosi, Leprosy, Cutaneous Tuberculosis, Squamous-cell carcinoma, Basal-cell carcinoma

**Conclusions:** In this case, the positive treponemal serology combined with the negative reaginic tests confirmed the tertiary syphilis. Due to the denial of the lumbar puncture procedure, we could not discard Neurosyphilis, which is the most frequent complication of the untreated syphilis. A 3 weeks treatment with Benzathine benzylpenicillin was started, at a weekly dose of 2.4 million units. At this moment the patient presents a clinical improvement of the skin lesions, as we evaluate the treatment response with new treponemal serology tests.

## EP22.10

### **Bridging anticoagulation: primum no nocere**

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**Background and Aim:** Chronic oral anticoagulation(OAC) frequently requires interruption for various reasons and durations. The evidence to inform decisions making is limited, making current guidelines equivocal and imprecise. The aim of this work is to review the indications for both the need for OAC interruption and the practice of routine bridging when OAC interruption is indicated.

**Methods:** A search was conducted on MEDLINE, Guidelines Finder, The Cochrane Library, using the MeSH terms “bridging anticoagulation”. The researches were limited to the articles published in the last 5 years in English, Spanish and Portuguese.

**Results:** From the research resulted 3 systematic reviews articles. From their analysis, we conclude that: OAC should not be interrupted for procedures with low bleeding risk; patients at highest risk for thromboembolism(TE) without excessive bleeding risk should consider bridging, conversely, those at low risk for TE should not be bridged; intermediate-risk cases should be managed by individually considering patient and procedure-specific risks for bleeding and TE. Procedures amenable to uninterrupted therapeutic warfarin: endoscopy, biopsies, endovascular interventions, percutaneous coronary interventions, cardiac device implantation, cataract surgery, dermatologic surgery, dental extractions, minor noncardiac surgery. When bridging is deemed necessary, more conservative bridging strategies should be entertained, such as low-dose heparin, post-procedure-only heparin, delayed initiation of post procedure heparin and early transitioning off of heparin as the INR approaches 2.0, rather than after. Further studies are needed in bridging of novel oral anticoagulants.

**Conclusions:** Periprocedural anticoagulation management is a common clinical dilemma with limited evidence to guide our practices. Although bridging anticoagulation may be necessary for those patients at highest risk for TE, for most patients it produces excessive bleeding. Contemporary clinical practice continues to favor interruption of OAC and the use of bridging anticoagulation. Physicians should carefully reconsider the practice of routine bridging and whether periprocedural anticoagulation is even necessary.

## **EP23.01**

### **Tools and methods(T&M) for measurement quality and safety. Current state of art.**

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**Background & Aim:** There are plenty of evaluated T&M concerning quality and safety in primary health care (QS). EQuIP has created some, gathered others, but we feel there is a lack of informations about the usage of them and especially their outcomes. The special interest group within EQuIP works on a survey about available actually used T&M. For now, we know that some of them are e.g. mandatory parts of practice accreditations, some are used for scientific projects, other on voluntary basis for self assessment. This workshop shall contribute to upgrade and update the list of T&M, add comments on suitability and feasibility for GPs.

**Method:** We will build on the survey from EQuIP members on T&M we know and use. After a short presentation about the findings, we will discuss it, presumably the participants add some missed T&M. After that we will split into groups aimed at defining what are the criteria to evaluate the Tools, what defines their usability and quality? Once we have defined the criteria we could evaluate the different tools and methods.

**Results:** A structured summary on chosen T&M will be created, allowing us to sort and compare individual T&M.

**Conclusions:** The field of T&M in QS is very broad and rather unsorted. We believe to change this in a longer term, using conclusions from this workshop. Participants will be able to distinguish T&M sufficient for their needs immediately.

## EP23.02

### Effects of yogic exercises on physical capacity and health in patients with obstructive pulmonary disease

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**Background and Aim:** Yogic exercises have been shown to increase functional capacity and decrease symptoms in patients with obstructive pulmonary diseases. However, the knowledge regarding physiological and mental effects of hatha yogic exercises and breathing exercises over longer time periods in patients with obstructive pulmonary diseases remains limited. The aim of this study was to investigate the effects of hatha yoga (HY) compared to an individual program of strength and endurance training (IT) on functional capacity, pulmonary function, perceived exertion, disease specific symptoms and oxygen saturation in patients with obstructive pulmonary diseases.

**Methods:** 36 patients (23 women, median age = 64, age range: 40–84 yrs) were randomized into HY (n = 19) or IT (n = 17). Both HY and IT involved a 12-week program. Functional capacity (estimated from a 6 minute walk test (6MWT), spirometry, oxygen saturation, perceived exertion and a disease specific chronic respiratory questionnaire (CRQ) were measured at baseline, at 12 weeks and at 6 months.

**Results:** Significant improvements emerged within each group on 6MWT (HY, baseline:  $593.5 \pm 116.4$ , after 12 weeks:  $626.2 \pm 111.6$ ,  $p = 0.014$ ; IT, baseline  $502.3 \pm 136.3$ , after 12 weeks:  $544.8 \pm 138.5$ ,  $p = 0.002$ ). for IT but not HY, these improvements sustained at 6 months. CRQ showed significant improvement in the domain mastery for the HY group and in all domains in the IT group.

**Conclusions:** Twelve weeks of HY and IT improved functional capacity in both groups with no significant between group effects. However, at the 6-month follow-up effects sustained in the IT but not in the HY group. The IT group, showed self-reported disease-specific improvements across all domains while HY group showed improvements in the mastery domain only. This suggests that both IT and HY have positive short-term effects while IT has long-term effects on functional capacity.

### EP23.03

#### **Opportunities to increase value: The semFYC experience**

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**Background & Aim:** The use of unnecessary tests and treatments contributes to health care waste (overutilization, overuse, overtreatment). During the last two years, the program of the Spanish Society of Family and Community Medicine (semFYC) called “Not to do” identified some of such items. This report describes the identification of the tests and the treatments from the primary care point of view.

**Method:** S: Each year (2014; 2015) an expert panel of 15 individuals identified candidate tests and treatments. The list was narrowed over a modified Delphi process. The top test and treatments were provided with Grading of Recommendation, Assessment, Development and Evaluation (GRADE) literature summaries.

**Results:** The expert panel achieved consensus on the following top items: Reduce antibiotic use for acute maxillary sinusitis, sore throat, acute lower-respiratory-tract infection and asymptomatic bacteriuria; Do not prescribe hormone therapy for preventing cardiovascular disease; prescribing precautions for NSAID, acetaminophen, benzodiazepines in older people, statins for the primary prevention of cardiovascular events in older adults, primary prevention of gastroduodenal toxicity, antiplatelet therapy after coronary artery stenting, systemic corticosteroids for acute exacerbations of chronic obstructive pulmonary disease, bisphosphonates if low risk of fracture, low molecular weight heparin for prevention; reduce self-monitoring of blood glucose in patients with type 2 diabetes mellitus and reduce intensive glycemic control; do not prescribe treatment for asymptomatic hyperuricemia for prevention of recurrent gout; avoid prostate cancer screening; not to do annual cytology cancer screening; avoiding the imaging test for low-back pain, chronic headaches, sinusitis.

**Conclusions:** The published list of the semFYC’s program “Not to do” highlights tests and treatments that cannot be adequately justified on the basis of efficacy, safety, or cost. This list and the report serves as to raise awareness and change GP behaviour and those actions that GPs and patients should try to avoid.

## EP23.04

### The standard measurement of HDL-C levels not enough in diabetic patients? Time for a new approach?

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**Background & Aim:** Dyslipidemia is the major risk factor for atherosclerosis, although the mechanism of this association has not been fully elucidated so far. HDL-cholesterol (HDL-C) is commonly considered as a “good cholesterol”, but some recent studies have identified individuals with a significant atherosclerotic burden despite normal or elevated levels of HDL-C. Antioxidant activity of HDL-C is associated with the levels of Paraoxanase -1 (PON-1). The main antioxydative protein in HDL is apoprotein A-I, and its role strictly depends on Myeloperoxidase (MPO). It has been shown that the expression of MPO is markedly enhanced in human atherosclerotic lesions. The aim of our study was to analyze if there are any differences in HDL-cholesterol subfractions’ profile and also in PON-1 and MPO levels between patients with ischemic heart disease in comparison to those with coexisting diabetes.

**Method:** The observational analytical case-control study was performed. The concentration of serum MPO and PON-1, as well as Apolipoprotein I and Apolipoprotein II were measured. We included 70 patients in the study, 35 with CVD and diabetes and 35 patients as a control group ( patients without diabetes matched to study group according to the age, sex, statin type and dosage, and smoking status).

**Results:** The study showed the significant difference between the groups in MPO level. The mean MPO level was 21.177 ng/mL in study group comparing to 16.640 ng/mL in control group ( $p=0.02$ ). In contrast, the average PON-1 level in study group was 856.2 comparing to 471.157 in control ( $p=0.04$ ). There were no significant differences between Apolipoprotein I and Apolipoprotein II levels between the groups.

**Conclusions:** It is hoped that a new, more adequate lipid panel will be developed and available for GP practice in order to improve the standards of care. Enzymes that have an influence on HDL-C may be the potential aim of further analysis.

## EP23.05

### **Determinants for preferences for lifestyle changes or medication and beliefs in ability to retain lifestyle changes. A population-based survey**

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**Background & Aim:** Perception of risk and preferences for treatment or lifestyle changes are of major importance in the management of chronic diseases. This study reveals knowledge about determinants for preference for lifestyle changes versus medication for prevention of cardiovascular disease, and knowledge about determinants for respondents' beliefs in their ability to retain lifestyle changes.

**Methods:** A representative sample of 40-60-year old Danish inhabitants was asked to imagine that they were at an increased risk of heart disease, and were subsequently presented with an offer of a preventive medical intervention.

**Results:** Among 1004 respondents, 962 (96%) preferred lifestyle changes to medicine. For the group of respondents who reported at least one of the following; smoking, low physical activity or BMI 25+, 704 (95%) preferred lifestyle changes. Significant determinants for lifestyle changes in this last group were female gender (OR = 2.1, 95% CI 1.0-4.3) and high BMI (ORBMI ORBMI 30+ = 3.2, 95% CI 1.2-8.3). Significant determinants for not opting for lifestyle changes were being self-employed (OR 0.3, 95% CI 0.2-1.1), poor self-rated health (OR = 0.4, 95% CI 0.2-0.8) and smoking (OR = 0.4, 95% CI 0.2-0.7). Non-smoking ( $p < 0.001$ ), high level of physical activity ( $p < 0.001$ ) and good self-rated health ( $p < 0.001$ ) were all associated with a high belief in ability to maintain lifestyle changes to prevent heart disease.

**Conclusions:** We found a high preference for lifestyle changes over medical treatment. Lifestyle factors and self-rated health were associated with preference for lifestyle changes, as well as belief in ability to retain lifestyle changes in the group of respondents who reported smoking, low physical activity or high BMI. For the general practitioner the risk communication should not only focus on patient preferences for lifestyle changes but also on beliefs in ability to maintain lifestyle changes and possible barriers against maintaining the changes.

## **EP23.06**

### **NYGP – Nordic Young General Practitioners**

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**Background:** The primary sector has an increasing focus on quality, patient safety, efficiency and research to ensure high quality primary care. At present there are no formal structure for young GP's to share knowledge, research, daily practice questions and quality improvement ideas within the Nordic countries.

**Aim:** Our aim is to create a long-lasting and productive network between GP-trainees and first five GP's in the Nordic countries. We propose that the new association would be supported by the NFGP and eventually the national boards of General practitioners.

**Method:** Creating a NYGP facebook group to establish a stronger organization and facilitate communication.

- Creating a newsletter with national, nordic and international topics of interest
- Seeking financial support to raise a dedicated budget within NFGP and the national boards
- Founding a preconference to be held before the Nordic Congress, first one in Reykjavik 2017.
- Using campaigns as an effective method to disseminate messages through short films, post cards, social media, etc.
- Promoting nordic meetings, conferences, networks and research

**Results:** Since 1983 Denmark has had a formal organization for Young GPs called FYAM - Forum for Young General Practitioners. DSAM (Danish College of General Practitioners) provides both administrative (content and communication) and economic support. FYAM is placed within the DSAM framework, but has its own executive board. Also VdGM (Vasco da Gama Movement - Young general practitioners in Europe) has managed to gather young GP's from all over Europe successfully to share knowledge, ideas, quality and research online with the use of social media such as Facebook, Twitter, YouTube, etc. This is with the support of WONCA.

**Conclusions:** Within the next 3 years, the NYGP will hopefully form into a natural gathering point for young practitioners in the Nordic Countries and provide a solid groundwork for the continued development of the Nordic collaboration.

## EP23.07

### **Epidemiological study on the smoking habits of high-school students in certain areas of Crete**

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Smoking consists one of most serious public health problems. International studies reveal that the crucial age for the experimentation and the beginning of smoking is the early adolescence. The aim of our study was to determine the prevalence of smoking, investigate the habits, the knowledge and the attitude of high-school students concerning smoking, in certain areas of Crete.

**Method & Population:** the collection of the necessary information was based on a self-handled anonymous questionnaire about smoking, which was used by the WHO and the Disease Control and Prevention Centre of the USA, for the conduction of the GYTS study. It was distributed and filled in by 961 students of randomly selected high schools, of which three (3) in an urban area, one (1) in a semi-urban area and one (1) in a rural area of Crete. The study was conducted during the school year 2013/14.

**Results:** 46% of our sample are males and 54% females. 40,9% live in an urban area, whereas 51,4% in a rural area. 67,8% denote non-smokers, 51,5% of smokers were males, 50,6% experimented on smoking at the age of 14-15, and 74,1% smoke less than 20 cigarettes per month. The places they usually smoke are cafes and friends' houses. 43,7% of the smokers have parents who smoke, and 28,9% have a best friend smoker. 91,3% are aware of the harmful consequences of smoking, noting that they learnt about them at school and 36,4% see themselves smoking the next five years.

**Conclusions:** the early intervention, before lifestyle and health habits are formed, could induce positive results in the reduction and fight against smoking. Health education and prevention programmes are necessary to be applied at the primary education, where the direct and the long term implications of smoking would be clearly demonstrated.

## **EP23.08**

### **From deep psyche to skin deep**

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**Context:** Excoriation disorder, newly included in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), is characterized by a recurrent body-focused repetitive behaviour resulting in skin lesions. Afflicted individuals must have made repeated attempts to decrease or stop the behaviour, which must cause clinically significant distress or impairment. The behaviour cannot be due to the effects of a substance or another medical condition; and cannot be better explained by the symptoms of another mental disorder.

**Aim:** We aim to raise awareness among family physicians on the excoriation disorder, as it's thought to be common, with a lifetime prevalence estimated at 2-4% of the population, and may result in medical issues such as infections, skin lesions, scarring and physical disfigurement.

**Case presentation:** We report a case of a 61-year-old married woman, mother of two, member of a functional, nuclear family in phase VIII of Duvall's Family Life Cycle. She has psychiatric history of depression for which she takes sertraline. During an appointment with her family doctor, the patient gives a history of frequently finding herself scratching the skin repetitively. She has clean, linear erosions, crusts, and scars on areas that the patient can scratch, particularly the extensor surfaces of the limbs, the upper part of the back and abdomen; the distribution is bilateral and symmetric. The physical exam is otherwise unremarkable. Suspecting of excoriation disorder, the patient is referred to Dermatology and Psychiatry, which later confirm the diagnosis.

**Discussion:** Excoriation disorder in this patient results from repetitive scratching and is associated with depression, as often is the case. Family physicians usually find these patients before they see a dermatologist or psychiatrist; thus, it is important for family physicians to be aware of the salient diagnostic features and the proper management of excoriation disorder by a multidisciplinary team.

## EP24.01

### Effectiveness of an educational strategy on implementing clinical guidelines among Spanish residents of family medicine (EDUCAGUIA): clinical trial by clusters

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**Background & Aim:** Clinical Practice Guidelines are developed with the aim of helping health professionals, patients or caregivers to make decisions about their health care, using the best available evidence. In many cases, incorporation of the recommendations into clinical practice also implies a need for change in routine clinical practice. The educational games as a strategy for implementing recommendations among health professionals has demonstrated to be effective in some studies but there is not enough evidence. The main objective of this study is to assess the effectiveness of a teaching strategy for the implementation of Clinical Practice Guidelines using educational games (e-learning EDUCAGUIA) to improve knowledge and abilities relating to clinical decision-making among family medicine residents. **Methods:** We propose a multicentric clinical trial with randomized allocation by clusters in Teaching Units of Family and Community Medicine in Spain. Sample size: 394 residents (197 in each group). The randomization unit will be the Teaching Units and the analysis unit will be the residents.

**Intervention:** Both groups will receive an initial 1 hour session on clinical practice guidelines use and usual dissemination strategy by email. Intervention group (e-learning EDUCAGUIA strategy): educational games with hypothetical clinical scenarios in a virtual environment. The main outcome will be the score obtained by the residents in evaluation questionnaires for each clinical practice guideline.

Other included variables will be: socio-demographic and training variables of residents and Teaching Unit characteristics. Statistical analysis: descriptive analysis of variables and baseline comparison of both groups. Main outcome analysis: average score comparison of hypothetical scenario questionnaires between EDUCAGUIA intervention group and control group that will be performed at 1 and 6 months post-intervention, using 95% confidence intervals. A linear multilevel regression will be used to adjust the model.

## EP24.02

### Vaginal administration of estrogens in postmenopausal urinary incontinence – evidence-based review

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**Background & Aim:** Urinary Incontinence has significant effects on the physical, psychological and social well-being, in addition to entailing high costs in health. Its prevalence increases with age. The decrease of circulating estrogen level in menopause leads to structural changes in the urogenital system, which has been associated with urinary incontinence. The aim of this study was to determine the effectiveness and safety of vaginal topical estrogens in the improvement of urinary incontinence complaints in postmenopausal women.

**Method:** Research of clinical guidance standards, meta-analyses, systematic reviews and randomized clinical trials in MEDLINE, evidence-based medicine websites and bibliographic references of the selected articles. MeSH terms: “urinary incontinence”; “estrogens”; “postmenopause”; “administration, topical”, from January 2005 to October 2015, in English, French, Spanish and Portuguese.

**Results:** From the research, 99 results were obtained. Of these, seven publications were included. One meta-analysis, that includes 34 articles, showed some evidence that the estrogens used locally (vaginal creams or suppositories) can improve incontinence, having been assigned a level of evidence 1. Three guidelines suggested a benefit of using vaginal topical estrogen, two with strength of recommendation A and one with strength of recommendation B. Three clinical trials have compared several types of vaginal topical estrogens, in distinct formulations, with different control groups, each of them being assigned a level of evidence 2. The results were discordant regarding the benefit of topical therapy associated with oral antimuscarinic.

**Conclusions:** There is evidence that the vaginal topical estrogens can have benefit in the improvement of urinary incontinence complaints in postmenopausal women, especially in the presence of vaginal atrophy (Strength of recommendation A). It is suggested to carry out randomized and controlled trials to assess the effectiveness and safety of this therapeutics in the long term.

### EP24.03

#### **Efficacy of home-based non-pharmacological interventions in depression treatment: A systematic review and network meta-analysis**

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**Background & Aim:** Depression is a common psychiatric disease. Non-pharmacological interventions are accepted as a standard depression treatment but initiation and maintenance rate of these interventions are low because of limitation to treatment access, especially in elderly and patients with co-morbidities. This study aimed to systematically review all available home-based interventions for depression treatment, pool effect size of each intervention, and compare efficacy among all available home-based interventions.

**Methods:** Medline, Scopus, and CINAHL databases were searched since inception to 21st September 2015. Randomized-controlled trials including depressed patients and comparing home-based interventions with usual care, were included in the review. Standardized mean difference(SMD) and random effect model were applied to pool mean difference of depressive score and relative risk of disease remission between each home-based intervention and usual care. Multivariate random effect meta-analysis was applied to compare the efficacy among all available home-based interventions.

**Results:** Among 656 identified studies, 17 studies met inclusion criteria and were included in the review. Nine, 3, and 4 studies considered home-based psychotherapy, home-based exercise, and combined home-based psychotherapy with exercise as interested interventions, respectively. SMDs of home-based psychotherapy, home-based exercise, and combined home-based psychotherapy with exercise were -0.69 (95%CI:-0.97,-0.42), -1.03 (95%CI:-2.89, 0.82), -0.78 (95% CI:-1.09,-0.47), respectively. These suggested that only home-based psychotherapy and combined home-based psychotherapy with exercise could significantly decrease depressive scores. Disease remission rate was also significantly higher in home-based psychotherapy and combined home-based psychotherapy with exercise groups than in the usual care group. Moreover, combined home-based psychotherapy with exercise was the best treatment regimen that had the highest probability of having disease remission among all home-based interventions.

**Conclusion:** Our study confirmed the efficacy of home-based psychotherapy and combined home-based psychotherapy with exercise in depression treatment. Combined home-based psychotherapy and exercise was the best treatment and should be considered in a clinical practice guideline for depression.

## EP24.04

### Body mass index and chronic non-communicable diseases in primary health protection

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**Background and Aim:** Determine a relationship between BMI and an emergence of non-communicable diseases in patients in primary health protection.

**Method:** Using intersected studies, systematic method of sample (first choice and every 14th) a group of 100 medical records of patients registered in Family medicine team. Were analyzed demographic data, the value of anthropometric measurements, laboratory blood tests and blood pressure values in the 2013/14 year.

Testing group to the values of BMI - and divided into three groups:

1. Normal body weight (BMI < 25)
2. Overweight (BMI 25-30) and
3. Obesity (BMI > 30). Statistical analysis was performed in Excel and Arcus QuickStat program.

**Results:** 60% of respondents were female and 40% male. The average age was 55 years. Average values of Body Mass Index were 27. 32% respondents had normal body weight, 40% respondents had overweight and 28% obese. Number of female respondents in the subgroup of overweight was significantly higher (♀ 71%: 29% ♂). Subjects with overweight and obese suffer from hypertension (53%), hyperlipidemia (44%), diabetes (26%), mental disorders (12%) and malignant diseases (9%).

**Conclusions:** The most common chronic non-communicable diseases in obese patients are hypertension, hyperlipidemia and diabetes (statistically significant). Obese women have a higher prevalence of dyslipidemia and mental disorders compared to obese men. The middle values of triglycerides were significantly higher in respondents with overweight. Depression is more prevalent in patients with normal weight compared to those who are overweight but not in relation to the obese. Extending the diagnostic protocol management and treatment of patients who have a problem of excessive nutrition, constant battle and pointing to threats that obesity carries with it, it should be one of priorities of physicians in primary health protection.

## EP24.05

### Should we be testing for mycoplasma genitalium in general practice?

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**Background & Aim:** Mycoplasma genitalium (MG) was first isolated in 1981 and is considered a sexually transmitted infection (STI). MG can cause cervicitis, urethritis, pelvic inflammatory disease (PID), adverse pregnancy outcomes, and infertility. Chlamydia trachomatis (CT) and Neisseria gonorrhoeae (NG) are frequently tested for in Danish general practices, whereas testing for MG is much less common. The purpose of this study is to find out how often women with cervicitis are infected with MG and if testing is recommended.

**Method:** This study is a literature review. PubMed was searched 14.01.2016 (keyword: “Mycoplasma genitalium” AND MeSH term [uterine cervicitis]). Research was supplemented by information from a National Clinical Guideline.

**Results:** The prevalence of MG among young, asymptomatic, Danish women was 2.3%. According to a review from 2013 the prevalence of MG in the presence of cervicitis was approximately 10% (range 2-29%). Three cross-sectional studies (two from STI-clinics, one from a gynecologic outpatient service) found that MG-positive women have an increased risk of cervicitis. This is supported by the meta-analysis from 2015, showing MG to be associated with significantly increased risk for cervicitis (pooled OR 1.66 (95% CI: 1.35-2.04)).

**Conclusion:** The results indicate that MG often causes cervicitis. The wide range in the prevalence can be explained by the different populations and different definitions of cervicitis. In women with cervicitis MG is more common than NG and less common than CT. There were no studies from General Practice. It is recommended to test women with cervicitis for MG, especially young women with sexual risk behaviour and recurrent or persistent symptoms, for whom testing for CT and NG was negative.

## EP24.06

### The direct and indirect healthcare costs of lung cancer CT screening in Denmark

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**Background and Aim:** To make a detailed analysis of the healthcare costs and utilization in relation to lung cancer CT screening using the "Healthcare costs in the Danish randomized controlled lung cancer CT-screening trial (DLCST): A registry study" as basis. This prior study calculated the direct and indirect healthcare costs of lung cancer screening by comparing costs in the CT group and the control group in the DLCST. After the publication of this study, the authors demonstrated that the participants in both groups experienced significantly increased concern after randomization compared with baseline. Moreover, participation bias has been documented. This bias plus the psychosocial impact on the control group could have resulted in over- or underestimation of costs.

**Method:** This analysis compared the healthcare costs and utilization of participants in the DLCST to a new reference group: a comparable random sample of the general population never invited to screening. The random sample, the CT group and the control group were compared respectively in a time period from randomization (2004-2006) until 2014.

**Results:** Compared with the new reference group, the participants in both the control group and the CT group had significantly increased total healthcare costs, 48% and 60% respectively. The increase in costs was caused by increased use in the secondary as well as in the primary healthcare sector.

**Conclusion:** CT screening leads to 60% increased total healthcare costs. Such increase would raise the expected healthcare cost per participant from EUR 2348 to EUR 3756. Cost analysis, which only includes costs directly related to the screening, and follow-up procedures are most likely underestimating costs, as our data show that the increased costs are not limited to the secondary sector.

## EP24.07

### Comparison of insulin resistance and metabolic syndrome as a optimal criteria for metabolically obese, normal weight

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**Background & Aim:** In certain populations with metabolic abnormalities, body mass index is not sufficient for defining obesity. In the present study, we aimed to determine the optimal criteria for metabolically obese, normal weight (MONW) with insulin resistance or with metabolic syndrome to complement body mass index in a Korean population.

**Method:** This was a cross-sectional study in which data from the Korean National Health and Nutrition Examination Survey in 2010-2012 were collected and retrospectively analysed. In total, 6274 normal weight adults were included in our analyses. The subjects were classified as MONW with insulin resistance (MONW-IR) and MONW with metabolic syndrome (MONW-Mets) to analyse the risk of cardiovascular events by using the Framingham risk score and atherosclerotic cardiovascular disease risk equation.

**Results:** Compared to those without insulin resistance, the odds ratio for the risk cardiovascular disease using the Framingham risk score in the MONW-IR group (1.132; 95% confidence interval, 0.854–1.502) was not significantly increased, whereas the odds ratio for the risk cardiovascular disease using the atherosclerotic cardiovascular disease risk equation in the MONW-IR group (1.809; 95% confidence interval, 1.410–2.322) was significantly increased. However, after excluding patients with diabetes mellitus, who represented the majority of MONW-IR subjects, the risk of cardiovascular disease was not significantly increased.

**Conclusions:** To diagnose MONW, using metabolic syndrome criteria may represent a useful screening tool in the Korean population. However, further prospective studies are hence needed to confirm our findings.

## EP24.08

### **Menopausal symptoms: development and dimensionality of the MenoScores Questionnaire (MSQ)**

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**Background:** Hot flushes and night sweats are common menopausal symptoms. Some women also experience emotional vulnerability, sleeping problems, fatigue, pains, problems with concentration, vaginal dryness and loss of sexual desire. The report of menopausal symptoms differs among different cultures and ethnic groups but also between individuals within a homogenous population. Therefore, measuring menopausal symptoms is a challenge and so is distinguishing between symptoms actually caused by the menopause and symptoms caused by normal aging or other life circumstances. No Danish instruments measuring menopausal symptoms validated using Rasch models exist. **Aim:** To develop a questionnaire with high content validity measuring menopausal symptoms and validate this questionnaire using Rasch models.

**Method:** Through a literature review, focus-groups, single-interviews and pilot testing a draft version of the questionnaire was generated. This draft version was tested in a cross-sectional study and the collected data were analysed using Rasch models.

**Results:** The draft version of the questionnaire encompassed 126 items covering eight domains plus one global item asking if the women in general were bothered by menopausal symptoms. 1504 women, aged 45-65 years, responded to this draft questionnaire. 71.3% of these responders replied to be bothered to some extent by menopausal symptoms. The psychometric analysis resulted in a multidimensional questionnaire named “the MenoScores questionnaire (MSQ)” encompassing 11 unidimensional scales and 1 single item; in total 60 items. The scales measuring “hot flushes”, “day and night sweats” and “menopausal specific sleeping problems” performed best in discriminating between the response categories of the global item.

**Conclusions:** Menopausal symptoms are multidimensional and only few of these constructs are unquestionably related to the physiological menopause. Many other symptoms are more likely caused by aging or other life circumstances. MSQ is a new validated instrument that can be used to measure menopausal symptoms.

## **EP24.09**

### **The time schedule of primary care transformation in Central and Eastern Europe between 1900-2010**

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**Background & Aim:** Countries in Europe, despite their social welfare systems, adopt certain policies for development of their health care systems, with predefined primary health care systems. To assess the periods of implementation of primary care transformation from multispecialty curative services oriented model to general personalized care model after 1990 in Central and Eastern European (CEE) countries.

**Method:** The literature on the health care systems reforms in Europe was reviewed. The primary care core component were identified in six countries in the region.

**Results:** The transformation of primary care started in 1991 in Latvia, lasting till 2008, when last core component was implemented at Slovakia.

**Conclusions:** Transformation of the primary health care systems in the countries of Central and Eastern Europe was complex and long process, with the same components but with different pattern of implementation.

**Competing Interests:** The study was part of DEMETRIQ EU project funded by the European Union Seventh Framework Programme theme HEALTH.2011.3.3-1 (Grant Agreement number 278511).

## EP24.10

### Evaluation of Digoxin users presenting to emergency service

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**Introduction:** Even though many studies from past decades have shown that digoxin does not have survival advantage it is still widely used in Turkey. Besides, it was shown that digoxin has been used most commonly in Turkey among European countries. Digoxin is identified in the Beers Criteria as a potentially inappropriate medication to be avoided in patients 65 years and older as first-line therapy for atrial fibrillation or heart failure.

**Methods:** With this study we prospectively investigate digoxin users admitted to emergency department; in a 6-month-period we followed patients who use digoxin for any diagnosis and reported demographic features, symptoms on admission, indications for digoxin prescription, accompanying diseases, laboratory findings, creatinine clearance, electrocardiography findings, medications, and the blood digoxin levels.

**Results:** The most dramatic data of analysis was that even it is known that digoxin users are geriatric patients (our mean age 76.77 years) and mostly have comorbid diseases (43.47% of our patients have 3 accompanying diseases), all of the patients have polypharmacy and the prescribed drugs interact with digoxin. Most common second prescribed drug was ASA (ASA decrease the serum concentration of cardiac glycosides, %52.17 patients used ASA with digoxin). All patients with blood digoxin levels under therapeutic index used a drug interacting with digoxin (n=11). All the patients with blood digoxin levels above therapeutic index used a drug that increase the serum concentration of, or enhance the adverse/toxic effect of Cardiac Glycosides (n=4), and they denied misuse of the drug. Most of the digoxin-user-patients were dyspneic and had low effort capacity on admission (n=14, 60.86% of the patients), the blood digoxin levels of them were under therapeutic index.

**Conclusion:** Drugs with narrow therapeutic index should be used with caution and the elderly require more attention here. Physicians should pay attention to interactions of the drugs they prescribe.

## **KA06**

### **Inequalities in health**

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Migration is an age-old global phenomenon but has seen increased attention in recent years with over 214 million migrants worldwide. European societies are increasingly more ethnically and culturally diverse. Regardless of the reasons people leave their countries of birth, migration affects the health of migrants. European health systems, primarily designed to cater to the needs of the majority population are often challenged when responding to newcomers and ethnic minorities.

Global predictions did not foresee that the exodus out of Syria would reach such enormous proportions in 2015. Europe's handling of the migrant situation has been fragmented, chaotic and hopelessly inadequate. The situation is complicated further by differences in formal entitlement to health care and even where migrants are entitled, they may not have equitable access as they face many barriers. Services they can access may not be 'diversity-sensitive' or 'culturally competent', in turn dissuading them from seeking care. Better health outcomes for all segments of the population warrant the need for adapting health care and addressing gaps.

This talk will address the following:

- Equity and Migration - Concepts, Terminology, Relevance and Context
- Framework for Migration and Health in Europe - Policies
- Migration and Health - Determinants and understanding of differences
- Ethnic Differences in Health - Cases from General Practice
- Adapting Health Care to Diversity - Challenges and Opportunities

**KA07**

**From individual to collective efforts towards health equity or what family medicine can learn from Canada geese?**

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The link between improved health equity and systems anchored around robust family medicine has been clearly demonstrated. Yet, even where quality family medicine is widely accessible, individuals faced with adverse social determinants of health such as poverty, precarious employment and social isolation become sick and die earlier than their peers. What might be the role of family physicians, of family practice teams and indeed of the discipline of family medicine in addressing health inequity? In this presentation, we will draw from the published literature and from examples of equity-focused efforts in the Canadian and other contexts to explore how family medicine might be leveraged at the individual and collective levels to advance health equity.

## Refugees in primary care: what are their needs and how can we care best? WONCA SIG on Migrant Care Symposium

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**Background & Aims:** Europe presently faces a huge influx of refugees. Primary Care has the potential to play a key role in the provision of affordable and high quality care to these individuals. They experience large health inequities and barriers in accessing healthcare. European general practice has acknowledged its responsibility in addressing this, in the WONCA 2015 Istanbul Statement. However, many GPs are not familiar with the specific health problems of refugees, and often have difficulties in understanding and addressing their health needs. Scientific knowledge Recent research and care projects can provide information on the health status and health needs of refugees as well as on effective ways of providing good quality and affordable primary care.

Objectives:

- Provide insight into the health and health needs of recent refugee groups in Europe
- Provide knowledge of best practices in primary care for refugees

**Methods:**

1. Presentations on the health and health needs of refugees:
2. Experiences and needs of refugees in 8 EU countries: EUR-HUMAN project results.
3. Health problems of Syrian refugees in Istanbul
4. Presentations on good practices in primary care for refugees
5. Oversight of guidelines for refugee care
6. Mediciens Sans Frontieres practices in Spain
7. Primary care for refugees in Greece
2. Discussion of expert panel with the audience: how to provide affordable good quality care for refugees in primary care.

**Results:** Participants will develop a better understanding of the refugee context; their specific health needs, with first hand reports from colleagues in the field; and develop the confidence to adequately perform health assessments and provide affordable and patient-centred care.

**Conclusion:**

The refugee crisis in Europe has left a trail of significant health consequences, leaving Primary Care with the important task of meeting new challenges in an effort to adequately care for these vulnerable populations.

### S38.1

#### **Health needs, views on and experiences with healthcare of refugees and other newly arriving migrants throughout their journey in Europe**

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**Background:** The EUR-HUMAN, EU funded project, aims to identify and implement guidance and instruments to improve primary health care delivery for refugees and other newly arriving migrants at hotspots, transit centres and first reception centres throughout Europe. The objective is to provide good and affordable comprehensive person-centred and integrated care, taking into account the trans-cultural setting and the needs and wishes of the refugees.

**Methods:** To gain insight into the health needs, experiences and wishes of refugees, a qualitative study was carried out in refugee reception sites in 7 countries, using a Participatory Learning and Action methodology.

**Results:** A total of 43 sessions were held with in total 97 refugees and 25 healthcare workers. The main health problems were journey related: wounds, common infections, mental health problems and lack of continuity of care for chronic diseases. Important barriers in accessing healthcare were revealed: at hotspots and transit centres time pressure impedes refugees from seeking help, and health care workers from building trust and assess the health care needs. At all sites linguistic or cultural differences and the lack of professional interpreters were mentioned as was the importance of feeling respected and of trust.

**Conclusion:** Instruments and training are needed for rapid assessment of health needs, to guarantee continuity of care and to bridge linguistic and cultural barriers.

## **S38.2**

### **Health problems of Syrian refugees in Istanbul**

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Beginning with the Arab Summer, the conflict in Syria became a multiple party war which led to millions leaving their countries. Described as 'the worst refugee crisis since World War 2'<sup>1</sup>, 4,718,230 people is registered or waiting registration.<sup>2</sup> Since 2011, more than 2,000,000 registered and approx. 500.000 unregistered refugees have arrived in Turkey. Even though the Turkish government included registered refugees in the national insurance scheme, the overwhelmed health resources, lack of translators and discrimination are some of the barriers the refugees have to struggle with. Many of the chronic illnesses and complicated cases (amputations, cochlear implants, surgeries) are not being treated efficiently.

### **S38.3**

#### **Healthcare for refugees in hot spot Lesbos, Greece**

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Greece is in deep financial crisis since 2009. In addition, Greece is the major recipient of refugees escaping the Middle East war zone. During 2015 approximately 1 million refugees crossed Greece toward their final destinations. Today approximately 55.000 refugees are trapped in Greece waiting for political decisions. During their journey, refugees encounter multiple health problems such as exhaustion, dehydration, malnutrition and opportunistic infections. Others suffering wounds from the war or victimized by human traffickers also need treatment. The temporary camps that host the refugees are often crowded and they do not offer appropriate hygiene and protection from environmental conditions. Major health problems are often left untreated. A new law was established recently for equal health care access for the immigrants to the National Public HealthCare System, as till now, NGOs are playing a vital role in Primary HealthCare for them. The EEU support is not so efficient as it lacks coordination although several European projects are held.

## **S38.4**

### **Oversight of guidelines for refugee care - summary**

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In recent times, Europe has experienced an unprecedented influx of refugees from various conflict zones, as people try to escape the violence, destructions and uncertainty in their countries of origin. Refugees and other migrants often face perilous journeys and many times live through the deteriorating conditions of refugee camps, with overcrowding, limited access to food and water and shelter, haphazard sanitation and unfavorable weather conditions. Many have witnessed violence, experienced trauma and been separated from family or suffered the loss of family members in the process. These experiences can have important health consequences, namely rendering these people both physically and psychologically more fragile. Given these past exposures it is expected that refugees may have poor or declining health status. Health services need to adapt to the specific needs of these individuals to prevent further marginalization. With resettlement often come the added difficulties in integrating in society and accessing health care. Here GPs have the potential to play a central role in providing the necessary assistance. Refugee care has over the years become a specialized field and various documents and evidence-based guidelines have been published to support doctors in providing the most adequate care to refugees. Some of the most important resources include The Canadian Collaboration for Immigrant and Refugee Health Guidelines; various UNHCR reports; the International Organization for Migration - Migrations Health Services Medical Manual; and Médecins Sans Frontières - Refugee Health Manual.

Presently, many GPs throughout Europe will inevitably come into contact with this population, as patients in their practice. As such, they will need guidance on how to approach the various relevant health issues, such as immunizations, infectious diseases, chronic and non-communicable diseases, mental health, women's health and sexual violence. Our presentation will aim to highlight the most relevant guidelines and provide guidance to GPs on how to perform health assessments, offer preventative interventions and adequately address the specific health needs of this vulnerable population.

## W93

### **How to be a good-enough GP for non-heterosexual people (LGBT - Lesbian, Gay, Bisexual and Trans people) - in Norway and in Turkey**

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**Background:** The living conditions for LGBT people are different in Turkey and Norway, but the differences are probably of a quantitative rather than a qualitative nature. In both countries homonegativity and minority stress contribute to impaired health and barriers to good health care for LGBT people. The Norwegian group has developed an educational package to be used in educational quality circles (QC's), and it will be presented in the workshop. The aim of the Turkish group is to focus on the health care workers' opinions, experiences and knowledge about the needs and provision of the health care of LGBTI individuals. Together we will conduct a workshop that explores aspects of LGBT life and the role of the GP for LGBT patients in different European countries. Our aim is to stimulate the workshop participants to reflect upon their own practice at home, and to contribute to GP's knowledge base and positive attitudes when meeting LGBT patients.

**Method:** Firstly, we focus on the conditions for LGBT people in each of the European country that is represented by the participants. Secondly, the Norwegian group and the Turkish group present their educational package and material, and case stories for discussion. Thirdly, we present facts and statistics from Norway and Turkey. The workshop will be held in an open and explorative atmosphere hoping to learn rather than to teach.

**Results:** The workshop will highlight and explore differences for LGBT people's living conditions, health and health care services throughout Europe. We will focus on consultation techniques and possible rooms of action for the GP meeting LGBT patients. The workshop will offer room for reflection and the learning of new consultation techniques that will benefit both the GPs and the LGBT patients in their everyday practice at home.

Conflicts of interest: None

## W94

### **GPs leading innovations for Inclusion Health: creating integrated pathways to care for marginalized people**

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**Background and Aim:** Homelessness leads to a high risk of dying young, from preventable diseases accompanied by futile super utilization of acute care services. GPs are the experts at creating innovative and effective health systems for the most vulnerable people in our society, such as people experiencing homelessness, vulnerable migrants, Gypsies and Travellers, sex workers, those in contact with criminal justice systems or using addiction services.

The development of best practice in integrated care includes taking health care to marginalised people where they live and following them into health systems and institutions. These approaches are championed by movements such as “Street Medicine” originating in the USA and the Faculty for Homeless and Inclusion Health, originating in the UK and exemplified by network-based GP led integrated care delivery in Copenhagen.

**Method:** in this workshop Street Medicine and Inclusion Health leaders will present a focus on approaches to integration, on the streets, in hostels and into hospitals, with examples of effective care in the various spheres. We will explore how the GP can utilize our experience to act as advocates to bring this reality informed care into main-stream health systems and medical education.

**Results:** Three areas for presentation and discussion will be:

- 1) Integrating Street Medicine and Inclusion Health into medical education
- 2) Pathway Care Coordination in Hospital Settings
- 3) Primary care, public health and addiction medicine as part of a city-wide social system.

The workshop will include group discussion about future directions for the inclusion of marginalized groups into family medicine

**Conclusions:** We will explore how every workshop participant can implement innovations in their own practice for marginalized people starting the day after the conference has ended. Expressing our values we aim to bring compassion and vocation to the heart of clinical practice.

## W95

### **Structural and intimate partner violence: empowering family doctors with identification and management tools**

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**Background & Aim:** As stated by *The UN Declaration on the Elimination of Violence against Women*, adopted by the General Assembly on 20 December 1993, gender and domestic violence as a form of violence against women is a manifestation of historically unequal power relations between men and women, which have led to domination over and discrimination against women. Structural violence refers to a form of violence whereby social structures or institutions disadvantage particular individualism, for example sexism.

Gender inequality and intimate partner violence are unfortunately embedded deep in our societies. Despite the prevalence of these issues, medical students and GP trainees receive little if any training in the recognition and management of intimate partner violence.

The aim of this workshop is to equip Family Doctors and trainees with a set of tools that should improve awareness of structural violence issues as well as increasing confidence in the identification and management of intimate partner violence.

**Method:** After a brief introduction on structural violence, gender roles and fundamental theoretical aspects of Family Violence, participants will be divided into groups to discuss different scenarios that arise in daily practice. Groups will then report the results of their discussion for a final discussion on inequalities and Family Violence management in Primary Care.

**Results:** By the end of the workshop, participants should be familiarized with the concepts of structural violence and fundamental aspects of Family Violence as well as basic tools to identify and help family violence victims

**Conclusions:** Through a dynamic and interactive workshop we aim to encourage participants to reflect on concepts of structural violence and the necessary tools in order to recognize and manage domestic violence with confidence. A valuable insight into structural violence, stereotypes and family violence is the first step towards early detection, as awareness is the first step to change.

## W96

### **Using comparative experiences of Turkish and Irish general practice as a basis for designing the model consultation: a workshop**

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**Background:** in October 2015, while attending the WONCA Istanbul conference, an Irish GP spent a day visiting Turkish general practice. Subsequently, the Turkish GP paid a visit to Ireland and spent 24 hours visiting Irish general practice. These visits provided for contextual identification of and discussion about similarities and differences between general practice in Turkey and Ireland.

**Aim:** The aim of this workshop is to identify strengths and weaknesses of general practice in different countries, and in doing so, arrive at a generic model that draws on the very best aspects of a range of primary health care systems.

**Methods:** During a brief introduction, the workshop leads will compare their personal experiences of Turkish and Irish general practice, as well as highlighting positives and negatives of each. After dividing into groups, facilitators will engage participants in discussion about their own primary care systems using the framework of a SWOT analysis; namely strengths, weaknesses, opportunities and threats. By focusing on maximising the identified opportunities and strengths and minimising the identified weaknesses and threats, each group will be tasked with designing a generic high quality model of primary health care.

**Results:** At the end of the workshop, each group will present and discuss the generic model they have designed. These findings will subsequently be summarised to arrive at a single generic model for primary health care. The group outcomes and overall findings will then be written up for publication.

**Conclusions:** in addition to designing a high quality generic model for primary care, this workshop will also encourage participants to critically appraise the positives and negatives of their health care systems, appreciate the potential advantages and disadvantages of alternative systems, and in doing so, develop an understanding of how primary health care systems might be improved.

## OP49.01

### Use of emergency CCRE by patients with terminal cancer

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**Background & Aims:** Patients with cancer often experience complex pain and symptom control issues that can cause them to presentation to Accident and Emergency [A&E]. This aims to establish what proportion of patients with terminal cancer present to Accident & Emergency (A&E) departments in their last year of life, and to determine the commonest causes for their presentations.

**Methods:** Using GRO death data, we identified 4,407 patients who had died from cancer between 2011 and 2014. Data from each A&E attendance in their last 12 months of life was obtained, yielding 197 'presenting complaints'. Descriptive statistics were used to analyse the data.

**Results:** Of the 4,407 patients in the cohort, 1,668 patients (38%) used A&E in their last year of life. Of these, 797 (18%) presented more than once. The mean number of presentations was 1.4 with a range from 0-21 attendances per year. There were 197 different presenting complaints (PCs) recorded during these attendances. The commonest PCs were 'closed fracture' (9.5%), 'pneumonia' (7.1%), 'soft-tissue injury' (6.4%), 'chest pain' (6.0%) and 'shortness of breath' (5.2%). Of the top 10 reasons for presenting to A&E, four were pain-related presentations.

**Conclusions:** Over a third of patients with cancer present to A&E departments in their last year of life. Presentations are commonly due to uncontrolled pain. Adequate pain relief is an important factor in improving patient journey and minimizing unscheduled care use. This research can potentially identify factors associated with unscheduled care use and suggest clinical and service provision changes that could be made to improve the patient journey in patients with terminal cancer. Determining patient factors, care planning, and prescribing features that are associated with use of unscheduled care services is crucial to increase patients autonomy, facilitate greater continuity of care, and reduce demand on unscheduled care.

## OP49.02

### The perception of equity of care by European GPs involved in the quality field

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**Context and Aim:** Equity, though it is a fundamental dimension of quality of care, is rarely explored. EQuIP, European Society for Quality and Safety in Family Medicine, planned a survey to explore the perception of equity of care by GPs involved in the quality field.

**Method:** The participants were the national delegates of EquiP and some key informants. The survey was based on a self-administered online questionnaire, constituted of a mix of closed ended and open ended questions. We also interviewed some of the delegates during EquiP regular meetings or by email, in order to go deeper into their answers. We made a qualitative content analysis, with a low level of interpretation in order to stay as close as possible to the informants' experiences.

**Results:** We got answers from 39 delegates (89%) representing 24 countries, and from 9 key informants. Sources of inequity identified: health insurance status, the ability or not to afford out of pocket costs, GPs time and money constraints, waiting lists to secondary care, language and cultural barriers. The evaluation of equity as a dimension of quality almost never happens at the practice level. Ways identified to improve equity:

- 1) At the system level: universal health care coverage, lower or no copayments, strengthening of primary care, new types of remuneration taking into account the complexity of the patient; incentives for GPs to settle in most deprived areas;
- 2) At the practice level: inter sector cooperation with social workers, community oriented care, training on equity, working with translators, applying protocols, collecting data about social status in the medical records and applying to equity the quality improvement methods.

**Conclusion:** There is still much work to be done to promote equity as a key dimension of quality in general practice in Europe.

### **OP49.03**

#### **Z ICPC2 trend in GP health centers in central Portugal between 2009-2013**

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Several sources feed discussion concerning whether or not Portugal qualitative/quantitative differences in health related to the recent economic crisis (RPOPSS2012-2014). Diagnostic needs have been identified. Psychosocial problems can affect health. Studies indicate increased unemployment in the context of economic/financial crisis related with premature death. A 2012 study on the welfare Portuguese families (n=980) indicated 22.2% reported reduction in health spending. In families with > 1 unemployed (20% of total), it occurred in 39.9 % (SEATS, 2012). Increased anxiety/depression identified in Portugal by several sources, including GPs clinical records. A northern region preliminary data, indicated 30% increase in depression diagnosis between 2011-2012.

Weight of ICPC2 Zcoding in the GP records before and after 2011 in Central Portugal? What is the evolution in coding for consultation of Reason(S), diagnostics (A), therapeutic Plan (P)?

Observational study of GP records (ICPC2) in electronic form provided by Central ARS, SIARS, between 2009-2013 and relating to (S)(A)(P) of the various ACES. Obtained and analyzed using statistical programs Mim@UF and SPSS17.0.

While n° users (1,965,393 to 1,840,916) and clinical appointments (7,048,805 to 5,825,092) decreased between 2009-2013, the number of codes increased by Z(S)(1498 to 2276) and (A)(17,850 to 27,553). The number of consultations ICPC2 coded increased (to 77%) but it does not explain by itself the quantitative increase of Zcodes: increased up to 0.42% in (A) and 0.28% in (P) compared to total all ICPC2 codes. In 2013, 67 users were required to produce a single Zcode. In 2011 were 90 and 110 in 2009. Qualitatively, Z01, Z05, Z06 were the most often brought to the appointment(S) and perceived as important by GP(A) mostly after 2011.

Zcodes(P) decreased in 2011 and crescendo in 2012-13, most being Z62, Z50, Z45. The code Z58 - therapeutic listening/counseling is residual.

Chapter Z has little expression in GP records vs sociological studies, however there were significant fluctuations in the period considered. Decision for coding and time-consuming issues during appointments could have influenced results.

## **OP49.04**

### **The Global Health Exchange Fellowship, pilot programme**

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**Background:** The Global Health Exchange Fellowship was a six month pilot project aimed at making global health real through experiential learning for UK and Kenyan trainees in General Practice/Family Medicine and Public Health. The multi-professional and multi-cultural team had two consecutive placements in areas of deprivation, in a low income and high income country. The first was within a rural Maasai community in Kenya, and next was an inner city area in the UK.

**Methods:** Using Qualitative research methods, a health needs analysis was carried out in each community. Challenges to health, including socio-economic determinants, were identified and organised into themes by the fellows. These themes were prioritised by the communities using an innovative voting methodology developed by the fellows. Findings were presented to the local health authorities with the aim of informing resource allocation to improve health and reduce inequalities. and fed back to the communities. The Capability Approach was incorporated to encourage community ownership of solutions.

**Results:** Access to healthcare was voted as the number one priority in the rural Maasai community while Education was the top priority in inner city UK. Surprisingly there were a number of similarities in the results from both communities. For instance, Gender Inequality and Culture gave us significant concern as healthcare professionals, but these themes received the fewest votes in the "Very Important" category in Kenya (a low income country) and in the UK.

**Conclusions:** The Fellowship was a true exchange in terms of location, knowledge and experience. Through their participation, the fellows experienced remarkable personal and professional development. We learned that the challenges to health facing deprived communities globally are complex but similar, and require context specific solutions which take into account social determinants like culture and poverty. This calls for improved interdisciplinary collaboration to improve health and reduce inequalities.

## OP49.05

### Attitudes towards the elderly among the young family physicians in Turkey

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**Background:** Turkey is aging and the knowledge and attitudes towards the elderly among the health professionals becomes an important issue for the welfare of elderly. Family physicians (FP) role is important as they are easily accessible especially for elderly.

**Aim:** To determine attitudes of junior family physicians toward elderly by University of California at Los Angeles Geriatrics Attitude Scale (UCLA-GAS) as it can be an important basis for present and future education and practice planning of family physicians.

**Method:** It's a cross-sectional study where a questionnaire including UCLA-GAS is used. The study population is 260 junior FP (residents and FP in their first five years after qualification). UCLA-GAS studied by Reuben et al. (1998) is one of the scales used to assess attitudes of health care providers toward elderly. Its Turkish validity and reliability was studied by Sahin et al. (2012). It has 14 items assessed with a Likert scale. As one's score increases, his/her attitude assessed as more positive.

**Results:** Of the participants; %58.1 (n=151) women, %35.4 (n=94) of them were FP, and others were residents. Mean age was  $31.30 \pm 5.40$  (Range:24-55). Mean score of UCLA-GAS was  $46.85 \pm 5.63$  (Range:30-61). The participants aged  $\leq 30$  years had significantly ( $p=0.003$ ) higher scores ( $47.70 \pm 5.99$ ) than aged above 30 ( $45.68 \pm 4.89$ ). There was no statistically significant difference between residents and FP ( $p=0.989$ ) and between participants who had elderly health education (n=63) or not (n=197) ( $p=0.383$ ). However, duration of work increased score of UCLA-GAS decreased significantly ( $r=-0.216$ ,  $p<0.001$ ). Participants who had education voluntarily had higher scores ( $p=0.028$ ).

**Conclusion:** Family physicians who were interested in elderly as expected showed more positive attitude. However, physicians who were older, and worked longer duration had less positive attitude. It seems important to understand and prevent this unfavorable attitude change occurs in time.

## OP49.06

### **Nurse practitioners as a response to future challenges in out-of-hours primary care and its impact on general practitioners' caseload**

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**Background & Aim:** With an aging population and an increasing demand for care, out-of-hours primary care faces serious challenges. Previous study showed that it was possible in terms of safety and quality of care to provide out-of-hours care by a team of 4 GPs and 1 Nurse Practitioner (NP) (Wijers, 2012). The purpose of this study is to give insight in the optimum skill-mix of GPs and NPs in teams providing out-of-hours primary care.

**Method:** A quasi experimental study was undertaken at one "general practitioner cooperative (GPC)" as follow-up of the previous study. In the first stage of the study care was provided by a team of 4 GPs in the control condition and 3 GPs and 1 NP in the experimental condition. In the second stage care was provided by a team of 2 GPs and 2 NPs. Quantitative data is derived from patient medical records. GPs' work satisfaction was explored by interviews.

**Results:** The 3 GPs-1 NP team more often prescribed drugs compared to the team with GPs only (44.2 vs 41.3 p=0.03). There were no differences in ordering X-rays between teams. The 2 GPs-2 NPs team significantly more often referred patients to the Emergency Department compared to team with GPs only (14.7 vs 12.0 p=0.03). GPs' caseload changed significantly per stage resulting in treating more urgent patients and more digestive complaints. Despite changes in casemix, there were only minor differences in GPs' productivity per hour and work satisfaction between stages.

**Conclusion:** This study shows that a team of 2 GPs and 2 NPs is feasible to deliver care during out-of-hours. GPs delivered care convenient for their level of expertise; less complex patients received treatment by NPs. The impact of skill-mix was of minor clinical relevance and may be a suitable response for future challenges in primary healthcare.

**W97**

**WONCA Special Interest Group on Conflict and Catastrophe Medicine**

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**Background & Aim:** WONCA's special interest groups comprise groups of individuals who share a common interest that is consistent with the Mission and Objectives of The Organization. In 2015, the WONCA Executive approved the formation of a Special Interest Group on Conflict & Catastrophe Medicine (WONCA SIG on C&CM). The workshop proposer is the Convenor of the SIG on C&CM.

The aim of the SIG on C&CM is to consider the impact of conflict or catastrophes upon health and health inequality. The SIG currently comprises representatives from twenty countries spanning all WONCA Regions. The Executive Committee comprises one representative from each WONCA region. A WONCA SIG on C&CM webpage has been established. 'Pre-launch' information was circulated during the WONCA Rural Health Conference in Dubrovnik (15-18 April 2014) and a workshop was held at the WONCA Europe Conference in Istanbul (22-25 October 2015).

**Method:** A brief presentation by the Convenor, then group discussions about the WONCA SIG on C&CM, health inequality and the healthcare needs of displaced persons and refugees within Europe.

**Results:** The workshop will:

- Provide useful in-country and regional contacts and networks of family medicine doctors.
- Share best practice and developments in conflict and catastrophe family medicine.
- Discuss the management of medical services during conflict or post-catastrophe in areas that have big needs but are resource poor.
- Encourage collegial discussions between countries.

**Conclusions:** Military actions, conflict and catastrophes may all adversely impact upon quality of life, universal human rights, gender equity and health inequality. The Inverse Care Law highlights how those in the greatest need often received the lowest, if any, standards of care. The WONCA SIG on C&CM provides a forum through which WONCA can lend its support to improving the quality of care of peoples of the world when they face some of life's greatest challenges.

**Key words:** Humanitarian, Conflict, Catastrophe

## EP25.01

### **Prevalence of drug-related problems in residential care facilities for the elderly: a systematic review**

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**Background & Aim:** Multi-morbidity and polypharmacy of the elderly population enhances the probability of elderly experiencing drug-related problems (DRPs). The objective of this research is to systematic review the literature in order to assess the prevalence of DRPs in residential care facilities for the elderly.

**Method:** Databases (MEDLINE, EMBASE) were searched for literature from 2004 to 2014 to identify studies examining DRPs in residential care facilities for the elderly. Studies were eligible when relying on Beers criteria, STOPP, START, PRISCUS list, ACOVE, BEDNURS or MAI. DRPs are defined in accordance with the criteria of inappropriate medication use as defined by the seven instruments.

**Results:** Nineteen out of twenty-one studies meeting inclusion criteria, assessed DRPs relying on criteria defined by Beers et al.. Considering all versions of Beers criteria, studies report residents experiencing DRPs from 2.26% up to 82.6% (median 41.4%). A smaller range, from 14.5% up to 63.0% (median 34.9%), is reported considering solely – the most frequently referred to – Beers criteria updated in 2003. Prevalence varies from 23.7% up to 70.8% (median 53.8%) in studies relying on – the second most referred to instrument – “STOPP”.

**Conclusions:** Beers criteria updated in 2003 and “STOPP” are most frequently used in residential care facilities to determine DRPs. Prevalence of DRPs strongly varies, even when considering similar studies. Despite heterogeneity in data, hampering meta-analysis, this review suggest that researchers are aware of the necessity of careful drug monitoring in residential care facilities for the elderly.

## EP25.02

### Identification of post-stroke cognitive impairment in the UK

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**Background:** Cognitive impairment following a stroke is common. For one in ten individuals, this will convert to dementia within the first year following their stroke. In the United Kingdom (UK), stroke-survivors require a review of their cognition prior to hospital discharge and then six months following their stroke prior to discharge from secondary care. This is to ensure that those at the greatest risk of developing dementia are identified to the primary care team. The Sentinel Stroke National Audit Programme (SSNAP) audits the quality of stroke care in the UK, which includes the assessment of cognition following a stroke. At present, it is unclear what proportion of these individuals is being identified.

**Methods:** Data was extracted from the SSNAP's database (July 2013 – June 2015). Data collected included whether the patient was a) screened for cognition prior to hospital discharge b) screened for mood, behaviour or cognition since discharge at six-months.

**Results:** 76253 stroke-survivors were eligible for cognition screening; 73.9% of these individuals were screened for cognition by discharge. For those that were not screened, the reasons given were: medically unwell (15.9%), organisational reasons (5.8%), patient refused (0.8%), unknown (3.6%). At the 6-month review, 30143 stroke-survivors were eligible for assessment of mood, behaviour and cognition screening; 67.6% of these individuals were screened. 21.8% needed support with 61.5% of these individuals receiving the required psychological support.

**Conclusions:** One in five stroke-survivors need some form of psychological support for their mood, behaviour or cognitive difficulties. Around a third do not receive this support. It is currently unclear what happens to this subset of stroke-survivors, nor the long-term cognitive sequelae of all stroke-survivors with some cognitive deficit. Family doctors need to be aware of these individuals who are at increased risk of developing dementia to be able to identify and support them when required.

## EP25.03

### Beliefs and attitudes in changing lifestyle

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**Background and Aim:** Promoting a positive lifestyle change is a challenge to primary health care. The aim was to analyze health and risk related beliefs and attitudes in relation to life-style and life-style change in a rural community.

**Method:** The study was based on the five-year follow-up data of Lapinlahti study (N = 361). The same structured questionnaire was used at baseline and follow-up with lifestyle items (smoking, alcohol use, exercise and nutrition). These were ranked as unhealthy (-1), neutral or healthy (+1). A mean value of lifestyle scores (range -1 to +1) was calculated. At baseline, participants took a stand on 29 statements about health and health promotion on a 5-point Likert scale. A factor analysis was conducted. Two attitude factors (factor 1= self-sufficiency; factor 2=pessimism, explaining 89% of the total variance) were found and distributed to tertiles. Tertile I represents the most self-sufficient or most pessimistic attitudes. Factor scores were transformed to standardized POMP-scores. Four attitude dimensions were made: self-sufficient/pessimistic; self-sufficient/non-pessimistic; non-self-sufficient/pessimistic; non self-sufficient/non-pessimistic.

**Result:** There was a linear positive trend ( $P<0.001$ ) in baseline lifestyle scores between tertiles of factor 1. A positive follow-up change of lifestyle score was found in all tertiles of factor 1, the most significant ( $P<0.001$ ) being in tertiles I and II. For factor 2, the difference between tertiles at baseline was non-significant. There was a significant positive change in all tertiles of factor 2. According to the attitude dimensions, the least healthy lifestyle was found in subjects described as self-sufficient/pessimistic. Non-self-sufficient/non-pessimistic subjects had the healthiest lifestyle. Self-sufficient/non-pessimistic subjects had the most significant positive life-style change but self-sufficient/pessimistic subjects did not improve their lifestyle.

**Conclusions:** Beliefs and attitudes are related to lifestyle. Lifestyle change is possible but self-sufficient and pessimistic subjects seem to have the least healthy lifestyle and be the most resistant to lifestyle change.

## EP25.04

### Geographic and demographic differences in access to appropriate care settings for Type 2 diabetes in the Reggio Emilia Province (Italy)

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**Background & Aim:** According to Italian guidelines, two alternative appropriate care settings (ACS) for Type 2 diabetes (T2DM) should be set up: an Integrated Care setting (with shared management between the GP and Diabetes Clinics) when T2DM is well-controlled; and an exclusive Diabetes Clinics Care setting for the remaining cases. The guidelines do not envisage an exclusive GP care setting for T2DM patients. The aims of this study were to quantify and characterize cases of T2DM that were not included in ACSs in the province of Reggio Emilia, Italy.

**Method:** The study population consisted of T2DM-prevalent cases extant at the end of 2012, as retrieved from the Reggio Emilia Diabetes Register. Investigated variables were sex, immigrant status and residence district. Multivariate logistic regression was applied to estimate Odds Ratios (OR) and 95% Confidence Intervals (95%CI).

**Results:** At the end of 2012, 5235 out of 27,828 individuals with T2DM (18.8%) were excluded from an ACS. Women were at greater risk than men (OR 1.18, 95%CI 1.11-1.26), the immigrants than autochthonous (OR 1.14, 95%CI 1.00-1.30), as were the elderly as compared with middle-aged persons (70+ vs. 50-69: OR 1.40, 95%CI 1.31-1.50). T2DM patients residing outside the main district were more likely to be treated in an ACS, with the exception of district no. 5 (OR 1.34, 95%CI 1.24-1.46).

**Conclusions:** The disadvantage experienced by women and immigrants confirms the results found in other studies investigating quality of T2DM care, and suggests the need to focus interventions on reducing health inequalities in these groups. Older T2DM patients should be involved in ACS programs to a lesser extent because a portion of this group lives in retirement homes and/or has multi-morbidity, while differences associated with district of residence require that action be taken to balance recruitment within the province.

## EP25.05

### Neighbourhood deprivation and treatment for irritable bowel syndrome in primary health care and specialist care in Sweden

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**Background & Aim:** Many diseases are associated with socioeconomic disparities, such as neighbourhood deprivation. However, no study has determined whether neighbourhood deprivation is associated with irritable bowel syndrome (IBS). We aimed to determine whether there is an association between neighbourhood deprivation and primary health care and specialist treatment of IBS.

**Method:** The entire Swedish population (N= 5,504,751) aged 20-69 years was followed from 1 January 2001 until hospitalization for IBS, death, emigration, or the end of the study period (31 December 2010). Treatment for IBS in primary health care was determined for cases diagnosed in four Swedish counties (2001-2007). Specialist treatment of IBS was determined according to the nationwide Swedish hospital discharge register and the Swedish outpatient care register for 2001-2010. Data were analysed by multilevel logistic regression, with individual-level characteristics (age, marital status, family income, educational attainment, migration status, urban/rural status, mobility, and comorbidity) at the first level and level of neighbourhood deprivation at the second level.

**Results:** Totally 36,966 IBS cases (72.4% females) were identified. Neighbourhood deprivation was not significantly associated with IBS treatment in primary health care neither in women nor in men. However, women (OR = 0.90, 95% 0.86-0.96, p-value<0.001) but not men living in highly deprived neighbourhoods had lower OR for specialist treatment. Depression, anxiety, and chronic obstructive pulmonary disease was associated with increased OR for specialist and primary healthcare treated IBS both among women and men.

**Conclusions:** Neighbourhood deprivation is not associated with IBS treatment in primary health care. However, women living in highly deprived neighbourhood have less access to specialist health care treatment of IBS, even after adjustment for individual socioeconomic factors and comorbidities.

## EP25.06

### **A WHO Initiative: Meaningful engagement – the patient and family perspective**

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**Background:** Building relationships and partnerships between health-care professionals and those receiving health services can help to ensure safe and quality care. Through meaningful engagement patients are encouraged to play an active role in their own care, which results in a more effective and efficient consultation. The WHO Patients for Patients Safety (PFPS) programme, within the Service Delivery and Safety Department, has conducted a survey exploring important actions that health-care providers can take to make the patient feel meaningfully engaged and empowered. Through analysis of these results, key themes have been drawn out around respect, trust, compassion and knowledge-sharing.

**Aim:** To explore perceptions and encourage reflection on the concept of meaningful engagement from the patient and family perspective, and the important role it plays in delivering effective primary health care.

**Methods:** We conducted a three-round Delphi study inviting patients and patient advocates to express actions and interactions they would want from health-care providers. A list of 89 actions was presented to the participants asking them to rank which actions most correspond to ‘meaningful engagement’ in their view.

**Results and Conclusions:** After three rounds of ranking, seven actions considered most important for meaningful engagement from the patient perspective included showing respect and compassion, access to information, listening, quality consultation and discussion and inclusion of families. Active engagement in shared decisions about care options and plans are considered important element in meaningful patient engagement.

## EP25.07

### RespiRo initiative on asthma

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**Background & Aim:** Romanian Family Physicians (FPs) have a gatekeeper role which could offer them a key position in the management of patients with chronic respiratory diseases. In reality, several restrictions imposed by the National Health Insurance Fund (e.g. reimbursed inhalers prescribed by FPs only on a medical letter basis) have demotivated FPs and contributed to the absence of a structured primary care (PC) approach of patients with chronic respiratory conditions. Therefore the management of these patients is heterogeneous and inefficient. RespiRo is an initiative of a small group of FPs to build a network of PC practices able to manage respiratory patients at high standards. The “Practical approach of difficult to control asthma in primary care” is the first project of the group intended to provide to participating FPs knowledge, skills and support to restructure their daily practice regarding the management of patients with asthma.

**Method.** A two years programme with four main interventions:

1. a teaching program based on the SIMPLES instrument;
2. developing a local operational protocol focusing on the main guideline recommendations related to diagnosis and asthma treatment;
3. a system of exchange visits, tutoring and monitoring;
4. an established peer evaluation and feedback.

**Results:** At the end of 2015 was held the teaching programme which included 15 FPs. The group is now involved in developing an operational asthma guideline adapted to the national health care specific. The results will be represented by data gathered from:

1. one questionnaire applied before and after implementation of a good standard asthma care to each FP involved in the project;
2. one questionnaire applied before and after implementation of the guideline targeting asthma patients;
3. one focus group with 10-12 representative FPs aiming at recording their views regarding good asthma care opportunities and barriers.

This is an ongoing programme so only partial results will be available.

**Conclusions.** At the time of the presentation will be available an overview of the teaching programme and the final document on standard care concept and tools. The final conclusions will be available at the end of 2016.

Competing Interests: Financial and educational support from IPCRG/U-BIOPRED

## EP25.08

### Heart failure with preserved ejection fraction in primary and hospital care

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Heart failure with preserved ejection fraction (HFpEF) is as serious as systolic heart failure (HFrEF). Despite these patients are managed in both out-patient Primary Care (PC) and Hospital in- and out-patient Care (HC) there is little information concerning potential differences. The aim of this study is to describe outcomes, comorbidity and management of patients with HFpEF in these populations.

**Methods:** We used the prospective Swedish Heart Failure Registry in which 16364 patients (age 77.6±10.6, 49.7% women) had HFpEF (EF≥ 40%). 2481 patients were registered in PC and 13833 in HC. Baselines characteristics and Kaplan-Meier curves for all-cause mortality and first hospitalization rates are shown for overall and matched cohorts. The matched cohorts, 2010 patients, were matched for age, gender, systolic blood pressure and renal function.

**Results:** in the unmatched cohorts 1year-mortality rates were 8.7%, (95% CI 7.7; 9.9) vs. 24.9% (95% CI 24.2 ; 25.6) in PC vs. HC group. Time to first all-cause hospitalization was 401 vs. 219 days. in the matched cohorts mortality rates were 8.3% (95% CI 7.2; 9.6) in the PC group and 15.2%, (95% CI 13.6; 16.9) in the HC group. Hospitalization rates were unchanged. The PC group had less frequency of diabetes (21.5 vs. 30.5%), and atrial fibrillation (47.2 vs. 53.9%) and lower NYHA-class (23.0 vs. 33.3% in class 3 and 4.).

**Conclusions:** Patients in out-patient primary care with HFpEF have lower mortality, are more seldom readmitted and have less severe comorbidity compared to patients that are hospitalized or seen in hospital-based out-patient clinics. This may indicate a less aggressive type of HFpEF in the primary care cohort.

## **EP25.09**

### **Systematic inventive thinking 'inside the box': practical approach to creativity, innovation and problem solving to advance educational and professional goals**

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**Background:** The University of Nevada School of Medicine (UNSOM), Department of Family and Community Medicine, in Las Vegas, Nevada, in collaboration with Humboldt General Hospital, a critical access hospital located in rural Winnemucca, Nevada, High Sierra Area Health Education Center and independent solo practicing physicians, fostered the development of the Nevada Rural Health Network. This project involves implementing a rural community medical education and practice collaborative to strategically alter the location, curricular and patient base exposure of Family Medicine residents coupling core concepts in community based training with the delivery of health care services in rural communities to 1) expand access to essential health care services in rural communities of Nevada 2) create successful pilot programs for community engagement and professional physician and provider development and 3) deliver educational programs such as Basic and Advanced Life Support in Obstetrics. The use of systematic inventive thinking principles with limited resources created a basis for success of the network.

**Method:** The workshop will have interactive discussion and a quiz to gauge innovation level of audience members. A case example will be used to apply principles of Boyd and Goldenberg's inside-the-box method to innovate, create opportunities, and overcome obstacles with limited resources.

**Aims:**

- (1) Describe the process to engage a rural community to create a framework (Network) for professional development and graduate medical education activities at a distance from the University
- (2) Develop a conceptual framework using principles discussed to create engagement within a community that provides opportunity for professional development
- (3) Demonstrate Boyd and Goldenberg's inside-the-box method of systematic innovation
- (4) Apply principles discussed to have participants create a plan for use of an innovation technique presented to solve a problem or create a breakthrough.

Competing Interests: none for the author

## EP25.10

### **Treatment with statins prior to first time myocardial infarction, with special reference to patients with previously diagnosed cardiovascular disease**

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**Background and Aim:** Cholesterol-lowering therapy with statins is recommended in established cardiovascular disease (CVD) and should be considered for patients at high cardiovascular risk. We surveyed statin treatment before first-time myocardial infarction in clinical practice compared to current guidelines, focussing on patients with known CVD.

**Methods:** A total of 931 patients (345 women) in the region of Jämtland Härjedalen, northern Sweden were enrolled in the study between November 2009 and December 2014. The patients were stratified by prior CVD, comprising angina pectoris, revascularisation, ischaemic stroke or transitory ischaemic attack, or peripheral artery disease. We used logistic regression to identify determinants of statin treatment.

**Results:** Among patients with prior CVD, only 34.5% (57/165) received statin treatment before myocardial infarction. The probability of statin treatment decreased with age ( $\geq 70$  years OR 0.30; 95% CI 0.13-0.66) and female gender (OR 0.39; 95% CI 0.20-0.78) but increased in patients with diabetes (OR 3.52; 95% CI 1.75-7.08). In the entire study cohort, 17.3% (161/931) of patients were treated with statins; women  $< 70$  years old were more likely to receive statin treatment than women  $\geq 70$  years old (OR 3.24; 95% CI 1.64-6.38), and men  $\geq 70$  years old were twice as likely to be treated with statins than women of the same age (OR 2.22; 95% CI 1.31-3.76) after adjusting for diabetes and CVD.

**Conclusions:** In patients with prior CVD we found considerable under-treatment with statins, to the disadvantage of women and elderly patients. Methodologies for case findings, recall, and follow-up need to be improved and implemented to reach the goals for CVD prevention in clinical practice.

## EP26.01

### Depression and risk for atrial fibrillation

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**Background & Aim:** While it is known that depression and atrial fibrillation (AF) are each associated with increased risk of ischemic stroke, and depression is associated with greater AF severity, it is unknown if depression is associated with greater risk of developing AF. Therefore, we studied whether depression is associated with increased risk for incident AF.

**Method:** We performed a nation-wide, register-based, matched cohort study comparing all patients initiating antidepressant treatment during 2000-2013 with a reference group matched 1:5 on gender and birth-month. Hazard ratios (HRs) adjusted for civil status and comorbidity were calculated using stratified Cox-regression. To distinguish between possible effects of depression and antidepressants, HRs were evaluated both before and after treatment. Potential monitoring bias was assessed using data on the number of electrocardiograms (EKGs) performed in general practice.

**Results:** We identified 886,402 patients initiating antidepressant treatment. Patients had a markedly elevated risk of AF within the first month of antidepressant treatment (adjusted HR=3.24 [95% CI: 3.00-3.50]), gradually attenuating to 38% [31%-46%] greater risk after 2-6 months and 16% [10%-22%] for the rest of the first year. However, their risk for AF was even higher in the 2 weeks before antidepressant treatment (HR=4.29 [3.87-4.79]). In the 2 months surrounding antidepressant initiation, 3.6% of patients had an EKG in general practice, corresponding to approximately 4-times more EKGs versus the reference group (highest incidence rate ratio of EKG=4.42 [4.30-4.55] in the 2 weeks pretreatment).

**Conclusions:** The risk for AF is high shortly after initiating antidepressant treatment but the association need not be causal. An even higher risk during the two weeks prior to treatment suggests that the association could be due to depression or related factors. While patients treated with antidepressants were more likely to have EKGs done, this factor does not appear to completely account for the observed association.

## **EP26.02**

### **The perception of elderly Turkish migrants about the healthcare services in Denmark and Turkey**

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**Background & Aim:** The labor migration from Turkey to Europe has started in the 1960s and resulted in the formation of a significant Turkish population in Europe which has already reached old age. The need to use healthcare services increases with advanced age and the high frequency of chronic illness.

This research discusses the perceptions of older Turkish migrants living in Denmark about the health services in their home and host country. The health system and the migrant's sociocultural conditions have been discussed in accordance in order to identify the perceptions of the migrants about health services.

**Method:** Semi-structured questionnaires were performed on 27 people aged 50 and over using a phenomenological approach. Interview records were categorized into themes and subthemes and subsequently analysed by descriptive qualitative analysis.

**Results:** The results of the research revealed that healthcare service experiences are shaped by the structures of health services, by interpersonal relations besides sociocultural conditions of the respondents.

**Conclusions:** The structure of health systems, financial and political conditions shaping those structures are affecting the perceptions and the preference of services as well. Besides those factors, the advantages and disadvantages of the health systems in both countries pragmatically affect perceptions and practices. Revisions in health policies and structural interventions such as new bilateral agreements could be of help.

### **EP26.03**

#### **Trauma in Greek correctional facilities over the period of 2012 to 2014: A GP experience**

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Trauma in Greek correctional facilities consists of three main categories: self-injuries, violence episodes and swallowing foreign bodies or chemical substances. The prevalence of these incidents is high because of the inmate population characteristics. Prisoners' average age fluctuates between 20 and 30 years old, and they vary as far as ethnicity, race, religion and criminal behavior are concerned. In this study we documented and analyzed trauma cases of Korydallos Prison Complex “St. Paul” Hospital, Korydallos Judicial Prison and Central Women’s Prison over the time period of 2012 to 2014. The majority of self-injuries (140 cases, 4 deaths) included sharp force injuries of the upper extremities and neck, rare cases of evisceration due to incision of the abdominal wall as well as hanging. Violence episodes (449 cases, 1 death) in the incarcerated population were also a quite common cause of wounds caused by pointed and sharp-edged weapons (stab, incised or chop wounds), craniocerebral injuries or even death. This entry does not reflect the actual number of cases, since the majority of such incidents is recorded as accidents (e.g. falls from standing position) so as any disciplinary penalties to be avoided. The quality of the wounds often indicated homicidal intention and the weapons used were mostly improvised. Foreign body ingestion can be a challenge to multiprofessional approach involving medical, surgical, neurological and psychiatric teams. The majority of these cases (225 cases, 1 death) was treated conservatively, with only a small percentage having the foreign objects removed endoscopically and even a smaller one ending up on the surgical table. High recurrence and redundancy of this comparatively rare psychopathological behavior resulted in swallowing a variety of available objects such as razors, batteries, antennas, bed springs and wires (primarily male population) as well as chemicals such as chlorine or shampoos (mainly female population).

## **EP26.04**

### **Management of patients with excessive alcohol consumption in primary care: results of alco-ap study**

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**Aim:** To evaluate the knowledge, attitudes and practices of physicians and nurses of Primary Care (PC) in the implementation of preventive interventions of the Programme of Preventive Activities and Health Promotion (PAPPS)<sup>1</sup> regarding to patients with excessive alcohol consumption.

**Methods:** A descriptive, cross-sectional observational study conducted in health centers of the Spanish National Health System (SNS).

**Results:** from January 2014 to December 2014, 1116 health professionals (86% graduates in medicine and 14% nursing graduates) have completed an online survey, with an average age of 45 years (SD 9.3). 81% of all claims to know the recommendations described in the PAPPS, although only 67% of them recognized they had received specific training in the management of patient with excessive alcohol consumption in the last 5 years. 65% of professionals assured to do a systematic examination quantifying alcohol consumption through questionnaires, with a follow-up rate after detection of 72%.

**Conclusions:** our preliminary results indicate that the level of specific training that health professionals have received in the last 5 years about the approach to patients with excessive alcohol consumption is low. The diffusion of the recommendations outlined by the PAPPS on the clinical practice that health professionals have to perform in primary care setting about alcohol consumption detection and management is critical and is a priority for the Spanish health authorities.

## EP26.05

### **Medical students internship experience: an educational activity on puberty and sexuality in a public school of a Brazilian underserved area**

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**Background and Aim:** The Vila Velha University Medical School Students organized an educational activity on Puberty and Sexuality in a public school of a Brazilian underserved area. It aimed to discuss and problematize with teenagers about puberty and sexuality, in order to reduce the teenage pregnancy and the sexually transmitted diseases.

**Method:** The educational activity on Puberty and Sexuality took place in a public school of an underserved area, in Vila Velha, Brazil. There were 40 teenagers from 11 to 15 years old. It was presented by the medical students a speech approaching some subjects: Sexuality and Puberty Concepts; Body Changes; Teenage Pregnancy and Contraceptive methods STD/AIDS prevention. The students demonstrated the teenagers how to use some contraceptive methods, with the male and female reproductive system models. Besides that, the teenagers received pieces of paper to write down some questions in order to grant anonymity.

**Results:** The activity lasted almost two hours because of the teenagers' participation. They wrote down and asked aloud many questions, answered by the medical students. They had many doubts and felt safe to use the activity to expose them. It was noticed that the teenagers felt a lot better after the activity was over. They were more secure and confident about their choices. The principal, pedagogues, teachers and employees were implicated, promoting reflections and discussions among them.

**Conclusions:** It is extremely important to perform activities about puberty and sexuality in public schools, because it is a theme that most parents avoid to discuss with their children. For many teenagers who participated in the activity, it can be the only contact with the subject for a while. Educational Activities on sexuality may affect decreasing the teenage pregnancy and the sexually transmitted diseases, reflecting and changing their attitudes.

## EP26.06

### Evaluation of the e-learning module “The Sexually Transmitted Disease Consultation”

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**Background & Aim:** in the Netherlands, approximately 70% of all Sexually Transmitted Disease (STD) diagnoses are made by GPs. To support the knowledge, skills and attitudes of GPs towards patients with (suspected) STD, the interactive e-learning module “The STD-consultation” was presented by the Dutch College of General Practitioners (NHG) in 2013. This e-learning module contains a variation of educational methods, including role models and interactive video’s.

The aim of this oral or poster presentation is to present the results on the evaluation of the effectiveness of the interactive e-learning module “The STD-consultation”.

**Method:** By means of questionnaires, taken before, right after and maximum two years after completion of the e-learning module, information was obtained from participating GPs. Also, by means of open questions, participating GPs were asked if they made changes in their daily practice concerning STDs, after the completion of the e-learning module.

The results were analyzed both qualitative and quantitative.

**Results:** The data collected on 2192 GPs were used for evaluation. After completing the e-learning module, GPs stated that they more frequently ask questions about sexual behavior, they feel more competent in diagnosing and treating patients with STD, they are more aware of the possibility of a STD in patients with non-specific symptoms, they diagnose patients more often according to the guideline for STD, and they aim to achieve a more active investigation policy regarding HIV. These changes persist among GPs that completed the e-learning module more than one-and-a-half year ago.

Also, GPs indicated that in their daily practice concerning STD, they changed their sexual history taking and the conduction of additional investigation.

**Conclusion:** The interactive e-learning module “The STD-consultation” has contributed to a persistent change in the knowledge, attitudes and behavior of GP’s towards patients with a (suspected) STD.

## EP26.07

### **Child abuse. “Only it is recognized what is known”**

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**Background & Aim:** We are in the most absolute ignorance with regard to knowledge, diagnosis and performance. The Convention on the rights of the Child, UN, Art. 172 of the Civil Code defines the Child Abuse as any action (physical, sexual or emotional), negligent dealing or not accidental omission in the dealing towards a minor by their parents or carers, which causes physical or psychological harm and that threatens it's both physical and psychological development.

**Method:** Based on this concept, we have studied the usual scenes of child abuse, social classes affected by the problem and economic and socio-political situations that aggravate it. Reasons of underdiagnosing and few denunciations. The short and long-term outcome of the child abuse. Women with childhood history of abuse or neglect, Statistics of the consequences. Attitude of the doctor in suspected abuse. Types and forms of abuse: Emotional, Physical Abuse - Beaten child - Shaken Baby - Corporal Punishment Münchausen syndrome by proxy, Sexual abuse, Neglect and abandonment. Labour exploitation, Begging, Racial discrimination. Educational abuse. Forms of approach to the problem in the public Spanish health system

**Results and Conclusions:** Gandhi said: “Only it is recognized what is known” We hope to be able to convince the listener to keep in mind the possibility of the diagnosis of child abuse to be able to recognize it and act consequently.

## **EP26.08**

### **Pocket guide for chronic obstructive pulmonary disease appointments**

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**Introduction:** Chronic Obstructive Pulmonary Disease (COPD) patients can be a real challenge for every doctor. For family physicians is important a holist approach of this patients and their comorbidities as they have a significant impact on the prognosis. The multitude of comorbidities in this patients is a challenge, not only to clinical practice, but also in terms of health resource management. Therefor is mandatory to access this comorbidities as they can be co-responsible for exacerbations.

#### **Objectives:**

- Update knowledge on COPD comorbidities;
- Raising awareness of the contribution of comorbidities in exacerbations;
- Structured approach in the assessment of comorbidities in COPD patients;

#### **Methods:**

- Pre-test - assessment of current knowledge.
- Oral presentation using multimedia presentation tools:
- Overview of COPD - Access comorbidities and their influence in COPD
- Evaluation of knowledge (post-test). - Pocket guide for comorbidities assessment.

**Results:** At the end of the session participants should be able to evaluate the comorbidities of a COPD patient, in a family physician appointment, in a structure way, taking into account the objectives outlined in this workshop.

**Discussion:** The diversity and complexity of comorbidities demands a standard approach that improves knowledge of the patient. The COPD patient is complex and requires a holist approach. This workshop will enable family physicians to integrate knowledge of comorbidities in their day to day practice in a structure and easy way.

## EP26.09

### **Economic evaluation of the effects of routine use of NT-proBNP in general practice in North Denmark Region**

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**Background:** Chronic heart failure (CHF) causes dyspnea, edema and unusual tiredness and may be difficult to diagnose. NT-proBNP is a peptide which can effectively be used to exclude CHF in general practice and may substitute echocardiography as first-line investigation.

**Aim:** The aim of the study was to investigate from a health perspective the costs and consequences associated with routine use of NT-proBNP in general practice prior to echocardiography in secondary healthcare.

**Method:** A cost-effectiveness analysis (CEA) was performed using the software TreeAge Pro Healthcare 2015 estimating the costs and effect as the number of saved echocardiographs in secondary healthcare following the introduction of NT-proBNP in general practice. The CEA was based on a population of 95 patients recruited from 11 general practices in the North Denmark Region of whom 15 % had CHF. Age specific cut-off values for NT-proBNP were used: 50 ng/L for patients < 50 years, 75 ng/L for 50-75 years, and 250 ng/L for patients 75+ years. The study included an estimation of implementing NT-proBNP in all general practices in The North Denmark Region.

**Results:** The analysis showed expected costs of €208 and €271 based on the patient population for NT-proBNP investigation method and current primary healthcare, respectively. With NT-proBNP 65 % of the patients were referred to echocardiographs compared to 100 % of the patients with current practice. The incremental cost-effectiveness ratio (ICER) estimated that The North Denmark Region can save approximately €63 pr. patient with reduction of echocardiographs with 35 %. The ICER indicated that NT-proBNP investigation was preferable in relation to cost-effectiveness. It was estimated that The North Denmark Region totally can save €122.930 including 685 echocardiographs per year if implementing NT-proBNP.

**Conclusion:** The use of NT-proBNP in general practice is a cost-effective tool in order to detect and eliminate CHF in Region Nordjylland.

**Cooperation:** Roche Diagnostics, Nord-KAP, Biochemical department at Aalborg University Hospital, Cardiology department at Aalborg University

## EP27.01

### **Adhesive shoulder capsulitis, treatment with corticosteroid, corticosteroid with distension or watchful wait; a randomized controlled trial in primary care**

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**Background & Aim:** Adhesive shoulder capsulitis is commonly encountered condition in primary care with unclear management at present. We aimed to explore whether treating adhesive capsulitis (frozen shoulder) by injections with corticosteroid and distension is more effective than treating with corticosteroids alone or watchful wait.

**Methods:** In this randomized intention to treat study, 105 recruited patients were randomized to one of three groups: Group 1 received intra-articular corticosteroid injection and Lidocaine; group 2 received in addition sodium chloride as distension varying from 8 ml to 20 ml; group 3 served as control group. Patients in group 1 and 2 received four injections in 8 weeks, and all were assessed on the 1st visit, and the 4th and 8th week. Outcomes were measured with Shoulder Pain and Disability Index (SPADI), Numerical pain rating scale (NPRS) and passive range of motion (PROM). Postal assessment was repeated after 1 year for SPADI.

**Results:** Out of the 216 referred patients, 146 met the inclusion criteria. There were no statistical significant differences between the two injection groups in SPADI, NPRS and PROM at baseline, 4 weeks, 8 weeks or 12 months. There was statistically significant improvement in the intervention groups compared to no treatment at 4 and 8 weeks for SPADI ( $p < 0.01$ ;  $p < 0.001$ ), NPRS ( $p < 0.01$ ) and PROM ( $p < 0.01$  for external rotation), but not at 12 months ( $p > 0.05$ ). The effect size (ES) at 8 weeks was 1.18 between groups 1 and 3 and groups 2 and 3. At 12 months, ES was reduced to 0.26 and 0.38 respectively.

**Conclusion:** This study indicates that four injections with corticosteroid with or without distension, given over 8 weeks, were better than watchful wait in treatment of adhesive shoulder capsulitis, but no difference after 1 year, indicating its natural course.

Key words: adhesive capsulitis, corticosteroid, distension

Trial registration: ClinicalTrials.gov NCT01570985

## **EP27.02**

### **A qualitative study on how mindlines develop and their link with clinical guidelines**

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In 1739 David Hume famously stated the problem of induction: it is impossible to predict the future. This issue remains unsolved until this day. Contemporary philosopher Ian Hacking argues that we only have 'evasions' of the induction problem and that frequency type reasoning - the dominant type of reasoning underlying RCTs - is just one of many ways to do so.

While we may have taken frequency reasoning in EBM for granted, multi-morbidity, over-diagnosis and person centred medicine prove to be challenging. In order to cope with this, the Guideline International Network (G-I-N, a collaboration of NICE and other guideline developing institutions) started to explore how to appraise and include other types of knowledge. Many more types of reasoning appear to occur during guideline development processes. These could be important as they may help to develop guidelines when there is no clear frequency of events, for instance in rare diseases, complex interventions in social care or prediction in the single case scenario of a patient in everyday practice.

A better understanding of the epistemological assumptions that underlie medical knowledge creation is urgently needed. Using a more advanced perspective on knowledge in the form of Gabbay and Le May's mindlines (collectively shared, largely tacit knowledge influenced by past personal experience and interaction with others) and Lonergan's interpretation model (observation, interpretation, judgment and deliberation), we set up an international research study at the Universities of Oxford and Oslo.

The study combines ethnographies of guideline panels (e.g. at NICE) and large online fora (such as Facebook for GPs), with seminars using a meta-narrative setup. We want to explore what it is that EBM tries to accomplish, how to increase our knowledge base as efficiently as possible and how to improve our inductive inferences to benefit healthcare for patients when there is no frequency of events.

### **EP27.03**

#### **Family medicine, elderly and palliative care, a great exchange opportunity**

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**Background:** After the General Practitioner qualification I decided to develop my competence in Family Medicine and in Palliative Care, especially regarding the care of elderly people.

I enjoyed Giotto's Movement and Vasco da Gama Movement and I have participated to Hippocrates exchange with the idea to combine my interests in unique exchange with a great positive personal outcome.

**Aim:** Promote Hippocrates exchange and maybe inaugurate new kind of exchange, this is remarkable because many family doctors may work in nursing home or in hospice.

**Method:** Oral presentation/Workshop. Discuss and share my reflections on this experience. Auditorium feedback and suggestions for beginning to work on this project.

**Results:** The Exchange I have done was extraordinary under many aspects:

- 1) The opportunity to participate in different Family Medicine settings such as Out of Hours Service and Hospice,
- 2) The exchange was multi-professional, multi-disciplinary and multicultural,
- 3) The possibility to personalized the exchange,
- 4) I received a lot of positive energy and many stimuli for my current plan and research activity, I have learned many notions useful for projects for future.

**Conclusion:** I would discuss about this extraordinary experience in Copenhagen, It could be a great opportunity to promote other kind of Exchange with palliative care expert or elderly people expert.

I believe could be interesting discuss regarding this experience for the innovative approach and Copenhagen could be the right place to discuss and working on this project.

## EP27.04

### **Nordic Research Network on Children and Adolescents in General Practice**

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**Background and Aim:** At the Nordic Congress of General Practice in Tromsø in 2011, general practitioner researchers with an interest in research on child and adolescent health created a research network. Since then, an increasing number of researchers have joined the network. Our objective is to establish a forum for sharing knowledge and conducting collaborative research with children and young people in general practice in the Nordic countries. The scope of the network is to facilitate and promote interest and knowledge about research in child and adolescent health in general practice.

**Methods:** We conduct regular meetings of the network twice a year. Their scope is to keep participants informed about scientific findings in different countries, to collaborate in larger research funding applications and to facilitate and support each other's ongoing research projects. Furthermore, networking with local researchers and stakeholders in the field of child and adolescent health is facilitated. Additionally we participate as a group at international conferences with posters, symposia and workshops.

**Results:** The network has conducted meetings in Copenhagen, Bergen, and Oslo and the next is planned in Inverness, Scotland 2016. We have conducted symposia and workshops together at the Nordic Congress of General Practice in Finland 2013 and in Sweden 2015 with the topics of:

- “Most children are healthy but... Challenges in general practice when children are not well”
- “Challenges in research and in clinical practice when dealing with children's and adolescents' health and wellbeing in a family perspective”
- “Family matters - children and adolescents' health and wellbeing in a family perspective”

We are currently planning several publications and larger grant proposals are under preparation.

**Conclusion:** The network facilitates and nourishes international and national studies on child and adolescent health and new members are welcomed.

## **EP27.05**

### **A workshop to discuss a self-regulating learning template for trainees in general practice**

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**Background and Aim:** Continuing medical education is key requisite for trainee doctors. It requires self-regulated learning (SRL) on the part of the trainee and the optimisation of skills in this domain can establish improved life-long learning. Our workshop sets out to test a potential plan for doctors to improve their SRL skills.

**Method:** We adapted a model proposed by White et al (2014) that divides SRL into 4 categories: planning, learning, assessment and attribution. We applied key concepts in each category to make a schematic that covered 7 topics including medical theory, examinations, procedures, investigations, management and patient experiences. In each topic the doctor is encouraged to set goals and explore their motivations. They are directed to optimise learning strategies. They are instructed to periodically assess their progress and seek feedback. They are then guided to reflect on their experiences and adjust strategies accordingly. An adjustable template has been designed to incorporate and link all these facets. We aim to present the template at the workshop in the form of a poster and handouts.

**Results:** Each concept of the template will be discussed demonstrating the reasoning and evidence base guiding the concept. Participants will be introduced to key concepts in medical education to inform their own learning patterns. They will be able to discuss how practical and useful the template is and through this, find a structure that they can use for personal practice.

**Conclusions:** SRL is an educational strategy that can be used to initiate reflective, goal-based and motivated learning that incorporates self and external assessment. We aim to introduce these concepts to participants in the form of a template that they can discuss and adapt to their own learning needs. No competing interests declared.

References: 1) White, CB et al. (2014) 'Self-regulated learning in medical education', in Tim Swanwick (ed.) Understanding Medical Education. Evidence, Theory and Practice. 2nd edition West Sussex: Wiley Blackwell. p. 201.

## EP27.06

### The use of narcotic analgesics in a comprehensive palliative care center

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**Background and Aim:** Throughout the world cancer pain is undertreated in less than 50% and 10% of patients in developed and in developing countries respectively. WHO strongly advocates pain relief for moderate and severe cancer pain, but also reports that 80% of cancer patients have no access to opiates. In this study we aim to evaluate the use of narcotic analgesics in Comprehensive Palliative Care Center.

**Method:** We did a retrospective chart review of the patients who were hospitalized in palliative care service between 29.07.2013- 01.01.2015 with regard to the patients' demographics, primary cancers and complaints, length of stay, types of discharge and the use of narcotic analgesics. Descriptive statistics are reported as mean±standart deviation and percentage. Student t-tests, Mann Whitney-U tests and Chi-square tests were used to compare groups. A p value <0.05 was considered as significant.

**Results:** Mean age of the patients (n:360) was  $60.5 \pm 11.4$  (range: 34 -97). 51.4% of patients were woman and the most common primary origin of cancer was gastrointestinal tract The average length of stay was 10 days. and the most frequent type of discharge was home (65.6%) The most frequent two complaints were feeding difficulties and pain (57.8%), respectively. Weak opioids (49.5%), strong opioids (2.0%) and weak+strong opioids combinations (42.8%) had been preferred for pain therapy. No significant differences were found to exist between the sexes regarding the average length of stay, opioid use and presentation with pain.

**Conclusions:** Cancer pain is still one of the most feared entities and a challenging and continuous task which necessitates the treatment with opioids in about 75% of the patients with severe pain. We suggest an improved yet rational access to opioids in palliative care services.

**Key words:** Palliative care, Cancer pain, WHO 3-step analgesic ladder, Family Physician, Opioid

## EP27.08

### The awareness of serotonin syndrome regarding combinations of serotonergic agents in the comprehensive palliative care center

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**Background and Aim:** Serotonin syndrome results from the elevated serotonergic activity in central and peripheral nervous system which is characterized with mental status changes, neuromuscular hyperactivity, and autonomic instability in the patient. It is a rare, yet a dangerous complication of concomitantly used serotonergic medications.<sup>1</sup> Terminal stage cancer patients usually receive polytherapy for the prevention or treatment of various symptoms such as pain, nausea and vomiting and depression. Therefore, drug-drug interactions (DDIs) between serotonergic drugs and opioids are possible. Our aim is to highlight this issue by presenting our treatment approach to a cancer patient who received a polytherapy in our palliative care unit.

**Case summary:** 69 years old male patient who was diagnosed lung cancer one year ago was admitted to palliative unit with diarrhea, vomiting, nausea, nutrition problems and pain complaints. His therapy included fentanyl, escitalopram and metoclopramide (Table 1). His order was reviewed by a clinical pharmacologist and multiple serotonergic agent use was noticed. We detected a major interaction between fentanyl and escitalopram and moderate interaction between metoclopramide and escitalopram regarding serotonin syndrome by screening several evidence-based databases.<sup>2,3,4</sup> However we decided not to change the treatment plan and closely observe the patient after a benefit versus risk assessment. No symptoms of serotonin syndrome was detected.

**Conclusion:** The drug groups which is frequently preferred in palliative care units can lead to enhanced serotonergic activity (Table 2). Because the incidence of the interaction appears rare (less than 1/1000)<sup>4</sup>, a risk versus benefit assessment led us to continue with the existing drugs, with a close-monitoring of the patient regarding possible serotonin syndrome findings. However, this decision should be given on a case-by-case basis. Clinicians should be aware of the serotonin syndrome and avoid unnecessary combinations of serotonergic agents in palliative care patients.

## PS1.001

### Are our obese, diabetic patients controlled properly?

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**Background & Aim:** To analyse the profile of degree of control of HbA1c, blood pressure and cholesterol of obese, diabetic patients in primary health care.

**Method:** A descriptive, transversal study of obese, diabetic patients treated at an urban primary medical health centre. To diagnose obesity, a BMI  $IMC > 30$  was used. To ensure a correct control, the values recommended by the ADA 2015 were used (blood pressure  $< 140$  mmHg and  $< 90$  mmHg, LDL  $< 100$  mg/dl, HbA1c  $< 7\%$ ). Averages were used for quantitative variables and percentages for qualitative variables.

**Results:** 40 subjects were analysed with an average age of  $68.73 \pm 11.2$  years, mainly male (57.5%), glomerular filtration of  $57.6 \pm 7.3$  and a BMI of  $33.53 \pm 3.56$ ; the average LDL was  $94.4 \pm 27.8$  mm/dl, HDL de  $43.95 \pm 9.2$  mm/dl, triglycerides of  $133.1 \pm 59.9$  mm/dl and HbA1c  $7.4\% \pm 1.8$ . The average BMI was  $33.49 \pm 4.5$ . 17.5% were smokers. 70% controlled their blood pressure correctly; 74.4% their HbA1c; 70% their LDL, and 72.5% their level of triglycerides 72.5%. 82.5% used statins, 72.5% used oral anti-diabetic medicine (mainly Metformin - 65%, DPP4 inhibitors - 37.5%, Repaglinide - 10%, GLP1 - 75%, and sulphonylureas - 5%) and 25% used insulin. 27.5% had some type of complication, mainly peripheral arterial disease (12.5%), coronary disease (10%) and ictus (7.5%).

**Conclusions:** The profile of an obese, diabetic patient is one of a 68 year old male, non-smoker, treated with Metformin. 25% of patients have some complication. The degree to which blood pressure, lipids and HbA1c is controlled can be considered to be good according to international indicators. Most require pharmacological treatment in order to achieve the recommended control figures.

## PS1.002

### Study of the control of diabetic patients with adverse cardiovascular events. Are we controlling high risk correctly?

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**Background & Aim:** A study on the degree of the control of diabetic patients with adverse cardiovascular events and a comparison with those who do not have these.

**Method:** Transversal, descriptive study of diabetic patients treated at an urban primary care medical centre. An adverse cardiovascular event was considered to be the existence of a cerebrovascular accident, peripheral vascular or cardiac disease. To calculate that the control is correct, the values recommended by ADA 2015 were used (blood pressure <140mmHg and <90mmHg, LDL<100mg/dl, HbA1c<7%). Averages and typical deviations were used for quantitative variables and percentages for qualitative variables.

**Results:** 100 subjects were recruited. 23% had an adverse cardiovascular event. The patients with an adverse event had an average age of 75.2±8.1 and were mainly male (52.2%). The average values found were HbA1c 6.5±0.8%, LDL 82.3±27.9mm/dl, triglycerides 142.6±8.2mm/dl, TAS 136±13.3mmHg and TAD 69.6±8.7mmHg. The patients with no adverse cardiovascular event had an average age of 68.7±12.4 and were mainly male (57.1%). The average values found were HbA1c 6.6±1.1%, LDL 97.4±28.2mm/dl, triglycerides 117.8±54.8mm/dl, TAS 136.5±13.6mmHg y TAD 74.1±10.6mmHg. On comparing diabetics with and without adverse events, 65.5 vs 73.3% (p=0.45) had their TA well controlled, LDL: 82.6% vs 64% (p=0.09) their LDL, triglycerides: 60.9 vs 81.3% (p<0.05), and HbA1c: 82.6vs71.6% (p=0.29). Establishing LDL<70 as a limit, the control was 10.7 vs 26.1% (p=0.06).

**Conclusions:** The degree to which risk factors for diabetic patients with adverse events are controlled, despite being high risk patients, is worse than those with no adverse events. Only in the control of triglycerides is the difference statistically different. We should modify the control and treatment of these patients to avoid future complications.

### PS1.003

#### Do we control diabetic patients according to international recommendations?

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**Background & Aim:** To analyse the characteristics of diabetic patients and the degree to which the recommended guidelines are complied with.

**Method:** A transversal, descriptive study of diabetic patients treated at an urban primary care medical centre. To calculate a correct control, the values recommended by ADA 2015 were used (blood pressure <140mmHg and <90mmHg, LDL<100mg/dl, HbA1c<7%). Complications were considered, such as the existence of strokes and peripheral vascular or cardiac disease. For quantitative variables, the average and the typical deviation were used, and percentages were used for qualitative variables.

**Results:** 100 subjects were selected, with an average age of 70.2±11.8, mainly male (56%), a BMI of 29.1±4.6, a waist measurement of 102.3±10.9 cm, a glomerular filtration of 58.42±7.4, of which 13% were smokers, and 23% presented some type of complication. The average values found were HbA1c 6.6±1.1%, LDL 93.89±28.7 mm/dl, HDL 47.8±12.97 mm/dl, triglycerides 123.6±62.9 mm/dl, TAS 136.4±13.4 mmHg, TAD 73±10.3 mmHg. 71.4% fell within the TA control figures, 68.4% the figures for LDL, 76.5% those for triglycerides and 74.2% those for HbA1c. As far as treatments are concerned, 69% had been prescribed an oral anti-diabetes medication, 21% insulin, 3% GIp1 and 75% a statin.

**Conclusions:** The degree to which important risk factors such as high blood pressure, LDL and HbA1c are controlled in a diabetic patient could be improved, as many of the recommendations given in the main guidelines are not fulfilled, particularly in the case of LDL. The profile of a diabetic patient treated is a 70 year-old male who is overweight, does not smoke, and who has been prescribed an oral anti-diabetes medicine and a statin.

## **PS1.004**

### **Intraosseous infusion: a good alternative**

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**Background and Aim:** The intraosseous infusion is a good alternative for intravascular access, bringing together some optimal conditions and is effective when administered treatments in emergency situations. At present the interosseous infusion (IO) is listed as a second option on the recommendations of the American Heart Association (AHA) Guidelines Advanced Trauma Life Support (ATLS).

**Goals:** Determine the management and use of the interosseous infusion with the nurse of the different points of attention to urgent health department ?

#### **Material and Methods:**

- Descriptive observational cross -study?

- Population 80 nurses working in various parts of the emergency that make a self-completed questionnaire with the following variables: age, sex, emergency accredited training and dependent variables.

1. What would be the infusion would choose if you can channel an IV in cardiac arrest?

2. Do you know what the infusion line recommended by the AHA in its last renovation in 2010, if the intravenous infusion does not exist and there is a vital commitment of the patient?

3. Have you received training on the interosseous infusion?

4. of 0 to 10 indicate your level of knowledge about this pathway.

5. Have you ever used the interosseous route?

**Results:** The average age was 39.44 DS 12,172 women were 53 males and 27; 62.5% have accredited emergency training; 68.8% would choose the interosseous infusion with alternative to the venous line, 90% know the recommendations of the AHA 50% has been trained IO, 28.7 have high average knowledge and have only used the IO 3, 8.

**Conclusions:** We emphasize education to use IO to stimulate the use of the same.

## PS1.005

### Cardiovascular risk and ankle-brachial index evolution in a population cohort at 5 years of follow-up

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**Background:** Atherosclerosis is currently considered a chronic, progressive systemic disease of multifactorial aetiology including arterial hypertension, hypercholesterolemia, diabetes mellitus and smoking as modifiable risk factors and age and sex as non modifiable factors . These factors have been integrated in prediction tables based on regression models with the aim of detecting the population with a high risk of cardiovascular events. in subjects with high vascular risk, the determination of ankle-brachial index (ABI) may provide relevant information on the presence of sub-clinical arteriosclerosis and future vascular events.

**Aim:** The evolution of cardiovascular risk and ABI in a population cohort at 5 years of follow-up.

**Method:** Prospective follow-up of a population cohort including 3786 patients > 55 years assigned to 28 health primary care centers settled at an urban and semi-urban environment. Followed for five years (2006-2011), a second cross-sectional evaluation was performed in (2011-2012). The cardiovascular risk was determined by the Framingham and Framingham adapted to the Spanish population (REGICOR). The ankle-brachial index determination was performed in a standardized method.

**Results:** The average cardiovascular risk in the first cross section (2006-2008) was 5.8% and at follow-up (2012-2013), the average was 5.5%. The same happened with the Framingham (14.2 vs 13.7) respectively. The difference found between baseline cohort and follow cohort was -0.24 to -0.51 for REGICOR and Framingham. Mean ABI observed at baseline was 1.09 and mean ABI at follow-up 1.12. The linear correlation between baseline ABI and that at follow-up was low ( $r = 0.23$ ).

**Conclusion:** in addition to cardiovascular risk behind the perspective of primary prevention, the development of strategies to allow for the identification of sub-clinical atheromatous is needed.

## PS1.006

### Progression and risk factors of peripheral arterial disease in a population cohort after 5 years of follow-up

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**Background:** Peripheral arterial disease(PAD) is a major cause of decreased quality of life, lower life expectancy and is a major cause of morbidity and mortality. With regard to quality of life, 10-20 % of the subjects with PAD have intermittent claudication and up to 50 % may have atypical symptoms in the lower extremities. In addition, PAD triples the risk of mortality and major cardiovascular events including myocardial infarction and stroke.

**Aim:** To know the progression of PAD as a marker of subclinical atherosclerosis.

**Method:** Prospective follow-up of a population cohort including 3786 patients > 55 years assigned to 28 health primary care centres. Followed for five years(2006-2011), a second cross-sectional evaluation was performed in(2011-2012). The progression of PAD is considered on finding a decrease >10 % in the minimum ankle brachial index(ABI) values of either of the extremities over time compared to baseline. The ABI determination was performed in a standardized method.

**Results:** In healthy patients (normal baseline ABI) a decrease in ABI >10 % was observed in 15 % (n = 326). The multivariate model showed the risk factors positively and significantly associated with PAD progression (decrease in ABI > 10 %) were: age (OR 1.03), former smoker (OR 1.42), current smoker (2.04), physical activity moderate limitation (OR 1.34), primary education level (OR: 0.52), secondary education level or university (OR 0.65).

**Conclusion:** In primary care it would be important to insist on controlling modifiable risk factors that influence the progression of PAD such as smoking habit and physical activity.

## **PS1.007**

### **Cutaneous ulcer - dermoscopy**

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**The case:** We reported a 80 -year- old woman with skin phototype II, included in the home care program, with hypertension, dyslipidemia, peripheral artery disease and bronchitis. Visited at home by ulcer in the left outer side arm 5x3,5 cm succulent and bright areas, with very slow growth and few itchy, 1 year of evolution, and not improved with standard treatment for skin ulcers. Dermoscopy was performed at home, watching non-pigmented lesion with branched telangiectasias, wagon wheel and ulcerations. Suspecting basal cell carcinoma by dermoscopy, the patient was referred to specialized dermatology. Basal cell carcinoma accounts for 80 % of skin cancers that produce local destruction, slow and progressive growth and rarely metastasize.

**Method:** Dermoscopy - It is a low-power microscope that sometimes use a fluid contact as interface or a polarized light in order to reduce interference from the skin surface due to light scattering.

**Results:** Punch at 2 areas, resulting in pathology: infiltrative and ulcerated basal cell carcinoma. The appropriate indications for dermoscopy are pigmented skin lesions, evaluation of non-melanocytic tumor lesions and inflammatory diseases, skin infections and skin and nail changes.

**Conclusions:** The dermoscopy in primary care screening is noninvasive, simple, fast and economical for displaying cross skin lesions even in home care. The clinical atypia is not correlated with histological atypia, but correlation between the dermatoscopy and histological diagnosis has been demonstrated statistically significant.

## **PS1.008**

### **Dyspnea at 66**

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**Background and Aim:** A 66 year old man with no history of interest, who refers dyspnea with minimal effort, without other symptoms of interest. Physical examination anodyne.

**Method:** The following additional tests were performed: Normal hemogram, basic biochemistry and coagulation. Transaminases, cholesterol, total bilirubin, alkaline phosphatase, thyroid hormones and tumor markers without alterations. Thoracic Xray with cardiomegaly. No electrocardiographic changes. Given the clinical findings, the patient was referred to cardiology consultation.

**Results:** The patient was diagnosed of Atrial Myxoma and was referred to thoracic surgery service. The tumor had surgery and the patient is currently being treated with heparin and is awaiting for the results of the pathology.

**Conclusions:** Myxoma is the most common primary benign cardiac tumor. In 90% of cases, the myxoma usually occurs unilaterally. The left atrium is the most common site in 75% of cases, followed by right atrium and ventricles. Right atrial myxomas can remain undiagnosed indefinitely due to nonspecific symptoms that accompany them.

## **PS1.009**

### **Getting diagnosis with an abdominal Xray**

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**Background & Aim:** 50 year old woman, native of Morocco, resident in Spain for 15 years. She works as housewife. She comes to our consultation for pain in right hypochondrium, for one week. Not fever. She says that it is always constipated.

**Method:** Good general state. Abdomen: depressible, without masses. Painful to palpation in right hypochondrium, without signs of irritation peritoneal. Bowel sounds presents. In view of the precedent of constipation and the persistence of the pain, we request an abdomen X-ray, thinking about possible accumulation of dregs or gases causing of the pain.

**Results:** Abdomen X-ray: calcified image in right hypochondrium compatible with liver cyst of approximately 7 centimeters. Because of the radiological finding we request analytical of blood and parasites in dregs. Analytical blood normal. Parasites in dregs negatives. According to the World Health Organization(WHO) pathological classification of CE liver cysts are divided into six (CL, CE1-CE5). Final stages are represented by CE5, referring to inactive cysts that have lost their fertility and are degenerating. We suppose that is the stage of our patient, even so we derive to Tropical Medicine consultation to complete study and treatment.

**Conclusions:** Hydatid disease is a parasitic infestation by a tapeworm of the genus Echinococcus. It is not endemic in Spain, but the change in the immigration patterns over the past 4 decades have caused a rise in the profile of this previously unusual disease throughout Europe. Pressure effects are initially vague. They may include nonspecific pain, low-grade fever, and the sensation of abdominal fullness. As the mass grows, the symptoms become more specific because the mass obstructs specific organs. In the liver, the pressure effect of the cyst can produce symptoms of obstructive jaundice and abdominal pain. With biliary rupture, the classic triad of biliary colic, jaundice, and urticaria is observed.

## **PS1.010**

### **Health conditions and healthcare expenses among undergraduate students at Prince of Songkla University receiving medical care at Songklanagarind Hospital**

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**Background:** As most of undergraduate student's health problem is preventable, health survey in this population is essential in developing a better health care system and implementing public health intervention.

**Aim:** To determine the incidence of diseases among undergraduate students at Prince of Songkla University receiving medical services at Songklanagarind Hospital's outpatient department or at Student Health Center and to evaluate the medical expenses of undergraduate students' visits in academic year 2013.

**Method:** in this retrospective study, we collected secondary data of all undergraduate students' visits at the outpatient department of Songklanagarind Hospital or at the Student Health Center between 1st June 2013 and 31st May 2014 from Songklanagarind Hospital Information System. Datasets consisted of hospital number, data of visit, clinic, ICD-10 code diagnosis, medical expenses, doctor code, date of birth, national and student ID. Data analysis was done using R program version 3.1.1.

**Results:** Top three causes of hospital visit of undergraduate students by ICD group are respectively respiratory disease, injury and health checkup. While, top three ICD-10 diagnoses are common cold, health checkup, and pharyngitis, with the incidence of 92.7, 69.9 and 44.3 per 1000 people respectively. Total medical expenses of all undergraduate students' visits in academic year 2013 that were covered by Songklanagarind Hospital were 169,523 USD. The median of expenses per person was 4.6 USD (IQR 22). The median of expenses per visit was 2.5 USD (IQR 6.1). Top three ICD groups with highest total medical costs were injury (34,673 USD), respiratory diseases (19,952 USD), and musculoskeletal diseases (14,668 USD), respectively.

**Conclusion:** Common diseases among undergraduate students are acute preventable diseases, the biggest problem being injury and respiratory disease. Injury is accounted for the highest total medical expenses among undergraduate students.

## PS1.011

### Overcoming challenges in a young woman with uncontrolled asthma despite inhaled corticosteroid therapy

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#### **Background:** Patient Presentation:

28 Year old female with poorly controlled asthma (frequent episodes of cough, wheezing and shortness of breath). Oral steroids and antibiotics twice in the past 12 months.

#### Pertinent Medical History:

Diagnosed demonstrable, reversible airway disease on several occasions using both spirometry and peak flow.

#### Current Medications:

Fluticasone propionate/salmeterol 250/50 ng accuhaler twice daily.

Salbutamol MDI as rescue inhaler

Patient does not smoke

#### **Method:** Examination and Laboratory:

Total IGE: within normal limits. Specific IgE for grass pollen: high.

Weight: 62 Kg. Height 172 cm. BP 120/70 mm Hg.

FEV1: via spirometry: 92% predicted.

Chest X-Ray: normal.

Therapeutic for the patient: control of asthma symptoms: coughing, night waking, wheezing, shortness of breath.

#### **Results:** Options for Improving Asthma Control:

- Increase ICS dose inc ICS/LABA Therapy

- Add an additional agent to existing ICS/LABA therapy: LTRA, Tiotropium Selection of add-on Therapy for the patient: Tiotropium 5 ng via Respimat Softmist inhaler added to ICS/LABA therapy.

After 4 weeks, The patient reports significant improvement in: control of asthma symptoms and quality of life and ability to exercise, participate in social activities.

**Conclusions:** Management of uncontrolled asthma can be challenging, even in cases of clear, uncomplicated asthma without comorbidity. Systematically consider the reasons for control and intervene where required. Consider the evidence and applicability for new therapeutic options and weigh the benefits and risks.

## PS1.012

### Factors associated with malnutrition in patients in home care.

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**Background & Aim:** To assess the nutritional status of patients in the home care program (HCP) and analyze associated factors.

**Method:** An observational, descriptive and transversal study. 455 patients over 65 years HCP three urban health centers, 212 were selected by stratified sampling doctor and place of residence. Nutritional status was determined by applying the questionnaire MNA (Mini Nutritional Assessment). sociodemographic, anthropometric, dependency, emotional and cognitive status, and laboratory parameters: In addition 57 variables were collected. A descriptive analysis of the main variables was performed. associations were analyzed by applying chi square analysis of variance. Levels are considered significant for  $p < 0.05$ .

**Results:** 80.7% were women and the mean age was 83.9 (SD = 7.4). 65% lived at home and 34.9% in a residence. 40.1% were at risk of malnutrition and 21.2% malnutrition. It has been associated with poorer nutritional status older ( $p = 0.03$ ) and live in a residence ( $p = 0.04$ ). Also with lower values: the weight ( $P = 0.03$ ), body mass index ( $P = 0.002$ ), arm circumference ( $p = 0.0001$ ) and calf ( $p = 0.0001$ ) and with parameters low analytical: hemoglobin ( $p = 0.01$ ), albumin ( $p = 0.0001$ ) and iron ( $P < 0.05$ ). Most functional dependence ( $P = 0.0001$ ) and cognitive impairment ( $P = 0.0001$ ), are also associated with poorer nutritional status.

**Conclusions:** There is a high prevalence of malnutrition (more than half of patients in the HCP are malnourished or at risk of it). It is recommended that a nutritional systematically evaluating these patients, especially those more dependent and cognitively impaired patients, since there are some parameters that can be corrected.

### **PS1.013**

#### **Prevalence and conditioning factors for breastfeeding on São Miguel Island**

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According to the 2005/2006 National Health Inquiries, Azores is the Portuguese district with the lowest breastfeeding rates (BR): 25% and 10% at 3 and 6 months, respectively.

**Objective:** To determine the prevalence and conditioning factors for breastfeeding in São Miguel Island. An observational, analytic and retrospective study was conducted, applying a questionnaire to a specific population of São Miguel's Health Care Unit between 15/09/2014 and 15/03/2015. The studied population was obtained from a convenience sample. We interviewed mothers of infants between 6 and 12 months of age. BR at birth was 74.2%, decreasing to 17.7% at 6 months. The largest decrease in the BR was of 21%, at the end of the first month ( $p < 0.001$ ). The three major reasons for breastfeeding cessation were: not enough breastmilk (71.7%); mom disliking breastfeeding (26.1%); and baby crying due to hunger (17.4%). We found an association between the 6th month BR and marital status ( $p = 0.026$ ), family income ( $p = 0.025$ ), the mother's professional status ( $p = 0.020$ ), previous breastfeeding experience of at least 3 months and 4 months ( $p = 0.019$ ,  $p = 0.009$ ) and exclusive breastfeeding during the first month. We can conclude that women who have an outside job, those with a higher monthly income and those who are able to keep exclusive breastfeeding for the first month are the ones who breastfeed longer. The success of BR at 1 month is a predicting factor for BR at 6 months. Therefore, our goal is to assist mothers, especially during the first month of motherhood, in order to increase BR.

## PS1.014

### How do we manage the heart failure in primary health care?

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**Background & Aim:** Heart failure is a major public health issue with the worldwide prevalence about 2-3%. The aims of this study were to determine a prevalence of congestive heart failure, pharmacological treatment and control of cardiovascular risk factors in patients attended family medicine practice.

**Method:** This retrospective study was conducted in Family Medicine Teaching Center Tuzla and included 57/1490 patients with diagnosis of congestive heart failure who were registered in one family medicine team. We evaluated age, gender, duration of heart failure, cardiovascular risk factors (smoking, body mass index, physical activity, blood pressure, lipid profile), ejection fraction of left ventricle (EFLV) and pharmacological treatment for heart failure.

**Results:** Prevalence of heart failure in family medicine team was 3,82% (57/1490). There were significantly more women than men (61,4% vs. 38,59%;  $p < 0,05$ ). Mean age of patients was  $71,62 \pm 4,57$  years. Majority of patients were older than 65 years (85,96%). Mean duration of heart failure was  $8,29 \pm 6,31$  years. More than half of patients (59,6%) were in NYHA functional class II. Majority of patients had EFLV 30-50%. The most prevalent uncontrolled cardiovascular risk factors were overweight and obesity (87,72%), dyslipidemia (56%) and physical inactivity (49,1%). The most common cause of heart failure was hypertension (52,63%) which was controlled in 47 (82,45%) patients. The most prescribed medications for patients with heart failure were ACE inhibitors or angiotenzin II receptor blockers (85,9%), beta-blockers (77,2%), and diuretics (61,4%).

**Conclusions:** Prevalence of heart failure was higher compared to world database. This condition affected more women than men, and its prevalence greatly increased with advancing age. Our main goals should be to improve the quality of life, reduce the number of hospitalizations and prolonged life expectancy of patients with heart failure in primary care setting.

## PS1.015

### **Questionnaire based urinal dysfunction measurement in daily family doctor practice. A two-countries comparative study**

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**Background and Aim:** Benign prostate hyperplasia is the most common men disease causing urinal dysfunction. I-PSS is the most popular questionnaire for urinal dysfunction symptoms evaluation. The aim of our survey was to evaluate the relevance of I-PSS questionnaire and the influence of other variables in relation to urinal dysfunction and quality of life due to urinary symptoms.

**Method:** A prospective, limited time, cohort study was carried out during 2015 in Lithuania and Romania. 375 men from Lithuania and 2075 from Romania, 50-75 years old, were asked to fill in a questionnaire containing a simplified I-PSS questionnaire and additional questions. Calculations were made using SPSS 20 and R.

**Results:** The mean age was 59 years (Lithuania) and 62 years (Romania). Multiple correlations have been found for both countries between all the symptoms in the scale and age ( $p<0.05$ ). Older men had more severe urinal disorders than younger in both countries ( $p<0.05$ ). for 62.4% (Lithuania) and 43.1% (Romania) quality of life due to urinary symptoms was good, for 34.4% (Lithuania) and 38.7%(Romania) fair and for 3.2% (Lithuania) and 18.2% (Romania) bad. The score of symptoms was significantly different between the patients with benign prostate hyperplasia and the remaining patients: Mean (Romania) 7.15 versus 11.74 ( $p<0.05$ ), mean (Lithuania) 5.91 versus 11.68 ( $p<0.05$ ).

**Conclusions:** Similar results have been achieved for both countries participating in the study. A correlation was found between age and prostate disorder symptoms. Most of urinal dysfunction is more sever for older men. for most men urinal function had no influence over quality of life, with slightly worse results for the Romanian population, partially understandable because of the more advanced age.

## **PS1.016**

### **Men awareness and participation in prostate cancer screening program**

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**Background & Aim:** Prostate cancer is the most common cancer in Lithuanian men population. The prostate cancer national screening started in 2006 and Prostate Specific Antigen (PSA) test is done every 2 years for 50-75 years old men and for men older than 45 years, if there is family history of prostate cancer. We tried to establish how men get information about the program and their participation in it.

**Method:** A prospective, limited time, cohort study was enrolled in 2015. 375 men (50-75 years old) filled in a questionnaire. In the questionnaire we asked about the age, the information source of the program, the last time they had a PSA test, the general physical exam and blood test. Reliability of the questionnaire was evaluated with Cronbach's alpha coefficient ( $\alpha = 0.601$ ).

**Results:** The mean age was 59 years. 78.1% of them got the information about the program from their family doctor, 18.7% from TV, 12.5% from newspapers, 11.2% from radio, 9.3% from family members or friends and 1.1% from leaflets. 39.7% got their PSA test this year and 42.9% before 1-2 years. 66.4% of men got their PSA test done at the same period of time when the general examination or blood test was taken  $p=0.001$ .

**Conclusions:** Most of the men, who participated in the study, had their PSA test in 2 years period. The PSA test was usually done at the same period of time when general examination was made or other blood test was taken. Most men have acknowledged about the program from their family doctor.

## **PS1.017**

### **The use of simplified I-PSS questionnaire in family doctor practice**

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**Background & Aim:** The most popular questionnaire for benign prostate hyperplasia symptoms evaluation is I-PSS. The aim of our survey was to evaluate the relevancy of simplified I-PSS questionnaire, age influence for urinal dysfunction and quality of life due to urinary symptoms.

**Method:** A prospective, limited time, cohort study was enrolled in 2015. 375 men who had participated in prostate cancer prevention program (50-75 years old) were asked to fill in a questionnaire. We simplified the I-PSS questionnaire's scale to 0- never, 1,2,3 - sometimes, 4,5 - often for urinary symptoms and quality of life was described as normal, fair or bad. Calculations were made by SPSS 20.

**Results:** The mean age was 59 years. The Cronbach's alpha for the modified I-PSS questionnaire was  $\alpha=0.861$ . The correlation was found between all the questions and age: for the first question  $p=0,001$ , second  $p=0.007$ , third  $p=0.001$ , fourth  $p=0.028$ , fifth  $p=0.001$ , sixth  $p=0.002$  and seventh  $p=0.001$ . Older participants had more severe urinal disorder than younger participants. for 62.4% of respondents quality of life due to urinary symptoms was good, for 34.4% - fair and 3.2% - bad.

**Conclusions:** Our simplified questionnaire is suitable for basic urinal dysfunction evaluations in daily family doctor practice and understandable for the patient. The correlation was found between age and prostate hyperplasia symptoms. for the most urinal function had no influence for quality of life and for about the third of men it was fair.

## **PS1.018**

### **Total cholesterol level association with cholesterol controlling therapy in patients with elevated cardiovascular risk in Latvia**

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**Background and Aim:** Despite evidence that high cholesterol levels correlate with coronary death, proposition that cholesterol lowering therapy could reduce coronary heart disease death remains unproven. Some medications even appeared to increase the incidence of non-coronary death. This information may lead to reduced amount of medication prescriptions by doctors and patient unresponsiveness to therapy. Aim of the research was to evaluate use of cholesterol controlling medications in patients with elevated cardiovascular risk and its influence on total cholesterol levels.

**Methods:** 120 persons were invited to participate in this study based on presence of moderate to very high cardiovascular risk. Patients were interviewed using questionnaire which included questions about medication use and lifestyle. The data were processed using SPSS software and analyzed by descriptive statistics, crosstabs, Chi square test and independent samples T test.

**Results:** 59 males and 61 females participated in study. Mean age was 66 years ranging from 40 to 93 years. 43.4% of respondents did use cholesterol controlling medications, 29.2% of them regularly. In 23.3% of cases no medications were prescribed, but 11.7% of patients were indicated to follow their lifestyle habits. 21.7% did not follow indicated drug therapy. In patient group which took cholesterol controlling medications cholesterol level <5mmol/l was found in 53.8% of cases in comparison with 20.9% in other group. Results were statistically significant. ( $p < 0.001$ ) 82.7% of patients who did use medications had history of cardiovascular event. 46.7% of patients were not informed of their total cholesterol levels. In Male group total cholesterol level was 5.35 mmol/l opposed to 5.7mmol/l in female population. ( $p > 0.05$ )

**Conclusions:** Overall use of cholesterol controlling medications in population with elevated cardiovascular risk is 43.3%. Presence of medical therapy has significant impact in total cholesterol level being under 5mmol/l. Main reason for use of medications is history of cardiovascular event.

## **PS1.019**

### **The role of family doctor in cardiovascular risk factors' screening in Istrian county: the importance of user-friendly IT support**

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**Objective:** To find out if user friendly IT support could motivate family doctors for screening and monitoring risk factors for CV diseases in patients from 40-65 years old without CV diseases who visited their family doctor from November 2014 to December 2015 in Istrian County, Republic of Croatia.

**Inclusion Criteria:** All family doctors in Istrian County were contacted to screen their patients with CV risk factors. Target group were patients from 40 to 65 yrs with no CV disease evidenced. Family doctors who responded had additional education on CV prevention. Additional IT programme within patients' medical e-card was created to determine SCORE factor from existing anthropological, laboratory and risk factor data. After examining these patients, SCORE factor has been calculated and entered SCORE (Systematic COronary Risk Evaluation) according to ESC 2007.

**Results:** 86 family doctors out of 114 responded to the invitation and participated in education; 55 family doctors out of 86 actively participated in survey doing both screening and interventions needed; 2.415 patients were included (1.125 men and 1.290 women). 9 doctors included more than 120 patients, 5 doctors included 70-119 patients, 41 doctors less than 70 patients.

Patients were structured as follows: abdominal obesity in 1.342 patients (669 - M; 673-F); 696 smokers (360 -M; 336-F); 1.215 physically inactive (527 -M; 688-F); 1214 under stress (519 men, 695 women).

SCORE factors in non diabetics: 1-4: 1.928 (780 men; 1148 women); 5-9: 206 (165 men; 41 women); 10: 35( 34 men; 1 women).

**Conclusion:** During 2014 each family doctor was visited by an average of 76% of his patients By opportunistic screening of CV risk factors, family doctor can cover substantial number of patients yearly. User-friendly IT support (including reminders) can facilitate screening and evidencing of CV risk factors, so that family doctor's intervention continuously improves long-term reducing of CV diseases.

## **PS1.020**

### **Aortic abdominal aneurysm screening in primary care: prevalence and diagnostic concordance**

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**Background and Aim:** Aortic Abdominal Aneurysm (AAA) is an abnormal enlargement of infrarenal aorta with a diameter equal to or larger than 3 cm. AAAs are usually asymptomatic until they expand and rupture. Abdominal ultrasound scan is a sensible, specific and profitable method to diagnose the condition which allows to schedule AAA surgery resulting in less morbidity and mortality.

Our aim is to know the prevalence of AAA in a Spanish male population aged 65 to 75 and to establish the diagnostic concordance between General Practitioners (GPs) and Vascular surgeons (VS) using abdominal ultrasound.

**Method:** A cross-sectional population-based study was carried out on 304 out of 407 men aged 65 to 75 randomly selected, invited for ultrasound scan screening of aorta.

Each patient was requested for a clinical interview and an abdominal ultrasound exam.

All the patients with aneurysm suspect and a sample of 20% of the patients with a normal exam were referred to a second ultrasound in the Vascular Surgery Department to show the concordance of the ultrasound between GPs and Vascular surgeons (Gold Standard). A Kappa coefficient was used to establish the diagnostic concordance.

**Results:** GPs screening diagnosed AAA suspect in 13 patients. All of them were confirmed by ultrasound scan performed at the Vascular Surgery Department. VS also confirmed negative the study held by GPs in another 63 patients (20% out of 287). This study reveals a sensibility of 100% 95%CI(75.29%-100%) and a specificity of 100% 95%CI(94.31%-100%). The agreement between GPs and VS was perfect (kappa = 1).

**Conclusions:** Search of AAA through abdominal ultrasound in the primary care setting is highly effective with a GPs' short training. We believe that ultrasound screening should be implemented in Primary Care for the early detection and proper treatment of our patients at risk of suffering AAA.

## PS1.021

### What medical students think about LGBT people and their health needs?

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**Background and Aim:** LGBT (or GLBT) are words' head letters, 'lesbian', 'gay', 'bisexual' and 'transgender'. There are no data to create a level about health of LGBT individuals because of less asking about sexuality during data collection. Homophobia among health professionals in working with LGBT patients, heterosexual assumptions, lack of knowledge, misunderstanding, such as excessive focus has been shown to cause barriers between patients and institutional personnel. In study we aimed to determine information about LGBT individuals and health needs, attitudes and behaviors of medical faculty sixth grade students.

**Method:** This research is a cross-sectional descriptive study. A questionnaire conducted to 124 Dokuz Eylül University Medical Faculty and 56 Marmara University Medical Faculty sixth grade students. Data collected with on-line survey and self fill out of questionnaire. Descriptive statistical analysis applied as well as the chi-square and t tests. SPSS 15.0 version used for statistical analysis.

**Results:** In our study 43,9% of students were male. Mean age of students was 23,94 years. About their sexual orientation 3 student answered as gay, lesbian, asexual respectively. One student told that she did not decide yet. Three of them had LGBT person in their family, but 33.3% had LGBT friends. 32,2% of students told they had any source of information other than faculty. Most common sources were internet, committees and foundations. Most common difficulties they felt about health care of LGBT people were; taking detailed history, detailed physical examination . 55.6% of interns told they did not feel confident about taking care of LGBT patients.

**Conclusion:** Medical faculty education period should involve more detailed information about LGBT people for making students more confident about taking health care of their LGBT patients in primary care.

## PS1.022

### Program for improvement of pneumococcal vaccination in adults with risk factors in primary care

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**Background:** The pneumococcal vaccine (PV) is an important preventive activity for the prevention of various and potentially serious diseases, such as pneumococcal pneumonia, invasive pneumococcal disease (IPD) and others such as pneumococcal meningitis, affecting both children and adults. Often adults with certain pre-conditions are more susceptible to infection by *Streptococcus pneumoniae*, therefore, the PV must be considered individually in each case, to avoid inequities in their health care, precisely. The programme is an experience to improve care quality, at the community level, by reviewing the indications for PV in adults (in the two types, 23-valent and 13-valent currently available in Spain).

**Methodology:** By reviewing clinical records, the extent of vaccination coverage was assessed as a guide of indications (made up of 16 Spanish scientific societies) and the guidance of our own institution (Catalan Institute of Health). If vaccination is indicated, we contacted the subject and proposed vaccination, covered by the public health system.

**Results:** A total of 49 patients (51% men), mean age of 67.5 + 16.2 years, were analyzed with formal indication for vaccination. of these, a total of 20 (40.8%) had a previous vaccination with VAN23. However, there was no person with VAN13. Once contacted and informed subjects, vaccination proposal was accepted in all cases. Indications for vaccination were: - Chronic renal failure (25 cases, 51%) - HIV infection (12 cases, 24.4%) - Chronic Corticotherapy (7 patients, 14.3%) - Solid organ transplants (3 individuals, 6.1%) - Neoplastic Diseases (2 persons, 4%).

**Conclusions:** This screening program and improving vaccination coverage has served to reach 100% of pneumococcal vaccines. Undoubtedly, this will improve their life prognosis and reduce inequality in these selected patient groups.

### **PS1.023**

#### **Experience about an educational activity on differential diagnosis - Dr House's Workshops**

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**Aim:** to emphasize the differential diagnosis as a basic tool of daily work of the family doctors.

**Methods:** a group of tutors in Family Medicine (FM) and its residents designed a postgraduate experience activity, about short workshops on clinical cases. The first edition was held at the headquarters of the CAMFiC (Barcelona), with collaboration of various working groups of this Society. Second edition was thought in collaboration with FM Docent Unit (provider of Spanish Ministry of Health). Third edition was held within a working day of residents and tutors of the Unit (Salou).

Currently, the portfolio is:

1. Skin lesions in palms and soles, plus chest pain
2. Dark nail coloration
3. Ulcerative spots in legs plus influenza-like clinic
4. Unconventional headache
5. Epigastric abdominal pain
6. Unexplained hyperglycemia in diabetic
7. Conjunctivitis and relapsing ear inflammation
8. Rash, nodes in legs and articular pain
9. Refractory anemia in old person
10. Abdominal pain simulating appendicitis

All these cases are (relatively) common in Primary Care and can be solved entirely in our level of attention. Some of them require any specific tests but we can order it directly.

**Previsible Results/Conclusions:** Finally, it has become an exportable course, within the overall support of CAMFiC, and some of the clinical cases were publicated. We think that the high interest is given by an appropriate differential diagnosis, conducted in a simulated clinical session where all participants contribute equally. There is a constructive debate assessing pros and cons of each diagnostic. Unlike the House MD-TV Series, a family doctor is a nearby professional and should be familiar with the differential diagnosis in multiple cases, by guiding symptoms, and know how to choose appropriate tests for confirmation of hypotheses, or the most accurate derivation in each case.

## PS1.024

### Health education in patients with congestive heart failure followed in primary care

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**Background & Aim:** to evaluate the effectiveness of health education of in patients with congestive heart failure in primary care.

Workplace: urban health center.

#### **Design and Methods:**

Design: longitudinal descriptive study

Subjects: patients with congestive heart failure followed in primary care (n=158)

Intervention: to evaluate 158 patients after two 6-monthly visits in primary care. Patients data obtained at the first visit were compared with those at the second visit. All patients completed on both visits the MLWHFQ (Minnesota Living With Heart Failure Questionnaire)

Variables: age, sex, risk factors, ejection fraction, functional classification, etiology of CHF, therapeutic regimen, BMI.

Analysis: descriptive using proportions, means and IC95% ( $p \leq 0,05$ ).

**Results:** 158 patients. Mean age:  $61.3 \pm 11,6$ . Males: 68.8%. Associated risk factors: hypertension 64.9%, dyslipidemia 53.2%, diabetes 32.5%, active smoking 20.8%, ex-smoking 40.3%. Mean ejection fraction (%):  $31.8 \pm 9$ . Functional classification: NYHA class I 28.6%, II 49.4% and III 22.1%. The etiology of CHF: ischemic 37.7%; hypertensive 24.3%; dilated cardiomyopathy 22.1%; valvular 5.2%; others 10.7%. Therapeutic regimen applied: RAS blockers 97.4%; betablockers 85.7%; loop diuretic 86.5%; spironolactone 51.9%; antiplatelet agents 53.2%, nitrates 27.6%, digoxin 35.1%. In the first visit our patients had a mean BMI:  $31.7 \pm 5.7$  Kg/m<sup>2</sup>, without statistical significance differences at the 6 months follow-up:  $31.3 \pm 5.9$  Kg/m<sup>2</sup>.

Regarding to the MLKHF questionnaire, at the second visit, we observed significant improvements in the global results:  $41,4 \pm 22.4$  vs.  $36.81 \pm 21.2$  ( $p < 0,001$ ).

**Conclusions:** after health education is seen a significant improvement in the quality of life of patients with congestive heart failure.

## PS1.025

### Diabetes mellitus type 2: control and complications

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**Objective:** To study in diabetic patients the degree of control and diabetic complications in primary care. Workplace: Urban health center

**Material and Methods:** - Design: longitudinal descriptive study (2012-2015). - Subjects: patients with DM2 assigned to a primary care quota (n=212) - Variables: age, sex, years of diabetes evolution, biannual and annual ocular fundus (OF) (normal, non-proliferative diabetic retinopathy (DR), proliferative DR), annual examination of the feet (normal, risk, diabetic), HbA1c, LDL-cholesterol, microalbuminuria and good control criteria (HbA1c $\leq$ 7%, LDL $\leq$ 100mg/dL and microalbuminuria $\leq$ 30mg). - Analysis: descriptive using proportions, means and IC95% (p $\leq$ 0,05).

**Results:** the mean time of evolution of diabetes is 8.44 $\pm$ 0.39 years. The average annual value of HbA1c increased from 7.08 $\pm$ 0.09% in 2012 to 6.86 $\pm$ 0.08% in 2015 in the first. 62.4% of patients have made two determinations of LDL in 2015 with an average value of 96.71 $\pm$ 2,31mg/dl in the final determination. The best percentage of patients with LDL-cholesterol $\leq$ 100mg/dl was obtained in 2014 (68.8%). Regarding microalbuminuria, it notes that 60.1% of individuals have two annual determinations in 2015 (positive in 16.3% and 12.9%). In 2015, microalbuminuria is negative in 59.3% to the patients with positive microalbuminuria in 2012. The OF and the examination of the feet were 65.1% and 86.3% in 2013, respectively. 22.2% non-proliferative RD in 2012 became proliferative RD in 2015 and the foot risk increases of 32.4% in 2012 to 48.3% in 2015.

**Conclusions:** at the end of the study, HbA1c and LDL levels of 2015 decreased compared to 2012 and microalbuminuria tends to become negative, while a progressive deterioration of the feet appeared and the severity of retinopathy increased in a significant percentage of patients.

## PS1.026

### **Functional assessment and level of dependence in elderly patients of a rural population; correlation sociodemographic**

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**Background & Aim:** Primary care is a breeding ground for the prevention of dependency in the elderly by detecting disability and associated factors. Prevalence of functional incapacity is measured by using the Barthel index in patients over 65 years seeking consultation or request home care and to define the profile of persons dependent for basic activities of daily living (BADL).

**Material and Methods:** A descriptive, cross-sectional study was performed. The sample was obtained from all patients attending a primary care centre in the Basic Health Zone of Tabara (Zamora, Spain). Functional capacity in BADL (Barthel index) was assessed and various sociodemographic variables were recorded.

**Results:** 242 patients (54.1% women) were assessed. The mean age was 78.89 years (SD: 7.229). The largest age group aged was over 80 years (46.3 %). A total of 39.3% of the patients were assessed as dependent for at least one BADL, the highest figure being for those in need of help with urine control (28.9%) and the lowest for feeding (9.5%). 30.6 % were minor dependents, 5.8 % moderate and 2.5 % severe, total dependents only 0.4 %. A statistically significant association was found between functional capacity and old age, widowhood, living in the home of relatives, usually their own children. No correlation was found between dependence and gender or educational level ( $p < 0.05$ ).

**Conclusions:** A significant portion of the subjects in the sample had excellent functional capacity, although the proportion is lower than previous studies. A third of the patients had some type of limitation for basic activities of day living. The best functional capacity was associated with lower age, living in a couple. These variables could be useful for select groups of elderly at risk, which could benefit from specialized interventions to prevent / reduce functional disability.

## PS1.027

### **AIDS patient with lymphoepithelial cyst of the parotid gland associated**

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Case Report: Woman 43 years consulted for 'tumor on both sides of the face' of long duration, no other symptoms associated. Palpation enlargement of both parotid regions and adenopathy is palpated in region II laterocervical left. TAC shows cervical enlargement of both parotid (predominantly right, with more marked uptake, and multiple hypodense cystic lesions intraparotídeas, some solid-looking, multiple punctate calcifications within both glands along with extension of deep lobe parotid and right less on the left, parapharyngeal plans and cavum laterocervical adyacentes. Bilateral adenopathies flows to the lower pole of the left parotid, 1.2cm and 0.8cm, center hypodense. In PAAF purulent material is obtained, without isolating any germ. Autoimmunity (RF and ANA negative) and positive serology for HIV and antiretroviral treatment toxoplasma. clinical improvement with antiretroviral treatment discussion HIV infection has been associated with various entities that affect the salivary glands like LLQB, which most often affects the parotid. Etiology is unknown; found markers of active replication of HIV-1, such as p24 protein or viral RNA within dendritic reticular cells, which has made suggest to some authors, these lesions are induced directly by HIV. The usual clinical presentation consists of a bilateral painless cervical tumor of slow growth, without inflammatory signs, y asimétrica. In patients with persistent poliadenopático syndrome, CD4 slightly decreased relative increase CD8. In imaging tests, which are usually pathognomonic, appreciate multiple bilateral parotid cysts associated with cervical lymphadenopathy. Clinical manifestations usually respond to treatment with antiretroviral. If no reply or local or aesthetic discomfort has been proposed as a treatment periodic percutaneous drainage of cysts or surgical excision.

**Conclusion:** LLQB must be considered in the differential diagnosis of neck masses in HIV patients. The benignity of the lesion allow us to treat it conservatively, especially in patients with advanced immunosuppression.

## PS1.028

### **Presentation lung carcinoma in a young patient, carcinoid tumor**

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**Introduction:** Pulmonary carcinoid tumors are tumors of neuroendocrine lineage. Its frequency corresponds to 2% of primary lung tumors and 25% of carcinoid tumors, typical carcinoid accounts for 80% of bronchial carcinoid. It usually occurs in patients in the fifth decade of life, although the most common primary tumors in children and adolescents. The diagnosis is obtained by imaging, bronchoscopy and histological confirmation, and treatment is primarily surgical. It's asymptomatic in 58% of cases presenting in the case of symptomatic: respiratory symptoms, Cushing syndrome ectopic ACTH (8%) or carcinoid (5%) syndrome. Case report: - Present Illness: Woman 16 years. Attend referring to the Emergency Department followed a week of evolution afternoon fever over 38°C, with chills and shivering companions, and productive cough that persists despite antibiotic treatment initiated by his Family Doctor 3 days ago. In x-ray is displayed on the hilar shadows, rounded increased density is attributed to pneumonic infiltrates with some degree of loss of volume. The blood test shows leukocytosis with neutrophilia. -

**Personal Background:** Allergic to AAS, family history of asthma, passive and active smoking occasional weekends; four pneumonias of LID in the last three years. - Physical examination: No unremarkable. - Evolution: They sent pulmonology outpatient antibiotic treatment; with TAC prior to the consultation, which evidences a right parahilar mass producing obstructive atelectasis LID multiple mucoid impaction by bronchial obstruction chest. A right hilar adenopathy centimeter is further appreciated. Scintigraphy in a hyperintense focus on right parahilar mass support TNE, along with a diffuse uptake, light intensity below this focus, pneumonitis secondary to watching. Bronchoscopy, mass on the origin of the bronchus of LID is confirmed, with the suspect bronchial carcinoid tumor. In medical-surgical session opted for surgical treatment and entered by CTO. - Histological Diagnosis: BAS and FNA samples were taken with cytologic report supports bronchial carcinoid tumor, T2aN1M0(EIIA).

## PS1.029

### Atypical presentation of lung cancer as pneumothorax

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**Introduction:** Spontaneous pneumothorax is a common disease in clinical practice, especially visible in the area of Emergency and Primary Care, with an incidence of 76 cases per year per million inhabitants. 0.46% of lung cancers are associated with spontaneous pneumothorax, while 0.03% of spontaneous pneumothorax originate from lung cancer. The cause of pneumothorax in this type of patient has been linked to the rapid growth of the tumor. Clinical suspicion should be established from the radiographic findings and the presence of risk factors for lung cancer. Case report: - Present Illness: Male, 57, who came to the emergency department by dyspnea and chest pain 6 hours of evolution.

**Personal Background:** Cardiovascular risk factors (DM2, hypertension, DL, chronic ischemic heart disease revascularized by PTCA and stent) plus smoking 100 packs / year. - Physical examination: Regular condition, muco-cutaneous pallor no palpable regional lymph nodes. A pulmonary auscultation revealed the disappearance of breath sounds in the left hemithorax. - Complementary tests: chest radiograph showed the presence of a left pneumothorax with practically complete atelectasis of the lung, with small left pleural effusion, which seems to intuit a lung mass. Baseline laboratory showed elevated liver enzymes drinking habits, along with iron deficiency anemia. - Evolution: Placing a chest tube on the left midclavicular line; due to persistent pneumothorax despite drainage and the presence of fever peaks of up 39 ° C accompanied by cough and expectoration a thoraco-abdominal CT which shows a left hilar mass infiltrating the pulmonary artery is performed; presence of left hidroneumotórax and liver metastases (hypodense lesion). - Histological diagnosis: Squamous Cell Lung Carcinoma (Stage IV).

## PS1.030

### Neck pain as a symptom diagnosis of lung cancer. Warning signs

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**Background:** Superior sulcus tumors account are 3-5% of lung tumors. Have as initial and most common symptom back pain (90%) due to involvement of the chest wall. As they grow affect the brachial plexus and sympathetic nerve chain. Usual symptoms of lung cancer are generally absent, being derived erroneously or trauma/rehabilitation consultation, or treated as musculoskeletal pathology, unnecessarily delaying the completion of a chest radiograph, also given the location of the tumor is more difficult to observe.

Case: 49 years woman, active smoker asking for neck pain radiating to the left arm cubital region, mechanical characteristics of a month of evolution that has worsened in the last week, without previous trauma. Physical examination -> Lump left supraclavicular 3cm. No painful or adhered to deep planes, attributed to muscle spasm.

Evolution: Rest and local heat is pattern with NSAIDs. Return in two weeks for persistent symptoms, so chest radiographs and cervical spine revealed a left apical mass is requested, so it is derived ER for urgent assessment by Pneumology. TAC Thoracic shows a mass in left apex with destruction posterior arches 2nd/3rd left ribs, left transverse processes of D1/D2 and D2 vertebral body, with a left adrenal mass infiltrating the psoas muscle. One puncture aspiration is performed Transthoracic FNA of soft tissue mass resulting in large undifferentiated cell carcinoma parties. Bronchoscopically no alterations were found. She was referred to oncology treatment with chemotherapy and radiation. Histological Diagnosis: Pancoast tumor Stage.-IV-T4N1M1.

**Conclusions:** Shoulder pain and neck pain are common complaints in primary care should conduct a detailed history and physical examination, paying particular attention to situations in which pain is not played against the movement the shoulder joint and/or accompanied by radiculoplexular semiotics, when to take into account the different possibilities of referred pain intrathoracic or cervical cause.

### **PS1.031**

#### **Myocardial infarction: prognosis and quality of life in elderly patients**

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**Background & Aim:** To analyze the survival and quality of life at 6 and 12 months after discharge of patients.

**Materials and Methods:** Design: retrospective study Subjects: Patients >75 years old with myocardial infarction in 2015.

**Methods:** We measured gender, age, if our patients have experienced a cardiac event in the first 6 and 12 months.

**Results:** The sample consisted of 94 patients (p), 46 men. Average age 79.8a years (men) and 80.06 years (women). At 6 months they had re-entered 14 p, 8 coronary event, 2 for stroke, 1 for lower limb ischemia, 1 due to heart failure, 1 for bradyarrhythmia that required permanent pacemaker and 1 non-cardiac cause. In the first 6 months died 12 p, cardiogenic shock (6 p), multiorgan failure (2p), arrhythmia (2p), sepsis (1p) and cancer (1p). Half Karnofsky Index: 87.2. Between 6 and 12 months were readmitted 8 p, 2 and 6 heart failure by coronary events. 10 patients died, 5 of cardiogenic shock, 2 for neoplasia, 1 stroke, 1 and 1 multiorgan failure due to arrhythmia. GEL Karnofsky index average was 76.6. Found as predictors of mortality at 6 months, female gender ( $p = 0.38$ , OR 6.44 (1.11-37.42) and left ventricular dysfunction ( $p = 0.039$ , OR 6.45 (1.1-37.7) and 12 months: females with OR 3.67 (1.01-13.46,  $p = 0.049$ ).

**Conclusions:** The survival of elderly patients with myocardial infarction in the short term is high.

## **PS1.032**

### **Temporary distal cyanosis: a case report**

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Chief complaints: 50 year old male who was attended by referring it for 2 weeks the right toes will change color and become cold.

Personal medical history: smoker of 30 pack-year.

Present illness: the patient refers to the right toes change color to become blue and cold for 2 weeks returning to normal in a few minutes without residual symptoms. No pain or other symptoms associated with other organs or devices. It is the first time that happens and he doesn't know the cause.

Physical examination: Cardio-respiratory auscultation is normal, rhythmic without murmurs. Abdomen: soft and palpable masses or organ enlargement or no sore spots. Stresses pulsatile abdominal mass or blow without alteration distal pulses at the time of exploration observed. Neurological: no focal neurological signs or sensory or motor deficits. Arms and Legs: we don't find trophic or vascular changes with palpable distal pulses. Hemodynamically stable with blood pressure 120/85 and heart rate 75 bpm.

Clinical suspicion: abdominal aortic aneurysm.

Evolution: we referred the patient to an urgent care centre and make complementary study. The patient was evaluated for a cardiovascular medicine specialist at the hospital and made a CT angiography scan that showed occlusion on right iliac artery; they decided to make an angioplasty and stent placement. The recovery was satisfactory and the patient continues with specialist reviews every six months.

Conclusions: we have to make a complete clinical exploration and if we find warning signs we must referred to urgent care to avoid serious complications.

### PS1.033

#### Role of point-of-care tests in adults with acute haryngitis in primary care

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**Background & Aim:** The aim of this study was to evaluate the validity of two immunochromotographic rapid antigen detection tests (RADT) in patients highly suspected of presenting pharyngitis by group A  $\beta$ -haemolytic streptococci (GABHS). In addition, the repetition of the RADT in patients with a previously negative test was also evaluated, and the association of C-reactive protein (CRP) levels with aetiology of pharyngitis was also determined in four prospective observational substudies carried out from 2007 to 2012 carried out in a primary care centre.

**Method:** Patients aged 14 or older with acute pharyngitis and at least two Centor criteria were consecutively recruited. All the patients underwent at least a pharyngotonsillar swab for microbiological culture. Two different RADTs were used and the CRP rapid test used was the QuickRead/Go device.

**Results:** A total of 686 patients were studied. The prevalence of GABHS ranged from 22% to 24.8%. The prevalence of group C streptococcus ranged from 8.8% to 15.8%. The sensitivity of the OSOM Strep A test among patients was 95%, with a specificity of 93%, a positive predictive value of 79.2%, and a negative predictive value of 98.5%. These results were 96.4%, 91.6%, 79.1% and 98.7%, respectively, with the repetition of the RADT in patients with a first negative RADT result. These results were 93.6%, 93%, 88%, and 96.4% with the use of Analyz-Strep A Rapid test. The highest CRP concentrations were observed among patients with group C streptococcal infection with a mean value of 56.3 mg/l.

**Conclusions:** The main result of these studies shows the usefulness of a single RADT determination for the diagnosis of GABHS infection with the repetition of RADT in those with a previous negative result being unnecessary. This study also shows that CRP is not useful for distinguishing patients with GABHS infection.

## PS1.034

### Healthy ageing the truth behind the curtain

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**Background & Aim:** There's a concept emerging around the world and all over Europe: "healthy ageing". The World Health Organization and the European Union consider of great importance all measures, policies and practices that contribute to healthy ageing. In fact, many European countries have developed programs that aim to improve the health and well being of older people. As elderly is a result of human longevity and ageing a social phenomenon of contemporary western societies, with the increasing of average life expectancy is important to raise public awareness of the issue.

**Methods:** Literature review, were selected articles of the main medical databases in English and Portuguese, Pubmed/Medline, using MeSH terms "healthy ageing".

**Results:** Healthy ageing depends on the balance between the natural decline of the various individual, mental and physical abilities and the achievement of objectives that are desired. There are three fundamental principles such as autonomy, learning throughout life and getting active. It's important to promote the right to self-determination while maintaining dignity, integrity and freedom of choice, as well as promoting the maintenance of cognitive abilities. The disease prevention, delaying its onset or reducing its severity is the key component of healthy ageing. In Portugal, there's example of two programs "Ageing and Violence" that identify situations of violence among older people and "GERIA - geriatric study on health effects of air quality in elderly care centers" that improve the health of older persons living in elderly care centres.

**Conclusion:** In a couple of years one-third of Europe's population will be aged 60 and over, and there will be an increase in the number of people aged 80 and older. Encouraging good health and active societal contribution among the older will be crucial in develop strategies to meet this goal. The challenge is not how to live more, but how to live better.

## PS1.035

### ***Actinic keratosis and squamous cell carcinoma***

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**Introduction:** The *Actinic keratosis* is a skin injury, premalignant, with the potential to turn into squamous cell carcinoma. It is therefore very important to be aware of skin lesions that are often undervalued by patients, and often inadvertently associated with aging.

**Objectives:** Early identification of the main risk factors for Actinic Keratosis, signs, and treatment, as well as their potential to progress to squamous cell carcinoma taking into account the perspective of clinical performance of the GP. Methodology: Bibliographical research articles in Portuguese, Spanish and English published in the last seven years, in medical sites Evidence Based and PubMed using the MeSH terms: *Actinic keratosis* and squamous cell carcinoma.

**Results:** The *Actinic keratosis* is a precursor lesion clinically associated with Squamous Cell Carcinoma and one of the most common diagnoses made by dermatologists. The frequency of malignant transformation and invasive potential of *Actinic keratosis* are not yet fully denied. Over the years, researchers have attempted to clarify the exact nature of the actinic lesion earlier and its evolution to Squamous Cell Carcinoma. Considerable progress in basic research has generated new insights about the genetic changes underlying the main skin cancers. The close relationship between *Actinic keratosis* and Squamous Cell Carcinoma continues to grow stronger, making the treatment of *Actinic keratosis* part of a preventive strategy that, combined with measures to reduce exposure to Ultraviolet radiation from the sun, aims to control this important public health problem.

**Discussion:** It is very important to the GP to be sensible of the close relationship between *Actinic keratosis* and squamous cell carcinoma. The treatment of *Actinic keratosis* in association with measures of Protection from ultraviolet (UV) radiation constitute a preventive strategy to control this important public health problem.

## PS1.036

### Platelet count increases in smoking pregnant

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**Background & Aim:** Physiological variations occur during pregnancy. Smoking was considered as causing disturbing effects on complete blood count parameters. In this study, we aimed to evaluate the impact of smoking on platelet count and platelet indexes in pregnant.

**Method:** Pregnants aged between 18-40 years who were on follow up in Obstetrics and Gynecology Clinics of Mevlana University Health Application and Research Centre from December 2014 to December 2015 were included in this retrospective study. From 218 pregnant 43 were smokers and 175 were non-smokers. Demographic characteristics of the pregnant were obtained from the archive files and complete blood count parameters from the laboratory information system.

**Results:** Platelet count was significantly higher in smoker pregnant than the non-smokers ( $p=0.013$ ). However MPV, PDW, PCT and PLCR values were similar in both groups ( $p>0.05$ ).

**Conclusion:** We can conclude that smoking in pregnancy increases platelet count, but does not influence platelet indexes.

Key words: pregnancy; smoking; platelet indexes

## **PS1.037**

### **Active listening and therapeutic touch in primary care**

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**Background:** in our daily consulting we meet patients that feel sad, are frustrated and who are suffering from different psychosomatic symptoms, not only because of their illness. To help them we use Active Listening and Therapeutic Touch, these techniques are taught in different Universities around the world.

**Aim:** To explain our experience in Primary Care using Active Listening (AL) and Therapeutic Touch (TT) as a complementary treatment and to accompany the therapeutic process of some patients.

**Method:** Descriptive observational study of the patients that have received AL and/or TT. We reviewed clinical records during a three year period.

**Results:** Subjects: 90 patients, 3 men and 87 women. Patients' age: 22 to 78 years old. Average: 51, 5. 67 patients received both AL and TT. 18 patients only received AL. 6 patients gave up after the first visit of AL and / or TT. The average number of visits is 4 in total. These visits were weekly or fortnightly. Some patients continued with more visits, depending on their needs. Using AL we progress in communication helping patients that are engaged in a conflict to be able to open up. Then they are more likely to explain what they are feeling and why. Giving TT, the energy field is balanced. The outcome is that patients feel relaxed, pain and anxiety is reduced, their insomnia improves and helps them to take a therapeutic distance from their daily problems.

**Conclusions:** Both AL and TT are complementary techniques that help us and our patients to obtain better results, allowing them to reduce the amount of pills they take. Patients' self-esteem and self-confidence increases, which helps them to get over new adverse situations. After reviewing this experience we think that these techniques should be used more often in our consulting.

## **PS1.038**

### **Meningioma: a diagnosis in Family Medicine**

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**Background and Aim:** Meningiomas represent 20% of all primary brain tumours and 12% of spinal tumours. It occurs more frequently in female gender and between 40 and 60 years of age. About 90% of these tumours are benign. The present case report reveals the relevance of a global approach to the patient with a very specific complaint.

**Methods:** Clinical interview and clinical process research were performed.

**Results:** Female patient, 46 years old. No significant pathological background. Starts a complain of decreased visual acuity of the right eye. One week later she consults her family doctor with total visual loss on the right. She had no other complaints. On physical examination she revealed a total loss of sight on the right side and had no other findings. She was evaluated by an ophthalmologist, who diagnosed central retinal artery occlusion and prescribed acetylsalicylic acid. The family doctor requested a head CT, a Carotid Doppler, an Electrocardiogram, Ecocardiogram, a complete blood cell count and a biochemical study. The CT Scan revealed a lesion occupying space in the suprasellar cistern, a suspected meningioma. The MRI supported the diagnosis. She had brain surgery to remove the tumour, wich was successfull.

**Conclusions:** The family doctor must have the important role of actively search for a diagnosis. The holistic approach he practices, is determinant. This is why the continuity of medical care, even after hospital referral is of extreme importance when we're searching for a diagnosis.

## PS1.039

### **Association between silicone breast implants and autoimmune diseases: is there any evidence?**

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**Background and Aim:** Silicone breast implants (SBI) have for long been considered as biologically inert and harmless. However the relationship between SBI and the risk of autoimmune diseases has generated intense medical interest over the past few years. The aim of our review is to summarize the data linking SBI and autoimmune diseases.

**Method:** A clinical research was conducted including articles from the last 16 years, in Portuguese and English languages, using the Mesh terms “breast implants” and “autoimmune diseases”. The literature searches were done in MEDLINE databases; National Clearinghouse; Canadian Medical Association Practice Guidelines InfoBase; Guidelines Finder of the National Electronic Library for Health in the British NHS; Database of Abstracts of Reviews of Effectiveness - Centre for Reviews and Dissemination; Bandolier and The Cochrane Library. We used the the Oxford 2011 Levels of Evidence to assign a level-of-evidence. Eligible articles included those who described a population of adult women (>17 years), which have breast implants versus women without implants. The clinical outcome measured was the development of an autoimmune disease.

**Results:** of the 244 articles obtained, 3 matched eligibility criteria (2 meta-analysis and 1 cohort study). One of the meta-analysis suggests that the evidence remains inconclusive. The other meta-analyses concluded that there was no evidence of association between SBI and any of the individual connective-tissue diseases or other autoimmune or rheumatic conditions. The cohort study concluded that in susceptible women, with pre-existent allergies, SBI was associated with an autoimmune syndrome.

**Conclusions:** Evidence remains inconclusive about any association between SBI and autoimmune diseases. We will need better evidence from large studies, with long time follow-up and with accurate methodology.

## PS1.040

### Benign breast disease: management in the primary care setting

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**Background and Aim:** Benign breast disease represents a spectrum of disorders that are very common in the Primary Care Setting. Usually they are presented to physicians as imaging abnormalities or palpable lesions found on physical examination. Some lesions confer an increased patient's future risk of developing breast cancer but many other have a negligible course. It is a source of anxiety to women and Family Physicians should know how to approach different situations and give advice to patients. The aim of this work was to create an algorithm explaining how to approach the diversity of benign breast disorders.

**Method:** Research of review articles and guidelines published in scientific databases, in English and Portuguese languages, using the MeSH terms "Breast Diseases" and "Fibrocystic Breast Disease".

**Results:** Benign breast disease can be classified histologically into three categories: nonproliferative (65%), proliferative without atypia (30%) and atypical hyperplasia (5%-8%). Clinical presentation is highly variable and many patients are asymptomatic. Nonproliferative epithelial lesions are generally not associated with an increased risk of breast cancer and management is directed at making a definitive diagnosis and providing relief of symptoms. Proliferative lesions without atypia are associated with a small increased risk of developing breast cancer, and once the diagnosis is established, no additional treatment is indicated. Atypical hyperplasia confers a substantial increase in the risk of malignant lesions (relative risk 3.7-5.3). Women with atypical hyperplasia should be closely monitored and counseled regarding risk reduction strategies. Clinical approaches to these lesions are different depending on their increased risk of cancer.

**Conclusion:** Primary Care physicians are responsible for the diagnosis and management of benign breast diseases. The goal is to reduce patient's anxiety and refer them to specialized medical departments if necessary. This algorithm contributes to a better clinical practice giving a systematic approach to benign breast lesions.

## **PS1.041**

### ***Polymyalgia rheumatica: the pain that matters (regarding a clinical case)***

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**Introduction:** *Polymyalgia rheumatica* (PMR) is one of the most common inflammatory rheumatic disease in persons over the age of 50 years, whose prevalence decreases from north to south European countries, with a low incidence in Mediterranean countries.

Case Report: 55-year-old female presented with severe shoulder pain for about a week, which precludes her from taking her daily tasks. On examination she wasn't able to raise her arms above shoulder height. Thinking of shoulder tendinitis she was medicated with NSAIDs with no clear improvement. Months later she returns with a severe hip pain and morning stiffness that hindered rising from a chair or turning over in bed. The pain was so limiting that she was worried about needing a wheelchair. She was referenced to the hospital for a Rheumatological appointment. On investigation her ESR was 46mm/h with a raised CRP of 8,4mg/dL and was diagnosed PMR. Treatment was immediately started with prednisolone 10mg daily with marked improvement and indication to continue for about 1 to 2 years.

**Discussion:** In primary care, rheumatic diseases represent a large number of appointments. When non-diagnosed and timely treated they can have severe physical, psychological, familiar, social or economic repercussions. There are other diseases that mimic PMR for which reason a careful diagnostic approach is required. In this clinical case, we had all the core clinical features for diagnosis, which includes bilateral shoulder and/or hip pain, morning stiffness and abnormal inflammatory markers. The prognosis is excellent. However prolonged corticosteroid treatment, sometimes for several years, may be necessary to maintain clinical improvement at the cost of a significant burden of risks and adverse effects. Family physician plays an important role recognizing this clinical entity, making a timely referencing and following up these patients to minimize their risk factors.

## **PS1.042**

### **Prevalence of cardiovascular risk factors in young patient in the province of Ciudad Real, Spain**

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**Background and Aim:** Knowing the risk factors for cardiovascular patients presenting between 30-55 years they have led to an acute coronary syndrome (ACS) and thus optimize the preventive management in primary care.

Knowing biochemical markers that we can use in primary care for prevention.

**Method:** Patients admitted with a diagnosis of SCA during 2012 were taken with an age range between 30-55 years lesion confirmed by cardiac catheterization .

Patients with pre-existing conditions like cancer procoagulant, coagulopathies, autoimmune diseases and pathological patients without coronary catheterization normally atherosclerotic lesion (coronary dissection, valvular) were excluded.

**Results:** 97 patients are obtained in the selection range, of which 86.3 % with male and 7.76 % of females. CVRF in common predominated the following: smoking 73.7 %, 45.5 % hypertension, hyperlipidemia with LDL > 100 38.8 % 34.9 % hypertriglyceridemia, hyperuricemia 24.2 % (all men ), Diabetes Mellitus 20.3 % Other (obesity, overweight, OSAS) 20.3 %. As for biochemical markers it was requested only by 7.7 % Homocysteine not show significant and which rose by 1.94 %. HsCRP required under 0.97 % with no significant result.

**Conclusions:** To encourage the cessation workshops increased consumption of snuff and organize programs for them. Optimize nutritional management (Mediterranean diet) and / or pharmacological our patients with poor control of LDL lipid in particular, to keep them in range currently recommended preventive objectives. Optimize the management of non-invasive diagnostic imaging and ankle -brachial index in patients with intermediate cardiovascular risk according to the current SCORE table in order to reduce the risk of presenting subclinical atherosclerotic lesion.

### **PS1.043**

#### **Prevalence of nocturnal leg cramps in the overall population**

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**Background & Aim:** Knowing the prevalence and possible causes of night cramps in the population, since in many cases the cause is unknown to this study we found some possibilities that can cause cramps in the legs and take appropriate measures to decrease its frequency paragraph and improve the quality of sleep. Secondly know the clinical characteristics of cramps, sociodemographic parameters affect the quality of sleep, family history and comorbidity

**Method:** Observational descriptive cross- sectional study.

Involved 96 patients randomly selected with replacement of both sexes and over 17 years of a rural population of 3500 inhabitants who have submitted cramps in the last year.

**Results:** 41 patients 44.71 % claim to have presented nocturnal leg cramps sometime in their life, 31 (32.29 %) in the last year.

The 54.84 % are women and the average age is 58 years. Appearing occasionally 54.83 %, followed by " 1 time a week " and " 2-3 times a month."

The average intensity is 7.6 / 10 with a duration of 95.32 seconds. Predominantly affect both legs 35.48% and leave no residual pain 45.16 %, secondary sleep disorders 16.13 %. They did not present more of a cramp of legs on the same night 25.81%. in 67.4 % disappears with stretching and / or massages.

Comorbidity associated with more frequent night cramps was Diabetes mellitus 19.35%, followed by chronic venous insufficiency, thyroid disease and radiculopathy. Consumed drugs related to the presence of cramps in our study are: statins 32.25%, followed by calcium antagonists and IECA's 25.8 % both.

**Conclusions:** Cramps in the legs predominantly middle-aged women may be related to polypharmacy, usually without evident electrolyte disorders and more often associated with diabetes mellitus, chronic venous insufficiency and thyroid disease.

## **PS1.044**

### **Receiving preconception care of pregnant women and related factors**

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**Background and Aim:** Preconception care is the provision of medical, behavioral and social health interventions to parents before conception occurs. It provides positive health outcome on antenatal, natal and postnatal periods. However doctors are not interested in preconception care as antenatal care in Turkey. This is one of the significant barrier for mother and infant health. We have not enough researches about receiving preconception care. We aimed to research receiving preconception care and related factors about preconception care among pregnant women.

**Method:** This was a cross-sectional study. Pregnant women (n= 527) recruited at our clinic answered a questionnaire. Data were analyzed with chi-square and student-t tests. Statistical significance level was accepted as  $p<0.05$ .

**Results:** Mean age of pregnant women was  $29.9\pm 6$ . We determined that 45.8% (n=233) of pregnant women, and 17.7% of their husbands received preconception care. 88.8% of pregnant women suppose necessity of receiving preconception care for women, and 69.8% for men. The major factor affecting to receive preconception care was planned pregnancy. To receive preconception care of men, to be university graduates, and to have professional occupation were seen positive factors affecting planned pregnancy. Preconception care ensured by family doctors were analyzed in terms of 5 components of preconception care, and it was seen that the most frequently asked question is about smoking (67.7%) and the least one is about patient's diet (15.8%).

**Conclusion:** The rate of receiving preconception care of parents was low. The level of receiving preconception care was associated with planned pregnancy and high education level of parents. It was shown family doctors do not evaluate the patients in terms of all preconception care components. Family doctors should be supplied to have more knowledge about preconception care before and after graduation. Parents should be evaluated in terms of preconception care together.

## **PS1.045**

### **Application of the telemedicine for the optimal control of asthma patients**

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**Objective:** To assess the impact of a telemedicine project that uses cloud platform Medtep in asthmatic patients.

**Method:** Consultation Asthma in which there is a collaboration of Pneumology-Primary Care. A group of 25 patients diagnosed with asthma, who are invited to participate in the study were selected. Meetings for training in the handling of a web portal to control asthma. They were also delivers Peak-Flow and taught their use. Data smoking, asthma diagnosis Years: 6 months clinical course and tickets to web portal where variables are collected continues. Asthma attacks. Hospitalizations. Treatments: Evolution. Patient level according to.

**Results:** A total of 25 patients diagnosed with asthma. 17 (67%) men and 33 (32%% women. The mean age 34 years. Only 5 patients were smoking (20%), 3 patients had ever smoked. Average consumption 2 packages. 42% had a diagnosis of asthma less 1 year, 20% between 1 and 5 years and the remainder over 5 years. Before entering the study 50% had had to resort to emergency visits at least once, having patients who had come even 4 times the last year. Since its inclusion in the study, no patient had come to the ER. Approximately 80% of patients entered the data daily. The drug has been filling more than 95% in those who have regularly used the system. The Peak Flow patients have an increase of 7% compared to baseline. Over 50% of patients had increased the dose of treatment prior to entering the study, since none has needed increasing doses and even 25% has declined treatment. Overall treatment improved the basis 32% of patients.

**Conclusions:** in our study telematics application to control asthma patients and improve clinical outcomes, decreasing the time who come to emergency visits and need less treatment.

## PS1.046

### **Correlation between dental caries and diet, oral hygiene habits, and other indicators among elementary students in Xiulin-township, Hualien-county, Taiwan**

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**Background & Aim:** To analyze the correlations between oral health status and eating habits, oral hygiene habits, and other indicators by dental healthcare oral examination and questionnaires. The target population was elementary school children in Xiulin-township and the aim was the identification of possible factors causing tooth decay.

**Methods:** A stratified purposive sampling approach was used. First and fourth grade students from eleven elementary schools in Xiulin-township during the academic year 2012 were selected as the subjects for an oral health examination and were also asked to fill in a questionnaire. The survey response rate was 86.8%. Statistical analysis was used to evaluate the correlation between the student's oral health status and the content of questionnaire.

**Results:** Subjects from Xiulin-township have a high prevalence of dental caries as well as high deft (decayed, extracted and filled teeth in primary dentition), DMFT (decayed, missing and filled teeth in permanent dentition) and deft+DMFT indices, which may be related to the fact that most of these children like to eat sweets, have poor oral hygiene habits, and have extremely low rates of dental healthcare utilization. Mouth cleaning after eating sweets, brushing after eating, and brushing for at least 3 minutes each time is able to effectively predict the deft+DMFT index of school children in Xiulin Township ( $R^2=0.218$ ,  $p<0.0001$ ).

**Conclusion:** These findings provide information to the relevant health authorities in Taiwan regarding ensuring an adequate distribution of dental care resources in mountainous townships and remote areas. The findings also indicate that there is a need for improved access to dental healthcare in these areas by means of the presence of professional dental hygienists at every school who can educate and supervise the school children to have good oral hygiene habits.

## PS1.047

### **Polypharmacy among residents in a nursing home in Singapore**

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**Background & Aim:** Polypharmacy (defined as concurrent use of  $\geq 5$  medications) in nursing home residents is a concern as the risk for adverse events rises with the number of medications taken. Monitoring polypharmacy in this population can improve the quality of nursing home care. This study aimed to determine the prevalence of polypharmacy and leading therapeutic subclasses included in the polypharmacy of Renci Nursing Home (RNH) residents.

**Method:** This was a cross-sectional study of all RNH residents ( $n=276$ ). We collected data from their inpatient medication records from 26 Aug to 3 Sep 2014. Non-medicated soaps and moisturizers were excluded. Statistical analysis was done using SPSS version 20. A  $p$ -value  $< 0.05$  was considered statistically significant.

**Results:** 60.9% were Chinese, 33.3% Malay, 5.1% Indian, and 0.7% others. Mean age was 71.7 years. 191 (69.2%) were elderly ( $\geq 65$  years old). Most residents were male (60.0%). 81.2% (224) and 29.3% (81) of all residents had at least 5 and 10 medications respectively. The prevalence of polypharmacy ( $\geq 5$  medications) was 79.1% and 85.9% among the elderly and non-elderly respectively. However, this difference was not statistically significant ( $p=0.181$ ). Similarly, although more non-elderly (34.1%) than elderly residents (27.2%) were taking at least 10 medications, this difference was also not statistically significant ( $p=0.246$ ). The most frequent medications for residents who received at least 5 medications included laxatives (91.5%), agents for acid or peptic disorders (56.3%), pain or pyrexia relievers (53.6%), antihypertensives (50.0%), and antilipidemics (45.1%).

**Conclusions:** Polypharmacy is common among RNH residents. Although complex medication regimens are often necessary for nursing home residents, monitoring polypharmacy and its consequences may improve the quality of nursing home care and reduce unnecessary adverse event-related health care spending.

## PS1.048

### Trend in morbid obesity prevalence in Korea adults, 2002 - 2013

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**Background:** Morbid obesity is the most severe stage of obesity and it is likely to be accompanied with multiple chronic diseases, lowering life expectancy. In Korea, however, it has not been a major concern and there is no accurate data due to relatively low prevalence of morbid obesity. This study aims to analyze the prevalence and lifestyle of severe obese population in Korea.

**Methods:** This study adopted a time-series analysis utilizing data acquired from a national health examination program conducted every two years by National Health Insurance Corporation during 2002 to 2013 in Korea and the number of total cases was 110,251,027. In addition, the data from the 2010 Population and Housing Census conducted by Statistics Korea was used for standardization by age and gender.

**Results:** The total prevalence of morbid obesity increased 1.59 times over a decade (2002~2003: 2.63%, 2012~2013: 4.19%). The prevalence of morbidly obese men more rapidly increased than that of morbidly obese women which were 1.86 times and 1.3 times, respectively. Also, the share of current smokers was 27.7 percent in BMI  $\geq$  30 group which is 1.26 times higher than BMI  $\geq$  18.5 and  $<$  25 group. BMI  $\geq$  30 group shows 1.51 times higher moderate/high alcohol drinker proportion (6.5%) and 0.81 times lower high physical activity group proportion (7.1%) than BMI  $\geq$  18.5 and  $<$  25 group.

**Conclusions:** The prevalence of morbid obesity continues to rise in Korea and its growth rate is higher than that of obesity. Therefore, more effective strategy for severe obese population is needed in the near future.

## **PS1.049**

### **Prevalence of Aspirin prescription among type 2 diabetic patients in Songklanagarind Hospital**

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**Background:** Many recommendation recommended the use of aspirin for primary and secondary prevention for CVD in diabetic patients but many reports show that may be underuse. From the doubt about use of aspirin in primary and secondary prevention for cardiovascular event in diabetic patient and the safety and contraindication of drug administration in the patients to perform their greatest benefits, the study was done to evaluate the amount of Aspirin prescribed in diabetic patients.

**Objective:** To determine the frequency of aspirin prescription, adverse effects and contraindications among the diabetic patients attending outpatient departments of Songklanagarind Hospital **Methods:** Descriptive analysis was conducted to review the medical records of diabetic patients that attending outpatient department from 1st December, 2013-31st December, 2013.

**Results:** A total of 1,342 diabetic patients were analyzed, 80.32 % in primary prevention group and 19.68% in secondary prevention group. Mean age was 64.29 years old. 44.71% were male and 55.29% were female. The study reveals the Aspirin prescribed about one-third (31.67%). Primary prevention was 19.00 % (95% CI 12.09-21.38) and secondary prevention was 83.65% (95 % CI 78.53-83.30) (P value <0.001). Side effect were gastrointestinal such as GI bleeding, GI upset, dyspepsia or gastritis 1.04 % (95% CI 0.80-2.45) and 0.07% (95% CI 0.00-0.58) had tinnitus. Contraindications in primary high risk of CVD group found active peptic ulcer (0.17%), history GI bleed (0.17%), bleeding disorder (0.17%), history of recent intracranial bleeding (0.34%) and severe liver disease (0.84 %). Contraindication in secondary prevention group consists of history of GI bleeding (4.65%).

**Conclusion:** Despite Aspirin is a safe, inexpensive and readily available therapy that is effective for preventing cardiovascular disease in type 2 DM and particularly likely to benefit than side effect, low of contraindication. However found significant underuse of aspirin therapy among our study.

## PS1.050

### **Knowledge, attitudes and practices ( KAP) of primary care healthcare providers towards childhood pneumococcal vaccination in Singapore**

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**Background and Aim:** Pneumococcal vaccine was included in Singapore National Childhood Immunisation Schedule in 2009.

Prior to the official introduction of the vaccine, the vaccine coverage was an estimate of 20% of all newborns

The aim of this survey was to study the Knowledge, Attitudes and Practices of healthcare providers (doctors and nurses) in Singapore primary care sector towards childhood pneumococcal vaccination.

**Methods:** 57 doctors and 11 nurses participated in this study. It was a self administered questionnaire. For each question, it was assessed on a likert scale of 1 to 4, 1 being strongly agree, 2 somewhat agree, 3 somewhat disagree and 4 strongly disagree. The doctors were analysed in two categories. Family physicians' (FP) category included doctors with post graduate diploma or degree in Family Medicine and Medical officers' (MO) category which included doctors with only Bachelor of Medicine and Bachelor of Surgery. All 11 nurses had basic degree in nursing and were involved in developmental surveillance and childhood immunization.

**Results:** 100% nurses strongly agreed that pneumococcal vaccine is safe, while only 79% FP and 75% MO strongly agreed. 81% nurses, 64% FP and 75% MO strongly agreed that pneumococcal vaccine is effective. 100% nurses, 64% FP and 75% MO felt strongly agreed that it is important to immunize the child against pneumococcal disease. 90% nurses, 50% FP and 26% MO strongly agreed that they understood how the pneumococcal vaccine work. None of the nurses, 7% of the FP and 7% of the MO strongly agreed that they were concerned of the potential side effects from pneumococcal vaccine.

**Conclusion:** The family physician and the immunization nurse play a central role in the uptake of immunization programmes. Thus, it is important to educate all healthcare providers on how this vaccine work and its respective side effects.

## **PS1.051**

### **Primary care physicians' knowledge of ACGME core competencies**

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**Background:** Prior to 2010, Singapore's graduate medical education had been modelled after the UK system, which was based on apprenticeship and summative assessments. The Residency postgraduate training programme was introduced in 2010 when it was reformed and structured along the lines of US residency model to produce more highly trained doctors. Ministry of Health collaborated with Accreditation Council of Graduate Medical Education (ACGME) to develop a structured formative training. National Healthcare Group Polyclinics had adopted these 6 ACGME competencies in the evaluation of the cases seen by the residents and junior medical officers.

**Aim:** The aim of this study was to assess primary care physicians' knowledge of ACGME 6 core competencies, namely (1) Medical knowledge, (2) Patient care, (3) Professionalism, (4) Communication skills, (5) Practice-based learning and (6) Systems-based learning.

**Method:** This was a voluntary participation and kept anonymous. All physicians with Graduate Diploma in family medicine, or Masters in family medicine were invited to participate in this study. The self completed questionnaires were distributed via each clinic key trainer, who would collect the completed questionnaires and returned to the principal investigator for analysis.

**Results:** A total of 46 questionnaires were completed. 48% were familiar with the competencies. Only 6% were able to name all the 6 core competencies. Patient care and professionalism were most frequently identified. Systems-based practice and practice-based learning were the least identified. 13% had received training in these competencies.

**Conclusions:** The study revealed that most physicians had limited knowledge regarding the ACGME competencies, thus affected their understanding in applying these competencies in graduate medical training. This highlighted the pressing need to educate this group of physicians regarding these competencies and its applications.

## **PS1.052**

### **Correct inequality in health for handicap patients with the development of exercise machine**

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The exercise machine for handicap patients is very important for rehabilitation. in Thailand, the conventional machines used in hospitals looked like a cage with steel net on four folds. A major drawback of the conventional one is space requirement at home. Furthermore, its feature and function did not conform user requirements. As a result, the handicap patients were unable to use the machines properly. The aim of this research is to develop the exercise machine based on the handicap patients' need with concept full function and comfortable on space limitation.

The method of study consists of five steps as follows:

- 1) home visiting for collecting general data,
- 2) checking the patient's ability and surveying his/her requirement,
- 3) setting ultimate goals from multi-professionals including family physician, physiotherapist, nurse and engineers,
- 4) designing the machine using software and building the prototype, and
- 5) testing a machine at the patient's home. The frame of the developed machine is made of X-Frame Aluminum.

It can be used by the patient with a weight up to 200 kg. Furthermore, the patients can use the machine to exercise their body, hands, legs or any body part in various directions. This helps the patients to exercise as suggested by physiotherapy programs and to improve quality of the patient's life. Moreover, with the development of exercise machine correct inequality in health for handicap patients to tantamount with normal patients.

Keywords: Exercise machine, handicap patients, inequality in health

### **PS1.053**

#### **Family physicians' approach and knowledge about the use of child car safety seats and seat belts**

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**Background & Aim:** Ttraffic accidents(TA) are at the sixth order among all causes of children deaths. More than 618,000 children rode in vehicles during a 1 year period without the use of a child safety seat, booster seat, or seat belt at least some of the time, according to the Centers for Disease Control and Prevention (CDC). Child safety seats(CSS) reduce the risk of death in passenger cars by 71% for infants, and by 54% for toddlers ages 1 to 4 years. Booster seats reduce the risk for serious injury by 45% for children ages 4 to 8 years. It is essential for the parents to be aware of the importance of car safety seats and seat belt use for their children. The aim of this study was to determine the self practices of family physicians in use of car safety systems for children and their approach to inform their patient population.

**Method:** In this descriptive cross-sectional study, volunteer family physicians fulfilled a form. Statistical analysis were made by SPSS 20.0.

**Results:** Sixty family physician participated the study, 55.0% (n:33) were male. 86.7% (n:52) were married. 93.3% (n: 56) had a private car. 75.0% were using seat belt in front seats everytime, 8.0% only for inter city journeys. 48.3% were never using rear seat belts. 60.0% were not using CSS for their children. 87.5% were putting the CSS on right hand side at the rear seat. Only 18.3% knew the mandatory legal age interval to use CSS. 95.0% did not ask their patients' CSS useage and 68.3% did not think they should inform their patients about CSS usage. Only 1.7% felt inadequate, whereas 48.3% wanted to be trained.

**Conclusions:** TA are an important preventable cause of death and disabilities in children. Family physicians should inform parents about CSS.

## **PS1.054**

### **Mediterranean boutonneuse fever a case in primary care**

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Reason for Consultation: Fever and headache

Personal History: 56 years old allergic to penicillin, former smoker and with moderate alcohol habit. Medical history of hypertension, vertiginous syndrome, gastroplasty for morbid obesity, anemia for vitamin B12 deficiency.

History: he went to our primary care center from four days to present fever of 38° C, intense frontal headache and papular rash (0.5 cm diameter) on the trunk and extremities with involvement of palms and soles. The patient explained that he had been in a rural area 5 days ago.

Exploration: conscious, oriented, cardiorespiratory auscultation normal. No focal neurological signs, reactive isochoric pupils. Papular rash lesions on the trunk, upper extremities, palms and soles.

Differential Diagnosis: during the first days, diagnosis is difficult without the rash. Differential diagnosis Q Fever, Rocky Mountain spotted Fever, Meningococcal infections, Measles CMV, VEB.

Clinical Trial: The first suspect was boutonneuse Mediterranean Fever, so we did a serology and complete analytic and we treated the patient with doxycycline for one week.

Analysis: reactive C protein 20 mg/dl, cholesterol of 147 mg/dl, triglycerides 245 mg/dl, AST 77 U/L, ALT 117 U/L, GGT 120 U/L, LDH 841 U/L, leukocyte 8.69, erythrocytes 3.95, hemoglobin 113 g/L, hematocrit 34%, neutrophilia of 79%, prothrombin 85.6%.

Serology: HAV, HBV surface Ag, Ag core IgM HBV, HCV IgG, HIV are negative. CMV IgG positive, CMV IgM, parvovirus IgM, HHV-6 IgM and IgM EVB are negative. EBV IgG positive.

Bacteriology: Lues reaginic VDRL test neg, Ac anti T. Pallidum IgG neg, Rickettsia conorii IgM positive, IgG positive conorii Rickettsia, IgM and IgG Borrelia burgdorferi negative.

Evolution: with the results of serological tests, the patient was treated properly and the outcome was favorable with disappearance of rash, fever and headache.

Applying to the Primary Care: there are abundant rural zones around Barcelona, so we can find cases like this. The incidence is higher in summer period, where it coincides with the biological cycle of vector. Mediterranean boutonneuse fever is an infectious disease caused by Rickettsia conorii which generally has a benign course, although only 10% generally have serious complications.

## **PS1.055**

### **Hypertension in the elderly: characterisation of a sample of patients in a primary care health unit**

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**Background:** With population ageing and blood pressure (BP) progressively rising during lifetime, hypertension is an increasingly more common problem amongst the elderly.

**Aim:** to study prevalence of hypertension in elderly patients and its characteristics in a sample from one medical file.

**Methods:** Cross-sectional study in simple random sample of patients aged 65 and over during 2014. Characterisation of guarded hypertensive patients according to: age; genre; body mass index; alcohol and tobacco consumption; dyslipidemia (DLP); diabetes mellitus (DM); glomerular filtration rate (GFR); albuminuria; systolic and diastolic BP; number and class of antihypertensive medications (AHM).

**Results:** Sample of 146 patients, with hypertension prevalence of 51.4%: n=75; mean age 74; 55% are women; 38.7% are overweight; 44% are obese; 44% are alcohol consumers; 2.7% are smokers; 66.7% present dyslipidemia; 30.7% are diabetic; 9.3% present albuminuria (measured only in 31 patients); mean GFR is 78.6 ml/min (creatinine clearance); 25.3% of hypertensive patients (HP) present GFR less than 60 ml/min. Mean BP is 135/74 mmHg, medicated with a mean of two and a maximum of five AHM; 50.7% are normotensive, 45.4% present isolated systolic hypertension. AHM more used are: diuretic (60%), angiotensin II receptor blocker (ARBs - 58.7%) and angiotensin-converting enzyme inhibitor (ACEIs - 40%). AHM combinations more used are: ARBs or ACEIs plus diuretic (30.6%) or calcium channel blockers (8%). 30.7% use three or more AHM.

**Conclusion:** Hypertension prevalence in this sample is lower compared with those of other national studies (under-coding of hypertension could explain those results, among other reasons). However, there is a high prevalence of risk factors and multimorbidities as expected for this age group. There is an under-measurement of albuminuria and a good BP control. AHM combinations predominate over mono-therapy. Despite presenting a small sample size, this study allows us to perceive better the profile of elderly hypertensive patients and their needs.

## PS1.056

### Renal function and glycemetic control in metformin-treated diabetic patients - a cross-sectional study

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**Background:** Glycemic control has an important role retarding development of vascular complications of Type 2 diabetes mellitus (T2DM), like diabetic nephropathy. Gold-standard medication is metformin, although it is contraindicated at kidney dysfunction (in Portugal: creatinine clearance - ClCr - below 60 ml/minute) because of lactic acidosis risk. However there are some evidences about a possible use at lower dosis for ClCr of 30 to 60 ml/min.

**Aim:** evaluate kidney function and glycemetic control among metformin-treated T2DM patients.

**Methods:** Descriptive, analytical and cross-sectional study at one primary health care unit. Simple random sample of metformin-treated T2DM patients in 2014. Variables: age, sex, weight, creatininemia, glomerular filtration rate (GFR) calculated by Cockcroft-Gault formula; glycated hemoglobin (HbA1c).

**Results:** A sample of 195 metformin-treated T2DM patients was obtained (mean age  $68\pm 11$ ). Most of them (44.1%) were treated with metformin plus one oral antidiabetic medication. Mean HbA1c, GFR and creatininemia were  $6.9\pm 1.0\%$ ,  $97\pm 35/\text{min}$  e  $0.82\pm 0.2$  mg/dl, respectively. 12.8% had moderate Chronic Kidney Disease (CKD) - GFR between 30-60 ml/min. One patient had GFR below 30ml/min. T2DM patient prevalence of glycemetic control (HbA1c below 7%) was 61.5% (GFR $\geq$ 60) and 68.0% (moderate CKD). There was statistically significant differences at mean age ( $p=0.00$ ) but not at HbA1c mean and glycemetic control among different CKD stage groups of patients, as between creatininemia and glycemetic control.

**Conclusion:** There was only one patient with absolute contraindication of metformin use, although there was a non-negligible prevalence of moderate CKD. A significant trend for kidney dysfunction with ageing was observed, compatible with diabetes natural history, although significant differences between glycemetic control and renal function were not observed. Renal protective and/or other antidiabetic medications optimized for renal function can partially explain those results. Biases of selection, information and calculation of GFR at obese patients have to be taken in consideration while interpreting results.

**PS1.057****“Metformin + PPI = -B12?” - Prescription study in diabetic patients of a primary health care unit**

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**Background:** Diabetes mellitus (DM) is a prevalent condition that is a risk factor for life quality and other diseases as gastroesophageal reflux (GERD). At GERD, gastric secretory activity suppressors (GSAS) are commonly used. Excessive prescription of proton-pump inhibitors (PPI) has been causing increased side effects and interactions. With a considerable number of DM patients taking metformin and GSAS, risk of B12 vitamin deficit, neuropathy and vascular complications are increased.

**Aim:** Characterize metformin and GSAS consumption, comorbidities and B12 vitamin deficit in DM patients of a primary health care unit (PHCU).

**Methodology:** Cross-sectional study at simple random sample of metformin-treated DM patients in 2015. Variables: comorbidities, GSAS prescription, B12 vitamin supplements, chronic consumption (CC; more than two months), prescription-related diagnosis.

**Results:** n=195 (mean age 68) - 68% have hypertension, 53% dyslipidemia, 3.5% dementia, 3.5% chronic alcoholism, 1.5% memory changes and 1.5% retinopathy. There were no records of peripheral neuropathy. One patient had sucralfate prescription; 61 (31%) were prescribed with PPI, 81% of those with CC (median: 19 months). Only 60% of PPI-CC has PPI-related diagnosis and 16% have potentially related free text records or endoscopy results. There were no patients diagnosed with vitaminic deficit or anemia. Three patients had B12 vitamin CC, with no PPI consumption. PPI-CC was found in 3 demented patients, 2 alcoholic patients and one patient with memory changes.

**Conclusion:** Despite record bias and reduced sample size, a relevant prevalence of DM patients with PPI chronic co-prescription with no clear reason was found. Under-diagnosis of peripheral neuropathy and vitamin deficit are admitted. This presentation also intends to sensitise prescribers and consumers for insightful prescriptions, polymedication risks and differential diagnosis of “diabetic” neuropathy that could be due partially by vitamin deficit. It could also be a starting point for quality improvement measures of PPI prescription in our PHCU.

## **PS1.058**

### **Central hemodynamics and hypertension: assessment in a Portuguese public health center population - research protocol**

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**Introduction:** Hypertension is a chronic disease that leads to increased morbidity and mortality. Although brachial blood pressure (bBP) measurements remain strong predictors of structural cardiovascular damage, central blood pressure (cBP) parameters have been showing increasing interest due to their prognostic value for cardiovascular events and a different influence under some antihypertensive treatment regimes, compared with bBP.

**Objectives:** The aims of this study were to evaluate, on a representative sample of a Portuguese Public Health Center population, the bBP and cBP parameters, to determine the prevalence of hypertension and to identify factors that may influence the difference between bBP and cBP measurements.

**Methods:** This is an observational, cross-sectional study, in adult users of a Public Health Center in Minho, Portugal. Use shall be a representative sample of the population, to which the measurement of the brachial BP seconds standardized rules for benchmarked device will be held, and calculated the central PA and hemodynamic indices by tonometry analysis of flattening the radial artery and pulse wave. Later there will be a conference where the demographic data will be collected (age, sex, weight, height, BMI, alcohol consumption and smoking), medical history (Vascular Accident previous Cerebral, diabetes mellitus, atrial fibrillation, Left Ventricular Hypertrophy and peripheral arterial disease) and anti-hypertensive treatment. Statistical analysis of data a descriptive analysis and subsequent comparison of dependent variables using multiple logistic regression models will be performed.

**Discussion/Conclusion:** This work may suggest subgroups of patients where the central BP measurements can contribute to the therapeutic antihypertensive decision, the benefits may be related to effects 'beyond BP control,' and whose characteristics may have greater weight in future studies.

**Keywords:** Hypertension; Brachial blood pressure; Central blood pressure.

## **PS1.059**

### **Current evidence of calcium supplementation during pregnancy**

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**Introduction and Objective:** During pregnancy and lactation, maternal calcium needs are increased, not only to preserve her normal calcium balance and bone density but also to meet the demands of the growing fetus. These requirements can be overcome by the increase of dietary intake. Inadequate intake of calcium may harm both the woman and fetus. This study aimed to determine, in the light of current evidence, the benefits of calcium supplementation during pregnancy.

**Method:** Searches were conducted in National Guideline Clearinghouse, NHS evidence, CMA infobase, Cochrane, DARE, Bandolier e Medline. It was surveyed guidelines, meta-analysis, systematic reviews (SR) and randomized controlled studies, published in Portuguese, English, Spanish and French from January 2006 until January 2016, with the MeSH terms 'pregnant women' and 'calcium'. To evaluate the evidence founded, the Strength of Recommendation Taxonomy of the American Academy of Family was used.

**Results and Conclusions:** After inclusion and exclusion criteria were applied, three SR, one meta-analysis and three guidelines were selected. The studies agree that there is no evidence to recommend universal supplementation of pregnant women because there are no clear additional benefits in prevention of preterm birth or low infant birthweight. However, one SR showed that calcium supplementation reduces the risk of pre-eclampsia, particularly in women with low calcium diets and those at high risk. This review shows that there is no evidence to recommend universal calcium supplementation during pregnancy, yet there is evidence to recommend supplementation with 1-2g/day of calcium in populations in which the calcium intake is reduced.

Mesh terms: “pregnant women”, “calcium”, “supplementation”

## PS1.060

### A case report of a confirmed Zika virus imported infection in Barcelona

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**Introduction:** Zika virus is a flavivirus mainly transmitted by Aedes mosquitoes. Zika infection, when symptomatic presents rash, low-grade fever, arthralgia, conjunctivitis, headache or, rarely, gastrointestinal symptoms. World Health Organization has declared Zika virus and its associated complications a Public Health Emergency of International Concern because its explosive spread in The Americas and the Caribbean in parallel with the unusual increase of microcephaly, fetal losses and Guillain-Barré syndrome among the affected. By 05/02/16 nine probable imported cases of Zika were declared in Spain.

**Case Report:** A 57 year-old male patient, native of Colombia, without remarkable past medical history, attended Primary Care with a 3-day history of exanthema and low-grade fever. The patient had arrived from Colombia 4 days before consulting, after a 21 days trip visiting family in Bogota and Cucuta. The very pruritic rash began in the face and spread over limbs and thorax, associated to pain in small and large joints (predominantly distal), low-grade fever and mild diarrhea.

On physical examination maculopapular rash was flagrant on arms, slight on thorax and legs, without other pathological findings. Based on high suspicion of Zika, the patient was referred immediately to the Tropical Diseases Department in Hospital Clinic. Diagnosis was confirmed by flavivirus RT-PCR positive for Zika in urine. RT-PCR was negative for Chikungunya and Dengue. Serology was positive for Dengue, probably due to cross-reactivity. No other significant laboratory test abnormalities were detected. The patient became asymptomatic after 6 days and is currently under being follow-up.

**Discussion:** Well trained and updated family medicine physicians among promoting communication paths and action protocols between Primary Care and other specialities is vital to early detection of emerging diseases. This case report is particularly relevant because of the acute state of the Zika infection, which, in a more favourable entomological environment, might lead to indigenous cases.

## PS1.061

### Case study of an abrupt statin intolerance - crucial role of family physicians

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**Background & Aim:** One of the most prevalent health problems a family physician has to manage is dyslipidemia. It's essential that a correct statin management is implemented to promote right metabolic control and prevent adverse effects (AE).

**Method:** RCS is a 68 year old active men with history of obesity, hypertension, dyslipidemia and chronic obstructive pulmonary disease, controlled with olmesartan medoxomil 20mg, atorvastatin 20mg, fenofibrate 267mg and aclidinium bromide 322ug. In a routine appointment the patient was asymptomatic, but outside the LDL target. The statin therapy was changed to pravastatin 40mg + fenofibrate 160mg. After a few weeks, in spite of a good LDL target, the patient manifested myalgia in both legs and elevation of AST (66 U/L), CK (2068) and creatinin (1,95 mg/dL). At the time, no therapeutic change was made. After 4 weeks, symptomatic and analytic deterioration was observed and the statin suspended. After 4 months the patient still referred myalgia and still had CK (569U/L), LDL (248,8mg/dL), total cholesterol (TC) (361 mg/dL) and triglycerides (TG) (381mg/dL) elevated. Further investigation showed hypothyroidism (TSH 150 ug/dL and Ft4 0.1ug/dL) in analytic review.

**Results:** After 1 month of therapeutic with only levotiroxin 300mg the patient became asymptomatic with normal lipid profile, AST, CK and creatinin, without requiring statins. In further appointments the levotiroxin was adjusted to 200mg and the patient remained asymptomatic with no analytic changes.

**Conclusions:** Statin management should obey to tight monitoring, not only to achieve target values but to prevent possible AE. Secondary causes of dyslipidemia should be investigated before statin introduction and if any AE occurs during therapy. Due to the good accessibility, family physicians have a vital role in statin management and it's crucial to develop skills, knowledge and to be updated in this area.

## **PS1.062**

### **Epilepsy in Celiac disease: a case-report**

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**Introduction:** The Celiac Disease is an autoimmune pathology which attacks the small intestinal mucosa in genetically predisposed individuals. It is characterized by chronic inflammation of the small intestine. The variability of clinical manifestations is huge, from classical gastrointestinal symptoms to extra-intestinal forms, such iron deficiency anemia, dermatitis herpetiformis and neurologic symptoms, being the most common the epilepsy. Diagnosis can be achieved using serologic markers, even though the gold standard method is small intestine biopsy. The only effective-proved treatment is the adoption of a gluten-free diet.

Case Presentation: An 18-year-old female, with previous iron deficiency anemia, transferred to the Hospital de Santo António due to psychomotor agitation, presented at admission prostrated, with oral dyskinesias, roving-eyes-type ocular movements, 4 member symmetrical mobilization and without signals of meningitis syndrome. Laboratory findings showed anemia, leukocytosis and thrombocytosis. The computerized axial tomography, the lumbar puncture, the magnetic resonance imaging and the electroencephalogram were normal. The histological and serological findings were compatible with celiac disease. The symptoms improved on a gluten-free diet.

**Discussion:** The delay in the diagnosis of celiac disease caused a prolonged exposure to gluten, causing an exuberant autoimmune reaction which triggered a seizure. The deposition of anti-transglutaminase autoantibodies around the brain blood vessels, associated with brain inflammation and brain-blood-barrier disruption might have been pathophysiological mechanism behind the epileptogenesis. The iron deficiency anemia, attributed to the diet, might be a consequence of the small intestinal mucosa, causing abnormal iron absorption.

**Conclusion:** Due to the great morbidity caused by delay on diagnosis therapeutic onset, it is of utmost importance to alert the medical community to this disease and its more serious consequences, as epilepsy.

## PS1.063

### The relationship between hyperuricemia and hypertension in primary care patients

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**Background and Aim:** Over the last four decades, the prevalence of hyperuricaemia has increased in the developed and developing countries. Various epidemiological studies and clinical trials have shown that elevated serum uric acid level is closely related to the development of hypertension. Hypertension has been reported as the highest non-communicable disease that visit primary health centers in our Municipality, Padang of West Sumatera Province of Indonesia from 2012 to 2014. This study aims to determine whether the hyperuricemia have relationship with hypertension cases in the primary care patients.

**Method:** We conducted a cross-sectional study in between January and March 2015 in Pauh Primay Health Center of Padang Municipality of Indonesia. We collected 63 patients by employing consecutive sampling technique, who met with the inclusion criteria of the study and had their willingness to participate in the study voluntarily. We measured patients' serum uric acid level and blood pressure that complied to ethical guideline and as well as sought formal approval from the municipality department of health. The data was analyzed descriptively and as well as using chi-square test for bivariate analysis.

**Result:** The results showed that most of hyperuricemia cases occur in the age group 39-45 years, which is almost equal number between man and woman. Bivariate analysis shows that hyperuricemia is related to hypertension ( $p < 0,05$ ,  $OR = 9,062$ ,  $CI 95\% = 2,276-36,084$ ).

**Conclusion:** The hyperuricemia in our primary care setting 'Pauh Primary Health Center' of Padang Municipality of Indonesia has significant relationship to hypertension. Therefore, in managing hypertension, especially for 'stubborn' cases, we should consider hyperuricemia as a hidden risk factor.

## PS1.064

### Antibiotic's utilisation in Croatia, 2005-2014: a preliminary results

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**Background & Aim:** Antibiotic resistance is important public health problem throughout the world, and is proven to be connected with the excessive use. The aim of this study was to investigate ten-year trends of antibiotic utilisation in Croatia.

**Methods:** The study is observational, based on routinely collected data from the Annual reports on drugs utilisation, Croatian Agency for Medicinal Products and Medical Devices, 2005 - 2014; anatomical therapeutic chemical classification (ATC) is used; pharmaceutical utilization is expressed in Defined Daily Doses per 1000 inhabitants per day (DDD/TID) and financial spending in Croatian kunas. According to ATC, antibiotics belong to the group J01 and subgroups J01A to J01X.

**Results:** Since 2005, a stable upward trend of antibiotic's utilisation (17.5 DDD/TID in 2005 and 23.5 DDD/TID in 2014) is recorded in Croatia. Penicillin's are the most widely used (48-55% of total antibiotic's utilisation), with increasing trend, from 9.2 in 2005 to 13.0 DDD/TID in 2014. Cephalosporin's are on the second place (13-16% of total utilisation), firstly with upward and than downward trend (2.9 DDD/TID in 2005, 4.2 in 2010, 3.0 in 2014). Macrolid's, on the third place, shows a trend similar to cephalosporin's, firstly slightly increased (2.0 in 2005 to 3.3 DDD/TID in 2010) and then decreased (2.95 DDD/TID in 2014). Tetracyclin's and quinolon's share the fifth and sixth places, with stable trends (around 1.5 DDD/TID per years). Utilisation of other antibiotic's, including aminoglycosid's are less present (less than 1.0 DDD/TID per years).

**Conclusions:** in comparison to international studies, antibiotic's utilisation in Croatia is rather high and with increasing trends. Our next step is to investigate the utilisation of individual antibiotics and to compare with the international data in order to rise up the awareness of the necessities for changing public and professional utilisation habits.

## **PS1.065**

### **Ethics in HIV communication**

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**Background & Aim:** Infection by HIV/AIDS always raised ethical questions regarding medical practice, in particular the situations of conflict of duties by the family doctor.

**Method:** Case description.

**Results:** 39-year-old woman, for the first time to the query that is pregnant with unknown time. Was questioned for personal/family background history, having the patient referred to history of psychiatric pathology, with attempted suicide 20 years ago. She denied other background. She was referred to Obstetrics. At the end of the consultation, was accessed the electronic clinical process and it was found that the patient was HIV positive.

Six months later, she returns, along with her husband, being assessed separately. She states that they are trying to get pregnant and, when confronted with the data obtained, the user refuses to inform her husband of her condition of HIV carrier. The husband appealed for Subfertility and apparently unaware of the fact that the wife was HIV positive. It was requested for analytical study of screening HIV, syphilis and Hepatitis.

The couple never returned to schedule appointment, were summoned and missed. Guided contacts with public health and Infectiology in order to intervene on this couple to identify possible risk of contagion.

**Conclusion:** The communication of the HIV carrier state to the spouse can raise ethical issues. First arises the problem of doctor-patient confidentiality before the HIV carrier. Secondly the right to the spouse to maintain his health, that is, the "right to life". The third problem arises when the user does not use the query, being so important to the advocacy of the patient and the management of contacts with the various specialties, for the prevention of the spread of contagious diseases.

## **PS1.066**

### **Eat to forget**

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**Background & Aims:** Obesity is an important cardiovascular risk factor and appears often associated with type 2 Diabetes. Its etiology is multifactorial, associated with sedentary, food errors or endocrine pathology. Rarely, may be associated with binge eating behaviours associated with psychiatric pathology.

**Methods:** Case description.

**Results:** 63-year-old woman, is part of a nuclear family. Diagnosed in 2013 with type 2 Diabetes, attends regularly to surveillance of Diabetes.

Features a grade I obesity, history of depressive pathology and anxiety. In one of the consultations, during an educational intervention on healthy eating, she verbalizes an important conflict with her husband. She was part of a verbally abusive relationship and victim of frequent criticism of her body image. This caused her feelings of low self-esteem and anxiety, and her way of dealing with the frustration would be eating. This patient had no other emotional support (didn't have any friends, or attended social groups).

Considering that the patient would benefit from a multidisciplinary approach to the treatment of obesity, she was referred to an Obesity centre. This request was refused due to the age of the patient.

In this way, the family doctor, tried the best control of the patient. Thus, the patient was given Metformin 500 mg and Fluoxetine 20 mg and proceeded to psychotherapeutic intervention, with stimulation of coping strategies and creation of relevant and emotionally healthy relations. This intervention has been maintaining over the periodic surveillance of Diabetes.

**Conclusion:** This case highlights the importance of the biopsychosocial approach of patients overall. Even in the face of an organic disease such as Diabetes, the primary cause of bad control may be associated with social/family dysfunction. After the unsuccessful attempt of collaboration and integration of hospital care, the family doctor, managed the resources at her disposal, guiding this patient: biologically, psychologically and socially.

## PS1.067

### What is the effectiveness of topic probiotics in the prevention of recurrent vaginitis?

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**Background & Aims:** Vaginal flora, predominantly consisting of Lactobacillus, is essential to the well-being and vaginal health. Change of its composition are related to the development of vulvovaginal candidiasis (VVC) and bacterial vaginosis (BV). The use of topic probiotics has been addressed in its prevention. Our aim is to systematize the existing evidence regarding the effectiveness of probiotics in reducing vaginal infection recurrence.

**Methods:** Survey of published articles, between 2000 and 2015, on Medline, evidence-based medicine sites, index of Portuguese medical journals and bibliographic references of the selected articles. The Mesh terms used were: "candidiasis, vulvovaginal", "bacterial, vaginosis", "prevention and control", "probiotics/therapeutic use" and "lactobacillus". for the classification of levels of evidence and assigning the strength of recommendation it was used the SORT scale.

**Results:** of 659 results found, 14 were selected: 3 clinical guidelines (CG), 9 randomised controlled trials (RCTS) and 2 non-controlled clinical trials.

in the CG, there are not recommendations as to the benefit of the vaginal probiotics in prevention of recurrences, considering that there is not sufficient evidence.

Most of the original work shows a tendency to the reduction of the number of recurrences with the use of probiotics. However, the results are not consistent. Although some original work demonstrates a reduction of recurrences in relation to Candidiasis and vaginosis, this reduction is not present or is not statistically significant in other works.

**Discussion:** The vaginal probiotics appear to be promising in preventing recurrences, especially in the case of BV, (strength of recommendation B). However, not all the evidence gathered is consistent, in particular regarding the VVC, observing methodological differences regarding study design, sample size and probiotic used (strain, dose, and duration). As such, further studies are needed to support its effectiveness and clinical utility.

## PS1.068

### Description of cervical cancer screening in a family health unit - a cross-sectional study

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**Background & Aim:** Cervical cancer in Portugal has an annual incidence of 12,8 per 100.000 women and a mortality of 4,2 per 100.000 women. However local reality is unknown. The aim of this study is to characterize the cervical cancer screening in the Family Health Unit of Afonsoeiro from 1 January 2012 to 31 December 2014.

**Method:** Cross-sectional study with a sample obtained from all colposcopy procedures made in the Family Health Unit of Afonsoeiro during that time. The analysis consists of interpreting: type of appointment, the waiting time between colposcopy and the histologic result, number and type of benign and malignant results, number of carcinoma in situ and deaths. Data was submitted to descriptive analysis tool in SPSS®.

**Results:** We screened 1692 women with 1844 colposcopy procedures, median age of 41 ( $\pm 12$  years). 85,5% of all colposcopy was executed in "family planning appointment". The results were available in 136 days ( $\pm 45$  days) and 29 days ( $\pm 18$  days), for high-priority requests. The rate of atypical colposcopy procedures was statistically superior ( $p < 0,001$ ) in high-priority requests.

Most frequent benign changes was inflammation (N=276), flora deviation (N=62) and atrophy (N=60).

The atypical colposcopy rate was 5,4% (N=100). 41 were ASC-US, 34 LSIL, 18 HSIL, 6 ASC-H and 1 AGC. These patients repeated colposcopy. From them 12 were lost to follow-up, 5 were waiting results, 42 changed the previous diagnosis, 13 revealed CIN 1, 25 CIN 2 or 3 and 3 showed CIS. There was no death among tracked women.

**Conclusions:** The limitations of this study are: patients lost to follow-up and the lack of diagnosis of late stage cancer. Family doctors can make the difference establishing high-priority colposcopy. The cervical cancer incidence we found in our population is similar to cervical cancer incidence in Portugal, although the sample was not representative.

## **PS1.069**

### **The impact of risk factors on stroke**

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**Background:** Stroke is the abrupt onset neurological disorder caused by a disturbance of circulation in the brain, which leads to an insufficient diet of certain parts of the brain with oxygen and nutrients.

Some diseases are risk factors for stroke that can be affected, such as high blood pressure, heart disease, irregular heart beat (usually atrial fibrillation), diabetes, elevated blood lipids, significantly narrowing of the carotid arteries.

The aim was to examine the prevalence and correlation of risk factors on stroke.

**Methods:** The study was a retrospective study conducted in the period of 01.03.2015-01.08.2015 in Public health Banjaluka and Prijedor in which data were collected on patients suffering from a stroke. Data were collected in five family medicine teams. All patients identified age, smoking status, laboratory analysis, the presence of hypertension and atrial fibrillation.

**Results:** in the study we observed 61 patients with stroke. 93.8% of patients had hypertension as a risk factor, 48% increased levels of cholesterol in the blood. 30,7% of patients had a positive family history, 25% diabetics, 21.1% atrial fibrillation as a risk factor, 31.1% of smokers . Narrowing of the carotid arteries was seen in 18.4% of patients. 40.38% of patients had three or more associated risk factors. 52.6% had unregulated blood pressure, and 42.6 % come regularly for check-ups.

**Conclusion:** The number of infected patients had positive risk factors. A significant number of respondents had associated risk factors. High blood pressure is a risk factor is the most common.

**Keywords:** stroke, risk factors, incidence

## PS1.070

### Uterine cancer mortality trends in Turkey

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**Background & Aim:** Uterine cancers (cervix uteri, corpus uteri, any part of uterus) is the most common cancer of the female reproductive organs. It is mostly seen in women aged 55 and over. The average chance of a woman being diagnosed with uterine cancer during her lifetime is about 1 in 37. The main objective of this study was to analyze the mortality trends of uterine cancer in Turkey between the years 1987-2008.

**Method:** The rates per 100,000 age-standardized to the European standard population were assessed and time trends presented using joinpoint regression analysis. Average annual percent change (AAPC), annual percent change (APC) and 95% confidence interval (CI) was calculated.

**Results:** Nearly 1550 uterine cancer deaths occurred in Turkey during the period 1987-2008. The average of age-standardized mortality rates (ASR) in Turkey from 1987 to 2008 were 0.84 per 100 000 people for cervix uteri cancer, 2.39 per 100 000 people for other uterine cancer. The age-standardized cervix uteri cancer death rates presented a significant increase of per year from 1987 to 2008 (APC=7.4, 95%CI=0.7;14.5). The age-standardized other uterus cancer death rates presented a significant decline per year from 1987 to 2008 (APC=2.4, 95%CI=-4.0;-0.7).

**Conclusions:** The increasing mortality trend of uterine cancer in older women suggests that development of well-organized tertiary centers for the implementation of modern therapeutic modalities. Also screening of young women, periodic health controls of the women by family physicians would lower the prevalence of uterine cancers and also the mortality rates.

## PS1.071

### When is too much water?

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**Background:** Is it very normal for doctors to recommend to drink water to most of their patients, but some already drink a lot of water, sometimes so much it can cause diseases, but they will describe it as "normal drink" "quite a lot".

**Case:** 63-year-old man with history of anticoagulated atrial fibrillation for years, benign prostate hyperplasia in treatment for one year. Consultation by anosmia in 2014, he was evaluated by specialist.

He enquires for another problems and he said that he was drinking plenty of water every day, when asked about low much water daily and he said that he drank around 10litres of water at day.

He insisted that he felt the urge to drink water constantly, even at night and that this situation begins to be uncomfortable.

**Results:** We requested 24 hours urine and blood samples with renal function and ions.

5 litres of urine were collected with low urine density and then we calculate the plasma osmolality and we observed slightly high osmolality (289,84mOsm/kg).The blood ions were normal and there were sign of plasma dilution appear.

Then we contacted with our fellows to the Hospital to make a thirst test and to end the study.

in the hospital were obtained several blood samples every hour along 5 hours without to drink water, the blood result noting a progressive increase in the plasma osmolality, starting at 292,8 and coming up to 404mosm/kg

After the administration of 1 miligram of desmopressin the osmolality of plasma rised to 562 mosm/kg.

A Thoracoabdominal CT was performed without finding anything problems justify the clinic.

A Cranial and sella MRI with and without gadolinium showed the pituitary gland was slightly decreased, without observing injuries occupants of space or alterations in the morphology of the gland. Therefore the report was Sella partially empty.

Finally the diagnosis was Incomplet central Diabetes Insipidus of uncertain etiology.

Whith the start of the treatment the desmopressin 120micrograms every 12 hours,the patient felt improvement of symptoms almost immediately after taking the medication.

## PS1.072

### Febrile syndrome: importance of the clinical interview

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**Discription:** 35 years old, male patient that came to our health centre with fever since 5 days, myalgias, disuria and urine with darker color. Denies contact with animals or travels to other countries.

**Physical Exploration:** Depresible abdomen, pain on left costal flange (spleen??). Hepatomegaly (3 fingers). Negative Blumberg. Not signs of peritoneal irritation. Erythema and micropapular lesions in abdomen.

**Blood test:** GOT 4082, GGT 217, GPT 5224, LDH 4460, PCR 14, Bilirrubine 2.9, Ferritine 3901

**Urine test:** Positive in hematies and proteins

After the phisical exploration we decide to take him to the hospital, and his wife suffers a presincope with fast recovery. At that time she claims she has return from a travel to South America and 3 weeks ago she is a bit tired. in the hospital the run a new test: VHA igM positive.

**Discusion:** AVH is one of the illnesses more extensively spread in the world. Generally it appears in the shape of epidemic sprouts and is transmitted predominantly by oral-fecal route, a third of the cases brought by this infection happens in children and consists of several clinical forms of presentation; the treatment is based on the application of general measurements as well as the active and passive immunoprofilaxis. Usually has a mild presentation, nevertheless approximately 0.15 to 3.7 % of the cases die of fulminating hepatitis and about 20 from 30 % of all the cases need hospitalization. Adults develops jauncide in 70-80%. It also can appear in a mild form or without symptoms at all. That what the case of the patient´s wife. On the other hand her husband had jaundice and several abdominal pain. After 3 month he still has intense asthenia, that is improving.

**Keywords:** Fever, clinical interview, hepatitis, travel

## **PS1.073**

### **Looking trough dysmenorrhea**

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Case Discription: 14 years old patient that comes twice for dysmenorrhea with nauseas and vomits. It started since menarche at 9 years old. The pain has been increasing in the past 6 months, with bad response to antiinflamatory treatment, limiting her daily life.

Menstrual calendar: 5/28-30.

Physical exploration: not conclusive.

She is send to gincology with the suspect of secondary dysmenorrhea

Transrectal ultrasound: Double uterus that ends in a single vagina. Right anexial cyst. Loss of the left kidney. RMN and TAC don't give new information.

Diagnose: Doble uterus. With the ultrasound images and the symptoms it is decided to perform a laparoscopic surgery (histerostomy of the rudimentary uterus and right anexectomy) and she will be given analogs of GNRH monthly, to decrease the pain until the surgery. After the surgery the patient remains asintomatic

Conclusions: The main cause of absenteeism from school and from work in young women is dysmenorrhea, that is also the most frecuent gynaecological pathology of women at reproductive age. It is our responsibility to distinguish between primary dysmenorrhea (more frecuent, no organic cause, asociated to ovulatory cicles, good response to hormonal treatment and AINES) and secondary dysmenorrhea that is characterized by having a organic cause, it start at a older age (except in cases of genital malformations), it also increases the intensity gradually and bad response to treatment. Mainly it is caused by endometriosis and pelvic inflammatory disease (normally it course with fever).

So if we suspect secondary dysmenorrhea, we have to send the patient to gynecology. in this case, having a ultrasound scanner in primary care would have been very helpful to guarantee an efficient care to the patient.

Keywords: dysmenorrhea, menstrual pain, menstrual disorders

## **PS1.074**

### **Young women with hemorrhagic stroke: HTA with a bad control**

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Personal History: - Family Background: no antecedentes de muerte súbita ni síncope inexplicados: - No medical allergies known. - No toxic habits. - Arterial hypertension diagnosed in 2013 treated with Losartan 50mg. Anamnesis: 46 years-old patient with general discomfort, stiffness and loss of consciousness, breathing difficulty of seconds. Physical exploration: Dysarthria and left hemiparesis with a 11 points in the GCS. Breathing difficulty. AT 200/110. Complementary test: Cranial TAC: Hematoma protuberancial with extensión to right hemimesencephalus open to IV ventricle causing acute supratentorial hydrocephalus. Arteriography: Both carotids and vertebral arteries without no AVM or other pathology that justify the ACV. Evolution: The patient had good neurological evolution with good level of consciousness, no dysphagia but blurred vision in both eyes that normalize covering one. Bilateral paresis of the horizontal look. Global Hemiparesis 4/5, REM ++/++++. Left Babinski. Right peripheral facial paralysis. Unstable walk with increase of the base. Diagnose: Protuberancial right bruise open to IV ventricle. Secondary hydrocephalus that required external drainage with normal arteriography with bad control of AT. Discussion: Our patient has a arterial Hypertension of recent diagnose in treatment with losartan 50mg. After reviewing her clinic history we discover that she had abandoned the treatment despite the advise of her primary care doctor. Nowadays cardiovascular diseases are the first cause of death in Spain. Arterial hypertension is a treatable disease. If recommendations of the primary care doctors are not followed complications of this disease can happen as in the case of our patient, which can be avoided if the AT is properly controlled. According to Spanish Society of Hypertension, in Spain there are 14 million people with hypertension, 9.5 million are not controlled and 4 million are not diagnosed. The first line for fighting hypertension are doctors and nurses of primary care by making blood pressure measurements. In recent years the degree of control of hypertension has increased as a result of improved and intensified treatments and increasing awareness of improving lifestyles. However, cardiovascular disease remains the leading cause of complications and mortality worldwide.

## PS1.075

### Awareness of vitamin B12 deficiency in type 2 diabetics on long-term Metformin amongst Irish general practitioners

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**Background:** Metformin induced Vitamin B12 deficiency has a reported prevalence of 10-30%. Despite numerous published clinical diabetic guidelines including NICE (National Institute Clinical Guidelines), SIGN (Scottish Intercollegiate Guidelines) and Irish Diabetic Guidelines, none address the issue of metformin induced vitamin B12 deficiency. Considerable overlap exists between symptoms of diabetic neuropathies and Vitamin B12 deficiency and differentiation between the two difficult at times.

**Aim:** To assess the awareness of metformin Induced Vitamin-B12 deficiency amongst Irish General Practitioners and their current monitoring practice.

**Methods:** Questionnaires were distributed to 249 general practitioners and general practitioner trainees via email, direct drop to practices and postal methods.

**Results:** were included in an excel database and analysed with SPSS software. Results: 51% (N=126) of questionnaires were returned completed. All participants managed patients with type 2 diabetes of which 53% (N=67) were aware of the risk of metformin induced Vitamin B12 Deficiency. 60% (N=49) routinely measured Vitamin B12 in patients on metformin. Monitoring of Vitamin B12 levels post metformin ranged from 3 months (12%), 6 months (22%) and 12 months (31%). 77% (N=97) believe Vitamin B12 should be routinely measured in patients on metformin.

**Discussion:** It is clear there is mixed awareness regarding metformin induced vitamin B 12 deficiency. With the rise of diabetes on the rise and metformin frontline medical management, it is time for the guidelines to include recommendations on its monitoring. Without appropriate screening, symptoms of vitamin B12 deficiency can easily be assumed to be due to diabetic neuropathy promoting inappropriate treatments. The results of this study support annual monitoring of Vitamin B12. Main Outcome Measures: There is no clear consensus for the monitoring of metformin induced Vitamin B12 deficiency amongst diabetic patients despite there being a clear relationship between the two. Vitamin B12 monitoring should be an integral component of diabetic guidelines.

## **PS1.076**

### **Identifying cases of violence against women and children: an essential skill set in family medicine**

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**Introduction:** Child abuse, sexual and domestic violence are among the most destructive experiences afflicting women and children that result to physical, behavioral, psychological, and economic consequences. Physicians in the front line need to be sensitive and vigilant in identifying both overt and subtle signs of these violations. As such, identification of victims is vital to prevent further abuse and injury, as well as to manage the patient holistically.

**Objectives:** To assess the skill of Family Medicine (FM) residents in detecting cases of violence against women and children (VAWC).

**Methods:** Eight case scenarios were presented to resident trainees from government and private hospitals in Metro Manila. They were tasked to identify cases pertaining to VAWC, and distinguish the case type.

**Results:** Red flags that were easily detected by more than 80% of trainees were cases of rape and physical abuse towards women. Circumstances with moderate challenge were neglect, sexual harrassment, abandonment and sexual abuse, in that order. On the other hand, respondents had inadequacy in detecting cases of physical abuse towards children; while the most difficult to recognize was emotional abuse .

**Conclusion:** Acquisition of this new skill set may prove beneficial in providing the ideal environment for proper management and support provision for the VAWC subjects. Lack of knowledge and training in this rising societal and health threat may cause underdiagnosis of common VAWC presentations. Consequently, this leads to failure of identification, assessment, documentation, and management of such patients.

## **PS1.077**

**The Case:** We reported a 40-year-old woman with Lennox-Gastaut syndrome (drug-resistant epileptic encephalopathy) and intellectual disability presented with a history of 8 weeks of anorexia, weight loss and insomnia. She was pale, her mother reported that she had lost 12 kg during the past two months and that she refused to eat. She was not able to speak and her intellectual development was impaired. The abdominal echography of the patient was normal. The traffic esophagus - gastro-duodenal showed an absence of peristaltic movement and was orientated as Gastroparesis. We considered the possibility of Gastrostomia Endoscopica's placement Percutanea vs medical treatment with Eritromicina. Finally, we decided to try a treatment with Eritromicina and observe the evolution. She was reevaluated in 15 days, presenting clinical improvement and progressive increase of ingestion.

**Method:** A review of the literature reflecting ethical analysis.

**Results:** The appropriate indications for Percutaneous endoscopic gastrostomy placement are neurological disorders such as stroke, cerebral palsy or amyotrophic lateral sclerosis.

**Conclusions:** in the medicine, there is a thin line between the 'Euthanasia for omission' and "Therapeutic Obstinacy / Cruelty". in order to offer a reasonable hope to the patient, the treatment should be proportioned. If this treatment is disproportioned it can be considered "Therapeutic Cruelty", which is a medical practice that includes diagnostic pretensions that do not have any benefits for the patient and that provoke an unnecessary suffering because of the absence of suitable information. The "Euthanasia for omission" represents the death for omission of an essential treatment to support the life. If we were able to perfectly delimit the line between these two concepts, we would be able to guarantee the fulfilment of the principle of welfare with the patients. in order to do so, it is necessary to consider many factors to decide which will be the best option for each patient. This particular reflection comes from the quoted case: is it necessary to fulfil a Percutaneous Endoscopic Gastrostomy Tube to lengthen someone's life in an artificial way?

## **PS1.078**

### **Sixth nerve palsy, abducens palsy**

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**The Case:** A 45-year-old female patient comes to the out-of-hours service of the Health center with a 3-day history of binocular horizontal diplopia and holocraneal migraine. The patient has no history of trauma. The patient presents double vision producing a side-by-side image with both eyes open. In the physical exploration, diplopia to levo, supra and infraversion of his gaze is apparent. The rest of the neurological exploration was normal.

**Method:** She was immediately referred to an ophthalmologist for examination. Ocular fundus examination and campimetry results were normal. There is a limitation of the abduction of the left eye. The patient is referred to Neurology; a cranial TAC is performed and results show no intracranial injuries. Upon analysis, all parameters are normal. The diagnostic orientation was idiopathic sixth nerve palsy.

**Results:** The sixth cranial nerve innervates extraocular muscle (ipsilateral lateral rectus) that action is abduction of the eye. The most common symptom of the sixth nerve palsy is diplopia (Fig 1 and 2). There is usually less double vision on near fixation than on distant fixation. It can be caused by diabetes, hypertension, atherosclerosis, trauma and idiopathic.

**Conclusions:** All the patients with abducens nerve palsy need an ophthalmologic examination: visual acuity, binocular function and stereopsis, motility evaluations and evaluation of ocular structures. In cases of sixth nerve palsy due to raised intracranial pressure, patients may experience headache. There is an article of the Department of Ophthalmology (Mayo Clinic, Rochester, Minnesota, USA) about the associations of sixth nerve palsy. They identified 137 new cases of sixth nerve palsy. Causes and associations were: undetermined (26%), hypertension alone (19%), coexistent hypertension and diabetes (12%), cerebrovascular accident (4%), post-neurosurgery (3%), aneurysm (2%) and other (8%). Treatment depends on etiology: systemic conditions are treated primarily. Most patients with a microvascular abducens nerve palsy are simply observed and usually recover within 3-6 months. There can be used occlusion to improve diplopia, torticollis and headache. Surgical intervention is only reserved for patients that had no improvement in 3-6 months of conservative management. Botulinum toxin can be considered too.

## **PS1.079**

### **A study of patient anxiety before surgical operation**

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Preoperative anxiety can worsen the outcome of treatment because anxious patients have worse perception of information. The purpose of the study was to assess patient's perceived anxiety before surgery, determine its links with sociodemographic factors, the nature of the operation and the patient's informational awareness before surgery.

**Methodology:** The survey was carried out among the patients' hospitalized to the Hospital of Lithuanian University of Health Sciences and Siauliai Republican Hospital. The study participants: 191 patients from the surgical units, 189 from the ophthalmology units, 199 from orthopedics and traumatology units. The instrument: 102-item questionnaire that consisted of sociodemographic questions, questions concerning the patients' anxiety before surgical intervention, patients' informational awareness and their expectations for preoperative counseling.

**Results:** This study involved 579 respondents: 37.5% of men and 62.5% of women. One-fifth of the patients involved in the study (20.8%) felt mild anxiety, 12.9% felt moderate anxiety and 3.6 - severe anxiety. Women felt moderate and severe anxiety statistically more often than men (20.1 percent and 10.6 percent respectively). The age of the patient, the hospital or the department to which they were hospitalized, were not statistically significant related to preoperative anxiety. Respondents of the survey with severe anxiety statistically significant more often indicated that they are worrying about various aspects which could potentially occur during the surgical intervention than those with mild anxiety. Anxiety due to possible pain sensation after surgery was relevant for both groups of patients with mild and severe anxiety.

**Conclusions:** More than one third of patient felt preoperative anxiety. Women felt preoperative anxiety more often than men. Preoperative informational awareness of patients, the nature of surgical procedure and the level of the hospital were not related to the anxiety before surgical procedure.

**Key words:** planned surgical intervention, preoperative patient counseling, anxiety

## **PS1.080**

### **Implementation of a cooperative movement in general practice**

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Danish general practice consists of small independent units with a limited tradition of benchmarking and organizational cooperation. This has led to high pricing of products demanded by general practice, with large profits. At the same time the task burden on general practitioners has increased and more tasks must be solved within the same economic framework. This puts general practice under pressure. We describe an initiative rooted in the Danish cooperative movement which on several levels saves resources for Danish general practice. We have established a cooperative where the joining practices will be cooperative members and co-owners of the association. The association endeavors to support the resources available in general practice in several ways:

- By focusing on the best economic agreements on procurement, and lower the costs of general practice
- By saving and streamlining human resources for each clinic through an IT platform that can be the axis of rotation for the performance, planning and development of the daily business operation
- Through education and information, to contribute to a greater focus on the management and organization
- in the long term to try to contribute to a situation where general practice can retain its independence in smaller units, by strengthening the sector through increased focus on networking, where smaller units can benefit from large-scale operational advantages where appropriate.

The cooperative association has been welcomed by Danish practitioners, and 1. january 2016 24% were members of the cooperative. The cooperative has already been a game changer in the procurement-related part of general practice, with the effect that the other players in the market have followed and have reduced their prices considerably.

We will in this session describe both the mind and visions for the cooperative association, and also describe the process with a focus on the experience we have gained so far.

## **PS1.081**

### **Dysphagia plus candidiasis (almost) ruined a marriage**

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**Introduction:** This is the case of a patient presenting dysphagia apparently due to an esophageal candidiasis. The challenges were finding the cause and understand the reason to the complaints after treatment. The diagnosis brought a third problem to the patient, mistrust of partner. This case is challenging both in diagnosing as to the interference with family dynamics, being the Family Doctor to manage all these aspects. Case Description: The patient is a 70 year-old Caucasian male who presented to a primary care facility complaining of a one month history of dysphagia for solids and liquids and sometimes post-nasal regurgitation. A careful physical examination only revealed a systolic murmur grade II. He had an oesophagogastroduodenoscopy that revealed an extensive esophageal candidiasis which in some areas almost occluded the lumen. The patient was treated with oral fluconazole and at reevaluation endoscopy everything was normal. Despite the improved imaging, the patient remained complaints and it was necessary investigate causes for the disease, including AIDS. At this point, came among the couple a relational conflict because his wife got the disease as transmitted through sexual intercourse. A medical intervention with the wife was necessary in order to demystify and clarify her doubts. Three months after first consultation the complaints persisted, referring as new difficulty in articulating words. It was requested head CT scan and neurology consultation. The patient had already undergone chest X-ray, spirometry and thyroid ultrasound all unchanged. Serological tests were all negative, thyroid function was also good. In otorhinolaryngology consultation held nasopharyngoscopy that revealed no abnormalities. At this time remains undiagnosed, awaiting neurology consultation.

**Discussion:** This patient's case demonstrates how sometimes medicine isn't obvious and creates unexpected difficulties. The communication between Family Doctor and the patient demonstrates how simple is to create communication channels between family members which promotes problem solving.

## **PS1.082**

### **The vagina as a potential reservoir for enterobius vermicularis? A ten year-old female child with recurrent pinworm infection**

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Enterobius vermicularis infection remains a common parasitosis, being prevalent in children. The diagnosis is mainly clinical and parasite eradication often poses challenges. The cure is seldom complete and re-infection is common, so that parasites may cause significant decrease in the quality of life. Here, we describe the clinical case of a 10 year-old female child, belonging to a nuclear family in the Duvall cycle stage IV. The patient was initially diagnosed with intestinal pinworms in 2014. The patient and her family underwent a single Albendazole 400mg treatment. Six months later, she again developed abdominal pain and anal itching, which was shown to be associated with the presence of stool parasites. A second dose of Albendazole 400mg was prescribed to the family. The patient had a remission of her symptoms. Nearly 4 weeks after, she again mentioned anal itching and the stool examination revealed 'eggs and adult worms of Enterobius vermicularis'. In face of a recurrent parasitic infection, the family was prescribed Pyrantel pamoate 11mg/kg. General cleaning and hygiene measures were also explained. After three treatment cycles there was no symptom improvement and the stool examination showed the persistence of the parasite. Mebendazole 100mg was then prescribed to the family and repeated two weeks later. The parasitological exam of the stool became negative and the patient has remained asymptomatic. The anthelmintics used here follow the guidelines of the Portuguese Society of Pediatrics. General cleaning and hygiene measures are also recommended. Deworming of the household is mandatory. The migration of perineal larvae to the female genital tract has been documented. In the present case, the existence of a vaginal reservoir could explain the challenge in eradicating pinworm parasites. For their holistic approach Family Doctors have a special role in these cases: care and work in partnership with the patient and the family.

## PS1.083

### Quality assessment and improvement in registering the diagnosis of osteoporosis

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**Background:** Osteoporosis (OP) is characterized by decreased bone mass and microarchitectural bone deterioration. Due to high prevalence and its medical, social and economic consequences, osteoporosis represents a public health problem. Nevertheless, there has been an apparent tendency to overdiagnose this condition. Aim To evaluate and assure the quality of registration of Osteoporosis as a medical problem in the personal electronic process in a Family Health Unit (FHU).

**Methodology:** The list of problems in the electronic clinical process (SAM®) of every patient registered at the FHU was evaluated for the quality of Osteoporosis diagnosis registration (L95; ICPC2). Information was retrieved from the electronic clinical process. As quality criteria, OP had to be registered with a bone densitometry with diagnostic values, appropriate to the age and gender; and/or a record of fragility fracture. A retrospective internal institutional audit was conducted for August 2014 and an educational intervention performed in November 2014. In June 2015 a new evaluation was performed.

**Results:** In the first evaluation a total of 267 individuals had been diagnosed with Osteoporosis, of which 153 (57.3%) had a densitometry registration. of these, 90 (58.9%) had the report with the T-score, 66 (73.3%) of which met the OP criteria. After the educational intervention, there has been a decrease in the number of individuals diagnosed with OP (267 vs. 217) and an increased registration of diagnostic criteria (27.7% vs 34.1%), although the difference was not statistically significant ( $p > 0.05$ ).

**Conclusions:** The proportion of patients with diagnostic criteria for OP was low. There is a need for a more accurate application of the diagnostic criteria, since the quality of the records will depend on a correct clinical coding. By doing that, the family doctor, manager of the patient health care, could intervene in a more targeted and effective way to manage Osteoporosis.

## PS1.084

### **Dizziness: a clinical approach in primary health care**

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**Background:** Dizziness accounts for an estimated 5 percent of primary care clinic visits. Diagnosing the cause of dizziness can be difficult because symptoms are often nonspecific and the differential diagnosis is broad. The aim of our work is to define an algorithm that will improve the approach of dizziness in primary care.

**Methods:** Literature research of review articles and clinical guidelines, published in the last 10 years, using the Mesh term: "Dizziness"

**Results:** Dizziness can be classified into four types: vertigo, disequilibrium, presyncope, or lightheadedness. The main causes of vertigo are benign paroxysmal positional vertigo, Meniere disease, vestibular neuritis, and labyrinthitis. Parkinson disease and diabetic neuropathy should be considered with the diagnosis of disequilibrium. Presyncopal patients complain of feeling faint and light-headed without losing consciousness. Psychiatric disorders, such as depression, anxiety, and hyperventilation syndrome, can cause vague lightheadedness. The history should first focus on what type of sensation the patient is feeling. It is important to refer that some causes of dizziness can be associated with more than one set of descriptors. Patients should also be asked about medication, caffeine, nicotine, alcohol intake and history of head trauma. The differential diagnosis of dizziness can be narrowed with easy-to-perform physical examination tests, including evaluation for nystagmus, the Dix-Hallpike maneuver, and orthostatic blood pressure testing. Laboratory testing and radiography play little role in diagnosis.

**Conclusions:** Dizziness presents in patients of all ages. Most causes of dizziness are benign, but early recognition of serious or life-threatening disease is important. The goal of the family physician should be to recognize which patients need inpatient management or emergent intervention. On the other hand appropriate diagnosis and treatment can significantly improve quality of life.

## **PS1.085**

### **Pregnancy after 65 years? A Case Report**

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**Background:** The Pregnancy Delirium is a rare condition that involves a firm but mistaken belief that the woman is pregnant, in the absence of symptoms and external signs of pregnancy and it is not confirming the presence of the fetus through the auxiliary diagnostic tests.

**Case Report:** We present a 65 year-old female. She has history of major depressive episode with psychotic symptoms for nearly 10 years. No other medical history of relief. She claimed to be pregnant for nearly two months, having performed a quick pregnancy test and the result was negative. However, the patient continued to claim to be pregnant and have not believed the test result. Denied previous history of sex. Denied nausea, vomiting, or other symptoms associated with pregnancy. To note the patient found herself conscious and cooperative, oriented in time and space, with symptoms of depression. The study for organic pathology, with analytical study and Skull computer tomography, were negative. The patient was hospitalized in the Psychiatric Service for compensation delusional disorder with onset of antipsychotic treatment observing progressive improvement of delusional activity.

**Discussion:**It is necessary to establish the differential diagnosis between delirium of pregnancy and pseudopregnancy. In pseudopregnancy, the woman shows external signs of pregnancy. On the other hand, in the presence of a delusion of pregnancy, it is imperative to the exclusion of organic pathology, since these can be a manifestation of dementia syndromes, metabolic syndromes, epilepsy or cerebral syphilis. These conditions arise often associated with prior psychiatric history. As seen in this case, after exclusion of organic cause, the antipsychotic therapy is a key element in addressing these delusional situations.

## PS1.086

### A preventable death

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**Background & Aim:** A 25 years old woman, 20 weeks pregnant, consults with her general practitioner for high blood pressure and occasional sight disorder alterations. Medical history: Non-smoker, no other toxic habits, fetal demise in the 25th week without known cause. RH A positive. Clinical examination: Good general health, blood pressure 146/95 mmHg. First trimester screen without disorders. Edema in lower limbs.

**Method:** Blood analysis: Haemoglobin 11.7, haematocrit 35.1%, platelets  $137 \times 10^9/L$ . 24-hour urinary protein: 735mg. Anticardiolipin antibodies and anticoagulant lupic are both negative. Abdominal ultrasound and Doppler: fetal hypoxia (fetal estimate weight 236g, without telediastolic flow in umbilical artery). She was treated initially with labetalol but no decrease in blood pressure values, slight improvement of the patient and the high risk to maternal and fetal health, it was proceeded by an abortion, prior consent of the couple and subsequent prevention with labetalol and aspirin.

**Results:** Diagnosis: Early severe intrauterine growth restriction (IUGR) with Doppler type III/IV in the early onset severe preeclampsia context. Differential diagnosis: Pregnancy-induced hypertension, HELLP syndrome, Eclampsia.

**Conclusions:** Pre-eclampsia occurs in about 10% of obstetric pathology with variable clinical expression that determine prognosis. Preeclampsia usually occurs after 32 weeks; however, if it occurs earlier it is associated with worse outcomes. Therefore, routine screening is important during first trimester prenatal performed in primary care in order to prevent maternal morbidity and mortality for both and to assess cardiovascular risk of women as hypertension during pregnancy is an early marker of essential hypertension and cardiovascular disease and kidney later in life. This promotes recommendations related to healthy lifestyles, reporting recurrence risks /fetal mortality in subsequent pregnancies.

## PS1.087

### Insertion of intrauterine device (IUD)

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**Background & Aim:** We objectify the different parameters about the insertion of the intrauterine device (IUD)during the year 2015. Study the profile of the user that demands the copper IUD insertion: Average age Insertion and other parameters such as the above nulliparity abortions, previous contraceptive IUD insertion methods.

**Method:** Descriptive observational study of patients who choose a copper IUD insertion at the clinic.

**Results:** Study of 95 patients. of all women who request an IUD insertion shows that the average age is 35 years, of which 45.3% had a previous abortion and 13.7% were nulliparous. The previous contraceptive usage method was a condom with 25.3%, 16.8% took an oral contraceptives, 15.8% of women did not use any method and 21.1% no data. Altogether in 2015, 16.8% replaced the IUD and had 27.4% of the women previously used IUDs. Regarding the insertion technique, 3.1% of the patients had a vasovagal reaction in, 4.2% had to be treated with Misoprostol due insertion difficulties. 6.3% placed the IUD during the period postpartum/breastfeeding.

**Conclusions:** IUD insertion is done in our country with an age of 35 years of the patient, where the majority reported being using the condom as a contraceptive. In addition almost half of the patients made a previous abortion IUD use. The intrauterine device with the implant account for reversible contraception has a very high efficiency rate (98-99%), but despite its proven, the IUD in Spain is still the third most used contraceptive method.

## **PS1.088**

### **Fibromyalgia and myofascial pain syndrome: are they related?**

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**Background & Aim:** Fibromyalgia is a common and chronic disorder characterized by widespread pain, diffuse tenderness, disturbed sleep, and exhaustion from head to toe. It affects up to one in 20 patients in primary care. Myofascial pain syndrome (MPS) is a common, painful disorder that can be localized or widespread, often in conjunction with vague symptoms like numbness, fatigue, or sleep disturbance. Fibromyalgia (FM) and myofascial pain syndrome (MPS) are common soft-tissue pain conditions seen in medical practice. It will be discussed the understanding of this relation, highlighting the role of the primary care physician.

**Method:** The link between Fibromyalgia and MPS were reviewed by searching PubMed and references from relevant articles, and selected articles on the basis of quality.

**Results:** In recent studies, Ge et al investigated whether the 18 tender points (TPs) used in the diagnosis of fibromyalgia are also Myofascial pain trigger points. Manual palpation was used to evaluate TPs in 30 patients with fibromyalgia, after which intramuscular electromyographic registration was used to indicate whether trigger points existed at these sites. According to the authors, most of the TP sites were also trigger points, with local and referred pain from active trigger points partially reproducing the patients' spontaneous fibromyalgic pain pattern. Based on the data, Ge et al suggested that active trigger points may contribute to the generation of fibromyalgic pain.

**Conclusions:** Although MPS and fibromyalgia are separate entities, they have some overlapping features, and can be related.

## PS1.089

### Evaluation and quality improvement for obtaining written informed consent in family planning procedures

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**Background:** Free and enlightened informed consent (IC) fulfills the medical practice aim of respecting human being autonomy. According to the clinical guideline 015/2013 from the Portuguese General Health Direction (DGS), the written IC is mandatory in family planning procedures (FPP). These include the insertion of intrauterine devices (IUD) and subcutaneous implants (SI). Aim: The USF Viseu-Cidade (USFVC) identified a low rate of obtaining IC in FPP (IUD and SI). This led to corrective measures with the goal of increasing the rate of obtained IC in FPP in that Family Health Unit (FHU).

**Methods:** Studied Dimension: technical and scientific quality Study Unit: Women in a fertile age, from USFVC and submitted to insertion of IUD or SI Periods of evaluation: 1) 01/09/2014 to 31/05/2015; 2) 01/07/2015 to 31/12/2015 Data Source: Digitally available medical files, IC archived files Type of Evaluation: internal, retrospective Evaluation Criteria: Rate of written IC obtained from women who went through insertion of IUD or SI Statistical Analysis: Microsoft Excel 2010® Standard Quality: Insufficient (<50%), Sufficient (50-69%), Good (70-89%), Very Good ( $\geq 90\%$ ) Intervention: educational - oral presentation of the DGS clinical guideline and of the results of the first evaluation, plus a reformulation of the table for internal FPP records.

**Results:** The first evaluation showed a total of 52 FPP (31 IUD, 21 SI), with an accomplishment of IC of 63.5% (Sufficient). After the educational intervention, during the second evaluation period, 13 FPP were made (7 SI, 6 IUD), with an accomplishment of IC of 100%.

**Conclusions:** Through the corrective measures, an increase in the written IC in FPP was obtained. The involvement of all the professionals from USFVC might have played an important role. Thus, by implementing simple strategies it was possible to increase the rate of obtained written IC. Disclosure: No conflict of interest declared.

## PS1.090

### Characterization of contraception in women in perimenopause from two Family Health Units

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**Background:** Perimenopause is a stage of transition in the reproductive life of women which begins around age 45 and goes until one year after the last menstruation. Although there is a progressive reduction of fertility until menopause, while ovulation occurs there is still a risk of pregnancy. Hence contraception advice is essential during this phase.

**Aim:** Characterize the contraception of women in perimenopause from two Family Health Units (FHU), according to the last registered contraceptive method.

**Methods:** Study: observational, descriptive, cross-sectional Population: women aging between 45 and 60 years old, from two Portuguese FHU Sample: women from two FHU, aging between 45 and 60 years old, with a Family Planning appointment in 2014 and a registered contraceptive method Exclusion criteria: women in menopause, hysterectomized or without records in the medical files Variables: age, registered contraceptive method (CM) Source: digitally available medical files (SAM®, MedicineOne®) Statistical Analysis: Microsoft Excel 2010®.

**Results:** A total of 941 women in perimenopause were evaluated. Subjects were aged between 45 and 60 years old (mean of 51.2 years). Subjects used the following CMs: 21.9% combined oral contraception (COC), 12.8% barrier method, 12.4% tubectomy, 5.5% oral progestin-only pills, 5.4% intrauterine device (IUD) without specification of the subtype, 6.1% hormonal IUD, 1.9% copper IUD, 2.2% subcutaneous implant, 0.3% contraceptive patch and 0.1% injectable birth control. Furthermore, 1.9% used natural methods and 29.6% did not use CMs.

**Conclusions:** Despite the risk of getting pregnant, almost a third of the women studied used no CM. Moreover, from the ones who used CMs, most preferred COC. The family doctor has a privileged position to advise about the most suitable contraception for women in perimenopause. Thus, the results of this study emphasize the importance of health education made at Primary Health Care.

Disclosure: No conflict of interest declared

## **PS1.091**

### **“Dr, I prefer to have pimples!” - a clinical case on the effects of isotretinoin**

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**Background:** Isotretinoin is an oral synthetic retinoid used to treat moderate to severe acne, when there is no response to other treatments. However, it has several side effects. Since the 80s, isotretinoin has been linked with depression, suicide and psychosis, but this is still controversial.

**Aim and Methods:** To describe a case of a psychotic episode in an adolescent taking isotretinoin for acne, using as main variables: symptoms, treatment and evolution.

**Results:** A 17-years old adolescent, suffering from acne, was evaluated in Dermatology appointments at Hospital Center Tondela-Viseu (CHTV) and oral isotretinoin was prescribed in September 2014. He went to Pediatrics Emergency Room (ER) of CHTV in 27/10/14 due to social isolation, unstable mood, anorexia, insomnia and locomotion impairment. The assistant dermatologist was called and recommended isotretinoin suspension and evaluation by child and adolescent Psychiatry (CP). In the absence of CP in the ER a Psychiatry evaluation was requested. The patient was sad, had a perplex look, scared and suspicious. He referred persecutory delusions, blockage of thought and a decrease in sleeping hours. He denied drugs consumption and smoking. Paliperidone and ethyl lofazepate were prescribed and a first psychotic episode appointment (FPEA) was scheduled. In the FPEA the patient said he was feeling better, less confuse and anxious, but very sleepy. The ethyl lofazepate dosage was reduced. In the following FPEA he said he was more focused, “without that ideas” and paliperidone dosage was also reduced. He kept follow-up in FPEA.

**Conclusions:** Once isotretinoin can cause depression and psychotic symptoms, it is crucial to closely monitor its possible side effects. The family doctor has a key role in this task, by giving support to patients and their families and clarifying the benefits and risks of isotretinoin.

**Disclosure:** No conflict of interest declared.

## **PS1.092**

### **Should I stay or should I go? - My Istanbul pre conference exchange**

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**Background:** The Pre Conference Exchange Programme is an event promoted annually by the Vasco da Gama Movement (VdGM) which is a working group of WONCA directed to family medicine young doctors and residents. In October 2015, the exchange took place in Turkey where participants shared their experiences and beliefs.

**Aim:** Promote VdGM activities relevant to our personal and professional growth.

**Discussion:** When I first got accepted in the exchange I was very nervous. I have never travelled alone and this was my first exchange experience ever. A lot is going on in Turkey, the conflicts in the border with Syria, the refugee crisis and the unstable political issues. This created a lot of anxiety about my journey, specially on my family and friends. Before my departure the organisation joined all participants in a conversation and a few colleagues were having second thoughts about going. The turkish were very understanding but everyone else was so supportive and encouraging that I felt safe immediately. I visited a practice in Besiktas and participated in consultations. Even though I didn't spoke a word of turkish, I was almost certain of what patients were complaining based on their body language which was surprising. Despite our differences in family health unit buildings' and staff I was surprised how much clinically alike we are.

**Conclusions:** The Istanbul exchange was a milestone event in my life and a memorable experience so I am very happy I didn't let fear control me. I learn so much about the Turkish history, culture and health system and it is my belief that sharing your experience works like cleansing and, due to our demanding work and responsibility, you need that experience to become more motivated and successful.

### PS1.093

#### Usefulness of urinalysis in primary health care

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**Background and Aim:** The urinalysis is a non-invasive and a low-cost test commonly used in primary health care and it is an essential part of the diagnostic evaluation of many urinary, nephrologic and metabolic diseases.

This review aims to assess the recommendations for the use of the urinalysis in general practice and the interpretation of its most frequent findings, including hematuria and proteinuria.

**Method:** A literature analysis was conducted, using the following databases: PubMed, Medscape, Uptodate and the Cochrane Library. Papers were included if they were written in Portuguese, English or Spanish. The final search was performed in December 2015.

**Results:** Urinalysis includes an amount of tests that characterize a urine sample and measure its various compounds. These tests combine the evaluation of physical characteristics (color and clarity), biochemical parameters (urine pH, density and presence of blood, glucose, nitrites, ketones, bilirubin, urobilinogen, and protein) and microscopic sediment evaluation (red blood cells, leucocytes, epithelial cells, organisms, crystals and casts). The urinalysis has a significant diagnostic value in urinary tract infection. Clinical suspicion of renal lithiasis, glomerular diseases and certain metabolic disorders can be supported by specific findings in urine tests. The sediment evaluation can also differentiate glomerular from non-glomerular hematuria. Urinalysis parameters must be evaluated in combination with clinical symptoms, physical examination and other laboratory tests. Its accuracy is influenced by collection method and it is essential to interpret accordingly.

**Conclusions:** Urinalysis is an important tool in the diagnostic assessment of a variety of diseases and it should be interpreted in each clinical context. Despite the utility of the urine tests, there is no evidence of its role in the approach of asymptomatic patients and therefore the prescription of urinalyses in routine medical exams is not recommended.

## PS1.094

### Is diabetic dermopathy interesting to search in a GP's office? Why?

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**Background and Aim:** Type 2 diabetes is increasing in incidence and prevalence. Cutaneous manifestations of diabetes and its complications are not generally well known by GPs compared with those of other organs. One of these such signs is diabetic dermopathy. This study emphasizes the association between diabetic dermopathy with micro and macrovascular complications.

**Method:** A quantitative observational study was undertaken at one GP centre. It was performed between June and August 2015. Patients were split into two groups: one with dermopathy (A), and the other one with all types 2 patients (B). 1,916 consecutive patients were enrolled into the study. 213 of these had type 2 diabetes.

**Results:** The patients with diabetic dermopathy (A) were older than the control group (97.4% are older than 50 years). in both groups, there was a similar ratio gender (55.2% of men in A, and 55.9% of men in B). 79% of patients with dermopathy suffered from diabetes for more than 10 years. Amongst patients with confirmed vascular disorders, a higher proportion of them were seen in the diabetic dermopathy group. This includes: Aterial stenosis is noticed in 34.2% of patients in group A, 26.3% in group B. Coronary aretery diseases were more frequent in group A (15.8%) than B (13.6%). Retinopathy was seen in 7.9% of patients in group, and 3.8% in group B. Finally insulin treated type 2 diabetics were seen amongst 13% of A; smaller amount in B (9.4%).

**Conclusion:** Diabetic dermopathy the most frequent dermatological sign in type 2 diabetes which was also conformed in our study (17.8% of diabetic patients in our study had it). Furthermore, we noticed an important link between dermopathy and microangiopathy (7.9%), and macroangiopathy (34.2%). This potential association highlights the importance searching this clinical sign in diabetic patients.

## PS1.095

### Is it important for a GP to know dermatological signs of type 2 diabetes?

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**Background and Aim:** Diabetes mellitus is an ever increasing problem throughout the world. It affects more than 350 million people. Consequently, we wished to study how skin disorders are linked with diabetes in a primary care setting. Our main aim consists in discovering the frequency of cutaneous signs, and show if it is important for a GP to search them.

**Method:** A quantitative, observational unicentred study was undertaken in a city with a population of 5,000. The study was performed over a three month period between June and August 2015. During this period, we saw 1,916 patients, and 213 suffered from type 2 diabetes.

**Results:** Most of the type 2 diabetes patients were older than 50 years (91.6%). for 20.7%, of the patients' type 2 diabetes had been diagnosed within the last 10 years. We found more men (55.9%), than women (44.1%) to have the condition. 50.7% of patients have HBA1C equal or under 7%. in regard to medications, 37% took a prescription of a Biguanides. The most representative signs we noticed were: diabetic dermopathy (17.4%), finger pebbles (6.6%), necrosis lipoidica diabetorum (2.8%), acanthosis nigricans (2.3%), scleroderma-like change (1.9%), scleroderma of Buschke (1.4%), diabetic bullae (1.4%).

**Conclusion:** Type 2 diabetes is and will be very important to search in developed countries. Our study permits to light the importance of cutaneous signs in this disease because 11.1% of patients with diabetes had representative cutaneous signs linked with this disorder. One fifth of patients aged between 18-74 do not know they have diabetes. By examining for cutaneous signs some diabetic cases could be diagnosed sooner, and patients life and treatments could be improved.

## PS1.096

### The age of patients with chronic pain and the experience of chronic pain and quality of life

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**Introduction:** The age structure of patients with chronic pain in Public Health Centre Sarajevo is very diverse, representation is evident and almost uniformly distributed in the age groups 19-65 years and 66+. **Objective:** To analyze whether age influences the subjective experience of pain and quality of life. **Method:** The study is conducted by surveying patients with chronic pain. Period: September-December 2015, within 3 teams of family medicine from Dom zdravlja Sarajevo. The studied variables were: age, gender, numerical pain score at rest and during activity, numerical grades (0-10) evaluating the quality of life: mood, general activity, interaction with others, sleeping. The patients were divided into two age categories: 19-65 years and 66+. The data was then statistically analyzed.

**Results:** Total number of patients was 120, 83 women (60.2%), 37 men (30.8%), average age 61.9, SD 39.9 (55 patients up to 65 and 65 patients 66 years or older). Statistical analysis of the data collected for these two age groups gave the following results no statistically significant differences with respect to diagnosis (chi-square=4.681;  $p=0.322$ ); no statistically significant difference in the score for pain at rest ( $t=1.324$ ,  $p=0.188>0.05$ ); no statistically significant difference in the average score for the quality of life-sleeping ( $t=0.900$ ,  $p=0.370>0.05$ ); there is statistically significant difference in the score for pain while under burden ( $t=2.436$ ;  $p=0.016<0.05$ ); there is statistically significant difference in the average assessment of quality of life-general activity ( $t=4.557$ ,  $p=0.000<0.05$ ); there is statistically significant difference in the average assessment of quality of life-mood ( $t=3.188$ ,  $p=0.002<0.05$ ); there is statistically significant difference in average assessment of quality of life-relationships with people ( $t=2.041$ ;  $p=0.043<0.05$ ).

**Conclusion:** The findings obtained in this study indicate that the age is a very important reference in the treatment of patients with chronic pain and as such must be given more space in the daily work of family medicine team.

## **PS1.097**

### **Hair loss in a young girl**

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**Introduction:** *Alopecia areata* (AA) is a cause of autoimmune hair loss with a lifetime prevalence of 2%. AA can affect patients of both genders and all ages, but it often begins in childhood. AA typically presents as one or more well-defined round/oval patches of hair loss on the scalp with small “exclamation mark” hairs at the periphery; it can progress to total loss of hair on the scalp (AA totalis) or complete loss of hair on the body (AA universalis). A personal or family history of autoimmune diseases may be observed in a small subset of patients. A strong psychological stress can occur prior to the first episode. AA is associated with social and psychological disturbances.

**Description:** A 14-year-old girl presented with a 7-month history of progressive hair loss accompanied by psychological stress related to the separation of a close friend and conflicts with her mother. During that period of time, the patient changed her lifestyle because she was afraid of being bullied at school. She has been treated for dental caries since age 12, but there was no personal or family history of autoimmune diseases. Physical examination revealed findings compatible with AA. Investigations revealed normal complete blood count and thyroid function tests and an erythrocyte sedimentation rate of 6 mm/h. Anti-nuclear, anti-double-stranded DNA and anti-thyroid antibodies were negative. It was decided to start treatment with oral corticosteroids (for 2 months) and topical minoxidil. Additionally, she had one cariated tooth removed. After 6 months, a total regrowth of her scalp hair was observed.

**Conclusion:** AA is a disease with a variable prognosis and has a great impact on patient’s life, as it can cause emotional and social functioning disturbances. Family physicians are well positioned to identify AA, initiate treatment and follow closely these patients in order to prevent psychological problems.

## **PS1.098**

### **Preventive health consultations with disadvantaged 20-44-year-old patients in general practice, Denmark. The general practitioners experiences. Questionnaire and focus group interview**

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**Background and Aim:** Politically and in general practice the role of general practitioners (GPs) in preventive health consultations is discussed. The attitude of GP's is important. In a randomised controlled trial 27 GPs had preventive health consultations with 211 younger disadvantaged patients. The participants had difficulty in finding solutions, bad self-rated health, lack of security, lack of confidence in family and extreme stress. During two consultations (60 and 20 minutes) they chose one or two health-related goals and discussed resources and barriers for reaching them. The GPs followed courses for about 50 hours regarding motivational interviewing, social and psychological aspects of health-related changes with focus on life style and resources.

**Method:** After the project period (1998-99) a questionnaire (Q) was answered by 25 of the GPs and focus group interview with 11 GPs in 2 groups was performed.

**Results:** The GPs found the courses very important to enable them to change the focus from risk of disease to resources for health-related changes. The GPs found the study relevant. The questionnaire, completed at home by the patients, facilitated patients autonomy and motivational interviewing in order to support personal goals. 22 of the 25 GPs achieved better understanding of the patients' resources and agenda. 21 focused more on resources after the project period. GP's requested further evidence of the effect of preventive health consultations.

**Conclusion:** GPs wants courses in motivational interviewing before offering preventive health consultations. Evidence for effect might support the GPs' motivation for preventive work. Further research on GPs' motivation to conduct preventive health consultations is needed.

## **PS1.099**

### **Prevalence of urinary incontinence in elderly in Baanpru city Hatyai district Songkhla province**

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**Objective:** To study the prevalence of urinary incontinence in elderly, effects of urinary incontinence, causes and reasons of why urinary incontinence elderly do not take treatments from the doctors, and to study self-handling when incontinence occurs. Elderly subjected are residence of Baanpru city Hatyai district Songkhla province.

**Data Collecting Method:** Interview has been set up for 300 elderly at the age of 60 and above who have residence in district 1, 3, 5, 7 and 9 of Baanpru city Hat Yai district Songkhla province. Apply descriptive statistics method with Chi-square test and Fisher's exact test to analyze.

**Results:** of 300 elderly, 23 are found to have urinary incontinence (7.7%). of those with urinary incontinence, 15 are female (65.2%) and 8 are male (34.8%). Ages of patients fall in the rank of 70-79 year-old, 11 people (47.8%). Nine elderly have itchininess effect (39.1%), 20 occurred with boredom (87%), and another 16 are afraid to go out (69.6%). Only two elderly have seen the doctors (8%). Twenty-one elderly take this symptom as aging effect (100%), while the other twelve elderly do not take it as a serious problem (52.2%). Twenty-one elderly take no action when urinary incontinence occurs (91.3%)

**Conclusion:** Prevalence of urinary incontinence in elderly at the age of 60 and above is 7.7%. The symptom affects the self-physical, self-mental and society. Eight percents decided to go see the doctor because they think urinary incontinence is a characteristic of aging. Therefore, knowledge distribution of urinary incontinence will help increasing the awareness and indicating the importance of this symptom.

## **PS1.100**

### **Vulnerable populations in healthcare: immigrants, race/ethnicity, and socioeconomic position**

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**Background & Aim:** An important proportion of the population in Europe is immigrant and the international literature indicates their inadequate access to health services.

This review is designed to update on recent discussions and research regarding vulnerable populations in medicine, including patients who are newly arrived, patients who have difficulties in communication. Also, they have a system of beliefs related to health and disease that makes difficult for health care professionals to comprehend their reasons for consultation, especially when consulting for somatic manifestations. Consequently, this is an important barrier to achieve optimum care to these groups.

This review will provide better knowledge of these populations and will improve the comprehension and the efficacy of the health care providers in prevention, communication, care management and management of resources.

**Method:** Review of original papers published (2013-2015) on access to health services of the immigrant population, immigrants, race/ethnicity, and disadvantage socioeconomic position, in Europe published in Pubmed.

**Conclusions:** Access to health care in immigrants has been scarcely studied, using different approaches and the barely analysed factors related to the services. No clear patterns were observed, as differences depend on the classification of migrants according to country of origin and the level of care. However, studies showed less use of specialized care by immigrants, higher use of emergency care and the existence of determinants of access different to their needs.

## **PS1.101**

### **Differential diagnosis of patients with important hyperhidrosis**

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**Background and Aim:** When a patient consults in primary care because of excessive sweating, we should do a thorough differential diagnosis about what causes may produce it. Most often they are banal causes but we can not ignore diagnoses that can risk patient's life. That is the reason we want to clarify the differential diagnosis of hyperhidrosis.

**Methods:** 80 year old woman with diabetes, present excessive sweating in the last 5 month, and also chills without fever and numbness in upper limbs. Hyperhidrosis is generalized, more intense in the back, daily and spontaneous. The examination revealed a loss of feeling in the upper limbs being the rest normal. We order a complete analysis with blood count, biochemistry with muscle enzymes (CPK), coagulation, serology (HIV, HBV, HCV and anti T. pallidum Ac), hormones (TSH), urine and a lumbar puncture. We also solicited a Thorax radiography, a TAC thoraco-abdomino-pelvic an electromyography and a Cranial and spinal MRI.

**Results:** All tests were inconclusive or negative except for HbA1C of 7.5%. We also rule out medication and other possible causes of secondary hyperhidrosis. After that, a dysautonomia by diabetes mellitus was diagnosed.

**Conclusions:** In diabetic patient with hyperhidrosis one of the main causes is diabetic dysautonomia. Diabetic dysautonomia refers to an abnormality of function of the autonomic nervous system that is present in 16-21% of diabetic patients, and the symptoms of autonomic dysfunction are usually under-diagnosed owing to its variability, lack of specificity and the wide range of symptoms (the cardiovascular, digestive, genitourinary and thermoregulatory systems and poor quality of life). It is important to recognise this entity because of its effects on increasing morbidity and mortality, although they can be reduced by means of a strict glycemic control and specific treatment.

## **PS1.102**

### **Chilaiditi syndrome as incidental finding in a patient with abdominal pain**

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Personal Background: Male, 34 years. No drug allergy. No medical history of interest.

Current Illness: Attend abdominal pain in epigastric region since last night. The pain has intensified in the last hour. It has had a self-limited episode of vomiting. The pain does not radiate. No tightness or chest pain.

Physical examination: good overall condition. Afebrile. Normal auscultation. Globular abdomen, painful on palpation widely. More tenderness in the right upper quadrant is appreciated. Voluntary defense.

Investigations: Electrocardiogram sinus rhythm without alterations. Blood tests highlight leukocytosis 15470. Hepatic profile, creatinine and normal Reactive Protein C. Rx abdomen air content shown in the right diaphragmatic region.

Evolution: analgesia is administered after which the patient is improved, abdominal examination being similar to his arrival in the emergency department. After assessing complementary tests are contacted radiology values a possible syndrome Chilaiditi radiograph abdomen. Because the patient does not improve with intravenous analgesia was performed abdominal ultrasound: irregularly thickened gallbladder wall adenomyosis with stones inside. No other significant findings. Is given new intravenous analgesia with pain relief. New abdomen examination is performed and this soft and palpable without tenderness, being able to discharge the patient home monitoring.

Conclusion: Patients with this syndrome have a higher chance of having a bowel volvulus, so you have to think about this if the patient has an acute abdomen. It is important to explain to the patient the possible consequences of this syndrome and to your family doctor knows that the patient presents.

### **PS1.103**

#### **Unusual complications of frequent diseases: diabetic amyotrophy**

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**Background & Aim:** When a diabetic patient comes to primary care due to weight loss, lower back pain and weakness in lower limbs, we must do a detailed clinical history and a thorough neurological exploration. Lumbosacral plexopathies represent a distinct group of disorders of the peripheral nervous system. The most common causes of lumbosacral plexopathy are diabetic amyotrophy, also known as Bruns-Garland syndrome, and the idiopathic (nondiabetic) lumbosacral radiculoplexus neuropathy. Nevertheless, we must rule out other causes like: immunologic, infections, neoplasms, hypothyroidism, alcoholism...

**Method:** Our patient has asymmetric proximal weakness, atrophic and muscular pain in lower limbs without an affection of sensitivity. Also, osteotendinous reflexes were abolished. The rest of the medical examination was normal. We order a complete analysis with blood count, biochemistry with muscle enzymes (CPK), coagulation, serology (HIV, HBV, HCV and anti T. pallidum Ac), hormones (TSH), urine and a lumbar puncture. We also solicited a Thorax radiography, a TAC thoraco-abdomino-pelvic and an electromyography.

**Results:** All tests were inconclusive or negative except for a minimal protein elevation in cerebrospinal fluid. The electromyography was reported as a large polyradiculoneuritis that affects the cervical, dorsal and lumbar areas. Given these findings, it is recommended to rule out paraneoplastic syndromes but is suggestive of diabetic amyotrophy.

**Conclusions:** Diabetes mellitus is the most usual cause for peripheral neuropathy and distal sensory neuropathy predominates. Diabetic amyotrophic is an uncommon diabetic complication that is not related to gravity or severity of the diabetes. The symptoms of this disease are acute or subacute, progressive, asymmetrical weakness and pain in the muscles of the proximal lower limbs. Medical history and electromyography give us the diagnosis. Treatment is conservative, we use physiotherapy. There is no evidence of the use of immunoglobulin or corticosteroids as a treatment.

## **PS1.104**

### **Emotions and opinions of women with psychosocial discomfort in relation to therapeutical intervention through a self-help group.**

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**Background and Aim:** To know the expectations, opinions and emotions of female patients of Primary Care in our area, that seek medical help due to symptoms related to emotional discomfort derived from psychosocial background after therapeutic intervention in self-help groups treating common daily problems.

**Method:** Qualitative analysis carried out in two-year period of time (2014-2015) in four urban health areas including all female patients with frequent visits related to psychosocial discomfort, willing to participate. Those patients were divided into two groups of 15 members each, directed by two social workers one of which would coordinate the group while the other one's duty would be to observe and register the ideas expressed. In total, twelve two-hour meetings were carried out on weekly basis. Before entering the programme and after its finalization, both the opinions and expectations as well as the emotions of those patients were analyzed to determine whether the group activity came in useful to help them express their feelings and helped them face everyday life difficulties and loneliness.

**Results:** Initial emotions and expectations registered: "It will help me feel better", "I will benefit from it", "I will face my fears", "I will look after myself more", "I will learn to express my feelings", "I will learn from others", "I want to find myself".

Emotions and expectations after the 12 week project: "I realized what my problem was and I wasn't left on my own", "I value and love myself more", "I thought it was my fault and I was wrong", "I received more than I gave", "I was given strength", "I regained energy to change".

**Conclusions:** Therapeutic intervention in self-help groups treating daily problems resulted effective to diminish discomfort suffered by our female patients by generating positive emotions and feeling of support.

## **PS1.105**

### **Lumbar pain in young male. Why should we not underestimate the enemy.**

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Case Description: 42 year old male, active smoker, in follow up by urology in 2012 for prostate syndrome. First appointment in primary care for initially localized low back pain suffered for two weeks that he associates with excessive workload in his job as a cook. He denies recent trauma, loss of strength, numbness in lower limbs and genital region, fever, weight loss, pain at night. Initially he is given NSAIDs indicating new appointment in case of no or little improvement.

Due to the fact that our patient returns to the surgery referring a significant increase of pain and recent irradiation towards buttocks and association of dorsal pain irradiated towards both upper limbs we order lumbar NMR and refer to specialist.

Physical examination and complementary tests Physical examination: Pain in right dorsal paravertebral muscles. Lasegue (-) Braggard (-). Blood test: PSA 388. NMR of thorax and lumbar region: Numerous thoracic and lumbar vertebrae fractures, bulging of rear wall of 12th intervertebral disc that narrows the right lateral recess. Soft tissue mass on Th3-Th4 level that infiltrates posterior left costal arches. Biopsy results compatible with adenocarcinoma metastases of likely prostatic origin. Clinical trial: Adenocarcinoma of prostatic origin with bone metastases. Differential diagnosis: Osteoporotic fractures, lymphoproliferative process, plasmacytoma.

Conclusions: Lumbar pain in young patients is a quite common motive for consultation in our zone, not only in primary care but also in acute care services and it might be for this reason we sometimes tend to underestimate the symptoms. The case of our patient shows clearly that it's extremely important to pay attention to every detail even if patient's age is not within the group of risk.

## PS1.106

### **Atherosclerosis as the main challenge of prevention in family medicine practice**

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**Background:** The most important consequences of atherosclerosis include: coronary or ischemic heart disease, especially myocardial infarction, cerebrovascular disease and narrowing or blockage of peripheral arteries, especially the legs and causing gangrene. Aim was to investigate the number of patients at risk for the occurrence of atherosclerosis and underline key preventive activities in Family medicine practice.

**Method:** Data were collected from the last Statistical Yearbook of the Federation of Bosnia and Herzegovina (FB&H). Recommendations for prevention are taken from the European Guidelines on cardiovascular disease prevention in clinical practice.

**Results:** The last decades, cardiovascular diseases are the leading cause of death in the FB&H with a 53.9% of total mortality. The prevalence of risk factors in the population are: hypertension 41.0% (male 35.5% vs. 44.8% female); smoking 37.6% (male 49.2% vs. 29.7% female); obesity 21.5% (male 16.5% vs. 25.0% female) and physical activity-active 15.0% (male 19.6% vs. 12.0% female). In primary prevention, assessment of absolute risk of fatal cardiovascular events for all healthy high-risk persons (smokers, with hypertension and hyperlipidemia) by Systematic Coronary Risk Evaluation-SCORE are necessary. For high risk persons it is necessary to reach the target value of interventions: do not smoke; balanced feed; 150 min. weekly physical activity, body mass index <25 kg / m<sup>2</sup> and avoid central obesity; blood pressure <140/90 mmHg; total cholesterol <4.5 mmol / L; LDL <2.5 mmol / L, blood glucose <6.0 mmol / L and HbA1c <6.5%.

**Conclusion:** Work on primary prevention should start as early as possible, even in childhood, creating healthy eating habits, no smoking, regular physical activity, can prevent or at least slow down the development of atherosclerosis. In secondary prevention, in addition of reduction of risk factors much more important is proper treatment of the disease.

**Keywords:** Assessment of cardiovascular risk, primary prevention, family medicine

## PS1.107

### Swallowing functions and activities of daily living impact for anxiety and depression symptoms in palliative care patients

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**Background & Aim:** Patients who are hospitalized in palliative care service are investigated about swallowing functions and activities of daily living impact for anxiety and depression symptoms is aimed.

**Method:** Patients that have been diagnosed oncologic or neurologic diseases and hospitalized between two years of 2013 - 2015 in palliative care service were included in the study. EAT-10, LB-IADL and HADS were applied. SPSS 20 demo program was used for data analysis.

**Results:** Sixty five people were included in the study and mean age was  $63,57 \pm 16,38$  (22-95). Fifty two point three percent (n=34) of the participants had oncologic, 47.7% (n=31) had neurologic diseases. Fifty six point nine of the participants were women, 76.9% (n=50) were married, 47.7% (n=31) had monthly 800-1499 Liras household income, 61.5% (n=40) were mobile. After the applied scales examined; according to scale results participants who had swallowing dysfunction, knowing no writing or reading and immobilization scored more EAT-10 points statistically significant. According to LB-IADL results of being dependent on daily living activities; participants who are over 65 years old, knowing no writing and much lower household income were statistically more. Being immobile were boosted anxiety and depression symptoms statistically significant according to HADS results. According to EAT 10 results participants who had not have swallowing (eating) disorders had lower LB-IADL, HADS-A and HADS-D points and it was statistically significant.

**Conclusions:** Patients that have been diagnosed oncologic or neurologic diseases and hospitalized in palliative care service; being immobilized and having swallowing dysfunction (dysfagia) increases dependance on instrumental daily living activities, anxiety and depression symptoms is found in this study.

## **PS1.108**

### **Endometriosis - a reflection concerning the role of the family physician**

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**Background:** The following case is crucial to General Medicine as it compels us to reflect upon the significance of framing together every health problem whilst giving relevance to the family history, especially if there is a disease with increased prevalence. Another dimension explored is the self conscience of the physician and his ability to reference the patient in a timely and correct manner.

Case Description: Female, 37 years, former professional athlete, no children, menarche at 11, dysmenorrhoea and metrorrhagia. Family history of chronic venous insufficiency with eight members of the family affected including males. The first consult occurred on 2007 due to an intense pelvic pain. Investigations unveiled the diagnosis of Endometriosis and the patient initiated therapy with Nuvaring®. On 2008 she felt lower limb paresthesia being posteriorly diagnosed with venous insufficiency and consequently underwent surgery. On 2013 returned with the desire to get pregnant and prenatal care was initiated. Six months later she recurred to the emergency service with pelvic pain and the progression of Endometriosis into stage IV was verified. After ovarian stimulation the patient got pregnant but she suffered a miscarriage later. Currently she is waiting to be accompanied by a fertility specialist while maintaining follow-up in our General Practice consult.

**Conclusions:** The patient suffers from Endometriosis which affects not only physically but also psychologically, raising the need for an adequate vigilance from the General Physician even if the disease transcends his area of expertise. As a treatment, the doctor opted for combined hormonal therapy despite the marked family history of venous insufficiency. This case brings out the question if there could have been a more active approach in order to prevent iatrogenic damage and highlights the importance of a proper articulation between primary and secondary care.

## PS1.109

### Is sleep deprivation in children related to weight gain? An evidenced-based review

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**Background:** Sleep plays an important role in physical and mental health. However, contemporary everyday life has relegated sleep to a secondary position. Insufficient sleep is associated to a significant risk of diabetes, high blood pressure, heart and kidney disease, a decrease in the immune system and an imbalance of the hormones that control hunger, which may lead to obesity. These consequences are particularly important to children, to whom sleep is also necessary to a favorable cognitive development and growth. Furthermore, child obesity has exponentially expanded throughout the world and as general and family doctors we must act to prevent this epidemic. Consequently, it is imperative to study the sleep pattern of children, in order to prevent serious diseases.

**Aim:** To review the literature in order to infer an association between sleep deprivation and weight gain in children.

**Methods:** Literature review in Medline and Cochrane, through Pubmed and Medscape using the Mesh-Terms: 'Sleep Deprivation', 'Child' and 'Weight Gain' in January 2016. From the resulting eight studies of our research, five were selected based on the full reading of the abstract.

**Discussion:** The five selected articles are systematic reviews comprehending the analyses of studies between 1966-2010, including epidemiological studies (cross-sectional, case-control, prospective and longitudinal studies), laboratory evidence and other systematic reviews and meta-analyses. The evidence suggests that in pediatric populations short sleep duration is consistently related to concurrent and future obesity, in an independent association, that may weaken overtime.

However, more interventional/randomized trials are needed to obtain definitive causal relationship between the variables.

**Conclusion:** All studies agree that sleep deprivation has significant consequences not only on body weight gain but also on neurobehavioral performance, especially in children, suggesting that health care providers should have a crucial role in family education regarding the unhealthy effects of sleep deficiency.

## PS1.110

### Prevalence of alzheimer's disease in a primary health care center

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**Background and Aim:** There is a relationship with Alzheimer's disease and diabetes mellitus because it promote the amyloid into brain. Our aim is to determinate the prevalence of Alzheimer's disease (AD) in a population with diabetes mellitus in a primary care center, and to determinate if the prevalence of this pathology depends of control of diabetes mellitus.

**Methodology:** Descriptive study. It was made during October 2015 to January 2016 in the primary care center "Les Fontetes". Cerdanyola del Vallès. Barcelona. Were revised the electronic clinical reports. Were selected all patients with diagnosis of diabetes mellitus. of these patients, diagnosis of Alzheimer's disease were obtained of the same electronic clinical report. These diagnoses were made by neurologist of the Referent Hospital and ACE's Foundations (Only they, can make the diagnosis and prescribe the treatment) We classified the patients with Alzheimer's disease according with the metabolic control of the Diabetes mellitus, adjusted by age (According the Spanish Guide of Control of Diabetes mellitus)

**Results:** Were selected 239 patients with Diabetes mellitus. Prevalence of diabetes mellitus was 15,22% (The assigned population were 1570 patients). The number of patients with Alzheimer's disease in this group was 26. The prevalence of AD was 10,87%. Were women 18 (69,2%). The average of age was 78 +-17 years old and the average of the duration of diabetes mellitus was 15 +- 6 years. The mains treatments in this group were: 14 metformin, 4 with diet, 4 with insulin, 4 with metiglinides and 2 with sulfonylureas. Respect to the metabolic control of diabetes mellitus, 24 (92%) were well controlled whereas 2 (8%) were bad controlled.

#### **Conclusions:**

1. In our study, the prevalence of Alzheimer's disease in patients with Diabetes mellitus was 10,87%.
2. In our study seems that the presence of Alzheimer's Disease don't have relationship with the metabolic control of diabetes mellitus.
3. In our study seems that the presence of Alzheimer's disease have relationship with the time of evolution/duration of diabetes mellitus.

## **PS1.111**

### **Claude Bernard Horner syndrome**

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**Background:** Claude Bernard Horner syndrome results from an interruption of the sympathetic nerve supply to the eye and is characterized by the classic triad of miosis, partial ptosis and loss of hemifacial sweating (ie, anhidrosis). It can be congenital, acquired - as a result of some kind of interference with the sympathetic nerves serving the eyes- or hereditary (autonomic dominant). The interruption of the sympathetic fibres may occur in the central nervous system (between the hypothalamus and the spinal cord in the upper cervical region) or in the peripheral nervous system (in cervical sympathetic chain, upper cervical ganglion or accompanying carotid artery).

**Method:** Case Report A 77- year- old male patient who complains of pain in left shoulder of 5 months duration treated with anti-inflammatory medication and corticosteroids without answer. History of smoking up to five years and atrial fibrillation treated with oral anticoagulants. Physical exam: left Horner syndrome. An indurated and fixed area to deep planes was palpable in left supraclavicular cavity. A chest X-ray was done and revealed a high mediastinum widened to the left and a CT scan was also done and revealed a tumor in the left upper lobe. A biopsy of the adenomegalia of supraclavicular fosse was done and revealed metastasis of undifferentiated carcinoma lung. Therefore, it is lung cancer that began with pain in left shoulder and Horner syndrome.

**Conclusions:** Horner's syndrome is a complex symptom sign that opens the probabilities of very varied causal entities. These causes can range from a cerebrovascular accident, a neck trauma or a cancer at the apex of the lung... Horner's syndrome requires to review the neurological pathway of sympathetic innervation of the eye and the face and it's a true example of the importance of obtaining a proper medical history and a complete semiologic and physical examination.

## PS1.112

### **FIRES... a rare epilepsy syndrome**

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**Background & Aim:** Febrile Infection-Related Epilepsy Syndrome (FIRES) describes an explosive-onset, potentially fatal acute epileptic encephalopathy that develops in previously healthy children and adolescents following the onset of a non-specific febrile illness. Overlapping signs and symptoms with other causes of encephalopathy and seizures make diagnosis and treatment challenging.

**Method:** We present a case of a 15 year old girl, previously healthy, with a typical disease course.

**Results:** After a febrile illness, the girl was found comatose with a tongue bite. She was intubated and ventilated, and started on anticonvulsives, antibiotics and antiviral medication. She initially improved and was extubated, but developed more generalised tonic clonic seizures, encephalopathy and in the course of a few days a convulsive state. Seizures were reduced temporarily but never completely inhibited, neither by barbituric coma nor by a ketogenic diet. Dysregulation of the autonomic nerve system including temperature and blood pressure instability were noted.

A full infectious, toxicological, metabolic (including muscle biopsy), autoimmune, cerebrospinal fluid findings and cranial magnetic resonance imaging did not reveal any etiology. Electroencephalography indicated epileptiform discharges in right temporal head region. More serial investigations were performed, and neurologists diagnosed a syndrome compatible with FIRES.

The girl went home subcomatose with a tracheostomy and ventilated, in the care of his parents and nursing service.

**Conclusions:** This case illustrates the diagnostic and therapeutic difficulties in Febrile Infection-Related Epilepsy Syndrome.

Patients with FIRES require immediate hospitalization. Antiepileptic drugs are given to treat seizures but are often ineffective. High-dose phenobarbital and clobazam are most likely to be effective. In severe cases, barbiturates are the only treatment for refractory status epilepticus, however, treatment by inducing a prolonged burst-suppression coma has been associated with a worse cognitive outcome. A ketogenic diet has been beneficial in some cases, especially if initiated early.

FIRES often has a poor prognosis but a few patients fully recover.

## PS1.113

### **Beyond the differential diagnosis of chest pain**

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**Background & Aim:** A 37 year old woman, arrives to our clinic referring 'I don't know what is happening, but I can not anymore.' Medical history: Allergy to Amoxicillin, smoker of 15 cigarettes/day. No other cardiovascular risk factors. In 2012 suffered a first episode of oppressive chest pain with shortness of breath and palpitations being in a party, that resolved spontaneously in 15-20 minutes. When she consulted in Emergency, she was cataloged of anxiety. After several months asymptomatic, she begins again with episodes of chest pain with similar characteristics, sometimes irradiated to arms, starting on slight exertion, disappearing in 10-30 minutes. These events begin to occur almost daily, leading to multiple visits to the emergency service with no ECG repolarization abnormalities and without alteration of cardiac enzymes. The patient shows multiple Emergency discharge reports with a diagnosis of musculoskeletal chest pain, anxiety, etc. She insists that it has been forced to limit her life because fear of pain.

**Method:** Good general condition. Eupneic. ACR: rhythmic heart sounds without murmurs. Preserved breath sounds, no noise added. No lower limb edema. ECG: sinus rhythm to 80bpm, right axis, unchanged repolarization. Analysis: Normal and TSH included. We decided referring to Cardiology, where it takes place: Ergometers: The test was suspended because a 2mm ST depression in inferior and left precordial leads occurred. Given this results, the patients was referred to the emergency for hospitalization and performed cardiac catheterization and was diagnosed with anterior descending coronary Milking.

**Results:** The intramyocardial bridge is a congenital disorder caused by a segment running intramyocardial coronary artery, with each systole stenosis of the vessel lumen occurs, even to collapse the artery (milking).

**Conclusions:** The intramyocardial bridge has an incidence of 5 to 25%, although its incidence in autopsy studies rises to 85%. Despite these figures and the potential severity of the patient it does not appear in the differential diagnosis of chest pain in everyday medical literature. But more important as general practitioners is the importance of listening to patients, especially when the complain is a very serious constraint on her daily lives as with our patient.

## PS1.114

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**Background & Aim:** Woman 26 year old, came to our clinic referring having discomfort in his right arm, is something that happens for months, but lately it unable daily activities such as hanging clothes. No other relevant medical history. We did a complete exploration of the neck and arm, there aren't changes of interest, except the loss of the radial pulse distal when lift the affected arm. We suspect thoracic outlet syndrome, we shunt to the Vascular Surgery to complete the study.

**Method:** X-ray Chest: Normal. No presence of accessory ribs. Ecodoppler: The subclavian vein and artery have blood flow with arm in neutral position. With arm abduction to 180° blood flow stops. The findings confirm the thoracic outlet syndrome. MR: show a posterior and inferior displacement, determining a lower amplitude of space between first costal arch and lower edge of the proximal third of the right clavicle. ECG and echocardiography: normal.

**Results:** Thoracic Outlet Syndrome.

**Conclusions:** The thoracic outlet syndrome (TOS) produces symptoms (such as numbness in fingers, pain in arm, and neck) by compression of nerves and/or blood vessels in the upper chest. Any condition that results in enlargement or movement of the tissues of or near the thoracic outlet can cause the thoracic outlet syndrome. These conditions include muscle enlargement (such as from weight lifting), injuries, an extra rib extending from the neck (cervical rib), weight gain, and rare tumors at the top of the lung. Often no specific cause is detectable. Treatment of the thoracic outlet syndrome can usually be successful with conservative measures with exercises for open the tissues of the thoracic outlet. Most people with thoracic outlet syndrome can have complete resolution of symptoms with conservative measures. Rarely, surgical intervention can be necessary to take pressure off of involved nerves and blood vessels.

## PS1.115

### Management of the most usual problems of contact lenses in primary care

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**Background & Aim:** 31 year old woman, comes to our consultation because of pain in her left eye. She says that she has been of camping and has not taken the contact lenses in 3 days. Due to the comfort that they suppose for the sport, the CL are more employees every time for all the people. Many of these pathologies can be handled from primary care, but for it we must know the most frequent as well as identify when it needs specialized consultation. The most frequent complications related to CL's use that we have: corneous infections, toxic disorders and for hypersensitivity, complications of mechanical nature and complications related to dryness. When we have a patient who consults for ocular trouble related to CL, first we must indicate get rid of the couple that it is using, as well as of the solution of cleanliness.

**Method:** In our case the treatment was collyrium of tobramycin and cicloplegyc for the pain. Two days later the patient consulted again because persistence of the pain and appearance of great ulceration that was impeding the vision. Given the high suspicion of keratitis for another microorganism stemmed in an urgent way to Consultation of Ophthalmology, where cultivation was realized, where an *Aspergillus ssp* grew.

**Results:** Fungal keratitis in LC's carriers.

**Conclusions:** The bacterial keratitis is the most serious complication in LC's carriers, being 80 times more probable incident in LC's carriers that in not users. The probability of developing bacterial keratitis is 8-15 times major in the night carriers that in the diurnal carriers. They are in general bacterial, though also they give themselves cases due to amoebae, especially *Acanthamoeba*, and with fewer frequency, to fungi. Always it is necessary to suspect when there are a torpid evolution with the antibiotic habitual treatment.

## PS1.116

### Occasional use of antimicrobials among patients taking oral anticoagulant therapy: is there any reason of concern?

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**Background & Aim:** To assess the degree of control among patients with nonvalvular atrial fibrillation taking oral anticoagulant therapy (OAT).

**Methods:** Retrospective study carried out in three primary care centres in Catalonia, Spain. Patients diagnosed of atrial fibrillation (CIAP-2 code K78) taking OAT and controlled only in primary care for one year were asked to record all the antimicrobials taking in the previous year. Patients with severe liver, blood, heart, gastrointestinal, neoplastic, and neurological diseases were excluded. Information about antimicrobial use was also retrieved from the medical records. Good control of OAT was defined as  $\geq 60\%$  time of International Normalised Ratio (INR) in therapeutic range (from 2 to 3).

**Results:** A total of 195 patients fulfilled the inclusion criteria considered in this study. 65.7% of the INRs evaluated in the whole sample were inside therapeutic range. A total of 249 different antimicrobial courses were taken by the participants in the previous year. The leading antimicrobial observed in this study was amoxicillin, taken by 30 individuals (15.4%), followed by amoxicillin+clavulanate (28 cases, 14.4%) and fosfomicin (18, 9.2%). A total of 148 patients who took at least one antimicrobial presented good control (59.4%) without statistical differences compared to those who did not. When patients took levofloxacin, observed in 12 cases, good control was observed in only 41.7% ( $p=0.052$ ).

**Conclusions:** Both general practitioners and patients are concerned by the occasional intake of antimicrobials when they are simultaneously taking OAT. However, in this retrospective study we failed to observe a worse control of INR when they were taken by these patients.

## **PS1.117**

### **Glass foreign body in the lung: an unusual etiology of back pain**

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A 28-year-old woman presented with back pain. Personal history: the patient had an otherwise negative medical history and was taking no medications. Anamnesis: 28-year-old woman presented to the Primary Health Care Center with complaints of pain in the left dorsal region during the previous 3 weeks that increased with walking and daily activities. Physical examination: cardiorespiratory exploration within normality. Thoracic spine exploration without pathological findings of significance. Complementary tests: - Normal blood test. - Thoracic spine X-ray showed no acute bone injuries. - Chest X-ray showed suggestive image of strange body in the left lower lobe (LLL). - Chest computed tomographic (CT) scan confirmed the presence, in the back of the LLL, of a foreign and sharpened body with triangular morphology of 33mm. Upon more detailed questioning, she recalled that she had an accident 19 years ago in which she broke a mirror on her back requiring surgical removal of the fragments. Knowing this detail, it was concluded that the image objectified in the tests was a piece of glass. Surgical treatment for extraction was indicated. Treatment: a conventional posterolateral thoracotomy was performed to remove the foreign body without incidents.

Conclusions: the foreign bodies that are missed on initial exploration may cause severe complications or even mortality, years after the traumatic event. In the event of a back pain with a torpid evolution, it would be essential to broaden the study directed with complementary tests.

Keywords (MeSH): back pain, foreign body, thoracotomy.

## **PS1.118**

### **Chronic diarrhea... what do we think?**

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Twenty-six years old man, with no known pharmacological allergies or relevant pathologic antecedents. Does not take medication normally. Father diagnosed with colorectal cancer at 52 years. Patient consulted Primary Health emergency room after 4 days of liquid diarrhea deposits, without pathologic products. No nausea, vomiting, fever, or any other symptoms. It was diagnosed as stomach flu, and he was informed of hygienic-dietetic measures and alarm signs for re-consulting. Three months later, he returned with the same complaint, this time with weight loss and occasional fever up to 37.4°C.

Physical exploration: Cachectic aspect, no fever, hemodynamically stable, with a soft abdomen and no pain when palpated, no masses found, augmented peristaltic and no metallic sounds. No adenopathies found.

Differential diagnosis: Young patient with diarrhea for more than 4 weeks, presumed to be chronic diarrhea. We should consider these: irritable bowel syndrome, celiac disease, lactose intolerance, inflammatory intestinal disease (Crohn disease or ulcerative colitis), hyperthyroidism, immunosuppressed diseases (HIV+), colorectal cancer, or the secondary effects of medicines.

Additional tests: Blood tests showed negative CRP and ESR, a normocytic-normochromic anemia, mild lymphopenia, normal platelets, normal thyroidal profile, negative anti-transglutaminase antibodies with normal total IgA, positive HIV, negative HBV and HCV, negative syphilis. Stool studies were positive for *Cryptosporidium*. Fibro colonoscopy didn't show any alterations.

Clinical judgement: Given the additional test results, the patient's illness is determined to be chronic diarrhea due to cryptosporidiosis, a common HIV+ side effect. We sent the patient to the Infectious Diseases Unit in the referring hospital for confirmation of the diagnosis, to repeat the stool studies and start treatment.

Final comments: With a young patient with chronic diarrhea, it is important to be aware of signs and symptoms of concern when making a good differential diagnosis, keeping serology in mind, because HIV is an increasing pathology in our society.

## PS1.119

### Face and content validity plus psychometric properties of a symptom diary for patients with urinary tract infection in primary care

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**Background & Aim:** Studies investigating urinary tract infection (UTI) often include patient-reported outcomes measures (PROMs). However, we have not been able to identify if any of those measures have high content validity and adequate psychometric properties in a Danish context. Therefore, the aim of this study was to test existing PROMs qualitatively for content relevance and content coverage and if a new measure was developed, to validate such a condition-specific PROM for adults with UTI in primary care using Rasch models.

**Method:** Content validity (content relevance and content coverage) was ensured by: 1) defining key domains 2) literature search for symptoms in previous studies, 3) single and group interviews with patients who had experienced having UTI. The PROM was used in two ongoing research projects and data collected in these studies were used to psychometrically validate the new PROM primarily using the partial credit Rasch model for polytomous items.

**Results:** Test of content validity resulted in a new PROM encompassing three domains; one for symptom severity containing 18 items, one for symptom bothersomeness containing 18 items and one for impact on daily activities with seven items: all items with the response categories 0 (no), 1 (yes, a little), 2 (yes, some) and 3 (yes, a lot). Results of the Rasch analyses will be presented at the conference.

**Conclusions:** The test of content validity resulted in a substantially different PROM compared to existing PROMs for patients with UTI. Before using PROMs, one has to ensure the content validity in the target population.

## PS1.120

### **Vascular ultrasound screening of subclinical arteriosclerosis alongside with assessment of vulnerability in plaque evolution towards thromboembolic complications through the strain-elastography**

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Atherosclerosis and its complications, are the leading cause of morbidity and mortality from heart attacks and strokes in Romania.

It is a chronic inflammatory disease of the arterial wall induced from endothelial injury followed finally by the complications of plaque and its obstruction.

**Methods:** We did a randomized clinical trial, controlled, over two years, on 500Caucasian patients, aged 40-80years, sex ratio1:1. Inclusion criteria were asymptomatic patients with high-risk lipid profile (LDL>160mg%) with or without statins and antiplatelet therapy in the past two years. Exclusion criteria was target organ damage.

We formed two groups: first under treatment with statins and antiplatelet agents and control group with untreated patients. All patients were examined with Doppler ultrasound and SE in three regions: carotid, abdominal aorta and femoral arteries. We monitored following: IMT, velocity, RI, PI, stenosis. We have established criteria of elastography, for classification of atherosclerotic plaque in 'stable-uniform elasticity' or „unstable-mosaic stiffness'. We performed descriptive and risk analysis. We have designed an ultrasound score to diagnose the vulnerable plaque.

**Results:** Increase of carotid IMT between 0.9-1.5 mm had meant: mild and moderate atherosclerosis in 42% of patients in the first and 33% in the control group. IMT over 1.5 mm had meant severe atherosclerosis in 58% of the first and 67% in the second group. These changes were consistent with 89% of cases in aorta territory and 78% at the femoral artery,p<0.01. Cut off value:of the aorta and femoral IMT>0.5 cm. Sensitivity:96.2%, specificity:88%, 95%CI:79.97%to93.64%, prevalence:83%. We analyzed the concept of early vascular aging with incidence:3.46%. The relative risk was:0.86 with 95%CI:0.75to1, Odds Ratio:0.68, p<0.05.

**Conclusion:** Ultrasound measurement of IMT in three regions, when assessing subclinical atherosclerosis and classification through elastography of the atheroma plaque in the vulnerable, was important for primary prevention of cardiovascular events and to early initiation of therapy.

## **PS1.121**

### **Sadness as perceived by nursing home patients**

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**Background and Aim:** Depression is prevalent among nursing home patients, but may be difficult to disentangle from non-pathological sadness. Diagnostics on psychological symptoms in nursing homes is sometimes haphazard, and there are reasons to believe that sadness is commonly treated as depression with antidepressant drugs.

The aim of this study was to explore sadness as perceived by nursing home patients.

**Methods:** The first author (a GP) conducted individual interviews with 12 long term care patients without dementia, but perceived to be sad by primary nurses. The interviews were audio-recorded and transcribed verbatim. The analysis was based on systematic text condensation in accordance with Malterud.

**Results:** The interviews revealed three main themes. (I) Decay and loss of agency. The informants expressed that sadness was caused by declining health and functional ability, reliance on long-term care and dysfunctional technical devices and aids, (II) Loneliness in the middle of the crowd. Loss of family and friends, staff members having little time to converse and poor caretaking were sources of sadness. (III) Relating and identity. According to the participants, what helped them avoid sadness was accepting the realities of old age, gratitude for remaining function and relating to own and family's life history. Some informants also conveyed that religious beliefs and practice were resources of comfort to them.

**Conclusions:** Doctors and nurses in nursing homes should identify and support coping resources among patients, avoid undue medicalization and address manageable causes of sadness.

## PS1.122

### **Comparison of the effectiveness of leech therapy and TENS therapy in the treatment of primary osteoarthritis of the knee: A randomized controlled study**

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**Background & Aim:** The aim of this study was to evaluate the effects of leech therapy in the treatment of knee osteoarthritis in terms of duration of effectiveness and symptomatic relief, and to compare these results with TENS therapy.

**Design:** This study was designed as a prospective, single-centred, randomized, single-blind and parallel group study with the approval of Institutional ethics committee. A total of 90 patients, 46 in the leech group and 44 in the TENS group, completed the study. Primary outcome measures were the changes of the pain scores in VAS and WOMAC on the measurements day 0, 21, and 180. Secondary outcome measures were the changes of sub-groups of the scores of the WOMAC. Interventions: Five leeches were applied on the affected knee, once every week for three weeks.

**Results:** VAS pain score decreased in both groups similarly in the evaluation on day 21 ( $p < 0.001$ ). The course of the change of VAS pain score in both groups was similar in the comparisons between groups. Long term benefits of TENS therapy group was slightly more than the leech therapy group. All the sub-scores of WOMAC in both therapy groups decreased similarly ( $p = 0.819$ ) throughout the study ( $p < 0.001$ ).

**Conclusions:** Leech therapy relieves symptoms in patients with osteoarthritis of the knee is as much effective as TENS therapy in the management of osteoarthritis of the knee and has the potential of being an additional or alternative therapy for the non-surgical management of osteoarthritis of the knee.

## PS1.123

### **Prevalence of blood brotherhood among high school students in Erzurum and the effect of peer-led education on this practice**

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**Background & Aim:** Blood brotherhood (BB) rituals are one of several types of alliances or ties that bind people together in a way analogous to, but distinct from, kinship bonds. There is a growing concern regarding dangerous blood-borne diseases including hepatitis B virus (HBV), human immunodeficiency virus (HIV), and hepatitis C virus (HCV). Although all three of these viruses are blood-borne and share common routes of transmission, the epidemiology of each virus differs based on the virus and the circumstances of exposure. This study aimed to assess the prevalence of blood brotherhood (BB) in Erzurum, Turkey and to observe the effect of education interventions on this risky cultural behavior.

**Methods:** This study was designed as a cross-sectional intervention, based on minor interventions through a peer-led awareness campaign regarding the transfer of blood-borne diseases through BB rites. This study was conducted from February through May 2007 at 29 high schools in Erzurum. Categorical variables were expressed as frequencies and percentages. Chi square test and McNemar's test were performed for bivariate comparisons. P-values lower than 0.05 was considered statistically significant.

**Results:** The study population was 53.8% (n=1,522) males and 46.2% (n=1,307) females. The proportion of the students who have participated in BB rituals was 24.1% (n=558). There was a statistically significant link between BB and a history of having Hepatitis B Virus (HBV) infection, family history of HBV and male gender ( $p<0.05$ ). After the structured peer-led education the intention to participate in BB rituals decreased from 30.0% to 20.6% ( $p<0.001$ ).

**Conclusion:** The prevention of BB rituals, which can result in the transfer of blood-borne diseases, requires urgent public awareness campaigns led by healthcare professionals.

## PS1.124

### **Branded and generic drugs in general practice: findings after switching to generic olanzapine**

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**Background and Aim:** Several reports of loss of efficacy or adverse effects have been described after generic substitution in general practice. To date, studies comparing serum drug levels in patients switched to generic antipsychotics in a standard clinical setting are lacking. The aim of this study was to investigate if switching to generic olanzapine is associated with differences in its serum concentrations and therapeutic response.

**Methods:** Pre- and post-switching serum olanzapine concentrations were compared in schizophrenic outpatients who were switched from a chronic treatment with branded olanzapine to the same dose of its generic alternative. The Positive and Negative Syndrome Scale (PANSS) was concurrently administered to assess modifications in schizophrenia symptom control.

**Results:** A total of 25 patients (13 females and 12 males, mean age  $41.2 \pm 12.8$  years) concluded the study. Mean olanzapine dose was  $12.2 \pm 5.4$  mg/day. The mean olanzapine serum concentrations decreased from  $27.7 \pm 14.4$  ng/mL during treatment with the branded formulation, to  $22.6 \pm 12.3$  ng/mL after the switching to the generic formulation ( $P < 0.01$ ). Total PANSS scores did not significantly change after switching from branded to generic formulation ( $49.6 \pm 8.3$  vs  $48.6 \pm 9.5$ ,  $P = 0.777$ ). No patient exhibited disease relapse or required dose adjustment after switching.

**Conclusions:** Significantly lower serum olanzapine concentrations were found after switching from branded to generic olanzapine. Although these modifications did not significantly impair schizophrenia symptoms control, it can not be excluded that a longer exposure to lower olanzapine serum concentrations may result in relapse of schizophrenic symptoms.

## PS1.125

### **Relationship between alcohol consumption and prostatic hyperplasia according to facial flushing after drinking in Korean men**

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**Background:** The purpose of this study was to examine the relationship between alcohol consumption and prostatic hyperplasia according to facial flushing after drinking among Korean men.

**Method:** The subjects were 957 Korean men (non-drinker, 180 men; drinking-related facial flushing group, 389 men; non-flushing group, 388 men) of the 40-69 ages who had undergone prostate ultrasound at the health promotion center of Chungnam National University Hospital between 2008 and 2014. Alcohol consumption and alcohol-related facial flushing were assessed through a questionnaire. In terms of the amount consumed, 14g of alcohol was considered a standard drink. With the non-drinker group as reference, logistic regression was used to analyze the relationship between weekly alcohol intake and prostatic hyperplasia for the flushing and non-flushing groups, with adjustment for confounding factors such as age, body mass index, smoking, and exercise patterns.

**Result:** In the group of drinking-related facial flushing aged 50 to 59 years had significantly lower prostatic hyperplasia risk than the non-drinker group depending on alcohol consumption {( $\leq 4$  standard drinks: adjusted odds ratio [OR], (95% confidence interval), 0.38 (0.16-0.86);  $4 < \leq 8$  standard drinks: [OR], 0.35 (0.13-0.95);  $> 8$  standard drinks: [OR], 0.33 (0.13-0.84)}. However, no significant relationship between the drinking amount and prostate hyperplasia risk was observed in the non-flushing group.

**Conclusion:** Prostatic hyperplasia risk is likely lowered by alcohol consumption among flushing group aged 50 to 59 years.

## PS1.126

### Teaching consultation skills to medical students using e-learning.

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**Background and Aim:** At the Clinical Course in Family Medicine in the last semester, the students work eight days as doctors in a general practice clinic. They see real patients, video their consultations and analyze them in small group sessions at the university with their teacher and fellow students. We teach them patient-centered medicine. The aim of this study is to measure the effect of our teaching.

**Method:** All students at the family medicine course in autumn 2013 and spring 2014 were included in the project (n=578). The usual course is the control group. The intervention groups had access to different short video-cases of consultations between a GP and an actor, a mandatory analysis of a consultation and four pre-exam self-tests with immediate answers. [1, 2] First and last day of the course the whole groups of students watch the same test-video of a consultation with a GP and an actor. Afterwards they fill in a ten item questionnaire, designed for the purpose of structuring the analysis (DanSCORE: Danish Structured Observation Registration and Evaluation) [3]]. (See [www.gp-and-patient.com](http://www.gp-and-patient.com)).

**Results:** The answers to some questions do not match our golden standard for the consultation. We are analyzing each item of our 10 item questionnaire and considering the possible consequences for the future teaching. The student`s access to e-learning changes very little in the questionnaire, but combining it with use in class room sessions has a positive effect.

**Discussion:** Access to on line cases combined with use in teaching sessions, improved the students` ability to analyze the test-video. The results from supplementing the basic teaching with different activities will be presented at the conference.

**Conclusion:** Our usual course is effective in itself. E-learning is more effective if also used in the teaching sessions.

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## **PS1.127**

### **The indication for mammography - case rapport**

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**Background & Aim:** Breast cancer has become the leading cause of death of women 40 - 60 years old, with one out of eight women getting ill. Almost 80% of all malignant breast tumors are Invasive Ductal Carcinoma (IDC). Timely diagnosis of malignant breast diseases represents the road to the decrease of breast cancer mortality rate. In economically developed countries, thanks to screening mortality rate is constantly declining and the death rate fell by 30%. At the moment, the only way to control the disease is its early diagnosis when the malignant lesion is under 1cm, which results in locally advanced disease in only 10% of the cases, and fifteen-year survival in 95%. Tumors bigger than 2cm are 77% likely to locally metastasise to regional lymph nodes and ten-year survival in this case is almost 60%.

**Method:** Clinical tests on breasts and axillae, Digital Mammography.

**Results:** Symptomatic patients, 67 years. with a palpable mass in the left breast. Evaluation of symptomatic breast for decisions on further action and the detection of associated subclinical malignancy in the other breast or symptomatic Mutual native mammography (MLO): stellate shadow in the left breast (2.5 cm) and the right breast (0.5cm) Histopathologic findings of: lobular carcinoma, tubular carcinoma.

**Conclusions:** Breast cancer has a huge socio-medical importance (owing to the consequences that may stem from it) and demands routine use of all available diagnostic methods, obtaining adequate material for pathohistological confirmation and close cooperation with surgeons. Therefore, I want to emphasize once again the importance of teamwork in diagnosing and treatment of breast cancer, due to the fact that the early diagnosis of this disease is currently the only way of taking control over it.

## **PS1.128**

### **Overdoing in community medicine: a case report coping with a renal incidentalomas**

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Overdoing in community medicine: a case report coping with a renal incidentaloma Inbal Kadman-Aizic, Tom Axelrod, Amnon Lahad.

Case presentation: A 71 years-old lady with a 4 years history of NIDDM discovered on routine lab tests and a well-balanced hypothyroidism. No other findings on history, anamnesis or physical examination. Laboratory exam was normal except for HbA1c and glucose values. After 2 years of balanced diabetes using oral medications only, her HbA1c starts to rise. She was put on insulin, but remained unbalanced. Upon her request, she was referred to an endocrinologist who suggested performing an abdominal CT to rule out pancreatic involvement that might explain the new-onset treatment-resistant diabetes. Her abdominal CT showed no pancreatic or other abdominal organs pathologies, apart from a 1.5mm non homogenous, irregular solid process on the cortex of the right kidney.

**Discussion:** The workup of renal incidentalomas is challenging, especially for the non-cystic middle-sized tumors. The differential diagnosis of such tumors ranges from benign (e.g. angiomyolipoma) to malignant (renal cell carcinoma) tumors. The guidelines are not straight forward due to the lack of high quality evidence. The treatment approaches ranges from a partial nephrectomy to follow-up policy. It has been estimated that over half of those aged above 50 have at least one process on one of their kidneys, and that 30% of kidney tumors smaller than 3 cm are benign.

**Conclusion:** While data from Australia and US of the past 45 years show steady increased incidence of renal tumors, there are no changes in mortality from those tumors - suggesting a pendulum tilt toward overdiagnosis, which in turn might lead to overtreatment.

## PS1.129

### Secondary prevention of diabetic retinopathy in patients with diabetes in a rural area of Greece

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**Background & Aim:** To determine if normoglycemic diabetic patients are receiving the recommended secondary prevention care in order to avoid or treat in time diabetic retinopathy according to the standards of medical care, in a rural area of Greece, disposing of a health center, but deprived of the necessary tools for funduscopy examination (Greek reality).

**Method:** We used balanced questionnaires (Cronbach alpha 0.907) in normoglycemic diabetic patients that are monitored by GPs in the health center, for regular follow-up of their disease (586 patients). As normoglycemic were considered patients with HbA1C<7% and also patients with 7%<HbA1C<8% in cases of insulin treated patients with multiple comorbidity and/or complications.

**Results:** 390 (66,55%) of the participating diabetic patients were found normoglycemic. of those, only 82 (21,03%), were following the guidelines carrying out a funduscopy yearly. Analysis of the questionnaire showed statistically significant correlation ( $p<0,05$ ) in responses to the causes of missing regular funduscopy examination in relation with: a) Long waiting lists in public health care facilities ( $U=2615$ ,  $p=0.021$ ) and b) Long distance from urban health care facilities with funduscopy possibility ( $U=2131$ ,  $p=0.019$ ). Statistically significant correlation ( $p<0,05$ ) was also found in the question to that would incite them to have a regular funduscopy examination, in relation with the response of undertaking the examination within the premises of the health center ( $U=2631$ ,  $p=0.021$ ).

**Conclusions:** Most diabetic patients achieving good glycemic control don't follow guidelines for further yearly funduscopy examination. The feasibility of funduscopy in the local health center would help improve patients' compliance, provided that tools for funduscopy examination are available. In this case given the good glycemic control, that prevents secondary complications, a better patient compliance will be also achieved following the recommendations for early treatment of a possible diabetic retinopathy.

### **PS1.130**

#### **Association between socioeconomic status and cancer screening in Koreans over 40 years in age based on the 2010-2012 KNHANES**

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**Aim:** We investigated the association between socioeconomic status and cancer screening in a Korean population aged 40 years or older.

**Methods:** This cross-sectional study included 5,284 men and 7,019 women from the 2010-2012 KNHANES.

**Results:** Compared to the lowest income group, the odds ratios (ORs) (95% confidence intervals [CIs]) for overall cancer screening of the highest income group were 2.113 (1.606-2.781) in men and 1.476 (1.157-1.883) in women; those for paid cancer screening of the highest income group were 2.446 (1.800-3.324) in men and 2.630 (2.050-3.373) in women, while those for free cancer screening were significant only in women (0.492 [0.388-0.623]). Compared to manual workers, ORs (95% CIs) for paid cancer screening of office workers were 1.300 (1.018-1.660) in men and 0.822 (0.616-1.098) in women. Compared to the least educated men, OR (95% CI) for paid cancer screening of the most educated men was 1.530 (1.117-2.095).

**Conclusions:** Higher economic status was associated with higher rates of overall and paid cancer screening in both sexes. Male office workers and more educated individuals underwent more paid cancer screening than manual workers and less educated individuals, respectively.

## PS1.131

### High-risk drinking is associated with dyslipidemia in a different way, based on the 2010-2012

#### KNHANES

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**Background & Aim:** We examined the association between alcohol-drinking pattern and dyslipidemia in Korean adults.

**Methods:** This cross-sectional study included 14,308 participants (6,694 men and 7,614 women) who participated in the 2010-2012 Korean National Health and Nutrition Examination Survey. We categorized alcohol-drinking pattern into three groups based on the alcohol use disorders identification test (AUDIT): low-risk, intermediate-risk, and high-risk. We categorized dyslipidemia as the follows; hypercholesterolemia, hypertriglyceridemia, hypo-HDL-cholesterolemia, hyper-LDL-cholesterolemia, hyper-non-HDL-cholesterolemia.

**Results:** 25.1% of men and 4.8% of women were high-risk drinkers. The prevalence of hypercholesterolemia, hypertriglyceridemia, and hypo-HDL-cholesterolemia was 34.3, 36.6 and 28.4% in men and 33.7, 18.4 and 44.4% in women, respectively. Compared with low-risk group, the ORs (95% CIs) for hypercholesterolemia and hypertriglyceridemia of high-risk group are 1.198 (1.001-1.434) and 1.979 (1.622-2.413) for men and 1.170 (0.818-1.674) and 2.307 (1.218-3.247) for women. On the other hand, the ORs (95% CIs) for hypo-HDL-cholesterolemia of high-risk group are 0.351 (0.279-0.441) in men and 0.413 (0.291-0.586) in women. Compared with low-risk group, high-risk group was associated with a higher prevalence risk for hyper-LDL-cholesterolemia in both sexes (1.541 [1.467-1.913] for men and 1.631 [1.034-2.575] for women).

**Conclusion:** high-risk drinking is associated with higher risk for hypertriglyceridemia and hyper-LDL-cholesterolemia in both sexes and hypercholesterolemia in men but lower risk for hypo-HDL-cholesterolemia in both sexes.

## PS1.132

### Microalbuminuria and diabetes mellitus at older age of life

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**Background:** Microalbuminuria (MA) is a risk factor for renal and cardiovascular disease in elderly people with type 2 diabetes mellitus (T2DM). The criteria for MA represents the albumin/creatinine ratio greater than 3.5 mg/mmol in female, and greater than 2.5 mg/mmol/l in male patients, found in three samples within the period of 6 months.

The aim of this prospective study was to determine the influence of some risk factors for the development of MA in older patients (over 65) with diabetes mellitus type 2 elderly.

**Methods:** We have monitored 182 patients with T2DM, but without MA, over the period of 36 months, and after this period MA was indicated in 70 patients. Then, we have extracted and compared the subgroup of 50 patients (17 males) with T2DM and MA, with average age of  $66 \pm 9.2$  (Subgroup 1), and the subgroup of 50 patients (15 males) with T2DM and normoalbuminuria, with average age of  $66 \pm 9.1$ .

**Results:** The average duration of T2DM in patients of Subgroup 1 from the time of T2DM diagnosis was  $11 \pm 6.6$  years, and in the second subgroup  $10.6 \pm 6.2$  (2-29) years ( $p = 0.49146$ ). In the first subgroup there was significantly greater number of smokers (13), compared with the second subgroup that had just 6 smokers ( $p = 0.0023$ ). Average HbA1c in Subgroup 1 were also significantly higher than the ones of the Subgroup 2 ( $8.94 \pm 2.5$  versus  $7.97 \pm 2$ ) ( $p = 0.0372$ ). Triglyceride values were also significantly higher in the subgroup of patients with MA ( $2.91 \text{ mmol/l} \pm 1.53$  versus  $1.94 \pm 1.06 \text{ mmol/l}$ ) ( $p = 0.0004$ ). Blood pressure, BMI and creatinine did not show any significant differences.

**Conclusion:** Smoking, increased HbA1c, elevated triglyceride levels are risk factors for development of microalbuminuria in older patients with T2DM.

### PS1.133

#### Family medicine doctors' opinion about prostate cancer screening. A pilot study

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**Background & Aim:** The idea behind this study emerges from the controversy between the pros and cons of early detection of prostate cancer using a systematic screening method of entire population. There is no scientific clear evidence whether this last is preferable over opportunistic screening, a one directed to patients who demanded it themselves or that performed for other motives of consult. The objective is to analyze how family doctors manage screening of prostate cancer and detect their doubts and needs regarding this act.

**Methods:** A self-completed questionnaire was designed for general practitioners. The questionnaire contained 6 sections (sociodemographic data, clinical management, needs, interests, prostate cancer screening guidelines and suggestions) and 49 variables. The variables were scored on a scale of 1-10 (low to high). A pilot study was performed. The present study was done in accordance with the Ethics Research Committee.

**Results:** 17 general practitioners responded the questionnaire. 59% were females with average age of 42 years old. Their average professional experience was of 15 years. Participation was of 100%. They considered that 59% of prostate-specific antigen (PSA) requests were demanded by patients. Factors that influenced the most in requesting PSA analysis were prostate clinical presentations (8.7 points) and family history of prostate cancer (8 points). The most adequately considered interval for a new screening for PSA was of 1 year (7.7 points). Interest in having information about active surveillance of prostate cancer was rated with 8.5 points. They rated their application of guidelines with: 3.2 points (European association of urology), 2.1 points (American cancer association) and 1.3 points (National cancer comprehensive network).

**Conclusions:** General practitioners showed an interest in having active surveillance protocols of prostate cancer and in updated guidelines. Currently in Spain guidelines mostly applied en primary care centers is of the European association of urology.

## **PS1.134**

### **Factors influencing alcohol consumption in adolescent at Khwao Sinarin district, Surin, Thailand 2016**

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There's a multitude of anti-alcohol campaigns to decrease number of alcohol consumers in Thailand. However, a number of alcohol consumers 15-19 years old has been increasing yearly. Khwao Sinarin has never been studied about factors influencing alcohol consumption in adolescent before. This research aims to study prevalence of adolescent alcohol consumption, analyze factors influencing alcohol consumption and describe the pattern of alcohol use in students.

A cross-sectional descriptive and analytical study was conducted in three schools at Khwao Sinarin district, from January 18th to February 1st, 2016. The study population was 226 students who were selected from a sample of 627 by a stratified random sampling method. Data were collected with a questionnaire covering socio-demographic features, knowledge, attitudes and external factors about alcohol consumption. The data were evaluated with the SPSS version 23.0. The prevalent odds ratios in the binary logistic regression model along and 95% confidence interval were used.

65.9% of the high school students (n=149) consumed alcohol. The main factors that influence alcohol consumption for individuals are those belonging to low income families, those belonging to high income families and those with a positive attitude about alcohol such as drinking make them feel more confident. External factors such as parental influence on child's alcohol use, spending time productively, were found to be protective from alcohol consumption. Among the students, 51.3% had their first drink between 13-15 years old. Peer pressure was the common stated reason they started (34.8%). Friends were also the most common group of people they drank with (48.4%). After drinking, 18.2% drove and 18.7% experienced vehicle accidents or fights.

Family was the most important factor affecting the child's alcohol use. Adolescents raised with negative attitudes and appropriate discipline concerning alcohol use were less likely to drink. However, peers also affect the students' drinking.

## PS1.135

### **Association between baseline thyroid stimulating hormone and changes in fasting free fatty acid and muscle mass in euthyroid men**

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**Background and Aim:** The purpose of this study is to determine retrospectively whether baseline thyroid stimulating hormone (TSH) levels relate with changes in free fatty acid (FFA) and obesity-related parameters in euthyroid adults.

**Methods:** A total of 92 subjects first visited the Pusan National University Hospital health promotion center for health checkup between January 2004 and December 2008. They revisited and median follow-up duration was 6.6 years. The subjects were divided into two groups by TSH level:  $<1.75$   $\mu\text{IU/mL}$  (low-normal, LN group),  $\geq 1.75$   $\mu\text{IU/mL}$  (high-normal, HN group). We analyzed the association between baseline TSH and changes in FFA and obesity-related parameters.

**Results:** In men, changes in body mass index (BMI), body fat percent, and muscle mass were not significantly different during the follow-up period between two groups. LogFFA change in LN group ( $0.20 \pm 0.25$ ) was higher than those in HN group ( $0.06 \pm 0.16$ ,  $p=0.039$ ). Using univariate linear regression analysis, baseline TSH and muscle mass was statistically correlated ( $p=0.016$ ), and baseline TSH and logFFA change was statistically associated ( $p=0.041$ ). In women, changes in BMI, body fat percentage, muscle mass, and log FFA were not significantly different between two groups.

**Conclusions:** Baseline TSH relates with changes in FFA and muscle mass during median 6.6 years in euthyroid men.

## **PS1.136**

### **New Center for Education and Research for General Practice (CERGP) in Copenhagen**

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**Background & Aim:** General Practice (GP) represents the citizen's first and unrestricted contact with the Danish health care system (DS). The GP uses a patient-centered approach, which is concerned with the individual, the family and the local community. As a gatekeeper to the DS, the GP focuses on the efficient use of available resources in cooperation with other health-professionals to ensure coordinated treatment. The Section of GP collaborates closely with the Research Unit for GP, the University Practice and the Specialty Education in GP, all of which are located in the Family Medicine Building at the Centre for Health and Society at the University of Copenhagen. In March 2016, the Section of GP and the Research Unit for GP in Copenhagen will merge into a new Center CERGP, which should stimulate to better research, education and quality improvement in general practice. To enhance evidenced based medicine in daily clinic and making research more relevant for clinical purposes.

**Method:** The various ways of conducting research, teaching and quality improvement will be described: Teaching CERGP currently offers several courses at undergraduate medical students: - Early Patient Contact (TPK) (1st term) - Clinical Course in GP + The Acute Patient (12th term) Specialist training A research training module, Region East's general medical specialty training is conducted at CERGP. This mandatory course prepares the future GP for independent, continuous further education and evidence based medicine. Research CERGP offers a comprehensive research environment, different disciplines, qualitative and quantitative methods and international collaboration.

**Results:** The visions and future activities will be communicated using a QR code to a webvideo.

**Conclusions:** CERGP will be responsible for teaching, research and the dissemination of knowledge within the discipline of GP.

## PS1.137

### **The relationship between uric acid and homocysteine levels based on alcohol-related facial flushing**

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**Background & Aim:** This study aimed to determine the correlation between blood uric acid and homocysteine levels, based on alcohol-related facial flushing.

**Methods:** Among male adults who visited a health examination center of a university hospital located in Daejeon, Korea, for a personal health examination from March 2013 to February 2014, 702 subjects were analyzed including 401 subjects without alcohol-related facial flushing and 301 with facial flushing. Pearson's correlation and stepwise multivariate linear regression analyses were performed between the log homocysteine levels and other variables including uric acid.

**Results:** Uric acid showed a significant positive correlation with log homocysteine ( $\gamma=0.166$ ,  $P=0.001$ ) ( $\beta=0.176$ ;  $P=0.001$ ) in the non-flushing group. In contrast, none of the variables showed any significant correlations with log homocysteine in the flushing group.

**Conclusions:** Alcohol users not exhibiting alcohol-related facial flushing showed a positive correlation between uric acid and homocysteine levels, whereas those without facial flushing showed no such correlation.

## PS1.138

### **How is the formation of a resident primary care in a community hospital in Spain? It is exportable to Europe?**

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**Background & Aim:** Since in 2002 transfers in health were finalized regions to expanding rural hospitals has been exponential in both geographical distribution and resources and volume of patients. This study aims to understand the impact of rotary resident doctors in a rural hospital and determine what aspects can be improved or enhanced training in medical resident of family and community medicine.

Compare their skills acquired in their peers doing the same rotating in a rural Hospital and in the same specialty.

Determine the effectiveness of a rotating within a training plan for a medical speciality made in a local hospital.

**Method:** Observational, cross-sectional study at rural hospital of the Andalusian Health System.

for an alpha error of 5%, an accuracy of 3% and a proportion of 50%, would be included in the study 12 subjects (available as a sample  $n = 17$ ). Once established their intention to participate, shall complete a survey online (Google form) previously piloted; likewise, the same survey, with the geographic modification- resident doctors of Family Medicine and Community rotating in the referral hospital. A descriptive and inferential statistics ( $P < 0.05$  bivariate and multivariate analysis) will be done. Received the approval of the ethics committee

**Results:** 84% female and 63% belong to the 2nd year of residency. The specialty where it is most often broken Internal Medicine with an average period of 5 months. The overall assessment of the rotation period is 5.4/6; compared to 4.9 /6 in a non-local hospital. Over 80% of respondents would repeat some rotating in a local hospital.

**Applicability:** To prove our hypothesis this study we intend to know what the real state of the training of residents of family and community medicine in a rural hospital, directing the results in a special way to improve those weaker points of the formation thereof by involving both professionals involved in the training and care management.

## PS1.139

### **Alcohol and head trauma... Why increase its incidence?**

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**Background & Aim:** to determine the prevalence of head trauma in emergency in patients who go with abuse of alcohol consultations. Describe the distribution of these diseases by sex, age, residence, marital status, previous psychiatric history. To compare the prevalence of the conditions and consultation by age group.

**Methods:** descriptive, cross-sectional study. Location: emergency service in Patients with abuse of alcohol and head trauma with different Glasgow Score. This unit psychiatric care in the months of September 2014 to February 2015. for an alpha errors of 5%, an accuracy of 4% and a proportion of patients would require 50% support in the study at least 306 patients. A descriptive and inferential statistics ( $P < 0.05$  bivariate and multivariate analysis) will be done.

**Results:** 789 patients are observed. 85% are male. Only 43% have a psychiatric pathology in this case. 67 % have >65 years old. 20% required hospitalization. 15 % remember head trauma and abuse of alcohol.

**Conclusions:** during the study year, alcohol abuse is present very prevalent form in most traumatic events treated in emergency departments. Fortunately, most traumatic events have been mild and most of them associated with chronic consumption of alcohol.

## **PS1.140**

### **Quality improvement projects in a family medicine residency programme**

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**Background:** Our Family Medicine Residents are expected to acquire in their training competency in Systems-based Practice: residents must demonstrate an awareness of and responsiveness to the larger context and system of healthcare and an ability to effectively call on system resources to provide optimal care. Amongst other things, the residents are expected to coordinate care with providers in the larger healthcare community. We try to teach this competency by getting each resident to do a Clinical Practice Improvement Project (CPIP).

**Aim:** To evaluate whether CPIP is useful in teaching residents competency in Systems-based Practice.

**Method:** After attending a course on CPIP, the residents would undertake a quality improvement project in their clinics. Tutors would evaluate the resident's projects and grade them according to pre-defined criteria.

**Results:** Some of the areas of improvement residents worked on include:

- increasing percentage of diabetics getting annual foot screening,
- increasing the percentage of diabetics with adequate BP control
- increasing the percentage of eligible patients being offered Pap smears.

in general, in assessing the residents' projects, the tutors found the residents showed competency in systems-based practice. CPIP was found to be useful in teaching system-based practice.

Some of the residents' learning reflections on their projects include :

- multidisciplinary team effort was needed to effect change
- learning how to gather support from staff so that changes could be implemented
- the importance of team work

**Conclusion:** The CPIP is useful in teaching residents competency in systems-based practice.

## **PS1.141**

### **A review on the effects of antidepressants on the prevention of post-stroke depression in patients with acute stroke**

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**Objective:** Post-stroke depression (PSD) is common, affecting about one in three survivors, and is associated with poorer rehabilitation outcomes as well as increased mortality. Prevention of PSD by pharmacological or other therapies is therefore clinically important, as it may improve the general outcome of patients. This review is aimed at evaluating if the use of antidepressants in non-depressed patients helps prevent PSD.

**Methods:** PubMed and CENTRAL databases were searched in Jan 2015 with keywords 'antidepressants', 'stroke', 'prevention' and 'depression'. The search was limited to randomized control trials which studied the effects on antidepressants on stroke patients without existing depression for prevention of PSD. There was no limit on the publication date of the articles, but only English articles were accepted.

**Results:** 9 articles were selected for inclusion in this review. More recent studies suggest that antidepressants may be useful for the prevention of PSD, but overall, the evidence was not strong enough to advocate their use as prophylaxis. Various classes of antidepressants were used in the trials, with no single group showing superiority over the rest, but they were generally well-tolerated. Limitations included small sample sizes, low prevalence of PSD leading to the trials being underpowered, as well as variable study methodology quality.

**Conclusion:** Antidepressants showed promising potential, with the majority of studies showing improvement compared with control. However, methodological issues, high drop-out rates and low participant numbers make it difficult to recommend antidepressant prophylaxis for the prevention of post-stroke depression at this time. More high quality studies need to be done to confirm the promising results which have been shown in recent years.

Keywords: Antidepressants, stroke, depression, prevention

## PS1.142

### Use of oral steroids for otitis media with effusion treatment - evidence-based clinical review

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**Background & Aim:** Otitis media with effusion (OME) is common and may cause hearing loss. However treatment remains controversial. Our aim is to review the evidence for the impact of oral steroids on treatment of otitis media with effusion treatment.

**Methods:** A clinical research was conducted including articles from the last 10 years. The Mesh terms used were: “otitis media with effusion” and “steroids”. The literature searches were done in MEDLINE databases; National Clearinghouse; Canadian Medical Association Practice Guidelines InfoBase; Guidelines Finder of the National Electronic Library for Health in the British NHS; Database of Abstracts of Reviews of Effectiveness - Centre for Reviews and Dissemination; Bandolier; The Cochrane Library and Index of Portuguese Medical Journals. The Jadad and The Oxford 2011 Levels of Evidence scales were used to evaluate studies quality and to assign a level-of-evidence (LE). Eligible articles included those who described a population diagnosed with OME, which underwent treatment with oral steroids (intervention) versus other different therapies or placebo. The clinical outcome measured was OME treatment (with improved clinical symptoms and/or positive variation on tympanogram).

**Results:** of the 262 articles obtained, four matched eligibility criteria: two guidelines, one systematic review and one randomized clinical trial. Both guidelines (LE 1) don't recommend oral steroid therapy in OME treatment. The systematic review (LE 1) concluded that there's no clinical benefit on hearing loss with steroid therapy, even though they can enable a faster resolution of the symptoms. The randomized clinical trial (LE 2) compares thermal therapy versus systemic oral steroids. This study shows better results for thermal therapy than for systemic steroids.

**Conclusions:** There is no evidence of beneficial effect from oral steroids on OME treatment (LE 1). However, more studies are needed to find an appropriate treatment for this disorder.

### PS1.143

#### **Sibling risk of hospitalization for heart failure - a nationwide study**

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**Background & Aim:** The familial risks of heart failure (HF) remain largely undetermined. This nationwide follow-up study was aimed at determining risk of hospitalization for HF conferred by affected siblings. **Method:** Swedish Multi-generation Register data, with records of at least one full sibling available at start of follow-up, were linked to the Hospital Discharge Register data for 1987-2010. The oldest participants were aged 78 years in 2010. Relative risks, expressed as standardized incidence ratios (SIRs), of HF hospitalization were calculated for individuals with siblings hospitalized with HF compared with those whose siblings who were not. Adjustments were made for common HF comorbidities, age, time period, socioeconomic status and region.

**Results:** During the 23 year follow-up (1987-2010) 23 212 individuals (7 155 females), were hospitalized because of HF. From this total 1121 had at least one full sibling hospitalized for HF. Sibling risks were generally similar for both males and females. The SIR of HF hospitalization was 1.62 (95% confidence interval 1.54-1.70) for individuals with one affected sibling and 15.46 (12.82-18.50) for individuals with two affected siblings. The SIR conferred by one or more affected siblings was 2.67 (2.24-3.16) below the age of 50 years, 1.92 (1.75-2.10) between 50 and 59 years of age, 1.63 (1.52-1.76) between 60 and 69 years of age, and 1.54 (1.38-1.71) between 70 and 78 years of age. Spouses had low familial risks, SIR=1.04 (1.03-1.06).

**Conclusions:** Familial factors are important in HF, especially in families with two or more affected siblings and in early onset of HF.

## PS1.144

### **Socio-demographics could predispose an increase in falling risk**

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**Background:** Falls in the elderly occurred frequently and may lead to a significant rise in morbidity and mortality. Annually, one-third of individuals over the age of 65 have experienced some fall events, and fifty percent for those over 80. Therefore, this study was to investigate the related factors of falling in the elderly in Taiwan beyond the commonly reported correlations to cardiac arrhythmia, dementia, Parkinson's disease, and knee osteoarthritis.

**Methods:** This was a retrospective cohort study. We excluded people who have known increasing risks of falling, such as heart or cerebrovascular disease, back pain or arthritis, cancer, balance disturbance, sedative agents usage, and past fall histories. A total of 13489 elderly were finally included from March 2009 to July 2010 in Taipei. The subjects had finished two repeated self-administered questionnaires recording the falling frequency, age, sex, educational and income status and BSRS-5 scores. We used logistic regression and controlled known confounding factors to evaluate the related factors of falling in our study population.

**Results:** The ultimate sample consisted of 13489 participants. The average age was 74.75 (SD 6.37). The prevalence of falls was 3.6%. According to multivariate analysis results, the factors and their relative impact on a predisposition to falling were as follows: female gender (OR 1.392; 95% CI 1.132-1.711), lower educational status (OR 1.754; 95% CI 1.345-2.287), low-income families (OR 1.672; 95% CI 1.155-2.419), and higher score in BSRS-5 (OR 1.677; 95% CI 1.225-2.294).

**Conclusions:** Falls in older adults can be a result of multiple factors. Social demographics play an integral role in determining a predisposition to falling. Thus, the mere examinations of a patient's chronic diseases to assess the risk of falling are not sufficient. Social demographics and psychological attributes are at least equally important in measuring such likelihood to falling.

## PS1.145

### **Influenza vaccination coverage in health care workers. Valencia Region, Spain. Seasons 2011/12 to 2015/16**

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**Background & Aim:** One of the influenza vaccination target groups is all the healthcare workers (HCW). Influenza vaccine is recommended in this group in order to prevent the transmission and the disease. The aim of the study was to analyze the trend in influenza vaccination coverage among this group from season 2011/12 to 2015/16.

**Method:** We conducted a descriptive study on influenza vaccination coverage in HCW using data from Vaccination Information System of Valencia Region (Comunidad Valenciana -CV)(Spain).

**Results:** CV population is around 5 million inhabitants and a mean of 57,500 HCW are target for influenza immunization each season. A mean of 680,000 influenza doses were administered in each season and the 3% corresponded to HCW (18,304 doses in 2011/12 and 26,213 in 2015/16). The 70% of the doses administered in that group corresponded to women (68% in 2011/12 and 70% in 2015/16). An increase of influenza coverage was registered in HCW during the study period from 26.1% in 2011/12 to 45.6% in 2015/16.

**Conclusions:** the number of doses administered in this group has increased during the period. The higher percentage of doses administered in women is according to the distribution of HCW by sex that works for the health system. In spite of the fact that influenza vaccination coverage has improved in HCW, the value remains low. It is necessary to be more effective in the influenza immunization strategies target to HCW.

## PS1.146

### **Pneumococcal vaccination in people older 18 years by risk group. Valencia Region, Spain. Years 2014-2015**

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**Background & Aim:** Pneumococcal conjugate vaccine is funded in Valencia Region (Comunidad Valenciana - CV) for adults that belonged to risk groups since 2013. Knowing the results of vaccinated risk groups allow to adequate vaccination future strategies. The aim of the study was to analyze the profile of vaccinated adults with Pneumococcal conjugate 13 vaccine (PCV13) in years 2014 and 2015.

**Method:** An analysis of vaccinated people over 18 years of age with the PCV13 registered in the Vaccination Information System (SIV) of CV in 2014 and 2015 was done.

**Results:** 11,913 were vaccinated in 2014 and 12,199 in 2015. By sex, 54.4% of the doses were administered in men in 2014 and 53.35% in 2015. Differences ( $p < 0.05$ ) were reported by risk group and sex in patients with HIV. In 2014, 37.2% were aged 45-64 years, 35.38% belonged to this age group in 2015. By risk group, the B or T cell immunodeficiency disorder or complement deficiencies were the most vaccinated (31.5% in 2014 and 31.63% in 2015), followed by the group of chronic renal failure (20.4% in 2014 and 21.56% in 2015). In 2014 16.3% of them had not risk factors, 21.49% in 2015.

**Conclusions:** There were not differences in vaccinated results by year of study. Most of the vaccinated people belong to a risk group. People with complement deficiency syndromes and chronic renal failure represent the higher percentage in vaccinated groups. There were not differences by sex except for the HIV group.

**PS1.147**

**Influenza vaccination coverage in pregnancy. Valencia Region, Spain. Seasons 2011/12 to 2015/16**

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**Background & Aim:** Pregnant women and their infants are at increased risk for influenza-related complications. Conselleria de Sanidad Universal y Salud Pública of the Valencia Region (Comunitat Valenciana-CV) recommends influenza vaccination for all women who are pregnant during the influenza season. The aim of the study was to analyze the trend in influenza vaccination coverage among this group from season 2011/12 to 2015/16.

**Method:** We conducted a descriptive study of influenza vaccination coverage in pregnant women using data from Vaccination Information System of CV and the metabolopathies registry (MetaB). The number of vaccinated women was obtained from SIV, and pregnancies from MetaB.

**Results:** A value from 49538 births (in 2011) to 43160 (in 2015) was registered in CV. According to the time period of the vaccination campaign, the influenza vaccination coverage in pregnancy was 33.44% in 2015/16 and 7.64 in 2011/12. for the last season it represents the 1.6% (10823) of the total doses administered during the influenza vaccination campaign. The mean age of vaccinated women was 32 years.

**Conclusions:** Influenza vaccination coverage has increased in the pregnant women target group, mainly in 2015, but it is necessary to maintain efforts in order to achieve a higher coverage value. That increase could be associated with the introduction in 2015 of the Tdap vaccination strategy in pregnant women that could have improved the perceptions about the safety of the immunizations in this group.

## PS1.148

### **Analysis of the refusal of human papillomavirus and influenza vaccine. Valencian Region, Spain.**

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**Background & Aim:** Vaccine refusal is an increasingly problem with a high impact in media. However, there is no more information about the real extent of the problem and the reasons for rejection. The aim of this study was to evaluate the vaccine rejection against two vaccines (HPV and influenza) registered in the Vaccination Information System (SIV) of the Valencia Region (Comunidad Valenciana-CV).

**Method:** Vaccine rejection data recorded in SIV for HPV and influenza vaccines was analyzed. HPV vaccine is administered in adolescent (girls born between 1996 and 2000) and influenza vaccine is target primarily to adults (vaccination season 2014-15). We calculated the rate of rejections and causes (percentages).

**Results:** HPV vaccination refusal rate was 1.4% (1,625 rejections during the analysis period). The main reason for rejection (54.9%) was to be anti-vaccination. 14,833 rejections against influenza vaccination were registered (rejection rate 2.1%), 5.6% of them were also to be anti-vaccination.

**Conclusions:** Although vaccination refusal is highly disseminated through the media and is consider an important problem due to the probably effect in vaccination programmes, rejection data registered in our region reflects a low impact. It is a highlight to maintain a continuous monitoring of rejection and their causes to establish appropriate strategies to minimize them.

## PS1.149

### What do our physicians know about their retirement?

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**Background and Aims:** The preparation for retirement is a process of information-training to the jubilable people and can assume their new role positively. This study is designed to determine the physicians demographics and retirement previsions of an autonomous community of Spain (Catalonia).

**Methods:** Design: a descriptive transversal study. Emplacement: primary care centers of Catalonia. **Subjects and Methodology:** An anonymous and voluntary survey of 17 multiple choice items is sent by e-mail to 1000 primary care physicians during February-May 2015, where data on socio-demographic factors, years of contributions to the social security and information about the retirement of participants are collected. Statistics: Descriptive analysis: absolute values, mean, percentages. Inferential analysis: Chi-square test for qualitative variables.

**Results:** 200 physicians respond. 58.7% are women and 53.5% are over of 54 years old. 69.3% are married or living in couple and 12.4% living alone. 43.5% have contributed to the social security more than 30 years. 44.6% do not have information about retirement, 30.3% would like to know more about it, 81% did not know what retirement pension will correspond, 90% do not know the formalities to carry out. 56.2% will occupy their time at leisure (travel, sport, creative activities) and 44.8% for volunteering or to be caregiver during retirement. 60% of women have a contribution to the social security period of 21-25 years ( $p=0.003$ ) and 29.4% of the physicians over 50 years do not know at what age they can retire ( $p=0.001$ ).

### **Conclusions:**

1. Feminization of primary care (60% of women have more than 20 years of contributions to the social security).
2. Important ignorance about retirement (44% uninformed).
3. Awareness to be informed more about retirement.

## PS1.150

### **Knowledge of stroke in patients over 65 years old attended in primary care**

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**Background and Aim:** Stroke affects especially people >65 years. If in 2050 the WHO expects that these patients will be 46% of the population, it is essential that this disease to be known to decrease its incidence and mitigate its consequences. This study is designed to determine the degree of knowledge of stroke in patients over 65 years old attended in primary care (terminology, risk factors, suggestive symptoms and attitude to take in case of transitory episode) and inform them about this disease.

**Methods:** A descriptive transversal study was utilized and a brief self-administered questionnaire of closed questions was passed randomly to the patients  $\geq 65$  years who came to visit with previous citation at medical and nursing practices of two semi-urban primary care centers. Oral information and a pamphlet about stroke were given after complete the questionnaire.

**Results:** 304 questionnaires were answered. Age: mean 72.6 and standard deviation  $\pm 16.3$  years. 53.6% are women. 51.7% knew the term 'stroke', 72.7% 'cerebral embolism' and 60.5% 'cerebral infarct'. The cardiovascular risk factors more associated to stroke were hypertension (78.9%) and hypercholesterolemia (74%); cardiac arrhythmia (44.7%) and diabetes mellitus (41.2%) were less related with it. 28.9% of respondents said that hypertension was the most important risk factor to suffer a stroke. 77% recognized the speech disturbance and 65.5% identified the decreased strength in a limb as alarm symptoms, 60.5% reported both symptoms. 87.1% would request urgent medical assistance if suspected a stroke, but the 24.3% of the surveyed patients would not consult urgently in case of transitory ischemic attack.

**Conclusions:** It is necessary to increase the knowledge of stroke, especially to the patients more susceptible to suffer it. Individual counselling and community educational activities from primary care should be enhanced for maximum dissemination of knowledge of stroke.

## **PS1.151**

### **Drugs dealing in our clinic practice**

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Personal History: female, 30 years. Without interest. Present Illness: patient who comes to Emergencies guarded by Police, suspecting ingestion of drugs capsules. It has not been possible to make X-Ray because possibility of pregnancy.

Physical Examination: Good overall condition. No symptoms at the arrival to the Emergencies Service. Hemodynamically stable. Complementary tests: pregnancy test: negative. Abdominal x-ray: uncountable foreign objects.

Diagnosis: body-packer. Evolution: the patient stays for 48 hours in Observation Area in treatment with evacuation solution, where she expulses 101 drugs packs coinciding with patient confession. In x-ray abdominal there is no presence of foreign objects.

Conclusion: it is important to know how to work with patients under arrest. Pregnant women are a population with many restrictions.

Keywords: Drugs, Body packer, pregnancy

## **PS1.152**

### **Abdominal pain in patient with chronic kidney failure**

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Personal History: male, 60 years old. No drug allergies. Chronic renal failure due to polycystis. Kidney transplant in 2000. HTA. Colonoscopy in 2013.

Present Illness: Patient who come to Emergency for abdominal pain with difficult for defecation. He has been in treatment with ciprofloxacin by temperature of 37.6°C, indicated by Nephrology. Physical Examination: pain in lower abdomen an both iliac fossas.

Complementary tests: Blood test: hemoglobin 13.1, Leukocytes 12.500, Creatinine 1.68. Until the necessity of abdominal CT, it is indicated treatment with acetilcistein as kidney protector.

Abdominal TC: mass in cecum infiltrating epiplon in relation with peritoneal carcinomatosis which produces an intestinal obstruction.

Suspected diagnosis: cecum cancer. Evolution: the patient is admitted in General Surgery to be operated.

Conclusion: It is important to be careful with patients with chronic kidney failure at the moment of making complementary tests. We have to know the different possibilities that exists in this kind of patients. Keywords: chronic kidney failure, CT, intestinal obstruction.

## **PS1.153**

### **About a case of Guillain-Barre syndrome**

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Personal History: No known drug allergies. No previous pathology of interest. No standard treatment. Anamnesis: 24 year old male who presented at our Emergency episode of weakness in lower limbs with unstable gait 2 days duration. Difficulty recently added to move the toes. Left frontal dominance headache associated. No fever or vomiting. No visual or level of consciousness or difficulty in speech disorders. Episode 10 days before tympanic perforation that required antibiotics.

Physical examination: Glasgow 15/15, isochoric and reactive pupils, no nuchal rigidity, no alterations in cranial nerves. No limb differences. Decreased strength in both lower limbs with paresthesias. Upper limbs preserved and symmetrical sensitivity and strength. Abolished patellar reflex and Achilles reflex. Positive Romberg. Unsteady gait with increased base of support. No alterations in language. Symmetrical palpable carotid pulse.

Rest of examination: Anodyne. Complementary Tests: Blood test: no significant findings. Chest X-ray: no significant findings. Cranial CT: no significant findings. Diagnosis: peripheral neuropathy ascending to rule Guillain-Barré syndrome Evolution: Neurology is contacted for evaluation meanwhile, decides admission to the ward to complete the study with EMG and ENG and early empiric treatment with gamma globulin. During admission diagnosis of Guillain-Barré syndrome is confirmed.

Conclusion: the establishment of a Guillain-Barré syndrome can be difficult to diagnose, so the history is very important (history of infections). It should be noted if symptoms are symmetrical, speed of onset of symptoms, the disappearance of reflexes.

Keywords: unstable gait, lower limb paresis, Guillain-Barré syndrome

## **PS1.154**

### **Atypical presentation of acute appendicitis**

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Personal History: No allergies. Independent for ADL. No history of interest.

Anamnesis: 59 year old male who attended the emergency room with symptoms of hypotension in context of epigastric abdominal pain, radiating to right flank, associated with nausea and dizziness, 2 weeks of evolution, several emergency room visits for the same reason. Asthenia and hyporexia refers several days of evolution. In the afternoon it begins with fever up to 40 °. No other symptoms or changes in bowel habits. Physical examination: low blood pressure on arrival (83/55), Abdomen not tender to palpation, with no signs of peritoneal irritation. Rest of exploration: no significant findings.

Complementary tests: Blood test: leukocytes 14500 (95.3% N), C-reactive protein 189, normal amylase, liver profile unchanged. Abdominal ECO: without pathological findings.

Diagnosis: cholecystitis Evolution: fluid pressure values to stabilize and control diuresis begins. During his stay in observation, the patient remains stable with sporadic localized right upper quadrant pain that subsides spontaneously. Digestive is contacted and recommends performing abdominal CT, which objective in right lower quadrant appendix gauge increased in relation to acute appendicitis. Subsequently, the patient is admitted for surgical resolution.

Conclusion: clinical manifestations resulting from appendicitis can be very unspecific in relation to location and orientation of the appendix, so in the suspected diagnosis must rely on imaging tests for the screening of the same as the symptoms presented by the patient can guide to other pathologies.

Keywords: abdominal pain, leukocytosis, appendicitis

## **PS1.155**

### **Cognitive impairment as a symptom of metastasis in the central nervous system**

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Personal History: Diabetes Mellitus type II, hypertension, dylipidemia, prostate cancer, glaucoma. Current treatment: lisinopril/hydrochlorothiazide, Adiro, fenofibrate, paracetamol.

Anamnesis: 76 years old male who came to Emergency department with episode of cognitive impairment from two weeks ago with memory failure and loss of strength in the lower limbs. Family refer that they notice like that since he had to leave the antidiabetic therapy (metformin / linagliptin). Refers not fever at any time. No other symptoms. Derived from primary care for screening cerebrovascular process.

Physical examination: Glasgow 15/15, isochoric reactive pupils, no nuchal rigidity, no alterations in cranial nerves. Left dysmetria. Decreased strength in left upper limb relative to contralateral. Sensitivity preserved and symmetrical. Negative Romberg. No gait or language disorders. Symmetrical palpable carotid pulse. Rest of examination: anodyne.

Complementary tests: Blood test: no significant findings.

Chest X-ray: no significant findings. Cranial CT without contrast: bifrontal area of mixed attenuation in supratentorial level, higher in right frontal and temporal region, displacing the midline, compressing the lateral ventricle and causing blurring of sulcus, suggestive of neoplasm. Cranial CT with intravenous contrast: mixed right temporo-frontal attenuation area, with thickened cortical and mild enhancement. Nodular area more enhanced appearance in the uppermost portion of the lesion, all compatible with neoplasm.

Diagnosis: space occupying lesion of brain to rule out metastatic lesion secondary to prostatic primary process.

Evolution: the patient is admitted in charge of Neurosurgery for study and surgical treatment of the injury.

Conclusion: with neurological symptoms of recent appearance in patients with a history of malignancy should be ruled secondary metastasis in the central nervous system.

Keywords: cognitive impairment, hemiparesis, prostate cancer

## **PS1.156**

### **Differential diagnosis of dyspnea in disabled patients**

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Personal History: No known drug allergies. Schizophrenia.

Current treatment: clomipramine, topiramate, Adiro, trimipramine, alprazolam, propranolol.

Anamnesis: 78 year old woman who comes to the emergency department brought by ambulance by feeling fatigue of recent onset. The family refers pallor and decay. In the last 48 hours she has submitted hip pain for which has taken anti-inflammatory. Concerns in recent days dyspnea with ambulation with a walker. Discuss cold symptoms in previous days without expectoration, well tolerated. 112 ambulance objectives hypotension (70/38) and 94% O<sub>2</sub> Sat at initiating perfusion with saline and transferred to Hospital.

Physical examination: mucocutaneous pallor. Cardiac auscultation: rhythmic and regular tones, no murmurs.

Respiratory auscultation: vesicular murmur preserved without stridor or wheezing.

Rest of examination: anodyne.

Complementary tests: Blood test: leukocytes 19610 (N 94.4%, L 3.1%), D dimer 19261.9, urea 109, creatinine 2.97, LDH 342, lactate 3.7, C-reactive protein 206. Gas analysis: pH 7.252, PCO<sub>2</sub> 43, PO<sub>2</sub> 22.9, HCO<sub>3</sub> 18.6, EB -7.3. Angio-CT: no signs of PTSD are objectified.

Diagnosis: respiratory origin likely sepsis Evolution: the patient is admitted to the observation area to start treatment with fluid therapy, antibiotics; blood and urine cultures being filed.

Conclusion: the differential diagnosis of dyspnea in an immobilized patient should include screening for PTSD.

Keywords: dyspnea, hypotension, reduced mobility

## **PS1.157**

### **Rhythm disturbance in older patients**

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Personal History: Allergy to NSAIDs. Independent for ADL. Hypertension, dyslipidemia, chronic renal failure (on dialysis), iatrogenic hypothyroidism secondary to multinodular goiter. In Simvastatin, Levotrroid, omeprazol, folic acid.

Anamnesis: 81 year old woman who came brought by ambulance after being found drop in his driveway, going to be collected for dialysis session. Given the low level of consciousness and facial and head trauma is transferred to Hospital. The family reports that the patient has since 3-4 years ago frequent episodes of dizziness, unconsciousness with sometimes and falls to the ground, mostly in connection with dialysis. These episodes have become more frequent in recent days. No report dyspnea or chest pain clinic.

Physical examination: Regular state general. BP 90/60. Heart rate 13 bpm. Facial swelling hemiface right. Isochoric and reactive pupils (right eyelid edema), Glasgow 13/15, generalized hyporeflexia, bilateral flexor plantar reflex, strength and sensitivity preserved in the 4 members.

Rest of examination: anodyne.

Complementary tests: Blood test: troponine I 22, CK-MB 44. EKG: ST decrease in lower territory. Cranial CT: shown subluxation C1-C2.

Diagnosis: severe bradyarrhythmia. NSTEMI. Facial trauma.

Evolution: case is discussed in coronary ICU who proceeds to income. During admission, the patient had occasional episodes of paroxysmal AF with evidence of very slow rate of escape and subsequent onset of sinus rhythm. Considering that was the origin of recurrent syncope of the patient indicated considered definitive pacemaker implantation.

Conclusion: frequent episodes of syncope in older patients requires us to study the presence of medication that causes decreased heart rate. Otherwise, you must perform full cardiologic study to find anomalies requiring pacemaker placement.

Keywords: bradycardia, syncope, myocardial infarction

## **PS1.158**

### **Rhythm disturbance in older patients**

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Personal History: Allergy to NSAIDs. Independent for ADL. Hypertension, dyslipidemia, chronic renal failure (on dialysis), iatrogenic hypothyroidism secondary to multinodular goiter. In Simvastatin, Levotrroid, omeprazol, folic acid.

Anamnesis: 81 year old woman who came brought by ambulance after being found drop in his driveway, going to be collected for dialysis session. Given the low level of consciousness and facial and head trauma is transferred to Hospital. The family reports that the patient has since 3-4 years ago frequent episodes of dizziness, unconsciousness with sometimes and falls to the ground, mostly in connection with dialysis. These episodes have become more frequent in recent days. No report dyspnea or chest pain clinic.

Physical examination: Regular state general. BP 90/60. Heart rate 13 bpm. Facial swelling hemiface right. Isochoric and reactive pupils (right eyelid edema), Glasgow 13/15, generalized hyporeflexia, bilateral flexor plantar reflex, strength and sensitivity preserved in the 4 members.

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Conclusion: frequent episodes of syncope in older patients requires us to study the presence of medication that causes decreased heart rate. Otherwise, you must perform full cardiologic study to find anomalies requiring pacemaker placement.

Keywords: bradycardia, syncope, myocardial infarction

## **PS1.159**

### **Risk of urinary tract infections in diabetic patients**

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Personal History: No known drug allergies. Ex smoker for 40 years. Dependent for basic activities of daily living. Hypertension, Chronic obstructive pulmonary disease, permanent atrial fibrillation, acute myocardial infarction in 2007, senile dementia, prostate cancer 15 years ago.

Current treatment: pantoprazole, Adiro, triflusal, torasemide, amiodarone, spironolactone, isosorbide mononitrate, Atrovent, Ventolin, Spiriva, lorazepam, Tardyferon.

Anamnesis: 85 year old male who came to emergency department with gait disorders and swallowing liquids difficulties. 8 days prior consultation regarding benzodiazepine poisoning episode. Since then, her daughter refers that he did not complete improvement of the medical picture with persistent unstable gait and exacerbation of symptoms of dementia with worsening at night. It is derived from the Primary Care Centre to screen for new cerebrovascular event.

Physical examination: Neurological examination: no alteration of cranial nerves. No alterations in the strength or sensitivity, unstable gait with small shuffling steps. Osteo-tendon reflexes present.

Rest of exploration: anodyne.

Diagnosis: stroke vs pharmacological intoxication.

Complementary tests: Blood test: no significant findings. Urinalysis: nitrites +, leukocytes +++. Benzodiazepines positive. Cranial CT: marked enlargement of the lateral ventricular system and of the third ventricle, which could be related to normal pressure hydrocephalus; hypoattenuation of the periventricular white matter; marked sulcus along convexity in relation to cortical atrophy.

Evolution: the patient was discharged with follow-up by Neurology consultation in the Memory Unit for organization of further tests and follow-up by Neurosurgery consultation.

Conclusion: the appearance of symptoms of dementia in elderly patients with polypharmacy forces us to look for possible causes such as infection or intoxication, in addition to rule out a cerebrovascular event.

Keywords: ataxia, polymedicated patient, dementia

## **PS1.160**

### **Seizure de novo in elderly patient**

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Personal History: Intolerance to metformin. Independent for ADL. Hypertension, dyslipidemia, type 2 diabetes, hyperuricemia, moderate CKD. Under treatment with linagliptin, omeprazole, allopurinol, atorvastatin, lisinopril.

Anamnesis: 74 year old man moved by ambulance per episode of one minute longer tonic-clonic seizure activity de novo at home while lying, witnessed by his wife, with stiffness and conjugate deviation to the right look. Upon arrival of the ambulance, postcritical patient prone to sleep, so he moved to the hospital. During the transfer, new similar episode. His family denies symptoms during the previous days.

Physical examination: sedated patient. Generalized hypoventilation. Miotic pupils, mobilizes the 4 limbs, other non-assessable neurological examination. Rest of exploration: no significant findings.

Complementary tests: Analytical unchanged. Rx chest without findings. CT scan: a mass of 3.9x2.7cm left parietal-occipital seen with significant perilesional edema compressing the ipsilateral dorsal horn of the lateral ventricle, without sources of bleeding.

Diagnosis: Intra-axial mass lesion left parietal area. Seizure de novo.

Evolution: during admission, the patient is hemodynamically stable, staying awake after spending effect of sedation and talking coherently. Neurosurgery is discussed if, after assessing the patient who recommends consultation with Internal Medicine for admission on their part and extension of study during the same with new imaging (MRI skull and thoraco-abdominal CT scan) to rule out possible secondary metastases primary tumor in another location.

Conclusion: the occurrence of seizures in elderly patients with no history of epilepsy, forced to do study to screen for the presence of stroke or LOE, which can manifest in this way.

Keywords: seizure, space-occupying lesion, elderly patient

## **PS1.161**

### **Syncope in young and healthy patients as indicative of congenital heart disease**

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Personal History: No known drug allergies. Episodes of syncope studies privately. No current medical treatment.

Anamnesis: 33 years-old male transferred by ambulance after suffering traffic accident on his motorbike. According a witness, the patient had suffered loss of consciousness. Upon the arrival of the ambulance, patient presents Glasgow 15/15, only slightly desoriented, although the witness refers possible previous seizure. Patient refers amnesia about what happened.

Physical examination: conscious, oriented and collaborator, Glasgow 15. Hematoma to supraciliar level and right eyelid, with incised wound at the level of the upper eyelid. Several facial injuries with loss of tooth. Immobilization of the left leg with swelling and pain in his ankle. Rest anodyne.

Complementary tests: Cranial CT: no significant findings. Left ankle X-ray: B-type fracture.

EKG: sinus rhythm at 65 bpm, normal axis, PR <0.20, incomplete right bundle branch block in V1-V2, with ST elevation in V2 and early repolarization. Urinalysis: bezodiazepines and cannabis positive. Blood test: no significant findings.

Diagnosis: syncope secondary to cardiac dysfunction (Brugada syndrome)

Evolution: the patient was admitted to Cardiology area to study possible syncope with Brugada type III pattern EKG.

Conclusion: the presence of unexplained syncope in a young patient should be of study of an underlying cardiac cause.

Keywords: syncope, early repolarization, Brugada syndrome.

## **PS1.162**

### **Urological sepsis in patient with care deficit**

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**Personal History:** Unknown allergies. Hypertension, ischemic heart disease with requested surgery for 2 stents. Without treatment from Jan / 14.

**Anamnesis:** 60 year old man brought by ambulance decreased level of consciousness. Warned by the landlord of the patient, who is faded in the bathroom of his home. Time of evolution is unknown. Upon the arrival of 061 find it lying on the bathroom, defecated, stuporous, with traces of bilious vomiting in oral cavity. Blood glucose 500 mg / dl and BP 88/56. Subsequently, it is located at a niece, who reports that was treated three days earlier at another centre by haematuria, was discharged with a diagnosis of UTI.

**Physical examination:** stuporous in response to painful stimuli, cachectic, unkempt. On auscultation crackles in both bases. Objective is hematoma in right chest. Tightening of perineum and penile swelling. Rest of examination: no significant findings.

**Complementary tests:** Blood test: 15200 leukocytes (N 13980), Glu 300, urea 95, creat 2.03, 260 CK, troponin I 4.74, C-reactive protein 175, PCT 35.68, 6.947 pH, PCO2 23, HCO3 4.8. Urine: ++ leukocytes, erythrocytes +++, abundant yeast. Chest X-ray: bilateral cottony pattern.

**Diagnosis:** Fournier gangrene vs perianal abscess.

**Evolution:** the patient is assessed by urologists, that determine performing contrast CT where the presence of Fournier gangrene is confirmed. Subsequently, given little improvement in the picture with hypotension despite volume replacement, and worsening in successive analytical tests, decided immediate surgery. After surgical debridement, the patient is admitted to the ICU for monitoring and subsequent cures in surgery in the next few days.

**Conclusion:** Fournier gangrene is a disease that requires immediate intervention because it is characterized by a rapid onset, usually with perirectal and onset of specific symptoms and can progress to necrosis, progressing to electrolyte disturbances, sepsis, coagulopathy, shock and death.

**Keywords:** Fournier gangrene, urological sepsis

## **PS1.163**

### **Scorpion bite. What to do?**

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**Background and Aim:** Young man who arrived to our Health Center because of a scorpion bite. This is a very unusual case in our country and the way to treat it was unknown. However, this is an urgency and it is very important to treat this patient as soon as possible. We looked for the correct treatment in many books and this is what we found. With this treatment our patient got better.

**Method:** Our 31 years old patient arrived with the bite on his right hand. It was really painful and he had already taken some antiinflammatories at home but this pain was getting worse. He didn't have any medical antecedent and he didn't take any chronic treatment. He felt a terrible pain on his right hand and then he looked for the animal which had bitten him. He found an scorpion on his garden and he came to see the doctor quickly. The first thing to do was taking blood test to make sure that he didn't suffer from coagulation disorders. The blood test was anodyne so we started the treatment. We washed his hand with soap and water; we put ice on the bites's area. Regard to medicines, we injected antiinflammatories, amoxicillin-clavulanate and tetanus gammaglobulina. As the pain was too hard, we injected corticosteroids too.

**Results:** This patient considerably improved so he could go home taking powerful antiinflammatories and antibiotics for ten days.

**Conclusions:** One of the most important things when we feel the bite of a poisonous animal, is to look for the guilty one. After that, you have to go to see the doctor immediately. If this patient wouldn't have been treated so fast, he probably would have had important complications, even his life could be at stage. Now, you know what to do in these strange cases.

## PS1.164

### Severity of symptoms as measured by the I-PSS questionnaire in 2035 adult males from Romania

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**Background & Aim:** Benign Prostatic Hyperplasia (BPH) is a common cause of Lower Urinary Tract Symptoms (LUTS) in older male patients. The severity of LUTS and the patient's perception about the disease are commonly measured using the International Prostate Symptom Score (I-PSS) questionnaire. The primary objective was to evaluate the symptoms of LUTS using the I-PSS questionnaire in an adult male population in Romania. A secondary objective was to model disease perception in these patients.

**Methods:** The study population comprised 2035 patients without prostate cancer who completed the I-PSS questionnaire during a routine visit to one of the 96 GPs participating in this study. BPH was present in 529 patients (26%). Patients with BPH had more often hypertension (85% vs 75%,  $p=0.0003$ ) and cystitis (19% vs 7%,  $p<0.001$ ). A linear regression model was constructed to estimate the perception as measured by question 8 of the I-PSS questionnaire.

**Results:** Urgency and weak stream were most often reported as severe (6% and 9% answered highest score). Average score was highest for nocturia (mean 1.8 points), followed by weak stream and urgency (1.5 and 1.3 points). Disease perception (mean 2.4 points) was higher in the BPH population (mean 3.1 vs 2.2 points,  $p<0.001$ ). The symptoms were more severe in BPH patients (mean 11.79 vs 7.76;  $p < 0.001$ ). The perception was directly correlated with the age of the patient, the symptom score, BPH and cystitis, and inversely to hypertension ( $R^2 = 0.62$ ). There was a significant interaction between the symptom score with both age and BPH.

**Conclusions:** Disease perception was significantly correlated to the symptom score and various comorbidities. Follow up of the BPH negative population may yield additional insight regarding the ability of the I-PSS questionnaire to predict the clinical evolution of these patients.

## **PS1.165**

### **Clinical practice “The skin cancer screening in primary care”**

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Skin cancer is increasing in Portugal. Usually, it takes up to a year to have a dermatological consult, which can be crucial for treatment of malignant skin lesions. To improve diagnosis and treatment of pre-malignant and malignant skin lesions, a skin cancer screening consult was created in a Portuguese primary care clinic.

**Aim:** To identify patients with pre-malignant and malignant skin lesions, to characterize them, to treat pre-malignant lesions and refer patients with malignant skin lesion to dermatologist.

**Methods:** each GP of this clinic referred his patients with the suspicious skin lesion to skin cancer screening consult. During this consult, a well trained GP performed dermatoscopy with a manual dermatoscope and referred those who had highly suspicious skin lesions.

**Results:** during 6 months 40 patients were observed, 4 of them were referred to dermatologist - 1 patient with melanoma and 3 with atypical nevi.

**Conclusion:** this practice demonstrated a significant reduction of referrals to dermatologist and possibility to provide effective skin cancer screening in Primary Care.

## PS1.166

### CV risk self-assessment for perimenopausal women

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**Background and Aim:** Menopause is a period in a woman's life when CV risks significantly increase. It is not sure whether this transition from lower to higher CV risk status is the consequence of the ovaries function exhaustion, older age, or changes in lifestyles and motivations. The aim was to assess the occurrence of CV risk factors in perimenopausal women and to get some insights into their lifestyles and behavioural and quality of life issues.

**Methods:** A total of 45 women, old 45-55 years, were interviewed by a multi-item questionnaire. Questions were on: menstrual periods, marital status, sex life matters, occupation, income, self-perceived satisfaction with life, depression, quality of sleeping, eating habits, cigarette smoking, physical activity, chronic diseases and long-term drug use, information on CVDs, diabetes, hypertension and serum glucose and lipids. Measures on BMI, waist circumference and blood pressure were also obtained.

**Results:** There were mainly low-income, married women, 17 out of 45 (38%) still having regular menstrual cycles. Self-reported and measured CV risk factors were rarely present, except for the factors: overweight (19/45; 42%, 3 of them really obese), increased (>80 cm) waist circumference (25/45; 56%, 16 of them >88 cm), and smoking cigarettes (21/45; 47%). Factors significantly associated with increased waist circumference included: irregular menstrual periods or lack of menstruation, lower sleep quality, chronic drug use, being a non smoker, bad eating habits, low physical activity and age over 50 (chi-quadrat test,  $p < 0.05$ ).

**Conclusions:** This approach, based on using a multi-item questionnaire, might be a useful tool for screening perimenopausal women on CV and behavioural risk factors and planning prevention.

## PS1.167

### The role of Bupropion in treating sexual dysfunction in women - an evidence-based review

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**Background/Aim:** Hypoactive sexual desire disorder (HSDD) is a common female sexual dysfunction with reported rates of 10-30%. The treatment is multifactorial and bupropion has been explored as a potential treatment for HSDD. Our goal is to determine the evidence of the efficacy of bupropion in the treatment of HSDD in nondepressed women.

**Method:** A systematic review of meta-analyses, systematic reviews, randomized controlled trials (RCT) and clinical guidelines, published between 01/2009 and 12/2012, was performed in Medline and Índice de Portugueses Databases, in English, Spanish and Portuguese, using the MeSH terms bupropion, “sexual dysfunctions, psychological” and female. We used the Strength of Recommendation Taxonomy (SORT) scale of American Family Physician to assign levels of evidence and strength of recommendations.

**Results:** From the 121 articles obtained, four met the inclusion criteria: one RCT, two classic reviews and one not controlled clinical trial. In the RCT the treatment with bupropion significantly improved HSDD in comparison with placebo (NE 1). One of the classic reviews, despite initial positive results in literature, concluded data are limited (NE 3). The other classic review showed that bupropion may have positive sexual effects, such as increasing the frequency of sexual arousal and desire (NE 3). The not controlled clinical trial indicates that bupropion can induce significant changes in sexual desire and arousability in a substantial percentage of women (NE 3).

**Conclusion:** It seems reasonable to recommend the use of bupropion in the treatment of HSDD (SOR B). Although, there is a need for future studies to evaluate the cost/benefit of bupropion in the treatment of HSDD.

## PS1.168

### Clinical spectrum of musculoskeletal manifestations of diabetes mellitus

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**Background/Aim:** Diabetes Mellitus is associated with several musculoskeletal disorders, whose development is dependent on the duration and metabolic control of Diabetes. These should be recognized and treated as soon as possible. In the majority of cases, these manifestations are associated with physical incapacity and pain, and an early diagnosis is important to improve the patient's quality of life. The present review addresses both the common and uncommon manifestations of Diabetes, focusing on their clinical presentations, diagnosis, management and treatment.

**Methods:** A research, in Pubmed, National Guideline Clearinghouse, Canadian Medical Association Infobase, The Cochrane Library, DARE, Bandolier e TRIP, of guidelines, meta-analyses, systematic reviews and randomized trials, published in the last ten years, in Portuguese, English and Spanish, was done, using the following MESH terms: diabetes mellitus, musculoskeletal diseases and prevalence. We used the Strength of Recommendation Taxonomy (SORT) scale of American Family Physician to assign levels of evidence and strength of recommendations.

**Results:** The musculoskeletal disorders can be divided into three categories: conditions unique to Diabetes - diabetic muscular infarction; conditions more frequent in Diabetes, such as limited joint mobility, diabetic hand syndrome/ diabetic cheiroarthropathy, adhesive capsulitis, trigger finger, Dupuytren's contracture, peri-arthritis; and at last, conditions sharing risk factors of Diabetes, such as Diffuse Idiopathic Skeletal Hyperostosis, gout and osteoarthritis.

**Conclusions:** There is a relation between musculoskeletal disorders and Diabetes Mellitus. Hand and shoulder disorders occur more frequently than other musculoskeletal manifestations of diabetes. Recognition of the association between diabetes and shoulder adhesive capsulitis, Dupuytren's contracture and stenosing flexor tenosynovitis facilitates their correct diagnosis in the setting of diabetes and prompt initiation of appropriate treatment, which may include optimizing glycemic control. However, more studies are necessary to clarify the physiopathology and the correlation with the progression of the disease.

## PS1.169

### **Pellegrini-Stieda syndrome as a cause of knee pain**

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**Background & Aim:** Calcification in the soft tissue next to the medial femoral condyle after a history of trauma around the knee is a recognized radiographic finding-PS (Pellegrini-Stieda) sign. When this is associated with pain and a restricted range of motion it is known as the PS syndrome. We describe a case of PS syndrom

**Method:** A case of 61 years old, female patient, with no relevant medical history, who six years ago suffered a closed low-energy trauma in his left knee. He was diagnosed with grade I sprain of the medial capsuloligamentous complex of the knee, without instability in it. in the x-ray showed no radiographic changes in the anteroposterior and lateral knee. Scheduled treatment was rest and NSAIDs.

Since 2 months presents mechanical pain and with swelling characteristics of the inside of the knee. On clinical examination of the knee, mobility is stable and complete. in the ultrasound, objective, thickening of the proximal third of the medial collateral ligament in the femoral insertion adjacent and with calcification of approximately 1.5 cm.. Conventional radiography was performed, confirming the linear calcification adjacent and parallel to the medial femoral condyle Mendes type I immediately below the tubercle of the adductor magnus, which allowed to establish the diagnosis of PS region syndrome. The patient was treated by puncture and aspiration of calcification, with mepivacaine 1%, under control of ultrasound.

**Results:** The patient has no pain in the knee and calcification of soft tissues adjacent to the medial femoral condyle has decreased

**Conclusions:** The treatment of PS syndrome normally conservative. It includes rest and rehabilitation. in the case has been described the utility of the local anesthetic injection and / or corticosteroids.

## **PS1.170**

### **Hip fractures in patients with type 2 diabetes**

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**Background & Aim:** Using records of Clinical Informatics History (CIH) to determine the prevalence of Hip Fractures (HF) in patients with Type 2 Diabetes (T2DM), to promote preventive activities in the Primary Care and in Specialist consultation of Orthopaedic Surgery and Traumatology (OST).

**Method:** Most osteoporotic fractures (OF) occur in the elderly, consuming significant resources, health, social and economic in the process of diagnosis and treatment. The authors conducted a descriptive cross-sectional study of patients diagnosed with Osteoporosis (OP) and T2DM and its complications HF, registered in CIH. From the list of 16.294 patients with CIH, 914 have been diagnosed with T2DM, 753 of Osteoporosis (OP), we studied the OP-prevalence and the HF-prevalence. We analyzed the causes of OF. Data are collected on a Excel spreadsheet and analyzed using SPSS 11.0 for Windows.

#### **Results:**

- Patients with a diagnosis of T2DM: 5,61% of patients-MRI.
- Patients-OP:20% of the population>50 years of age.
- OP: 753 cases (687 female,66 men. female/male ratio:10/1).
- O and HF: 37 cases, female/male ratio: 2/1. Prevalence O-HF: 5%
- T2DM and HF: 142 casos, 75 female, 67 men, female/male ratio: 1/1. -Prevalence T2DM-HF: 18,8%

**Conclusions:** The conclusions were clear. in type 2 diabetes, regardless of sex, the risk of fractures of the hip joint was four times higher than non-diabetic individuals. what justifies the implementation of a Health Improvement Plan, including Program for Health Education aimed at groups and the development of preventive activities in the Consultation Primary Care and in OST.

## PS1.171

### **Antioxidants for male fertility - an evidence based review**

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**Background & Aim:** Infertility affects approximately 10-15% of all couples in industrialized countries. Despite great advances in this field, many cases of male infertility are still diagnosed as idiopathic. Between 30% to 80% of male infertility cases are considered to be due to the damaging effects of oxidative stress on sperm. Infertile men have higher levels of seminal reactive oxygen species than fertile men, with associated sperm dysfunction, sperm DNA damage and reduced reproductive potential. This review is aimed to assess whether supplementation with oral antioxidants would improve sperm parameters and pregnancy rates in subfertile males.

**Method:** The MEDLINE database was searched using PubMed with combinations of the mesh terms “male infertility”, “antioxidants” and “oxidative stress”. The search was limited to clinical trials published in the period from year 2011 to 2016. Studies about the use of antioxidants during assisted reproductive techniques were excluded.

**Results:** From the numerous search results, 14 primary studies were chosen and their data were gathered in order to provide a complete overview of the literature. The majority of studies confirmed beneficial effects of different antioxidants on at least one of the sperm parameters. Favorable effect was confirmed when using vitamin E, vitamin C, selenium, N-acetyl-cysteine, L-carnitine and zinc. In a smaller number, some studies showed a significant improvement in pregnancy rate after antioxidant therapy.

**Conclusions:** Antioxidants play an important role in protecting semen from reactive oxygen species and can improve basic sperm parameters. However, there is a need to further investigation to confirm the safety of antioxidant supplementation as well as the need to determine the ideal dose of each compound to improve semen parameters, fertilization and pregnancy outcomes.

## PS1.172

### **An analysis of overweight and obese children versus normal weight children in a primary care practice**

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**Background:** The childhood obesity is a serious public health problem. The prevalence of obesity among children and adolescents is increasing. The majority of the overweight and obese children can be diagnosed, monitored and treated by family doctors. The objective of the study was to evaluate clinical and paraclinical parameters and to create a regression model with body mass index as a dependent variable and other clinical and paraclinical factors that could have an influence on the excess weight.

**Method:** The observational study included 156 individuals: 78 overweight and obese children (39 girls/39 boys) and 78 healthy children (39 girls/39 boys) who served as a control group, in the evidence of the family medicine practice in 2015. We recorded the family and personal medical history and performed the clinical exam and laboratory tests (blood sugar, lipids) in every patient.

**Results:** The average age of entire groups was  $11,6 \pm 0,4$  years (6 - 18 years), the average age of the excess weight children group was  $12,6 \pm 0,3$  years vs.  $11,6 \pm 0,3$  years in the healthy children group. We recorded a higher average BMI for children with birth weight less than 2500g, the estimate risk was 1,5 (95%CI 1,01-2,24) in the overweight and obese children group. The prevalence of family history of diabetes mellitus was two times higher in the excess weight children group vs healthy children group. The systolic and diastolic blood pressure values were higher in the overweight and obese children group vs healthy children group ( $p < 0,001$ ). The average plasma serum glucose was also higher in the excess weight children group ( $p < 0,05$ ).

**Conclusions:** We have found a significant correlation between BMI values and low birth weight, family history of diabetes, systolic and diastolic blood pressure values and plasma serum glucose. Overweight and obese children are likely to develop cardiovascular diseases or diabetes.

### PS1.173

#### The value of markers for assessing of hypertension development in young patients

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**Background:** In this study we aimed at the involvement of risk factors in the occurrence of hypertension in young people such as family history of hypertension, premature cardiovascular disease and diabetes, smoking, the fasting glucose, dyslipidemia, pulse rate and anthropometric value.

**Method:** In this observational study we included one hundred male patients aged up to 55 years old ( $46.9 \pm 5.7$ ) from which 50 with hypertension and 50 were normotensive. The two groups of patients were compared in terms of the values of fasting plasma glucose, the pulse rate, the BMI and waist circumference, their positive family history of hypertension, premature cardiovascular disease and diabetes, and regarding the prevalence of dyslipidemia, diabetes and smoking.

**Results:** Patients in the group with hypertension showed values of fasting glucose ( $p=0.014$ ), the pulse rate ( $p=0.001$ ), BMI ( $p=0.001$ ), the waist circumference ( $p=0.001$ ) and the ratio waist/hip circumference ( $p=0.001$ ), significantly higher than their average in normotensive patients group. Also the prevalence of diabetes ( $p=0.003$ ) and dyslipidemia ( $p=0.001$ ) was significantly higher in patients with hypertension. Patients in the group with hypertension had a family history of premature cardiovascular disease ( $p=0.012$ ), diabetes ( $p=0.006$ ) statistically significantly more frequent than in the group with normal blood pressure. In the case of electrocardiographic parameters evaluated statistically only shortened QT interval ( $p=0.011$ ) was observed.

**Conclusions:** The data reveal the role of elevated fasting glucose and obesity in hypertension appearance in young patients. The existence of diabetes or dyslipidemia are also risk factors for the occurrence of hypertension in young people. So the history of premature cardiovascular disease and diabetes at their relatives is a genetic background for further development of hypertension in young people.

## PS1.174

### Assessing the level of basic knowledge regarding mental health of the patients in everyday practice of the family doctors

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**Background:** Mental health disorders represent a major public health and requires a multidisciplinary team, in which the family doctor occupies the central place by informing and educating patients. Our goal was to assess the level of basic knowledge regarding mental health of the patients in everyday practice of the family doctors.

**Method:** Pilot study observational, done in a family doctor's office in urban areas, based on a questionnaire, conducted on a sample of 80 patients, 41 women and 39 men, average age  $52.46 \pm 16.72$ , visiting the family doctor within two consecutive weeks.

**Results:** 88.75% of patients perceive state of health as consisting of both health of the body and the mental health, with no statistically significant difference between the women versus men ( $p=0.4827$ , Fisher exact), but with statistically significant difference between people with higher education and those educated until and including high school ( $p=0.0003$ , Fisher exact). Only 45% of patients know that a chronic or acute disease can be associated with a mental health disorder, with no statistically significant differences opinion of women to men ( $p=0.8046$ , Chi-Square). Only 31.25% of the patients know that children can suffer from mental health disorders, without statistically significant differences according to sex or education. 62.50% do not know that some mental health disorders are preventable, with statistically significant difference between people with higher education and those educated until and including high school ( $p=0.0001$ , Fisher exact). 87.50% say that the first doctor which would address would be family doctor if they experience a mental health disorder, without statistically significant differences according to sex or education.

**Conclusions:** The patient's knowledge regarding mental health need to be improved by educating patients about mental health and prevention, by integrating mental health at the level of family medicine.

## **PS1.175**

### **Family doctors' role in early identification of mental disorders in Romania**

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**Background:** Given the alarming increase of mental disorders incidence in Romania we have considered that it is extremely useful to assess the early identification tools available to diagnose mental disorders for the family doctors, how they currently use them and what should be done in the near future.

**Method:** Our goal was to evaluate the use of early diagnostic tools in daily practice using a simple questionnaire with only 12 questions addressed to family doctors from Bucharest and surroundings (urban areas). We were interested in the degree of usage for recommended questionnaires like MMSE, autism, postnatal depression, the 2 simple questions for depression, Hamilton scales for anxiety and depression or PHQ-9.

**Results:** We have analyzed the answers from 60 family doctors, out of which 68,33% are consultants, 28,33% specialists, 1,66% GP's and 1,66% medical residents. The average age is 46,91 years old and 16,66% of them are men, the rest-women. 85% from our group offer around 20 medical examinations per day, 28% of them summing up to 500 a month. 37% of the respondents have noticed clinical signs of mental disorders for 5-10% of their patients. Only 20% of them use standardized questionnaires for early diagnostic of mental disorders. The same percentage, 20% obtained a 25-50% diagnostic confirmation rate for a mental disorder suspicion from their colleagues, the psychiatrists while 45% had even a better rate of 50-100%.

**Conclusions:** There is a certain reluctance of family doctors in front of the mental disorder diagnostic due to the time constraint and the lack of proper adaptation for the screening questionnaires to their daily practice. On top of the current difficulties in using the available early diagnostic tools the family doctors are confronted also with the reduced number of psychiatrists that they can collaborate with (very low number versus the population needs).

## PS1.176

### Self-efficacy and personality traits relations with body composition after a phase II of cardiac rehabilitation

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**Background:** The success of a comprehensive cardiac rehabilitation program depends among other factors on the correct compliance from the patient. Perceived self-efficacy, defined as people's beliefs about their capabilities to complete tasks and reach goals, and personality traits can influence the outcomes. Different biotypes have been largely associated with aptitude for exercise and cardiovascular risk. **AIM:** Detect personality traits associated with bigger self-efficacy and its relation with body composition after a comprehensive cardiac phases I and II rehabilitation program.

**Method:** S: Transversal study within one visit following the phase II of the CRP. Self-efficacy was assessed by Baessler & Schwarner and Salamanca quiz for personality traits, Beck and Hamilton quizzes for depression and anxiety severity. Body composition measurements taken were: body mass index (BMI), components of somatotypes, total fat and muscle mass (MM). Doupe formula was used for muscle mass and both Behnke & Wilmore (BW) and Faulkner (F) formulas for total fat.

**Results:** 86 patients were included. Self-efficacy was negatively correlated to anxiety ( $p=0,0018$ ) and depression ( $p=0,0012$ ) as well as with dependent, impulsive unstable, borderline unstable, antisocial and esquizotypic personality traits. Higher levels of anxiety was correlated to more fat ( $p=0,0031$ ), endomorphic biotype ( $p=0,0093$ ) and less MM ( $p=0,0349$ ), meanwhile severity of depression had a direct correlation with fat and endomorphic biotype ( $p=0,046$ ), but not with MM. The personality trait more related to an endomorphic predominance and to a less ectomorphic component was the borderline unstable one, as long as the patients with higher paranoid scores had higher BMI. As we expected, higher BMI was correlated to a predominance of the endomorphic and mesomorphic over the ectomorphic component, as well as higher fat. The endomorphic component was associated with more body fat and less MM.

**Conclusions:** Personality traits can predict a better or worse outcome in body composition and influence the self-efficacy to maintain healthy lifestyles.

## PS1.177

### **One- year follow up of a smoking cessation program in a clinic of family medicine department in Izmir, Turkey**

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**Background & Aim:** Cigarette smoking is an important-preventable health problem. in Turkey, 16 milion people are smoking and 100.000 people are dying from health problems caused by smoking. Assessment of smoking addiction, motivational interviewing, pharmacological and non-pharmacological therapies and follow-up are recommended for smoking cessation programmes. The aim of this study is the assessment of one-year follow up of a smoking cessation program of a clinic of family medicine department in university.

**Method:** 122 volunteer individuals who were administered to Dokuz Eylul University Faculty of Medicine, Smoking Cessation Clinic of Family Medicine Department between 1 March 2014 and 1 March 2015 were included in the study and asked the state of smoking cessation by phone. Data related to sociodemographic characteristics, addiction situations, cessation therapies and the ratio of non-smoking situations were obtained from their medical records.

**Results:** There are 122 patients that 49 (40.2%) were women and 73 (59.8%) were men. The mean age was 39,3 ( $\pm$ 13.5) years. The mean cigarette smoking was 21,4 ( $\pm$ 16.0, n=110) pack-year. 32.0% (n=41) of the individuals were high dependence on nicotine. As a therapy; 14.8% (n=18) used veranicline, 30,3% (n=37) used bupropion, 1,6% (n=2) used bupropion+nicotine replacement therapy, 0,8% (n=1) used only nicotine replacement therapy and 4,9% (n=6) were gotten non-pharmacological therapy(motivational interviewing and cognitive behavioral therapy). After one-year follow up, 22.1% (n=27) of the sample were not smoking whereas 73,8% (n=90) continued smoking.

**Conclusions:** As a result of this study, new strategies are generated for smoking cessation program.

## **PS1.178**

### **The relationship between sleep quality in patients with chronic diseases and newly diagnosed depression**

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To determine sleep quality in patients with chronic diseases and newly diagnosed depression. A cross-sectional study was completed with 89 participants newly diagnosed depression 44.9% (n=40) of the participants had in addition to one or more of chronic diseases, depression, respectively participants in the study consent form, after filling, sociodemographic, data collection form, the Pittsburgh Sleep Quality Inventory, the Beck Depression Inventory, Beck Anxiety Scale 58.4% of the volunteers were females and 41.6% were male the age distribution varies between 18-79. 52% married 83.1% live in cities. Bad quality of sleep 80% of those with chronic disease, while 67.3% of those without chronic disease thirds impaired sleep quality. The difference between the two groups was not statistically significant ( $p=0,664$ ). The majority of patients moderate and severe depression sleep quality was bad ( $p=0,000$ ). People with chronic disease needed longer time to fall asleep ( $p=0,008$ ) Quality of sleep was worse in patients with chronic disease, while no statistically significant difference was present between two groups may be due to number of patients involved were not enough, more comprehensive studies should be made.

## PS1.179

### The violence of patients with psychiatric disorders against healthcare worker

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**Background & Aim:** Patient violence is a serious problem in Turkey because of the high prevalence. Healthcare workers are often abused from psychiatric and emergent patients Although patient violence causes serious physical injuries and psychological trauma at the healthcare workers, but unfairly, administrative improvements are not going along with the scientific improvements, thus these situations are not documented. The aim of this study is to find out the kind and the frequency of violence of patients against health care workers

**Method:** In this study both, qualitative and quantitative methods are used. In qualitative research; focus group and in-depth interviews had been used for data collection. Inquiry has been established by two researchers after phenomenological analysis of decoded interviews. Quantitative section of the study has a cross-sectional analytic model. Inquiry had been used for the quantitative research. The survey was conducted in psychiatry department of 5 university and state hospital in region of Aegean in Turkey. In these departments 213 health workers are working. 173 have accepted to participate to the research.

**Results:** 74.7 percent of the participants were women, where 19.5% were academician, 24.7% residence, and 55.8% were nurse. 87.6% of the participants had physical, 92.4% of the participants had verbal abuse and 35.7% had sexual violence in their occupational life in psychiatry. Besides; 74.9% had verbal and 59.8% had physical violence from the patients' families. 63.8% of doctors and nurses have declared that they were not responsible of the violence. 74.2% of nurses had said that in the psychiatric clinics they could be faced with the crime just like on a street.

**Conclusions:** Patient violence healthcare workers against is a major problem in occupational life. The health care workers take care of psychiatric patients face the risk of physical, sexual and verbal violence.

## **PS1.180**

### **Probiotics for irritable bowel syndrome: an evidence-based review**

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**Background & Aim:** Irritable bowel syndrome (IBS) is the most commonly diagnosed gastrointestinal disorder and is characterized by chronic abdominal pain and altered bowel habits in the absence of any organic cause. Probiotics are microorganisms that have beneficial properties for the host. Initial studies of selected probiotic species have suggested potential efficacy in several gastrointestinal illnesses, including IBS. **Aim:** To determine if probiotics are effective as a treatment for IBS.

**Method:** Data sources: Pubmed/MEDLINE; National Guidelines Clearinghouse; Canadian Medical Association Practice Guidelines InfoBase; Guidelines Finder of the National Electronic Library for Health in the British NHS; Database of Abstracts of Reviews of Effectiveness - Centre for Reviews and Dissemination; Bandolier; The Cochrane Library; Evidence-based Medicine - British Medical Journal; TRIPDATABASE.

**Review Methods:** Systematic Reviews (SR), Meta-analysis (MA), Guidelines and Randomized Clinical Trials published between 01/01/2010 and 26/12/2015 using the MeSH terms 'probiotics', 'irritable bowel syndrome' and 'treatment'. American Family Physician's 'Strength-of-Recommendation Taxonomy' scale was used to assess the quality of the studies and the strength of recommendations.

**Results:** The search produced a list of 137 articles; 9 articles were included - 8 SR/MA and 1 guideline. The SR/MA showed that probiotics reduce overall symptom burden, particularly abdominal pain, and improve quality of life (EL 2). The NCG guideline state that there is moderate evidence concerning the use of probiotics in IBS; the patient should be advised to take the product for at least 4 weeks in the dose recommended (EL 3).

**Conclusions:** The authors concluded that the use of probiotics in IBS seems to be beneficial in terms of symptom improvement and quality of life (SORT B). However, results should be interpreted with caution, as longer term trials are needed in order to focus on the type, optimal dose of probiotics and the subgroups of patients who are likely to benefit the most.

## **PS1.181**

### **Anisakis: think about it in a recurrent urticaria!**

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We present the case of a 68 years old patient with history of chronic obstructive pulmonary disease which presents urticarial rash and angioedema 3 days after changing the inhaler from a dry powder one to a soft mist inhalation spray. Tiotropium is retired but the allergy persists and precise antihistaminic and cortisone treatment during 6 months. Blood analyses reveal raised Immunoglobulin IgE with normal eosinophils and blood count. Allergy tests: negatives for drugs and aliments. Despite the uninterrupted antihistaminic treatment the patient keeps presenting urticaria outbreaks without apparent cause. Careful interview reveals: the patient is an usual fish consumer and presents mild abdominal pain and intermittent diarrhea. Suspected diagnosis: Anisakiasis, confirmed by positive IgE against *Anisakis simplex* and positive specific prick test. Upper endoscopy reveals esophagitis and antritis.

**Discussion:** Anisakiasis is a parasitosis caused by the nematode *Anisakis simplex*. Man is an accidental host acquiring the larvae by eating raw or undercooked fish. Clinically, cause gastrointestinal reactions (abdominal pain, vomiting, nausea within hours of the ingestion of contaminated food, inclusive mimicking acute abdominal syndrome) or allergy symptoms (urticaria, erythema, angioedema, anaphylaxis). Upper endoscopy within 12 h of the ingestion of larvae is essential to allow the localization and removal of *A. simplex* with a complete resolution. The chronic form is due to the localization of *Anisakis* in the intestinal wall. Typically, symptoms persist for months, with mild cramping abdominal pain, diarrhea or urticaria and it can be difficult to diagnose. There is no effective pharmacological treatment able to kill the larvae once eaten, the only protection against *A. simplex* is the correct storage and processing of raw fish: freezing at temperatures lower than -20 °C for at least 24 h.

**Conclusion:** Anisakiasis is a diagnosis to consider in case of recurrent urticaria especially in seafood consumers.

## PS1.182

### 24 hours ambulatory blood pressure monitoring in primary care

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**Background:** Arterial hypertension - one of the major risks of cardiovascular diseases. The mortality of them in Lithuania is 56,3% (2013). The detection of high arterial blood pressure is essential for controlling the diseases afterwards including the life change or using antihypertensive medications.

**Aim:** To evaluate the benefit of 24 hours ambulatory arterial blood pressure monitoring, suspecting or controlling patients with arterial hypertension.

**Methods:** Prospective cross-sectional study of 314 patients, enrolled and followed in Vilnius University Hospital Family Medicine Centre, Lithuania from August/2011 till November/2014 with suspected arterial hypertension or uncontrolled hypertension. The data source type - clinical records, arterial blood pressure monitoring results.

**Results:** 314 patients. Mean age 53,97 ( $\pm 14,87$ ), 146 (46,3%) men. 107(34,1%) hypertension not diagnosed before monitoring, 39 (12,4%) of them hypertension newly diagnosed. The most often complaints - high arterial blood pressure (42,7%), rapid pulse - (18,5%), heart ache (18,2%), no complaints (8,9%). The most frequent distribution of antihypertensive drugs after ambulatory blood pressure monitoring - ACF (44,7%), CCB (34,0%), BBC (28,7%). Cardiologists statistically significantly adjusted CCB, sulfonamide diuretics. Other drugs cardiologists and GPs adjusted statistically similarly. 28 (63,6%) diagnosed patients got antihypertensional treatment. for 17(60,7%) patients with newly diagnosed hypertension, the blood pressure was adjusted by GPs.

**Conclusion:** The results improve the 24 hours ambulatory arterial blood pressure monitoring worth. Less than half of patients complain having high arterial blood pressure. The hypertension treatment between Cardiologists and GPs is similar.

## **PS1.183**

### **Opinions of key stakeholders on medication management at transitions of care in Ireland**

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**Background:** Medication reconciliation (MR) occurs when a detailed list of all current medications is compiled at each point of transition in a patient's care. This is particularly important for vulnerable patients such as elderly patients on multiple medications who undergo numerous hospitalisations. In order for MR to be an efficient process, information regarding the discrepancies occurring at points of transition in care is necessary.

**Aim:** The purpose of this project is to interview various healthcare professionals (HCPs) and patients to provide both a wide and detailed exploration of the barriers and drivers to the implementation of effective MR both within & between primary and secondary care in Ireland.

**Methods:** Semi-structured interviews with HCPs and patients nationwide (n=39). These were audiotaped and transcribed verbatim. The interviews were analysed using a combined theoretical framework of Grol and Cabana to classify the drivers and barriers identified. NVIVO software was used to aid the coding process. Ethical approval was obtained from the RCSI Research Ethics Committee. Funding was obtained by the RCSI Undergraduate Research Summer School Student Fund.

**Results:** Lack of a joined up ICT infrastructure, competing time constraints, inaccessible data sources and absent communication between HCPs were identified as barriers. Drivers were innovative local initiatives, knowledgeable patients, and greater use of specialist pharmacist knowledge.

**Conclusion:** Many barriers to MR were identified. This is a complex process and greater support needs to be provided for implementation in the diverse setting of the Irish health care system.

## **PS1.184**

### **Case: oromandible dyskinesia secondary to clebopride**

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Case Description: Male aged 15 years old comes to our office complaining anxiety. From midday he presents awkwardness to open his mouth what causes him speaking problems and turns him quite nervous. Yesterday he started taking Flatoril ® (Clebopride/simeticone) because of two weeks abdominal disturbances according to his doctor instructions.

Exploration and complementary tests: BP: 140/75 mmHg, HR 88, SatO<sub>2</sub> 100%, Temp: 36.7°C. Conscious, orientated, eupneic. Very anguished, right deviation of his mandible that hardens speech. Tongue muscles contracture appearing vertical. Snuffle. Rest of exploration normal.

Cervical Xray and Blood analytics, normal results.

Clinical approach: It could be a muscle contracture or late-onset partial epilepsy, but the recent consumption of Clebopride guide us to a suspect of dyskinesia secondary to drug intake.

Treatment: Intravenous Diazepam (5mg) diluted in physiologic saline. Intravenous bolus of Biperidene (5mg) diluted in 10cc of physiologic saline. After 6 hours kept under observation, the patient is asymptomatic.

Clinical Discussion: Clebopride is an intestinal motility stimulator. Its prokinetic actions appears to be mediated by serotonergic receptors 5-HT<sub>4</sub>. It is used as an antiemetic drug because of its block effect to Dopaminergic D<sub>2</sub> receptors. This dopaminergic activity causes its main adverse effect on central nervous system: extrapyramidal symptoms, mostly in children and elderlies.

Iatrogenic Acute Dyskinesias are treated with anticholinergic drugs such as Biperidene. With a first dose is enough in most cases, but if necessary, dose can be repeated every 30 minutes up to 20mg. Benzodiazepines can be also used in these cases: diluted Midazolam o Diazepam in slow perfusion.

## PS1.185

### **A must in family medicine: long-term symptoms overview**

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Case description: 37-year-old male with polydipsia (up to 7 liters/day) and polyuria 4-6 months ago. He's been treated for anxiety the last two years. Impotence attributed to anxiety.

for suspected diabetes mellitus it is performed an analysis: Glucose 80mg/dL, HbA1c 5.4% Leukocytes 16.4K/mL; Neutrophils 11.3K/mL; Lymphocytes 3.66K/mL; The rest is normal.

He's referred to an Endocrinologist for Diabetes Insipidus study. Liquids supression test with desmopressin is negative, so endocrinology discards the diagnosis of primary polydipsia.

Sent to Haematology for persistent neutrophilic leukocytosis and monocitosis, performed Thorax Xray, abdominal ultrasound, complete chemical and haematology analysis, peripheral blood smear and complete serology are normal, so Hematology dismiss pathology in his field.

Two years later, he has partially improved polydipsia, but now begins with episodes of disconnection seconds long that are attributed to anxiety.

Suddenly, he presents loss of consciousness and tonic-clonic convulsions for 2 minutes, with spontaneous eye opening without fixating or vocalization. 40 minutes after, he starts talking and progressive temporal-spatial orientation.

Neurological examination after episode: no pathology signs. Cranium CT scan: space occupying lesion 6,6x4.x5cm. MRI w/contrast: Pituitary Sellar Macroadenoma

Final diagnosis: Invasive Macroprolactinoma.

Differential diagnosis:

- Diabetes: mellitus/insipidus
- Primary Polidypsia
- Anxiety with conversive phenomenon
- Primary CNS neoplasms
- Metastasis

Conclusions: Prolactinomas are adenypophysis tumors producing prolactin. More common under 40 years-old individuals, are five times less common in men. In men, hyperprolactinemia may not cause symptoms or cause gynecomastia, decreased libido, impotence, headaches or visual disturbances. When these symptoms are not recognized, the tumor grows causing compression symptoms (hypogonadism, hypothyroidism, adrenal insufficiency). Family physician should provide the overview of the patient's symptoms to guide us to the proper diagnosis.

Keywords: prolactinoma, polyuria, polydipsia

## PS1.186

### The ultrasonography as a useful tool to diagnose in primary care: a case of choledocholithiasis

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**Background:** 83 years old asymptomatic female patient seen in Primary Care to check the results of a routine blood test that shows elevation of transaminases, gammaglutamyltransferase and phosphatase alkaline with normal bilirubin. Personal medical history: hypertension, type 2 diabetes Mellitus. No data of previous surgery.

**Method:** The physical examination was normal except for little abdominal pain in palpation of its upper area. The rest of the blood test apart from the elements pointed above was normal. Suspecting an obstructing disease of the biliary tract, it is done an ultrasound examination in the primary care room in with a multifrequency convex abdominal transducer. Ultrasound findings were: increased diameter of the common bile duct with an image inside of it with hyperechoic posterior acoustic shadow compatible with choledocholithiasis in its distal part, in the area of the head of the pancreas. The gallbladder had normal wall with internal material with similar characteristics to the previous image compatible with gallstones.

**Results and Conclusions:** Choledocholithiasis is the presence of at least one gallstone in the common bile duct. They can be primary if they are built in the bile duct or secondary if they come from the gallbladder. Its incidence increases with the age and represents a 15% of patients with gallstones. The typical symptom is the right hypochondrium pain, but in the 14% of the cases they are asymptomatic. It is the most common cause of non-neoplastic obstructive jaundice. Ultrasonography is an affordable, non-invasive, safe patient examination. In this case the ultrasonography done in the primary care room has allowed us to diagnose the choledocholithiasis from an elevation of hepatic enzymes, establishing its secondary origin by the cofinding of gallstones. We also could examine the liver, explore the biliary tract dilatation and check the status of the gallbladder excluding acute complications as cholangitis.

## **PS1.187**

### **Copper intrauterine device (IUD) removal in a primary care health center**

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**Introduction:** We want to check the causes of copper intrauterine device removal in a Primary Care Health Center during 2015 compared to the results with 2012, as we are interested in knowing which are the most common reasons in the last year and if they are similar to those of previous years or they are changing..

**Objective:** Knowing the most frequent reasons of copper IUD removal in our Primary Care Health Center.

**Method:** Descriptive observational study of patients using the copper IUD that came to medical office asking for its removal from January to December of 2015 compared to the patients who came for the same reason in 2012.

**Results:** In this period there were 73 women using copper IUD that asked for its removal. The reasons exposed to ask for the IUD removal were: polymenorrhea 24'6%, gestational desire 17'8%, change to a new one 15'1%, pain 12'3%, menopause 9'5%, persistent Actinomyces infection in Pap smear 2'7%, partner vasectomy 2'7% and other reasons 13'7%. Compared to 2012 we observe an increase number of copper IUD removals due to gestational desire, because in 2012 only 5'1% removed it for this reason, a very low number compared to 17'8% in 2015. Concerning to polymenorrhea and pain we notice that the data numbers kept stable, being those in 2012 of 25'6% and 12'8% respectively.

**Conclusions:** The main reason about copper IUD removal in patients of our Primary Care Health Center in 2015 was the increased bleeding. It is known that the copper intrauterine device can cause side effects in some women as increased uterine bleeding and pain. Compared to 2012 the main reason for the copper IUD early removal has not changed coinciding with the most frequent side effect of using this kind of device.

**PS1.188****Sulfonamide skin hypersensitivity as adverse effect of open angle glaucoma treatment**

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We present a case report of skin hypersensitivity located on exposed to sun areas on a 82 years woman under open glaucoma treatment with dorzolamide (sulfonamide) and timolol on eye drops. The interest lies in that despite low doses of dorzolamide every day, the chronic use of this drug can cause adverse effects as skin hypersensitivity. Clinically manifest as intense facial hiperemia with local temperature increase. We also appreciate neck and cleavage congestion. It is used clinical diagnosis in this cases. Treatment consist of retire the drug and use topical corticoesteroid on skin lesions. We also take advantage of this case report to make a bibliographic review that summarize epidemiology, clinical behavior, diagnostic methods and so skin hypersensitivity treatment due to drugs.

**PS1.189**

**Zenker's diverticulum masquerade as gastroextraesophageal reflux**

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Gastroesophageal reflux disease (GERD) affects a big percent of Europe population (more than 20%). There is no sensitive and specific diagnostic test, and its symptoms often are nonspecific and overlap with other conditions commonly seen in primary care. Its is utmost importance to rule out the possibility of malignancy. Once cancer is excluded, many benign upper airway conditions also can masquerade as GERD. Although reflux is a potencial etiologic factor for upper airway symptoms, it is important not to blame reflux. in our case we presents a 62 years woman with regurgitation, hoarseness and dysphagia symptoms for five years who was diagnosed by GERD by her family doctor and treated with empiric PPI therapy. Later on, otolaryngologist found food debris in left pyriform sinus reason why he asked for computed tomography which showed a Zenker's diverticulum. This case report is an example of how GERD symptoms can be confused with laryngopharyngeal pathologies. Accurately diagnosing GERD requires thoughtful clinical judgment when taking the history, choosing diagnostic testing and in the treatment approach.

## **PS1.190**

### **The potential of integrative medicine to address modern challenges of health care**

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**Background:** If we as doctors humbly look into our day-to-day practice, how many chronic cases do we really manage to cure? How often do we wish that our toolbox was larger and contained cheaper and more appropriate options with fewer side effects? We all have a feeling that healthcare has to be individualized, but our treatments are standardized. In our clinic we have asked ourselves if sharing health care with different modalities of therapy from around the world is a part of the answer. By combining the various diagnostic and treatment strengths of diverse systems, the integrative model effectively addresses limits of the current system.

**Aim:** To explore the potential of Integrative Medicine to address modern challenges of health care.

**Methods:** The process started 7 years ago. Experiences from that process created the foundation for developing the Integrative approach, which we now explore and develop further in our daily work at Santé Clinic.

**Conditions:** A collaborative effort of a multidisciplinary experienced team where all are willing to participate in the process of creating and working in an Integrative health care model. A dynamic and flexible organisation structure capable to accommodate new ideas and implementation of necessary changes. Current team: Ayurveda, Traditional Chinese medicine and acupuncture, medical doctors, homeopathy, medical shiatsu, yoga and breathing teacher, psychotherapy, lifestyle coaching. To facilitate the process of collaborating within an Integrative Team we have developed:

- Interdisciplinary conferences (exchange, learning, visioning)
- Patient care conferences and health navigation (integrative patient care)
- Themes (exploring efficiency of each discipline in addressing various pathologies)
- Joint interdisciplinary consultations (practice together)
- Integrative telephone consultation
- Consultation record format used by all doctors/therapists
- Documenting treatment of selected conditions for future research

**Results:** Still a work in progress:

- Joint interdisciplinary care for acute/chronic patients is taking shape
- Providing health care to a population of 3000 people representing 42 countries.

## **PS1.191**

### **A letter to young general practitioners, family practitioners!**

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Dear young GP/FP,

Please, do not think a lot; just apply for Vasco da Gama Movement (VdGM)! You do not have to speak perfect English, to have scientific posters, or lot of money and time to travel! It would be great if you have enthusiasm for family medicine, but even if you are frustrated, or see no future, it is also OK! We are here for all your frustrations. We will share and debate all our ideas, emotions, concerns and worries. VdGM and WONCA meetings are the places where you and your everyday work getting importance, scientific clarifications and friendship support.

Let learn from my personal experience:

I was twice host in Croatia for the colleagues from Italy, Romania, France and Turkey. I was also twice at exchange in Israel and Turkey. I also share time with colleagues at exchange programs in Zagreb, organised by the Foundation for the Development of Family medicine. After each exchange I can not stop talking about it, everywhere and for months later. I learn so much about other health care systems, family medicine, colleagues, patients, people, culture, cuisine.... I realised how many prejudice I had had before. After all, I realise that we are doing the same job and have similar problems worldwide and that our power is just in coming and working together. This is my "take home message". It is not about the new guidelines in treating hypertension or diabetes, it is the notion that we all are responsible for our patients and our profession of family medicine as a young scientific discipline. Therefore, we have to spread our voice and tell the people who we are.

Please, stop at this poster and share the energy and emotions coming from those photos!

## PS1.192

### **Chronic non-cancer pain management in primary health care: evidence-based practices for safer opioid prescribing**

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**Background & Aim:** Pain is often considered the “fifth vital sign” and affects not only patients themselves but also their families and caregivers. The majority of patients with chronic non-cancer pain are managed in Primary Health Care and there has been an increase in opioid prescriptions in recent years. This management has a potential for misuse, abuse, addiction and overdose which, along with inadequate knowledge, time and resources, helps to explain reluctance to use long-term opioids among primary care physicians. The purpose of this review was to find evidence-based opioid management practices that protect patients from potential opioid-related harm.

**Method:** We conducted a systematic search of published literature on the following online databases: MEDLINE/PubMed, Cochrane Library, DARE, National Guideline Clearinghouse, National Library of Guidelines, CMA Infobase and Trip Database. Searches were limited to English-language publications and search terms (MeSH) included “analgesics, opioid”, “chronic pain” and “Primary Health Care”. We included relevant literature published in the last 5 years and study quality was assessed using Strength of Recommendation Taxonomy (SORT).

**Results:** of 47 studies retrieved, 5 met inclusion criteria: 3 were research articles, 1 review article and 1 case studies. In addition, 6 clinical guidelines were included.

**Conclusions:** Several guiding principles are recommended to protect patients from opioid-related harm: 1. Initial and periodic evaluation of patient’s history and risk factors (SORT A); 2. Initial and at least annual urine drug screening to assess for prescribed or other controlled drugs (SORT B); 3. Avoid prescribing opioid medication for patients taking benzodiazepines (SORT A); 4. Patient referral to a pain specialist if morphine equivalent dose reaches 120 mg per day and pain and function have not substantially improved (SORT A).

### **PS1.193**

#### **Attitudes towards women and violence tendency of students in high schools of Izmir**

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Women population of %35 had involved violence. Women are exposed to violence in physical, psychological, gender and social types. Violence tendency is occur at young ages.

This cross sectional study was conducted in 2321 students in 30 different high schools in Izmir, Turkey. VTS (Violence Tendency Scale), validated for Turkish by Haskan et al. and ATW (Attitudes Towards Women) scale, validated by Bugay et al. were given for violence tendency and sense of women. Additionally a questionnaire including socio-demographics and violence questions was used.

Mean age of participants was  $17.1 \pm 0,6$  (min:15-max:20) and, 54.1% were women, 56.4% had medium level income, 38.6% had high or very high level income. 51.1% of participants' mothers 42.8% of father's education were not more than primary school. Physical violence was the most known violence type. Only 45.0 % did violence to someone, 38,7% had involved violence. 57.7% of participants' family or neighborhood had been involved to violence, 57.3% did violence to someone from family or neighborhood. The mean score of violence tendency was  $47.2 \pm 10.7$  and of violence towards woman was  $27.1 \pm 7.0$ . According to VTW scores there was no difference between male and female results. Men tend to violence more than female ( $p=0.000$ ). While lower socioeconomic conditions, the education level of parents just only at literate stage had increased the tendency to violence ( $p<0.05$ ), the participants that didn't involve to violence to their family or neighborhood and did see anyone who had involved violence someone were more sensible about violence towards women ( $P<0.05$ ). There was medium level correlation between tendency to violence and VTW scores ( $r=0.583$ ;  $p=0.000$ ).

Turkey is a traditional society, violence towards women remains to be serious issue. in our study our aim is to find aspects about violence towards women in students. Other studies will be an intervention study to change the attitudes.

## PS1.194

### **Patients with epilepsy: relationship between their psycho-emotional status and suicidal behaviour**

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**Background and Aim:** The studies show that epileptic patients (EP) have a stronger tendency toward suicide than healthy people. It should be noted that family doctors are rarely interested in these patients' emotional status and seldom ask about their suicidal ideation. The aim of this study is to assess the relationship between psycho-emotional status of EP and their suicidal behaviour.

**Methods:** The cross-sectional study was performed in the Epilepsy Centre of Vilnius University Hospital and in two outpatient Centers in 2013-2015. 966 patients with epilepsy (average age  $36.35 \pm 14.12$ ) were interviewed. The socio-demographic, clinical (duration of epilepsy, frequency of seizures) data including questions about suicidal ideation and attempts were analyzed. Beck Depression Inventory Scale (1961) and Hospital Anxiety and Depression Scale (1983) was used.

**Results:** Only 359 (37.2%) EP were working or studying. 670 (69.4%) suffered from epilepsy for more than 5 years. The average seizure frequency was 6 times per month. 481 (49.8%) had anxiety, which in 282 (79.4%) of them could be described as moderate or severe. 305 (31.6%) had depression, 236 (24.4%) of them - moderate or severe. Every fifth of all EP had suicidal ideation ( $n=199$ ; 20.6%). 66 (6.8%) individuals admitted having tried to commit a suicide. The suicidal ideation occurred more in EP with moderate anxiety ( $\chi^2=90.35$ ;  $p<0.001$ ), attempts to commit a suicide were significantly more frequent in EP with severe anxiety ( $\chi^2=46.8$ ;  $p<0.001$ ). Suicidal ideation and attempts to commit a suicide were prevalent in EP with moderate depression.

**Conclusions:** The symptoms of moderate and severe anxiety in epileptic patients dominate more than moderate and severe depression. Suicidal ideation was more prevalent among people with moderate symptoms of anxiety and/or depression. Suicidal attempts were found to be more frequent in those with severe symptoms of anxiety and moderate symptoms of depression.

## PS1.195

### Coexistence of diaphragm eventration and thoracic ectopic kidney

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**Background:** Diaphragm eventration is defined as elevation of all or some parts of diaphragm because of defect in the diaphragmatic structure. On the other hand, ectopic kidney within the thoracic cage is an unrelated anomaly which is very rare. In study, we report an infant with coexistence of diaphragm eventration and thoracic ectopic kidney.

**Method/Results:** A 4-month-old male infant was brought to emergency department because of tachypnoea and pallor. He was delivered at 30th week of pregnancy by normal spontaneous vaginal delivery. Heart rate was 156 beats/min, respiratory rate 46 beat/min, oxygen saturation was 85% in room air with sign of cyanosis. Heart sounds were heard on the right side of the thorax. No breath sound could be heard on the left side. In posteroanterior chest radiography, intestinal segmental gas pattern simulated large bowel haustration was found filling up the left hemithorax up to the hilus level. This caused displacement of heart and mediastinum to the right. A continuity between left upper abdominal quadrant with the left hemithorax was apparent. Contrast study with radiopaque agent revealed that displaced intestinal segments filled with localised opaque agent within the left hemithorax. Appearance was consistent with diaphragm eventration. Patient was referred to paediatric surgery for operation. In postoperative abdominal ultrasonography, left kidney was located above the spleen in the thorax. In kidney scintigraphy, the right kidney was within normal limits and the left kidney was located within the thorax.

**Conclusion:** In patients who have laboured breathing and tachypnoea during infancy, one should consider diaphragm eventration as one of the differential diagnosis and radiological investigations can help to establish the diagnosis. In patients with eventration, the presence of mediastinal masses found in imaging should prompt the consideration of a thoracic kidney. Furthermore, organ dysfunction may occur because of atypical locations.

## PS1.196

### **Scimitar syndrome - a late onset associated with asthma clinic**

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**Background:** Scimitar syndrome is a rare congenital anomalous pulmonary venous drainage of the right or left lung into vena cava inferior. Cases diagnosed in early childhood have significant clinics of pulmonary findings but late onset group may have subtle clinics and also be diagnosed accidentally.

**Method/Result:** A thirteen years old girl was brought to the hospital with the complaints of recurring respiratory distress, grunting and cough which was started in her babyhood and continued periodically. She had lower respiratory infections after when she was 7 months old and then repeated every 2-3 months. She had these infections every month last 3 years. During this period, she had the diagnoses of bronchitis, bronchiolitis, asthma and pneumonia and was given antibiotics and bronchodilator therapies for many times. When she was 3 years old, adenoidectomy was performed because of the complaints of grunting and respiratory distress. Lung sounds were equal but coarsening and expiratory sounds were prolonged in her physical findings. Her pulmonary function tests are low, FEV1 was 72%, FVC was 69%, FEV1/ FVC was 100%. In PA radiographics there was an atypical view of asymmetrical fullness in the left hilar area. There was a huge venous structure at the base of the right lung that drained into vena cava inferior and in the neighborhood there were foci of focal emphysema in thorax computed tomography. In three dimensional thorax angiographic CT there was an aberrant pulmonary vein at the base of right lung and the largest dimension of pulmonary vein through costodiaphragmatic recess was 11 mm and it was draining into vena cava inferior adjacent to liver. This view was compatible with scimitar syndrome. Drainage of 3 of the pulmonary veins into left atrium and drainage of aberrant pulmonary vein into hepatic vein were observed in her echocardiography.

**Conclusion:** Scimitar syndrome should be evaluated in children with recurrent pulmonary infections, asthma clinic and respiratory distress.

## **PS1.197**

### **Satisfaction assessment and burnout of employees in community health centers**

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**Background & Aim:** Community health center (CHC) is the health institution determining related risks and problems in order to protect and improve public health, making corrective and preventive activities and providing the coordination between the health institutions in its area and other institutions and organizations. Satisfaction and burnout of employees in CHCs constitute a serious problem which may disrupt health service providing and receiving stages. in our study, we aimed to discuss the issue.

**Mehod:** We reached 163 employees in five CHCs in Samsun. Employee satisfaction survey and Maslach Burnout Inventory were applied.

**Results:** Number of females constituting 65,6% of the participants were significantly higher compared to men ( $p=0,04$ ). Middle aged nurse-midwife group was the most common occupation group (47,9%). It was determined that demographic data didn't effect burn-out. Emotional burnout and personal success scores were at the worst levels in those who had at least nine years of CHC experience and desensitization increased without a statistically significance.

**Conclusion:** Positive communication and occupational support provided by management units and managers to the staff increased the environment of thrust and satisfaction.

## **PS1.198**

### **A general overview on occupational health and safety and occupational disease subjects**

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**Background:** Occupational health is bringing the well-being of workers, partners and children to the uppermost level, developing living conditions, protecting them from unhealthy conditions both in working and living environments, making them work in suitable jobs for their talents and providing a healthy and high-quality production with healthy people and being protected from all kinds of stress factors as far as possible. According to numbers reported by ILO, nearly 6,000 people die due to occupational accidents or diseases every day.

**Method:** Problems such as lack of national policies on occupational health and safety and occupational health safety legislation, inadequate education, inability to spare a satisfactory budget to occupational health safety and inadequacy of staff for including small-sized enterprises and informal sector should be solved in developing countries. If the occupational disease occurs after leaving work, during the occupational and social safety legislation investigation of the subject, shutdown workplace or inability to determine occupational health and safety conditions or execution conditions in the working period of the employee also make the determination of occupational diseases harder. Occupational diseases are completely preventable diseases. There are cases effecting not only one factor, but many factors. Nutrition, individual sensitivity or variations, medicine used, smoking and drinking habits, fatness, etc. can be named among them. Occupational diseases effect family and social life. Specific organization and regulations are required in order to diagnose occupational diseases. Epidemiological studies and researches made in recent years on occupational disease increased information and intervention possibilities on occupational diseases.

**Results/Conclusions:** Applying occupational health and security rules in law, legislation and regulation level in order to prevent occupational accidents and diseases would be one of the most important steps in social protection.

## **PS1.199**

### **Adenovirus infections in primary care**

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**Background & Aim:** in family physician practice, patients seeking medical advice due to complaints for infection diseases are very common. Most of these infection diseases are viral sourced. Among these viral diseases adenovirus infections are observed in a considerable amount in family physician practice. The aim in this study is to give information on common adenovirus infections, diagnosis, protection and treatment methods to primary care doctors.

**Method:** Humans are the reservoir of adenoviruses. They can be transmitted by direct contact, fecal and oral way and / or through droplet. Latent infection is observed in the lytic (epithelial cell infection) and latent infection in lymphoid tissues are observed in the pathogenesis of the disease. Virus fiber protein determines organ specificity. They commonly cause upper and lower respiratory tract infections, gastroenterites and eye infections such as keratoconjunctivitis. Less commonly they may cause some atypical infection diseases such as hemorrhagic cystitis, orchitis, nephritis and urethritis. Although cell culture is the golden standard for diagnosis, its practical use is limited due to late results. Direct fluorescent antibody assay (DFA) is rather promising in this area.

**Results/Conclusion:** Protection against the disease and individual personal hygienic precautions in treatment (using disposable glove and chlorination of swimming pools) are important. Ribavirin and Sidofovir are also recommended for use.

## **PS1.200**

### **Severe acute renal failure secondary to noncompliance of insulin-treatment**

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Personal History: Woman 36 years with no known drug allergies. Type 1 diabetes mellitus with poor compliance.

Home treatment: 20-0-14 Levemir insulin and rapid insulin.

Actual illness: He goes to the emergency room for visual impairment in both eyes for 12 hours, you begin to see with white lights and decreased visual acuity. holocraneal headache with no other neurological symptoms. Upon arrival to the emergency it presents blood pressure levels of 210/110 sagging after taking captopril and sublingual diazepam.

Physical examination: Good general condition, conscious, oriented, eupneic at rest.

Cardiopulmonary auscultation: rhythmic and regular without murmurs. breath sounds preserved without added noise.

Neurological examination: Alert, isochoric and normorreactivas pupils, cranial unaltered, no neurological deficit.

Investigations: Analytics: 9.8 out hemoglobin, and a creatinine of 5.19 (on 2010 0.9).

Evolution: While in the emergency room was valued by Ophthalmology where moderate diabetic retinopathy appreciated - grave. Nephrology is contacted who decides to enter it in their treble unit where he was discharged after a few days with a diagnosis of diabetic nephropathy possibly ala hemodialysis.

Conclusion: It is very important to explain to diabetic complications of the disease to have a good adherence to not have early target organ damage.

## **PS1.201**

### **Quality of life of elderly**

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**Background & Aim:** Facing the reality of demographic change is perceived that there is a growing elderly population, highlights the importance of ensuring not only the elderly to live longer but also a quality of life better. Quality of life goes beyond it's healthy, involves self-esteem, emotional, social interaction, cultural values, functional ability, socio-economic status, social and religious, daily activities and family environment. This study aimed to analyze the quality of life in old age.

**Method:** We used two questionnaires, the first was to enroll families in the community to have some data to know which will work and the second was that each course of perceived community need and work with that one focus.

**Results:** Aging brings progressive changes for individuals, both in functional aspects, both motor, psychological and social. These changes vary from one individual to another and are influenced by both lifestyle and genetic factors. Among the changes from aging stands the functional impairment of the individual caused mainly by mental and physical disuse. The elderly on active duty, the sedentary is closely related to the onset of chronic-degenerative disorders. The practice of physical activity oriented (PAO) acts as a form of prevention and rehabilitation of the elderly, strengthening the elements of physical fitness (resistance, flexibility, strength, balance and body composition). The authors believe also that this improvement is directly associated with the independence and autonomy.

**Conclusions:** We noted that the physical activities stand out significantly in terms of developing healthy habits to bio-psycho-social health of the elderly.

## **PS1.202**

### **Male gynecomastia**

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**Background & Aim:** Gynecomastia is characterized by enlargement of the male breast, caused by glandular proliferation and fat deposition. It is the most common benign breast condition in males and occurs in all age groups, affecting at least 30% of men. Since it causes emotional distress, fear of breast cancer and psychosocial discomfort, patients usually seek medical attention. Early diagnostic evaluation is important to rule out serious illness. The aim of this work is to review the pathophysiology, etiology, clinical evaluation and treatment of gynecomastia.

**Method:** Literature search was undertaken in February 2016 in textbooks and Pubmed database of review articles with free full text published between 2011 and 2016 in portuguese and english, using the MeSH terms “Male Gynecomastia”.

**Results:** of the 26 articles that met the inclusion criteria, 5 were relevant to this work. Gynecomastia results from a hormonal imbalance between estrogens and androgens. Physiologic gynecomastia is common in newborns, adolescents, and older men and usually is self-limited. The etiology of nonphysiologic gynecomastia is attributed to chronic conditions (renal insufficiency, cirrhosis, hypogonadism); use of medications, supplements or illicit drugs; and, rarely, tumors. The evaluation of gynecomastia includes a detailed medical history, clinical examination, specific blood tests, imaging and tissue sampling. Treatment should be individually oriented and early implemented. Weight loss, management of underlying disease and discontinue use of contributing medications are the basis of treatment. Estrogen receptor modulators and surgical correction are indicated in the treatment of select patients. The main aim of any intervention is to exclude serious etiological factors and relieve the symptoms.

**Conclusions:** Gynecomastia is a prevalent condition caused by several etiological factors. The family doctor must be capable to confirm the diagnosis, search for a specific cause, exclude serious illness and referral to specialized care, when needed.

### **PS1.203**

#### **Descriptive study of inpatient in a palliative care centre of hospital complex of pontevedra**

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**Background & Aim:** The primary objective of this study was to describe the main characteristics of inpatient in a palliative care centre of Hospital complex of Pontevedra (CHOPO).

**Method:** This is a descriptive study of prevalence to evaluate inpatient in a palliative care centre of Hospital complex of Pontevedra. All patients's information who were admitted in centre since January 1st ,2014 to December 31th,2014 have been analysed, using a template that was developed ad hoc and it was filled out by the researchers. The information were analysed by SPSS 19.

**Results:** 128 patients, out of which only 2% remains alive, were analyzed. Most of the admissions were male (68%) and over 65 years (76%), the duration was of a day or less. A 18% admitted two or three times in other services in the last 12 months and 13% had previously been treated in outpatient visits of palliative care. 80% required sedation. Most of these admissions came from Emergency department (35%), HADO (25%), Oncology (10%), primary care (10%). Only 8% die at home. Only 5% of patients were encoded in primary care.

**Conclusions:** The profile of patients admitted to the palliative care centre is a patient with very serious prognosis and / or very poorly controlled symptoms. It shows an ignorance of what is a situation of palliative care by primary care, because it shows that the patients are not encrypted and also the number of direct derivations is minimal. As in other hospital services the referral to the palliative care centre is getting late and in a situation of 'last days' even exist previous admissions in the last year or in the case of oncology patients or with advanced chronic illness.

## **PS1.204**

### **Observational study of prehospital management of acute chest pain**

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**Background & Aim:** Chest pain is one of the most frequent reasons for consultation in the Prehospital Emergency Care (PEC). There are many causes of chest pain, ranging from mild conditions to entities with high mortality, requiring a high clinical suspicion and early treatment. All this shows the great importance of the diagnostic and treatment of these patients in the early stages of healthcare.

Our aim is to describe the patient profile that requires pre hospital emergency electrocardiogram, in order to meet its key features.

**Method:** A cross sectional study was designed. Data of patients seeking care with they need to do ECG for 3 months (September 2015 to December 2015) were collected. Different parameters of affiliation, dating, symptoms, blood pressure and diagnosis were included. The data were treated statistically.

**Results:** A total of 21 patients were observed. of these, 66.7% were women; the majority (57.1%) were between 70 and 89 years. They had dizziness (52.4%), chest pain (33.3%), abdominal pain (23.8%), + (headache, stress, disorientation 4.8%). The average of TAS was a 143.86 and 81.71 of TAD. They were made more ECG on Sunday (42.9%) and less on Mondays (9.5%), in the second half of the month (66.7%). The ECG was normal in 71.4% of cases and was arrhythmia 14.3%, being similar to the previous in 90.5% of cases. Patients were diagnosed dizziness (42.8%) and muscle pain (23.8%) in most cases. of these, require referral to hospital by 19%.

**Conclusions:** Most of the ECG were conducted in elderly patients and were caused by banal pathology, which must not be transferred to hospital. In most cases, patients were nervous when they had chest discomfort and they went the emergency room. The doctor of the PEC should make an early diagnostic and therapeutic approach in patients who come to these centres with chest pain.

## **PS1.205**

### **Pediatric patient profile who comes to the ambulatory emergency Marin**

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**Background & Aim:** The demand ambulatory urgent, presents a continuous and progressive growth, reaching now figures close to the system's saturation. This is not a purely national problem, as occurs in most developed countries. These services are the query option for acute pathology of patients, without waiting for an appointment. The ambulatory emergency physicians require solid knowledge, experience and the ability to make a rapid assessment. The aim of the paper is to describe the profile of the pediatric patient of ambulatory emergency care in Marin.

**Methods:** A cross sectional study was designed. Data from patients 0-15 years attending the ambulatory emergency of Marin, since 1st October to 31th December of 2015, were collected. Different parameters of affiliation were registered: demographics, symptoms, treatment and diagnosis. The data were treated statistically.

**Results:** 150 patients were analysed. The 56.7% were male, with a majority (47.3%) at the preschool and the least adolescents (4.7%). The most frequent reason for consultation was fever (20%), followed by respiratory diseases (17.3) and otolaryngology (17.3%). They had passed 12 to 24h from onset of symptoms in most cases (43.3%). The 85.3% of them had not been consulted before and the 55.3% had not taken any previous treatment. The antibiotic treatment was the most used (25.3%) followed by NSAID (22.7%). The 86% did not require later reference and 7.3% was required referral Hospital.

**Conclusions:** Primary care (PC) is an effective filter of hospital emergencies. PC urgent care is comparable to the consultation without an appointment, because of offering the possibility to consult any situation at the time when the population demands, regardless of severity. An improper use of these services motivates a lack of continuity care, lack of receipt of preventive practices, an increased health care costs, medicalization and difficulty in dealing with the really serious diseases.

## PS1.206

### Rapid diagnostic referral for colorectal cancer in Pontevedra

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**Background and Aim:** Recently, a rapid diagnostic referral (RDR) process based on clinical criteria was implemented in our area for both Primary Care Physicians and Hospital Doctors. The aim was to shorten the interval between diagnosis and treatment of colorectal cancer to less than 30 days. We audit this process in order to assess its real usefulness.

**Method:** We conducted a retrospective audit of the RDR during the last trimester of 2015. We recorded the criteria of the referral, as well as dates of consultation, endoscopy, discussion of cases at our Cancer Committee and beginning of treatment.

**Results:** 2 out of 31 patients (6.45%) that went into the RDR process had a real colorectal cancer, both included in the RDR by their Family Physicians (2 out of 17, 11.76%). While in-hospital referrals included cases without clinical criteria, Primary Care referrals did adjust to them. The main criteria was abnormal bleeding or blood in stool sample (38.71%). The median delay to consultation was 6 days (IQR 5-12), to endoscopy was 7 days (IQR 5-36), the discussion at the Committee was always the day following the endoscopic diagnosis. And the treatment of both cases began the second day after the diagnosis (one underwent surgery and the other received chemotherapy).

**Conclusions:** Although there is still room to improve our RDR process, it reduces the time to treatment in cases with high suspicious. It is clear from the results that the usefulness of this pathway is focused on the referrals from our Primary Care level, since in-Hospital referrals seem to use the RDR with other purposes.

## **PS1.207**

### **Frail elder, a challenge for the family doctor**

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**Background and Aim:** Elders are defined as people aged 65 years and over. In Europe, by 2060, those aged will comprise 30 % of the population. There is no clear consensus on the definition of frailty. Frailty is not synonymous with comorbidity and disability. Comorbidity is a risk factor for frailty and disability is an outcome of it. Frailty is described as status of global impairment of physiological reserves involving multiple organ systems.

**Method:** A review of the literature is made about frailty definition and the applications as screening to identify frail older patients in primary care. In older people, comprehensive geriatric assessment should form the basis of the diagnostic process.

**Results:** Two groups of frailty definitions can be categorized. Frailty phenotype, described by Linda Fried, and deficit accumulation model which most important representative author is Rockwood. Frailty phenotype uses the biological syndrome model of frailty that includes five major criteria: weight loss, fatigue, weakness, low physical activity and poor endurance. It allows a classification in non-frail, prefrail and frail. On the contrary, deficit accumulation model considers symptoms, diseases, conditions and disability. Includes 75 components, ranged from 0 (absence of frailty) to 1 (full expression of deficit). It is important to know that frailty is independent of age and we can use the screening in primary care to prevent the disability and reduce the morbidity. These interventions are based in physical activity, nutritional intervention and cognitive therapy. There is no consensus on which are the most appropriate.

**Conclusions:** Although, the frailty definition is controversial, it can be used to identify frail older patients in our daily clinical practice to prevent adverse events as disability, mortality or institutionalization in patients in which we can do preventive cares.

## PS1.208

### Do our patients know a lot about osteoporosis?

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**Background & Aim:** To study the knowledge the people who attend a rural medical centre possess about osteoporosis.

**Method:** A descriptive transversal study carried out on patients who were seen at the rural medical centre in Lamasón, Spain, using a questionnaire they answered by themselves, between June and September 2015. Social and demographic variables were collected, as were general concepts, risk factors, prevention and diagnosis. For quantitative variables, averages and standard deviation were used, and for qualitative variables, percentages were used.

**Results:** 50 patients were analysed, with an average age of  $62,16 \pm 17.8$  years, predominantly female (56%). 86% had completed primary education. 42% knew about the pathology, and 96.2% associated it with bones. 50% considered hip fractures to be the most frequent pathology and 86% considered the vertebral fracture to be the most serious. 19.5% believed that only women were affected, and 65.4% believed it was physiological. 79% thought that you could work on the peak bone mass throughout your whole life. With regards to risk factors, 28% recognized the menopause as being a factor, 40% thought that smoking was a factor, and 37.5% didn't think that falls influenced fractures, or that they had little influence. 100% considered that calcium had an influence and 26.5% believed that this could be obtained through exposure to the sun. 32.4% thought that vitamin D was an influence. Nobody knew about the FRAX tool and 10% knew about the bone density test.

**Conclusions:** There is a large lack of information both regarding the fractures produced, the possibility of affecting the peak bone mass and many of the risk factors such as smoking and falls. Few people also know about the diagnosis and assessment tools. Good information on calcium or vitamin D doesn't exist or on how to obtain these. Information should be provided on the risk factors and prevention measures.

## PS1.209

### Analysis of the knowledge our patients have on calcium and vitamin D

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**Background & Aim:** To analyse the knowledge patients attending medical centres have regarding calcium and vitamin D, and how these can be obtained.

**Method:** Descriptive, transversal study using questionnaires completed by patients attending the rural medical centre in Lamasón, between June and September 2015. Social and demographic variables related to calcium, vitamin D, and how these are obtained, were collected. Averages and standard deviation was used for quantitative variables, and percentages for qualitative values.

**Results:** 50 subjects were analysed, with an average age of  $62.16 \pm 17.8$  years, mainly female (56%). With regards to calcium, 100% knew of its relationship with bones. 100% thought it was obtained through food; 26.5% through sun exposure; and 16.3% only through medicines. With regards to foods containing calcium, 100% identified dairy products, 24% identified fish (sardines, anchovies), 2% said fruit (cherries, oranges), 6% said vegetables and pulses (cabbage) and 18% said nuts (hazelnuts, almonds). With regards to vitamin D, 32.4% said it had an influence on bones. 23.5% said it was obtained through food; 23.5% through exposure to sunlight, and 17.6% said it could only be obtained through medicines. Analysis by gender led to findings that say the only significant difference between the two is in the way calcium and vitamin D are obtained through sunlight and fish calcium.

**Conclusions:** The population clearly identified the relationship between calcium and vitamin D with bones, but not the way they are obtained. There are important lapses in knowledge such as whether calcium is acquired through sunlight exposure or just through medicines. The patients are also not clear on the foods that are high in calcium, with the exception of dairy products. People should receive information on how they are obtained, as correcting their diet and lifestyle is a good way to prevent osteoporosis.

## PS1.210

### **The control of diabetic patients with renal failure. Are we doing it correctly?**

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**Background & Aim:** To analyse the degree of control of diabetic patients with renal insufficiency (RI) and comparison with those who have normally functioning kidneys.

**Method:** Transversal, descriptive study of diabetic patients treated at an urban primary care medical centre. Filtration of RI<60 (GF) was considered. To calculate that the control is correct, the values recommended by ADA 2015 were used (blood pressure <140mmHg and <90mmHg, LDL<100mg/dl, HbA1c<7%). Complications were considered to be the existence of strokes and peripheral vascular or cardiac disease. Averages and typical deviations were used for quantitative variables and percentages for qualitative variables.

**Results:** 100 patients were recruited. 19.4% had renal insufficiency and an average GF of 58.42±7.4. The RI patients had an average age of 78.5±8.4 and were mainly female (63.2%). The average values found were HbA1c 6.6±1.1%, LDL 87.7±18.8mm/dl, triglycerides 124.1±5.9mm/dl, TAS 134.8±11.4mmHg and TAD 72.6±8.5mmHg. The patients without RI had an average age of 67.8±11.4 and were mainly male (60.8%). The average values found were HbA1c 6.6±1.1%, LDL 95.3±30.6mm/dl, triglycerides 123.5±64.1mm/dl, TAS 136.5±13.9mmHg and TAD 73.2±10.8mmHg. On comparing patients with and without RI, there was a correct control of the TA in 73.7 vs 71.8% (p=0.86); of LDL in 84.2% vs 64.6% (p=0.09), of triglycerides in 63.2vs78.5% (p=0.35), and of HbA1c in 73.7 vs 74.4% (p=0.95). 31.6% of diabetic patients with RI had complications, vs 21.5% of those without RI (p=0.35).

**Conclusions:** The degree to which the risk factors are controlled in diabetic patients with RI do not differ to a large extent to the controls taken for those without, and in both cases, these controls should be improved as the patients are high risk.

## **PS1.211**

### **Pediatric pathology at the emergency department of a health center**

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**Objective:** Learn about the urgent pediatric pathology attended in our Rural Health Center during the week and study its variables.

**Materials and Methods:** Were collected the pediatric patients (from 0 to 14 years) who came to the emergency department of the Health Center of Rincón de la Victoria, registering age, sex, day of the week and diagnosis. These data were studied using Student's - t test for independent samples, Chi square and ANOVA for qualitative data.

**Results:** The total sample was 451 individuals, 241 females and 210 males. With an average of patients per day ( $\bar{x}$ ) of 16.86, with a standard deviation (SD) of 5.6923, and confidence interval (95% CI)  $\pm 0.5287$ . Significant difference ( $p < 0.05$ ) was found for Sunday as the busiest day (96), followed by Saturday (84) and Monday (81), must be noted that one of these Mondays was festive, so there were no pediatricians in the center. Regarding the pathology, highlights the otorhinolaryngologic diseases with 172 patients, followed by traumatologic (62), and digestive (51), being significant relation ( $p < 0.05$ ) between patient age and diagnosis (older patients and dermatological and traumatologic diseases group, and younger patients and ophthalmology and infectious diseases) and non-significant relation between day and diagnostic group or sex and diagnostic group.

**Conclusions:** When there are no pediatricians in the Health Center, the emergency department is busiest with pediatric patients. The otorhinolaryngologic diseases are the most common.

## PS1.212

### **Evaluation of the monitoring of patients with type 2 diabetes by performing retinography and exploration using monofilament**

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**Objectives:** To assess the degree of completion of the exploration of the sensitivity of the sole of the foot using monofilament, and of the exploration of the fundus, by performing retinography, in patients with type 2 diabetes, as a quality criterion in the control of the diabetes process in our health center.

**Material and Methods:** descriptive study of a random sample of patients with type 2 diabetes treated in 15 medical consultations during the period 2008-2010. They were analyzed the parameters of: weight, age, sex, glycated hemoglobin, basal glycaemia, fundus and sensitivity of the foot sole, being excluded those who had not collected some data (except fundus and sensitivity to monofilament was classified as normal, abnormal or missing), age younger than 30 years or type 1 diabetes.

**Results:** the studied sample was 161 individuals, 57.14% female, 42.86 males, pathological exploration with monofilament was found in 9.32%, N = 15 normal in 60.87%, N = 98 and no record in 29.81%, N = 48. Regarding the fundus exploration, was normal in 24.22%, N = 39, pathological in 7.45%, N = 12 and no record in 68.32%, N = 110. Studied using the homogeneity test of two independent samples (T Student) the group of pathological monofilament sensitivity and normal sensitivity group regarding the variables age, weight, fasting plasma glucose and glycosylated hemoglobin, no significant differences between both groups were found.

**Conclusions:** It is necessary to introduce corrective measures with respect to the exploration of the sensitivity and the fundus in diabetic patients in our health center.

## PS1.213

### **Pain treatment and the elderly patients**

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**Purpose:** is there any correlation between patients of 75 years old or more according to their sex and pain treatment?

**Material and Methods:** observational transversal descriptive study performed in the Health Centre of Malaga, Rincon de la Victoria. The sample size of patients of 75 years old or more coming from 5 different quotas of the Basic Sanitary Zone was calculated on the assumption of simple random sampling. Data collected: sex, age, pain treatment or existence of any important medical condition. Used for the study: means ( $\bar{x}$ ), standard deviations (ds), confidence intervals at 95% (IC), tests for independent samplings, analysis of the variances and Chi square test.

**Results:** data of 250 patients (50 per each physicians office). 4 patients excluded because of the data absence. The mean age of the rest of 246 patients was: 81.3252 years, with ds: 4,8705 and IC= $\pm$  0,6117. Out of 246 patients 101 were men and 145 women, with the mean age of 80,7920 and 81,6965 respectively with age difference not statically significant,  $p > 0,05$ . 45,2% of the patients were with pain treatment, 13,7% men and 31,5% women. In 54,8% of the examined population there was no pain treatment. There was a correlation established between sex and pain treatment  $p = 0,014$  as well as between pain treatment and having some neurological condition  $p = 0,0011$ . The medicine most frequently used: Nonsteroidal anti-inflammatory drugs 9 Metamizole = 10 Tramadol = 12 Paracetamol + Tramadol = 16 Paracetamol = 65 Tapentadol = 7 Oxycodone = 3

**Conclusions:** There is a statistically significant correlation between the pain treatment and sex being the women with more pain treatment. The medicine most frequently used is Patacetamol. However most of the pain treatment medication is included in the therapeutic guides for elderly patients, there are still patients taking nonsteroidal anti-inflammatory drugs that should be revised.

## **PS1.214**

### **Use and satisfaction of electronic prescriptions**

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**Background & Aim:** After implementation in our health area of electronic prescriptions 6 months ago we decided to investigate if our patients know the use and satisfaction

**Method:** We proceeded at random, for a week, to ask users who were in the health center outside consultations "if they knew the electronic prescription"; "If using the electronic prescription"; and we score of 1 to 5 your satisfaction with the electronic prescription, filling out a questionnaire.

**Results:** of all users surveyed, 47% were female and 53% male, 41% admitted that they did not know electronic prescriptions while only 42% of respondents admitted that they used electronic prescriptions. However 53% of respondents recognized an improvement electronic prescriptions.

**Conclusions:** The electronic prescriptions. calls for slow implementation even just a little more than half of patients surveyed know the electronic prescription. It is noteworthy that at least half of respondents recognize the improvement of electronic prescriptions. It's in the hands of the professionals most use and dissemination of the same.

## PS1.215

### Use of electronic recipe in a health center

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**Background & Aim:** The electronic prescription is a model of prescribing and dispensing of medicines and medical devices included in public funding.

**Prescription:** The medical act of a treatment order. The electronic prescription is a electronic access to prescription orders allowed dispensation from anywhere. It allows you to create a 'balance' with the treatment prescribed by the family doctor and the patient does not need to go to the clinic to pick up prescriptions need to renew the prescription for standard treatments or that requires several packages complete treatment duration to the indicated dose. With the new electronic prescription, the physician issues a treatment sheet with patient directions. The patient has to submit this form and your individual health card at the pharmacy. After 12 months of implementation of electronic prescriptions by the Murcia Health Service in our health center we have addressed the use of electronic prescriptions by general practitioners.

**Method:** The health center consists of 13 general practitioners. Four randomly selected physicians. Proceeded, also at random, to select a day of consultation in January 2016. We noted in all patients that day if you ever had used electronic prescriptions and then apply the percentage of use thereof of the 4 general practitioners.

**Results:** of all patients that day (223), 34.7% had used electronic prescriptions and 65.3% had not used the recipe.

**Conclusions:** The electronic prescription takes an even slow implementation for only a little over a third of patients have used it. We should encourage more use among. general practitioners.

## **PS1.216**

### **Focusing on the tight relationship between mental health and family violence: ||practice and training implications**

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**Background & Aim:** A strong relationship exists between alcohol and substance abuse, anxiety disorders, depression, eating disorders and family violence. This symposium addresses these often neglected relationships, rarely adequately addressed in primary care and also mental health care.

**Method:** An update will be given about causal relationships and consequences of mental health problems and family violence in a broad perspective. Case presentations will be used to illustrate interrelationships between different mental health problems and different forms of family violence. The audience will be presented with several conceptual models for improving detection, assessment and counselling in situations where mental health and family violence are intertwined.

**Results:** Mental health problems need more specific attention as causes and consequences of family violence. Implications for practice and training will be discussed. Practitioners are invited to apply structured care strategies to deal with these relationships when caring for individuals and families affected by family violence. The perspective of the victim and perpetrator should be considered and a strategy should be defined in all practices taking into account local needs and resources.

**Conclusions:** General practice should pay more attention to identification of violent relationships when clients present with mental health problems as well as to identification of mental health problems in families affected by family violence. Consequences of violence on mental and social wellbeing merit active follow up and support. Training is needed at all levels, starting from undergraduate training to continuing medical education. A holistic and a more mental health oriented care approach - including implementation of adapted psychosocial care models - may help to decrease reoccurrence as well as consequences of family violence. More research is needed to apply specific organization models recognizing more the importance of the relationship between mental health and family violence.

## **PS1.217**

### **Bullous pemphigoid in elderly patient treated with Enalapril**

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Medical History: 84 year-old male without any allergies, diagnosed of hypertension and treated with Enalapril three months ago.

History of the Present Illness: Patient presented 15 days of pruritus on the palms, small vesicles on the hands and feet, without signs of infection. Dishidrosis was the first diagnosis and the skin lesions were treated with Clobetasol . After 15 days, the patient experienced widespread of blisters, without affecting mucosa. On physical examination 0.5-1 cm blisters on arms, back, hands and feet and generalized rash with vesicles on shoulders, back and hands. With the presumed diagnosis of Bullous Pemphigoid, an steroid treatment was started and the patient was referred to the dermatologist.

Blood Test: HbsAg (-) / IgG Anti-HCV (-)/ Anti-HIV1/2 (-) / Anti-IgG Varicela Zoster (+)/ Anti-IgG CMV (+)/ Anti-IgG Virus Epstein-Barr (+) / Specific allergens IgE total; serum 33.10 kU/L/ Autoimmunity: Anti-IgG anti-BP180 serum: >200.00/A U/mL.

Skin Biopsy: Linear deposits of IgG and C3 along the dermal-epidermal basement membrane, suggestive of bullous pemphigoid.

Treatment: Prednisolone, Clobetasol propionate 0.05% with absolute symptoms remission in 15 days.

Conclusion: Pruritus and blisters on hands and feet always suggests dyshidrosis because of its high prevalence. However in this patient treated with Enalapril, we should have thought in Bullous Pemphigoid from the beginning. Bullous Pemphigoid is the most prevalent autoimmune blistering disease in Europe and it is known that this drug is a promoter of the Bullous Pemphigoid.

Key words: Blister, Pemphigoid, Bullous, Eczema, Dyshidrotic, Enalapril

## PS1.218

### Great chest pain

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**Background & Aim:** 55 years-old male, smoker, with arterial hypertension and obstructive sleep apnea, who comes to our primary care office because he had in his left chest, pleuritic pain for 4 days with white sputum that did not get better with paracetamol not even with metamizol. 3 days after, he came because he had more pain even with tramadol. He looks bad, sweaty and with dyspnea. He had also hypertensive crisis so we referred the patient to the hospital emergency.

#### **Method:**

Exploration: TA 172/95. Rest of the examination was normal. EKG: normal. ANALITYC: low kidney failure (Cr 1.52). Chest Rx. Alveolar infiltrate with predominance in lungs bases. TC: heterogeneous solid mass in the roght kidney (8x7cm) with multiple secondary deposits in lung and adrenal gland.

Surgery: right kidney and adrenal gland removed.

**Results:** Papillary renal carcinoma tipe II with bilateral adrenal glands and bilateral lungs deposits (T3aNxM1).

**Conclusions:** Male with cardiovasc risk factors, who came because bad control chest pain and hypertension crisis so we removed to emergency to rule out aortic syndrome, with a final diagnosis of renal carcinoma with lung and adrenal metastases.

## **PS1.219**

### **Anamnesis, the most important part of an interview**

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**Background & Aim:** 76 years old female, with arterial hypertension, auricular fibrillation (treated with acenocumarol) comes to Primary Consult Office because one month ago she started with a progressive dyspnea that has become to moderate efforts during last days. Those symptoms started also with episodes of interscapular pain, that stops with supine position. The patient refers also edema increase in both inferior members. She also denots that she has lost 7 kgs in the last month, being more nervous and with tremblings. She refers no changes in her diet. The cardiologist stopped 20 days ago the treatment with amiodarona, because she had sinusal rhythm.

#### **Method:**

Exploration: Cardiac auscultation: aortic systolic murmur. Normal pulmonar auscultation. The rest of the exploration was normal. -Blood test: TSH 0.01 T3 6.41 T4 5.20.-EKG: sinusal rhythm 75 heartbeats per minute.-Rx Torax: interstitial infiltrate bilateral that do not appear in previous.

**Results:** Interstitial pulmonar disease and hyperthyroidism due to amiodarona.

**Conclusions:** The case consists on a woman with multifactorial dyspnea because of her hypotiroidism and interstitial pulmonar disease with peripheral radiologic pattern, atypical for suspecting cardiac descompensation. After stopping amiodarona, antithyroid (carbimazol) and prednisona, she started feeling better. A new blood test showed a descense of thyroid hormone.

## PS1.220

### Medical representative visits and opinion leaders: a declining versus a rising source of information for family doctors

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**Background & Aim:** Medical representative visits (MRVs) and opinion leaders (OLs) interventions are two of the major strategies used by the pharmaceutical industry to promote drugs and guide prescribing habits. Whereas MRV was the most powerful policy a decade ago, it is now declining. The use of so called “OLs” is a policy currently reaching a peak. This original qualitative study examines these two strategies in detail in the context of family medicine practice, using Swiss French speaking samples providing an interesting and relevant example.

**Method:** We conducted a qualitative content analysis of 22 semi-structured interviews with family doctors, experts in psychopharmacology (OLs) and medical sales representatives, complemented by direct observation of MRVs as well as educational events led by the experts.

**Results:** MRVs are seldom used by family doctors: 1 MRV/medical sales representative/family doctor. A necessary typologization of OLs was conducted to clarify their roles in the field of medicine: local, formal/informal, expert/peer and key OLs. Using this categorization, we found that our local OLs, identified from among the experts and not appointed by the pharmaceutical industry, are the main actors of mandatory continuing medical education (CME). They are the privileged source of information used by family doctors. Unlike MRVs, which impose a message on family doctors, local opinion leaders are used by family doctors as a proactive means of information to shape their prescribing behavior with intellectual independence. The quality of the delivered message, credibility of our local OLs, mandatory CME and changes in the drug market are discussed in relation to our results.

**Conclusions:** The main means of information to guide family doctors’ prescribing habits in our sample are the local OLs. Our results contribute to an understanding of why the pharmaceutical industry is increasingly approaching local OLs to use them as marketing tools.

## PS1.221

### Use of OTC drugs in patients in health care center mostar

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**Background:** Medicines sold directly to a consumer without a prescription are called OTC or „Over the counter“ medicines. If used properly, these drugs have wide therapeutic range, low toxicity and interactions are reduced to a minimum. OTC drugs are intended for conditions which can be easily recognized and don't require essential medical supervision. Pharmacist should have the biggest role in informing patients about OTC medicines. OTC drugs are an important component of Health Care Systems in developed countries. Most residents of EU countries are actively pursuing self-medication. The leading place is occupied by the UK with 87%. The use of OTC drugs reduces the costs in HCS.

**Aim:** The main goal was to investigate the frequency of OTC drugs use and the pharmacist's role in the distribution of OTC drugs.

**Method:** The study included 200 patients in HCC Mostar older than 18 who filled out a questionnaire of 10 questions. Including parameters were: age, gender, educational level and economic status. The study was conducted in the period of 2 months.

**Results:** 68,5% respondents use OTC drugs. 43,7% of respondents identified the physician as the main source of information. The most commonly used OTC medicines are analgesics (44,8%). Only 19,7% of respondents stated that pharmacists never ask about medical history and 20,3% that pharmacists don't give information on drug specifications. 45,3% of respondents answered that pharmacist has never refused to issue the OTC drug. 52,1% of respondents inform their doctor about OTC drug use. Significantly 69,5% of respondents told that the use of OTC drugs eases solving of their health problems. Patients older than 65, chronic patients, those with higher educational level and middle economic status commonly use OTC drugs.

**Conclusion:** OTC drugs are frequently used, especially analgesics. Pharmacist has the most important role in advising the patient on OTC drug specifications considering his health condition.

## PS1.222

### **Sicilian GP trainees interest in abroad exchanges: a cross sectional study**

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**Background and Aim:** it is known that international health experiences have several benefits on medical trainees and the Vasco da Gama Movement offer different exchange options for GP trainees to attend a primary care practice among different European Countries. Nonetheless, participation rates are quite low in Italy, and extremely low in Sicily. The aim of the study was to assess knowledge about Vasco da Gama Movement between Sicilian GP trainees and to investigate propension and influencing factors on participating in international exchange programmes.

**Methods:** a questionnaire was developed based on literature to measure variables that could influence GP trainees choice to attend an international exchange during their training period. The questionnaire was administered to all trainees, anonymously and voluntarily, that were present at the weekly lecture meeting. Chi square test, T-student and ANOVA were used to assess differences across groups of categorical and continuous variables, respectively.

**Results:** 155 out of 204 trainee answered (76%) and only 44 knew about VdGM (28,9%). 78 (52%) wrote they would attend an exchange with the current known obstacles, while excluding obstacles participation rates peaked at 94,8% of respondents. Trainees who already joined any kind of exchange programme were more likely to attend one in the current conditions ( $P=0,031$ ), but surprisingly there was an inverse association with trainee knowing about VdGM less likely to participate on an exchange at the very moment ( $P=0,04$ ). Most influencing factors were the need of taking personal days off and economical reasons.

**Conclusions:** lot can be improved to diffuse knowledge about VdGM and its Hippocrates exchange programme, also more efforts need to be done to remove barriers keeping GP trainees away from an international experience.

## **PS1.223**

### **Obstructive sleep apnoea syndrome - management in primary health care**

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**Background and Aim:** Obstructive Apnoea Syndrome (OSA) currently has a high prevalence among the adult population (2-4%). This disease poses a significant risk factor for cardiovascular and cerebrovascular disease. The pathophysiology of the disease is based on repetitive collapse of the upper airways. It presents direct and indirect costs and a high morbidity / mortality considerably. The aim of this study is approach the obstructive sleep apnea by primary health care.

**Methods:** Classical literature based on research in the database PubMed medical sites based on evidence, using the keywords: "obstructive sleep apnea" and "management" and "primary care". The inclusion criteria were articles in English, Portuguese and Spanish and with time limit from 2004 to 2014.

**Results:** The diagnosis of OSA begins with the collection of the history of the patient through the patient's routine assessment or patient complaints or evaluation of high-risk patients for OSA. The collection of clinical history based on the characterization of patients sleep research as well as complications associated with the syndrome. The physical examination should investigate the presence of obesity, alterations of the upper airways and increased cervical perimeter. Through clinical history and physical examination and determination of the severity of the patient is indicated to perform objective tests. The Polygraphic sleep study is essential in the diagnosis and determines the severity of the syndrome. OSAS is a chronic disease and it requires long-term care. Treatment with ventiloterapia by continuous positive airway pressure is the treatment of choice. With regard to adherence to treatment the family doctor has a crucial role in the continuum of care. There are multiple factors that are present in adherence to treatment involving individual characteristics, social, economic and government.

**Conclusions:** The approach of OSAS in primary care is crucial in the evaluation and continuation of long-term care of these patients.

## PS1.224

### Do we always listen well to our patients? Maybe today they're telling us a different story...

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**Background & Aim:** Attending chronic patients sometimes could lead us to misdiagnosis and consequently mistreatment, as they almost always have the same complaints and usually they don't say "something new".

**Method:** We will present a clinical case from our health care practice; all data were extracted from the patient's electronic medical records.

**Results:** 78-year old woman diagnosed with inflammatory bowel syndrome, essential tremor, glaucoma, osteoporosis and depression, in chronic treatment for her pathology. Motive of consultation: she came saying that all her health conditions got worse within the last two months: she experienced more diarrhoea and weight loss, more shortness of breath especially at exercise since then, more trembling and she couldn't take it anymore, her depression "went faster", she started to cry during the visit. Physical examination: rapid irregular heart sounds, no murmurs, no oedema of lower limbs, BP: 110/65 mm Hg, O2Sat: 98%. ECG: atrial fibrillation (AF) at 130 bpm. Blood tests: Haemoglobin 11.6 mg/dl, mild neutropenia, mild thrombocytosis, NT-pro-brain natriuretic peptide (NT-proBNP) 2,969 pg/mL (NV: <450), TSH<0.008, T4: 3.52.

**Diagnosis:** primary hyperthyroidism. She was referred to hospital. During hospitalization she was seen by endocrinologist (diffuse hyperfunctioning goiter, initial treatment tiamazol), cardiologist (AF, atrial hypertrophy, started treatment with propranolol 40 mg bd), haematologist (oral anticoagulation for AF - acenocumarol). What happened: patient's new condition - hyperthyroidism- triggered the development of AF and acute cardiac failure (shortness of breath), trembling, diarrhoea, weight loss and her depression also got worse.

**Conclusions:** We have to be very careful when attending chronic patients because although they almost always say the same words, they can experience new health conditions and we might misinterpret them.

## **PS1.225**

### **The Patient Protection and Affordable Care Act and physicians**

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After almost a century of fashioning a healthcare system for the uninsured in America, Congress in 2010 passed the Patient Protection and Affordable Health Care (ACA).

This paper aims to explore the perspectives of Ohio physicians on ACA. While much has been debated about ACA, relatively few studies have focused on how ACA will impact physicians' practice behavior.

**Method:** The research data come from a mailed survey of 90 randomly selected physicians practicing in Ohio, USA.

**Results:** Overwhelmingly, while the physicians surveyed were familiar with the specific provisions of ACA, almost half of them opposed it. Primary care physicians reported generally favorable opinions about ACA. All but one, concluded that ACA, much like managed care provisions, has undermined and will continue to reduce the autonomy of physicians.

**Conclusion:** Study has practical implications for examining how physicians are responding to the new health care reform. It has broader implications for addressing the problem of the uninsured and the role of the federal government in health care provision.

## **PS1.226**

### **The power of money outcome and quality of treatment**

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**Background & Aim:** The availability of diagnostic procedures, modern therapies determines the material ability of the health system. Countries in transition and developing countries are faced with materially limitations in the quality of care and treatment. The material possibilities of the individual, favor him compared to other citizens.

**Method:** Patient J.E. Born in 1941 year, the patient is in good financial situation.

**Results:** in 2007 the emergence of changes DG: carcinoma basocellularae capilicii, revealed a dermatoscopy and operations. 2009 he had an appearance of blood in the urine when diagnosed with the help of ultra sound, tumor markers, targeted biopsies adenocarcinoma of the prostate, which operates the laser technique in Ljubljana because the country operates a classical method after operation he has a therapy target irradiated in Istanbul. 2011 gets pneumonia - the chosen doctor sends it to the RTG lungs where reveals the changes in the top right lobe resectable cell carcinoma of the lung which operates laser method in Istanbul where he performs a PET scan, he recovers quickly and goes traveling. 2015 doing a checkup in which are included the FOBT test, which becomes positive, he pays colonoscopy at Military Medical Academy (MMA) where he bypasses the waiting list and diagnoses polyposa collonis. Physician examination revealed adenocarcinoma intramucosae and they operate it. in Istanbul he does a checkup with a PET scan where it reveals metastasis in the th vertebrae III and recidic adenocarcinoma prostate, with a consular decision he receives zometa infusion on the oncological institute.

**Conclusions:** At any time, the patient is able to self-timely provide diagnostic, treatment, food, care, vacations, which with the support of family, which largely influences on the outcome.

## PS1.227

### **Morbidity trends of hypertension registered in Croatian Family Practice and the consumption of antihypertensive drugs: longitudinal study, 2005-2014**

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Arterial hypertension is the main independent risk factor for cardiovascular diseases, the most common cause of death and disability around the world. The aim of this study was to explore the morbidity trend of hypertension registered in Croatian family practice (FP), and utilisation of anti-hypertension drugs in ten-year period, from 2005 to 2014.

**Method:** From the Croatian Health Service Yearbooks, 2005 - 2014, data were collected on the number of diagnoses of hypertension registered in FP. Data on consumption of antihypertensive drugs were collected from annual reports of Croatian Agency for Medicinal Products and Medical Devices, 2005 - 2014. The utilization was expressed in both, DDD/TID and financial indicators (Croatian kunas).

**Results:** in the period 2005 - 2014, the number of hypertension diagnoses increased by 1.33 times; sharing 54 - 57% of total cardiovascular morbidity. Consumption of anti-hypertension drugs during this period increased from 184.7 to 285 DDD/TID or by 1.54 times. A group of drugs which affect the renin-angiotensin system are mostly used, followed by Ca-channel blockers and diuretics. Utilisation of all groups of anti-hypertensive' increased. The most increase is observed in group of adrenergic (by 2.04 times and containing 5% of total utilisation), followed by rennin-angiotensines (by 1.88 times). Financial cost of anti-hypertensive drugs is stable and ranges from 600-700 million kunas per year. The most spending is on rennin-angiotensins (from 300 to 350 million kunas per year), followed by Ca-channel and beta-blockers. Anti-hypertensive drugs share 50-70% of the gross amount of all cardiovascular drugs expenses.

**Conclusions:** Increase in the consumption of antihypertensive drugs is higher then the increase in the morbidity of hypertension registered in Croatian FP. High increase in the group of renin-angotensine drugs requires special attention. Financial spending does not follow the therapeutical consumption, probably due to the introduction of different pricing methods.

**PS1.228**

**Primary care services delivered through the Royal Flying Doctor Service, Victoria - going to the people**

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This presentation will detail the work of the RFDS Victoria in its disseminated approach to delivery of services to communities in Victoria where services are lacking. Programs include providing female practitioners to areas where female practitioners are not available to the community, telehealth consultation programs in specific illnesses preventative and treatment dental services, education and training to under serviced and rural communities, health screening programs and mental health services for community and individual resilience.

## PS1.229

### Clinical characteristics and survival in polymedicated elderly patients

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**Background and Aim:** To describe the clinical characteristics of polymedicated elderly patients in Primary Care and analyze their survival estimated as a function of comorbidity.

**Method:** Cross-sectional study made in six consultations of family medicine of four basic areas of health. 275 individuals  $\geq 65$  years who consumed more than five drugs for at least six months were selected through consecutive sampling. Sociodemographic variables, cardiovascular risk factors, health problems (CIAP-2 classification), drug consumption and survival estimated by the Charlson comorbidity index (CCI) were collected. Descriptive, bivariate and multivariate (multiple linear regression) analyzes were performed.

**Results:** The mean age was 76.5 years (SD: 6.7). 55.6% suffered from more than five diseases. The most common health problems were endocrinological 93.8%, cardiovascular 92.0%, locomotive 57.8%, respiratory 25.8%, digestive 24.0% and psychological 22.3%. 85.8% had hypertension, 57.1% dyslipidemia and 41.1% diabetes. The average number of drugs consumed was 8.2. (SD: 2.1). The median survival estimated at 10 years by CCI was 24.4% (interquartile range, 1.1% -53.4%). Survival showed a statistically significant inverse correlation regarding the number of health problems ( $r=-0,309$ ;  $p<0,001$ ) and the number of drugs ( $r=-0,285$ ,  $p<0,001$ ). Through adjustment with a multiple linear regression model, the variables associated with increased survival estimated at 10 years were: younger age, female sex, less number of drugs consumed, and absence of ischemic heart disease, stroke, peripheral artery disease, heart failure, diabetes, digestive, respiratory and urological problems.

**Conclusions:** The vast majority of polymedicated elderly patients have endocrine and cardiovascular diseases. More than half of them suffer from more than five pathologies. Survival in polymedicated elderly people is related with the variables included in the CCI as with others such as sex, number of drugs consumed and the presence of any Urological, digestive or respiratory problems.

## **PS1.230**

### **Sub acute aortic dissection type B, mimicking acute left abdominal pain: a case report**

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Aortic dissections are a deadly pathology that its suspicion is crucial to be detected and treated as earlier as possible, but some uncommon manifestations could delay the diagnosis and treatment. Mimicking other illnesses could be a life-threatening condition for the patient and a difficult detection for the physician.

A 68 years-old female with a history of controlled hypertension, dyslipidemic and chronic depression in treatment, no drugs abuse or alcohol intake, a smoker of ½ package/year. Family history: father death at 54 from unknown sudden death, 28 years old firstborn male child death suspected to aortic syndrome. She consulted her primary care emergency center for an acute abdominal pain, at first located in epigastric region and then descending to the left side in relation with drinking a glass of water, without other symptoms or alterations were described. Fifteen days prior she had had a similar episode that was diagnosed with abdominal inespecific pain and that episode passed with symptomatic treatment. Physical examination reflected some pain to light pressure in the left side of the abdomen, BP (blood pressure) 185/75, HR (heart rate) 66, no fever; analysis show a slightly elevated leukocytosis and a lactic acid of 2,38 mmol/L; EKG without alterations and a chest and abdominal x-ray totally normal a general surgeon was consulted and she was transferred to the reference hospital to perform an upper-body and abdominal CT-Scan. In the CT an aortic dissection type B (Stanford classification) with thrombosis of the false lumen and affectation of celiac and upper-mesenteric arteries was founded. The patient has no hemodynamic instability and a conservative approach was followed. She now attends to follow up consult with a ct-scan of control and regular appointments with vascular surgery and cardiology.

To summarize, suspecting an aortic dissection could be the best way not to fail to diagnose it, complementary imaging test could be our best resource to have a quick and unbiased diagnosis, since its clinical manifestations could be confused with other differential diagnoses.

## **PS1.231**

### **Tuberculous supra-clavicular lymphadenitis: a case report.**

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Tuberculosis (TB) is a bacterial disease cause by, in a high percentage, *Mycobacterium tuberculosis*. Its prevalence in developing countries is elevated and recently due to migration movements to European countries TB is increasing in these areas with an incidence of 10 cases/100.000 habitantes. The most common manifestations of TB are the pulmonary but extrapulmonary ones are not uncommonly seen. In the earlier 20th century Scroufas (cervical lymphadenitis) were as common as pulmonary manifestations. We present a case of a 21 year-old female, originally from Guinea with no family or personal history of illnesses, with some time in between as refugee in a camp, without any allergies, alcohol intake, smoking or drugs abuse, who presented a swelling in the right supraclavicular space of recently appearance. The swelling had been increasing in size and was painful; she also had chest pain with inspiration. As for differential diagnoses implicated viral adenopathy, dental abscess, tuberculosis, lymphoma, leukemia and sarcoidosis. Complementary tests as laboratory analysis, x-ray, tuberculin skin test, cervical echography and a biopsy were done. CRP resulted of 23 mg/L, with chest x-ray that showed a necrotic tumor in the supraclavicular region, confirmed on echography. Tuberculin skin test resulted positive (5 cm) and microscopy showed granulomatous necrotic tissue with caseous center. The diagnosis of tuberculous supraclavicular lymphadenitis was confirmed. The patient started the first line of medication and she had follow-ups with primary care and hospital specialization, during these period the patient became pregnant but drugs were safe, so she had to continue taking the medication. Even though Tuberculosis is not the most known cause of adenopathies, a differential diagnosis has to be made and tuberculin and chest x-ray has to be included in the preliminary study.

## **PS1.232**

### **Breasts are also important to men. Cannabis smoking and anabolic steroids in gynecomastia. Two case reports in primary care**

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in this article, we will be describing two cases of bilateral gynecomastia without galactorrea and analyze: the context, causes, and primary prevention.

Patient X. E. is a 24-year-old man with a palpable left breast mass, that was eventually discarded by ultrasound as a concentration of liquid. X. E. has been taking anabolic steroids since 2013 and shows signs of hypogonadism, hypertension, high cholesterol levels and possibly vigorexia. The endocrine study shows, in comparison to normal values, X.E. experiences slightly higher Testosterone (T) levels, and a low T/Estradiol (E2) ratio. Furthermore, significantly low levels of Lutotropina (LH) and Folitropina (FSH) levels were detected.

Patient O.A. is a 40-year-old man with palpable bilateral breast masses, which was ultimately discarded by ultrasound. O.A. has smoked approximately one or two cannabis cigarettes daily for a number of years. Recently, while cutting down on tobacco and cannabis intake, he has presented a slight increase in cholesterol meanwhile maintaining correct IMC and blood pressure levels. The hormone study illustrates that O.A. has slightly high Androstendiona (A) levels and normal T, LH, FSH, Prolactine (P) and E2 levels.

Cannabis smoking and anabolic steroids are associated with gynecomastia, yet studies analyzing this problem, and the evidence of a causal link, are very few and insufficient. Due to the raise in cases in our health area, we are developing a protocol to tackle the issue of gynecomastia in primary care while raising awareness of the business it creates for the exercise and drug industries through the implementation of an educational program at high schools.

## **PS1.233**

### **Late-life depression or cancer?**

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**Objective:** Depressed mood may be the first symptom of a number of medical conditions affecting the elderly including cancer.

Case Report: 75 years-old-male, caucasian, retired as bus driver. His medical history; TBC during youth, ex-smoker (60 pack years), type II diabetes mellitus and atherosclerosis.

Ambulatory medication: metformin, clopidogrel and rosuvastatin.

He attends GP due to unexplained and progressive asthenia, irritability and anhedonia for the past 3 months. He denied sadness or any other psychological symptom. Physical examination was normal. Various exams were performed, all normal except the laboratorial tests: hemoglobin of 11.0, a platelet count 534.100, WBC 20,000 and Ferritin 725. We suspected a paraneoplastic syndrome, therefore vigilance was held by internal medicine at the local hospital, one month later. A full-body CT scan was performed. CT chest and lung biopsy results confirmed a stage IIIB Non-small cell lung cancer with frontal lobe metastasis. The patient died 6 months later.

**Conclusions:** This case relates a short period evolution of common and debilitating diseases, such as cancer and depression. Both can be linked together in a late-life depression, as reported. The primary care provider has an important role in recognizing clinical manifestations of this condition in its early stages and in initiating the appropriate diagnostic workup.

## PS1.234

### Medical approach of dysphagia

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**Background and Aim:** Dysphagia is a subjective and/or objective sensation, that limits the passage of liquids or solids from the oral cavity to the stomach. It is considered to be an alarm symptom, specially in elderly people. An initial medical evaluation is needed to define the exact cause to initiate appropriate therapy.

**Method:** Publications between 2002 and 2015 on sources of evidence-based medicine and scientific society (Pubmed and UpDate) in English and Portuguese. Mesh terms: 'Deglutition Disorders' and 'Patient Care Management'. Exclusive criteria: pediatric patients.

**Results:** A careful history is the most important step during the medical interview. The history can also help distinguish dysphagia from odynophagia and globus sensation. A critical component of the medical history is determining the types of food that produce symptoms (solids, liquids, or both) and the temporal progression of symptoms. Thus, it will be easier to distinguish oropharyngeal from esophageal dysphagia. A large number of conditions are associated with esophageal dysphagia such as peptic stricture, Eosinophilic esophagitis, esophageal webs and rings, carcinoma, cardiovascular abnormalities, Achalasia and autoimmune diseases. Functional dysphagia is a diagnosis of exclusion in patients without evidence of a structural abnormality or motility disturbance. Specific tests can be rolled such as endoscopy, barium swallow and swollen test in patient with neurologic pathologies. The choice of specific testing depends upon the clinical presentation and available expertise. Patients who present with acute dysphagia require immediate evaluation and intervention. Treating dysphagia depends on the initial cause: swallowing rehabilitation, surgery and or dietary modifications could be needed.

**Conclusions:** The goals of treatment dysphagia are to improve food transfer and to prevent aspiration, specially in elderly people. The primary care provider has an important role in recognizing clinical manifestations of this condition in its early stages and in initiating the appropriate diagnostic workup.

## PS1.235

### Evaluation of a new model of care, multidisciplinary for patient care in complex situation in Catalonia

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**Background & Aim:** To analyze the characteristics, comorbidities and functional situation by Barthel index (BI) of Complex Chronic patients (PCC) and Patients in Care Model Advanced chronicity (MACA) Stratify patients by clinical risk groups (CRG) and Groups Morbilitat Association (GMA)

Detect polypharmacy patients

**Material and Method:** Cross-sectional study of multidisciplinary care activity (doctors, nurses) provided to patients (PCC), (MACA) registered in the database (e-cap) of Our Service Unit chronicity (UFACC) during the periods between 02/2013 and 09/2015.

Study variables: Sociodemographic (gender, age), coding (MACA/PCC), comorbidities associated with: Coding (CRG) that classified into 8 groups: Group I (healthy people), Group2 (persons with acute diseases), Group3 (persons with a less relevant) chronic condition, Group4 (irrelevant people with various chronic diseases), Group5 (people with a relevant chronic disease), Group6 (people with two significant chronic diseases), Group7 ( $\geq$  three people with chronic diseases relevant) and Group 8 (cancer disease), and (GMA): active neoplasia, chronic illness of one, two or more systems; number of prescribed drugs and degree of functional dependence through Barthel index (BI).

**Results:** of all patients (n=3084), 1594 (51.7%) were male and 1490 were women, mean age 79.2 years and mortality (53.9%).

742 were coded as frail patients, 926 MACA and 959 as PCC.

The degree of functional dependence present is high: 537 (17.4%) had total dependence, 755 (24.5%) had severe dependence.

ach (CRG) has a weight as an expression of expected consumption of resources of the patient. The greatest weight is focused on health conditions GRG 6 (significant chronic disease in multiple organ systems): 31% and GRG7 (dominant chronic illness in three or more organ systems): 27.4%. With regard to (GMA) a higher proportion of patients was observed with GMA4: 27.9% followed by GMA3: 9% respectively

In terms of usage of drugs it is noteworthy that 830 (26.9%) patients consumed less than 10 drugs

**Conclusion:** It is vulnerable patients with very advanced disease with poor prognosis that are subject own continuous changes of the disease itself and other derivatives of the variability of actions by the various professionals who assist them. We must continue working to ensure a quality system according to their needs.

## PS1.236

### Not all dementias

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**Background & Aim:** Our patient is a 52 years old man, natural Guinea-Bissau. He comes to our clinic for 3 years. He has not returned to his country at this time. Share housing with five compatriots. Personal history: no drug allergies. No cardiovascular risk factors, or toxic habits. He is working in a glass house. Speaks few Spanish. HB past and resolved. Came to our clinic referring forgetfulness, and difficulty doing basic tasks like shopping. He is included in dementia process for a brain CT where we found a cyst compatible with neurocysticercosis. We prescribed albendazole 800mg for 7 days and steroids.

#### **Method:**

Hemogram: Normal without eosinophilia. Structural hemoglobinopathy is discarded.

Biochemistry: Normal. Ig E: 7.42. Serology: HIV and Lues negative. Filariasis, Schistosoma and Strongyloides: Negative Normal urine. Parasites in feces, blood and urine negative.

EKG: normal sinus rhythm.

Rx Chest: Growth bilateral hilar right predominance (similar to previous).

**Results:** Neurocysticercosis.

**Conclusions:** Neurocysticercosis is an affection of the central nervous system by the larvae of the *Taenia solium*. Although its diagnosis in our country is exceptional, in recent years a notable increase in the number of cases diagnosed has been observed, due to the phenomenon of immigration from countries where the disease is endemic. The most frequent form of presentation of neurocysticercosis is seizures, followed by headache. To diagnose it we must evaluate the epidemiological data, the clinical record and confirm this through neuroimage and immunological studies. The treatment selected should be pharmacological, principally with albendazole, and surgery reserved for cases where the former fails. Hygienic measures and the treatment of patients with teniasis are of great importance.

Given the foreseeable increase of its incidence in our milieu, health professionals must understand this disease and include it at higher levels of the algorithms of differential diagnosis. It is important to consider the history of the patients, in this case the case was raised at the Health Center and found the existence of another patient who presented similar symptoms, who performed the CT scan showed several similar cystic lesions, which required stay at hospital and intravenous therapy.

## PS1.237

### **Interference of speculum lubrication in Papanicolaou test accuracy and pain relief - evidence based review**

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**Introduction:** in Portugal the cervical cancer is the fifth most frequent cancer in women. The Papanicolaou test is an effective and well-accepted screening tool against cervical cancer and an important reducer of mortality and morbidity of the disease. However, fear of pain during a vaginal examination may reduce the compliance for regular screening, therefore the physicians use lubricant on the speculum in an attempt to minimize the pain and discomfort of the patient.

**Aims:** To determine whether gel obscures cervical cytology and whether it decreases pain and discomfort for patients.

**Methods:** A search for articles using the MeSH terms speculum, lubricants, vaginal smears and pain published between January 2005 and July 2015 was conducted. The Strength of Recommendation Taxonomy of American Family Physician was used to assess the quality of studies, the levels of evidence and the strength of recommendations.

**Results:** of the 30 articles obtained were selected ten. Seven of them (four with evidence level 1 and 3 with evidence level 2) alleged that a small amount of lubricant does not affect the result of the cervical cytology. Two of these (evidence level 2) concluded that the lubricant does not decrease the pain and the discomfort of the patients during the exam. Another study claims that the pain relief only occurs in postmenopausal women. Only one study concluded that the pain relief occurs both in postmenopausal women and in women of childbearing age (evidence level 1). The remaining three articles (evidence level 2) affirm that the lubricant interferes with the cytology result.

**Conclusion:** The studies conclude that a small amount of water-based lubricant does not interfere with the quality of cervical cytology results, neither relieves the pain and discomfort during the exam (Streng of recommendation A).

## PS1.238

### Quality of diabetic patients follow-up in one Family Health Unit

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**Background & Aim:** Diabetes mellitus has a high prevalence in our country. The last national inquire revealed that 34.9% of the population, aged 20-79 years, has an abnormal glucidic metabolism. This disease is relevant, not only for the high prevalence, but also due to it's complications. They can be prevented if a good glycemic control is achieved. Although has been shown that this glycemic control must be individualized there isn't evidence for a glyated hemoglobin (HbA1c) target above 8%. The aim of this paper is to evaluate and improve the quality of diabetic patients follow-up in a Family Health Unit (FHU).

**Method:** Population: All patients with Diabetes Mellitus type 2 (DM2) who are followed in our FHU; Data source: electronic clinical process; 1st evaluation: 5/20/15; 2nd evaluation: 11/20/15; Intervention: June/2015, oral presentation of the 1st evaluation results at service meeting and discussion about aspects to improve; Quality criteria: HbA1c<8%; Data analisys: Excel®.

**Results:** On the 1st evaluation we had a total of 14151 patients in the FHU and 6.44% (N=911) had the diagnosis of DM2. From DM2 patients, 94,3% had HbA1c<8%. On the 2nd evaluation we had 14203 patients in our FHU. From this patients, 6,44% (N=915) had the diagnosis of DM2. From DM2 patients, 95,30% had HbA1c<8%.

**Conclusions:** The intervention was a presentation explaining why the HbA1c target should be for all patients without exception under 8%. The results show that in both evaluations the number of patients with DM 2 and HBA1c >8% is relatively small. This small value might explain the small variation verified between evaluations. In conclusion we can say that the intervention was important because there was a positive change in the quality criteria defined.

No conflict of interest declared.

## PS1.239

### **Contraception and pagophagia: a clinical case**

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**Background & Aim:** Pica refers to a perverted appetite for substances not fit as food. Pagophagia, or pica for ice, is particularly common and specific for iron-deficiency state. The aim of this paper is to discuss an atypical presentation of iron deficiency, which is a common disease.

**Method:** We collected the clinical history directly from the patient and the laboratory results from her clinical process.

**Results:** The case refers to a woman, 25 years old, Caucasian, working as over the counter employee. In April 2013, because she often forgot to take the contraceptive oral pill, she decided to insert an etonogestrel implant (EI). She was asymptomatic until February 2015 when she started having abnormal uterine bleeding (AUB). For that reason we prescribed mefenamic acid and estradiol for 5 days, which resolved the uterine bleeding. In July 2015, at a consultation, she states that she's been having pagophagia and also appetite for dirt. Suspecting of an iron deficiency anemia we requested a complete blood count and the serum ferritin concentration, that revealed the following results: hemoglobin (Hb) 9.5g/L, hematocrit (Htc) 31.9%, mean corpuscular volume (MCV) 70.9fL, mean cell hemoglobin (MCH) 21.1pg and ferritin 4.3ng/mL. We then initiated treatment with iron hydroxide 375mg daily. In September/2015, with the patient asymptomatic, a new analytic evaluation was performed that revealed the following results: Hb 12.3g/L, Htc 39.2%, MCV 74.5fL, MCH 23.4pg and ferritin 6.5ng/mL. At this point, since the patient no longer had AUB, the EI wasn't removed and the iron treatment was continued.

**Conclusions:** This case illustrates the importance of knowing the atypical but rather specific presentation of a fairly common disease. Another important aspect shown was the suspicion of an iron deficiency in the presence of an AUB.

No conflict of interest declared.

## **PS1.240**

### **Eagle syndrome: report of a clinical case**

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**Background:** The Eagle's syndrome is a rare cause of facial pain, first reported in 1937. More frequent in females, it's characterized by the elongation of the styloid apophysis and/or calcification of the stylohyoide ligament. Albeit with a prevalence of 4%, few patients have manifestations (0,16 %). It can arise at any age. Classically, occurs with intense facial pain, headache, glossitis, dysphagia, otalgia and temporomandibular joint pain, limiting the movements of the head. More rarely, stylo-carotid syndrome can occur, by compression of the carotid artery, as well as carotid-sinus syndrome, transient ischemic attack and even death.

Case description: A 63-year-old woman, Caucasian, farmer, from a nuclear family, resorts to the family doctor in December 2014, for odynophagia and burning sensation of the tongue, aggravated by mastication, with 2 years of duration. She had already extracted some teeth looking for pain relief, with no success. Recently, the condition worsened with the arising of facial pain and cervicalgia. Physical examination showed no alterations and analgesia was instituted. She returns in February 2015, now also with otalgia and tinnitus. A mass was palpable in the right tonsil loca and anti-inflammatory treatment was started. In April, by persistent complaints, it was requested a computed tomography (CT) and added pregabalin. CT scan showed bilateral elongated styloid apophysis and calcification of stylohyoide ligament. Patient was referred to the otorhinolaryngology consultation to deliberate surgical treatment.

**Conclusions:** Being an uncommon disease, it can easily be mistaken for other conditions. It's important to maintain an appropriate knowledge so that diagnosis won't be delayed, since symptoms can become debilitating. Physical examination as a first approach will guide the follow-up study, where CT has a key role. Treatment can be tried with anti-inflammatory drugs and some antiepileptic drugs. In cases of difficult-to-control pain, surgical resection of the apophysis proves to be effective.

## PS1.241

### **Ophthalmoplegic migraine oriented by primary care**

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**Background and Aim:** 31 year old female patient with a history of episodic migraine with visual aura accompanied by autonomic signs (redness, tearing and right eyelid edema) from the age of 22, suffering from crisis with a frequency of about 2-3 per month, especially in relation to menstruation. She came to our primary care clinic, because off a migraine headache without aura with 7 days of evolution and having no pain-free periods which it was refractory to standard treatment. When she came, the headache has gone, but she started with binocular double vision when she looked to the left.

**Method:** We proceed to perform the neurological examination of our patient, in which we are found a sixth cranial nerve paresis. The exploration of the rest of the cranial nerves were normal, and no other focal neurological signs were found. We decided to refer our patient to the emergency service. The patient improved clinically and hospital discharge occurred. Treatment consisted of corticosteroids and beta-blockers controlled by primary care.

**Results:** Our patient was attended in the emergency service and were admitted to the neurology department, where the patient is diagnosed of a ophthalmoplegic migraine (monoparesis of the VI craneal nerve) according to International Headache Society criteria.

**Conclusions:** An exhaustive neurological examination does not need many resources and gives us much information about the state of our patient directing a subsequent diagnosis. As primary care physicians, we are the first patient contact with the health system so it is our duty to be updated to guide correct and accurate assessment of the symptoms of our patients and act accordingly.

## PS1.242

### **Loss of consciousness and convulsions in young African man, the family doctor as active watcher of his patients**

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**Background and Objectives:** Male 45 years, native of Gambia, living in Spain during the last seven years, farmer in a greenhouse. Active smoker. No other significant medical history. While he was consulting with his primary care physician for a single episode of loss of consciousness, he starts to have tonic-clonic movements lasting a few minutes.

**Methods:** The primary care physician decided to send the patient to the emergency ward for further studies as soon as the episode of convulsions ended, with medical assisted ambulance.

**Results:** In the emergency room, the patient convulses again, with an episode of amnesia. He was admitted in internal medicine with suspected tropical disease, laboratory and radiological tests evidenced brain calcinosis compatible with Fahr's Syndrome and a brain lesion suggestive of a low-grade glioma. The patient evolved favorably with antiepileptic treatment, always remaining asymptomatic. It was decided to discharge the patient, keeping antiepileptic treatment and sending him to neurosurgery service which carried out regular checks on an outpatient basis, and to his primary care physician, who will jointly monitor him to underline possible changes in the evolution of his neurological diseases.

**Conclusions:** The primary care physician has the privilege of being able to control more strictly the evolution of his/her patients, playing a key role in the early detection of clinical changes that may need urgent intervention with the obvious benefits it would entail.

## PS1.243

### **Breast cancer does not forget men**

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**Background:** AND AIM 67 year old man who came to our office for having pain and a mass in the right breast that had been growing in the last year. The patient did not come earlier because he thought that breast cancer was something exclusively of females and he had no reason to be worried, but because off the growth of the tumor, he finally decided to consult.

**Method:** In the physical exploration of the breast, we found a solid tumor in the upper external quadrant of the left breast of about 2cm approximately and that had adhered to deep planes of the breast. We also found a serous secretion coming out of the left nipple. We request an urgent bilateral ultrasound and an appointment in the Breast Unit of our reference hospital.

**Results:** Ultrasonography showed a lesion of about 10x11mm, classified as a BIRADS 4 in the right breast and a mass under the left nipple of about 6x25, classified as a BIRADS 4 as well. They made an ultrasound guided biopsy with thick needle that proved to be a bilateral ductal infiltrating carcinoma. A bilateral mastectomy was performed and subsequently he received chemotherapy.

**Conclusions:** As Primary care Physicians, we have to be wary of breast cancer symptoms in general, and never forget that the male presentation of the disease also exists. This striking case, teaches us that although the prevalence and incidence of the breast cancer in males is much lower, we can't relax because breast cancer also occurs in men. A delayed diagnosis may worsen the actual prognosis off the disease.

## PS1.244

### Deep vein thrombosis detected in primary care

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Context: 46 year old woman with no relevant medical history or active medication except oral contraceptives, which came to our primary care clinic with symptoms of a few hours of itching, pain and edema in left lower limb.

**Methods:** Examining the patient: good overall condition, mild pale skin and mucous membranes, hemodynamically stable.

Lower limbs swollen of the entire left lower extremity, hard, pasted, positive Homans sign. Wells Score: 4. Having a high suspicion of DVT, we derive the patient to the emergency room for evaluation and complementary studies as may be lower limb doppler ultrasound and laboratory tests.

**Results:** In the emergency room the following examinations and additional tests were performed.

- analytical Values of note:
- D-dimer: negative (<500 mcg / L)
- Ekg: Sinus rhythm at 80 beats per minute, with no signs of ischemia or hypertrophy.
- Conventional X-ray chest film: unchanged.

Even with negative D Dimer, guided by a very suggestive physical examination (Wells Criteria > 3), it was decided to ask Ecocolor Doppler lower limb, which resulted in a deep vein thrombosis in the left popliteal vein. As oral contraceptive treatment was suspended and added 120 mg subcutaneous enoxaparin daily to meet in hematology.

**Conclusions:** It is important to consider that negative D dimer not always excludes deep venous thrombosis because what is really vital to any doctor, either in primary care or not, is the clinic patient.

## PS1.245

### **Vulvovaginal-Gingival Syndrome (VVGS): a case report**

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**Background & Aim:** Oral lichen planus (OLP) is a chronic, autoimmune disorder of inflammatory condition and unknown etiology. The prevalence of OLP in the world ranges from 0.5 to 2%. The disease affects mostly adult population between 30 and 70 years old. It is more common in women (60-70%). Although the most affected zone is the oral mucosa it may have a plurimucosal manifestation named VulvoVaginal-Gingival Syndrome, characterized by erosion and desquamation of the vulva, vagina and oral cavity. It is a rare manifestation with a prevalence around 1%. Patient diagnosed with VVGS of lichen planus. Over the years she develops tongue cancer and 10 years later vulvar cancer.

**Method:** Female, 89 years old, no toxic habits.

Medical history: hypothyroidism, hypertension and anxiety depressive disorder. When the subject was 78 years old she suffered from tongue lesions treated as oral thrush, with no improvement. Through biopsy an erosive lichen planus was diagnosed. Three years later she developed lingual carcinoma. Two years later, after surgery, she suffered from node recurrence. At present she is stable of the disease.

**Results:** in March 2015, after some episodes of dysuria treated as LUTS with no results, an examination of the genital zone was performed showing a vulvar mass. The result of the biopsy was a vulvar cancer on lichen sclerosus et atrophicus. Seven months after surgery she developed node recurrence, her health worsened and now she is in her terminal phase.

**Conclusions:** Prevalence of VVGS is very low, however, through the years lesions can develop, apart from the oral mucosa, in other mucosae (vulvovaginal). OLP has a malignant transformation potential. That is the reason why we insist on the importance of periodic follow-up of the lesions. Relation with other specialists, dermatologist and gynecologist, is essential due to the presence of the lesions in other mucosae.

## PS1.246

### Effectiveness of a multidisciplinary intervention to improve frailty parameters in the community-dwelling frail older people

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**Background & Aim:** Health, social and economic impacts of disability are increasing due to population ageing. Identifying frail population to perform effective preventive interventions that can reduce or delay the loss of autonomy constitutes a public health priority.

**Aim:** to evaluate the effectiveness of a multifactorial and multidisciplinary intervention to modify physical and cognitive status in frail people  $\geq 65$  years old.

**Method:** A randomized clinical trial with intervention group (IG) and control group (CG), conducted in eight Primary Care Centers in Barcelona, with 352 patients recruited, 176 in each group, measurements assessed by blind evaluators at baseline, 3-months after intervention and 18-months follow-up on-going. Inclusion criteria:  $\geq 65$  years old, Barber test  $\geq 1$ , Timed Get Up and Go Test (TGUGT) 10 to 30 seconds, no severe cognitive impairment.

Intervention: physical therapy, hyperproteic shakes, memory workshop, medication review, during 12 weeks. Measurements: Short Physical Performance Battery (SPPB, range 0-12), Hand Grip Strength (HGS), Limbs Power by Lineal Encoder (LE), neuropsychological evaluation and number of prescriptions in both groups.

**Results:** 75.3% women, mean age 77.3 (DE:7.2). Mean number prescriptions 7.2, mean TGUGT 14.8 seconds, mean SPPB 7.2, mean HGS 16,5 kg, mean LE 129,3 W. No differences between groups at baseline. After intervention, in IG prescriptions decreased (7.7 to 6.9) and SPPB, HGS and LE improved (7.1 to 8.1, 16.5 to 18.7 129.3 to 160.6),  $p < 0.001$ , the opposite observed in CG. Cognitive performance (Verbal Memory and Abstraction, Animal Naming Test, Evocation of Words) also improved in IG, and compared to CG ( $p < 0.001$ ), effect sizes  $> 0.9$  for all comparisons.

**Conclusions:** Multifactorial intervention on frail subjects had showed to be effective in strength and cognitive performance at short-term. Long-term benefits and adverse outcomes (falls, disability, hospitalization, institutionalization, death) are being analyzed: preliminary results encourage such interventions for scalability and collaboration with community organizations in elder-friendly cities.

## PS1.247

### **Impact of a training programme for professionals in primary care in the treatment of patients with excessive alcohol consumption**

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**Introduction:** In our country, hazardous drinking and harmful alcohol consumption is one of the first preventable causes of morbidity and mortality. Alcohol is the third most important risk factor for premature death and disease, ahead of hypercholesterolemia and overweight.

**Objectives:** 1. Reveal the significance of the impact of alcohol use in clinical practice. 2. Provide technical and necessary both for the early identification of persons with harmful alcohol dependence as those who suffer clinical skills. 3. Provide communication skills and specific clinical management for patients reduce their drinking and / or achieve abstinence. Design: quasi-experimental study, before and after, open, multicenter study. Site: Health centers in the province of Cordoba.

**Material and Method:** a training plan based on the recommendations of PAPPS be developed. Material: survey on knowledge, attitudes and practices are used in relation to addressing the drinker patient, performing a pre-post-intervention assessment using standardized patients videotapes.

Study subjects: AP Professional health centers in the province of Cordoba.

Selection Criteria: of inclusion: - Family doctors (specialists and residents) or nurses working in health centers.

Exclusion: Professionals who refuse to participate.

Sample size: at least 15 family physicians, 30 medical residents in family medicine 4th year and 15 nurses (n = 60) were recruited.

Statistical Plan: descriptive and inferential analysis, applying statistical tests for both independent and paired samples.

Intervention: Workshop 10 teaching hours, in groups of 15 students.

Before and after the workshop, learners will be videotaped in a query 'type' with a standardized, previously trained patient. The videotape will be evaluated following a check-list for the purpose.

Applicability: The results of this study will help us understand the impact that results from applying a training plan aimed at addressing alcohol for PC professionals, so help us implement and / or suggest to the health authorities and agencies involved action plans that try to raise awareness and the implementation of preventive interventions temperance professionals of PC.

## PS1.248

### **Nursing homes are important learning sites for work-based training for medical students**

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**Background & Aim:** Tomorrow's physicians have to deal with a rapidly growing ageing population. Despite being the largest institutional level in our health care system, Norwegian medical students have so far not been trained in nursing homes as part of their undergraduate training. In 2013 the University of Oslo in collaboration with Oslo municipality established a pilot program of two weeks clinical rotation in nursing homes for medical students in their last year of the study. The students were trained in clinical skills and procedures according to a written manual supervised by nursing home physicians. The aim of this study was to evaluate the training.

**Method:** Students who were in practice spring and autumn 2015 and their supervisors participated in focus group interviews. We had four groups, separate for students (n= 10) and supervisors (n=11).

**Results:** Both students and supervisors found the training very useful. The students reported improved skills in communication with elderly patients and their next of kin. They were engaged in multidisciplinary team work, particularly in medication review and in the end-of-life care. The possibility to work independently with access to supervision was viewed as crucial for a good learning process. The students were surprised about the large extent of advanced medical treatment in nursing homes. The supervisors experienced that the students gained valuable insight in nursing home practice. Finding time for supervision was, however, a challenge for the nursing home physicians.

**Conclusions:** An aging population calls for physicians skilled in treatment of elderly patients. Nursing homes are important learning sites for work-based training in clinical skills, communication and multidisciplinary teamwork.

## PS1.249

### Social support for over 65 year-old people

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**Aim:** To evaluate the social support of people over 65 in our health area by MOS-Medical Outcomes Study survey.

**Material and Methods:** Design: Transversal descriptive study. Location: Two urban Primary Care health centers. Participants: Out of the 2218 people over 65 seen by 6 GPs, a systematic random sample of 284 people was taken. Measurements: They completed the MOS questionnaire either at home or at the doctor's. Demographic and health data, number of cohabitants at home, and the availability of domestic support was collected.

**Results:** 14% of those over 65 live alone and 45% with another person. A 6.7% has no close relative or close friend and a 22% has a small social network (less than three people). 12% do not have enough social support. Within the diverse dimensions measured with the MOS survey, 13.4% has insufficient emotional/informational support, 15.5% insufficient tangible support, 18.3% insufficient positive social interaction and 11.3% insufficient affectionate support. Social support is worse in people with a small social network, in people over 85 and in women, being especially worse in the latest aforementioned in two dimensions: emotional support and positive social interaction.

**Conclusions:** We emphasize the importance of assessing the size of the social network and the perceived social support of the elderly in order to detect and intervene in situations of distress. For that purpose the MOS survey is a useful, reliable and easily applicable instrument. People with a small social network perceive less social support, so the health sector should propose and promote greater participation in community activities or programs that facilitate social relationship.

## **PS1.250**

### **Psychotropic drugs in primary care**

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**Aim:** To determine the frequency of visits for mental disease and profile of use of psychotropic drugs in our environment.

**Methodology:** Design: Descriptive study. Location: Two health centers in primary care. Participants: All patients attending 5 Primary Care consultations in 23 randomly selected days in a three month period. Measurements: The number of consultations for mental disease. Patients taking psychotropic drugs, reason for the indication, drug class, treatment duration, prescribing physician.

**Results:** 1595 consultations were attended, of which 93 (5.8%) consulted for mental disorders: 42% for anxiety, 31.2% for depression and 20.4% for insomnia. 368 people (23%) are being treated with psychotropic drugs; mean age 65, 71.4% women. Reason for prescription: insomnia 36%, 28.5% for depression, 24.5% for anxiety. 76.5% prescribed by the family doctor, psychiatrist 14%, 9.5% by another specialist. 20.4% of the patients seen in consultation for any reason taking benzodiazepines or hypnotics, antidepressants 11%, being 6.6% with SSRIs. 69% of the patients treated with psychotropic drugs take one psychotropic drug, 26% two and 4.3% three. 60% have taken antidepressants for more than two years. 76% have taken anxiolytics for more than a year now. in addition to the psychotropic drug, 47.7% is polymedicated with more than 5 drugs.

**Conclusions:** The use of psychotropic drugs in our environment is within the average collected in the literature. Insomnia is the most frequent reason for taking psychotropic drugs. Benzodiazepines are the most prescribed and used for a long time, exceeding the recommendations of clinical practice guidelines psychotropic drugs. Predominance of women in the use of psychoactive drugs.

## PS1.251

### **Benzodiazepines in primary care: do we prescribe them correctly?**

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**Objectives:** Analysis of the characteristics of Benzodiazepines (BZP): prescription reason, type and duration of treatment. Analyze if there´s a correct monitoring after prescribing a BZP.

**Methodology:** Design: Observational descriptive study with follow-up. Setting: We analyzed patients with one or more prescriptions of BZP or Hypnotics Z during 2014 at a Primary Care Centre in the province of Gipuzkoa (Basque Country). Patients: Inclusion criteria: being  $\geq 14$  years with one or more active prescriptions for BZP or hypnotics Z in Presbide (electronic prescription program). Variables: Information was collected on demographic characteristics, diagnosis and therapeutic data (BZP prescribed number, type, duration, level of care prescription, whether or not a follow-up treatment and its possible adverse effects).

**Results:** 248 patients were analyzed. Prevalence of benzodiazepines was 22.6%. Average age of patients was 58.7 (SD 16.8) years and 64% were women. Duration of the treatment: 22.3% of patients had a prescription for less than 11 weeks, 10.9% from 12 weeks to one year and most of them (66.8%) for more than one year. We observed a positive linear association between patient age and duration of treatment ( $p < 0.001$ ). Prescription reasons: 22,2% was because of anxiety; 17% for depression and 27% was unknown or wasn´t written on the patients's medical record. The most frequently prescribed BZD were: lorazepam (41,7%), diazepam (16,7%) and lormetazepam(15,2%). Only on 20% of the cases, there was clearly a monitoring of the prescription. There were identified 9 adverse reactions.

**Conclusions:** According to the data, we don´t the prescription of benzodiazepines is longer than the recommended on the guidelines. In a high percentage of the studied subjects, the prescription wasn´t clearly attached to the diagnosis, neither if there was a monitorization after prescribing. Because of this, we think that these prescriptions should be reviewed to avoid problems with them.

## PS1.252

### **How we treat patients of high cardiovascular risk in primary prevention and which their adherence to the treatment is**

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#### **Background and Aims:**

- To describe the pharmacological treatment in patients with diabetes mellitus type 2 associated with arterial hypertension and dislipemia in primary prevention.
- To evaluate the adherence to the treatment in these patients.
- To describe the profile of the high risk diabetic in our Primary Care.

#### **Method:**

- Descriptive cross-sectional study.
- Studied population: 103 patients between 35-74 years registered in IT system with diagnosis of diabetes mellitus type 2, arterial hypertension and dislipemia without isquematic cardiopathy, not ictus, not peripheral arteropathy.
- Variables of study: sex, age, body max index (BMI), smoking, pharmacological treatment, Morisky-Green test.

#### **Results:**

103 patients. 51.85% women. Average age 65.85 years.

Average BMI 30.95 Kg/m<sup>2</sup>. 44.5% BMI > 30.

16.5% smokers

Morisky-Green test: 51.45% non-adherent.

72.81% takes 6 or more drugs.

46.55 antiattaches or anticoagulated.

Antidiabetic treatment: 85.43% metformine, 33% insulin, 22.33%

IDPP-4, 13.59% sulfonylureas, 3.91% GLP-1, 7.76% others.

Antihypertensive treatment: 86.4% rennin-angiotensin-aldosteron system inhibitors ( 51.45% IECA inhibitors and 34.95% ARA-II), 56.31% diuretics, 23.3% beta blockers, 22:3% calcium antagonist, 5.82% others.

Hypolipidoemic therapy: 81.55% statins, 7.76% fibrates, 7.76% ezetimib.

#### **Conclusions:**

- The breach of the treatment degree is high in diabetic patients with arterial hypertension and dislipemia.
- High percentage of these patients should take six or more medicaments.
- These treatments are adapted to the recommendations.
- Patient profile in our environment: obese woman, non smoker, non adherent to the treatment, capture breaks six or more medicaments, among which these are included: SRAA-inhibitors, metformine, statins and not antiadded , not anticoagulated

We should analyze which factors that influence the lack of adherence to treatments and apply measures.

## PS1.253

### Tiredness yes, but why?

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**Background and Aim:** 38 years old woman with no allergies. Previous record of neither medical nor surgical precedent. No toxic habits. Two healthy pregnancies. for the previous six months the patient has been suffering tiredness and nausea, asthenia, and frequent forgets, expressing unease regarding those symptoms. The origin of these symptoms were never found. Lost of ten kilograms in the last two years, after the second pregnancy. She has regular menstruations. She is an active worker and for the last weeks she found it difficult to develop her usual tasks due to progressive tiredness. During the last two weeks she consulted in relation to liquid faeces in large amount without mucus or blood nor fever.

**Method:** Exploration: Good overall status, eupnoea in resting, tachycardic, Blood pressure 85/55 mmHg. Cutaneous hiperpigmentation, even in non exposed areas and oral mucose. Marked cutaneous dryness, more evident in palms and soles. Nor palpable masses neither abdominal pain. Nor cervical adenopathies neither goitre. Complementary tests: Blood test: sodium 127mmol/l, potassium 5,7 mmol/l. Thyroidal enzymes and ferric profile in the limits. Blood osmolarity 277, urine osmolarity 611, cortisol 0,4, ACTH >1250, antithyroglobuline antibodies 89. No other alterations. Adrenal CT: normal morphology but a decreased size of glands. Mantoux test negative. Differential diagnosis: Primary adrenal failure, neoplastic pathology, granulomatous adrenal disease.

**Results:** Primary adrenal failure. After the substitutive treatment (hydrocortisone and fludrocortisone), the digestive manifestations disappeared and the sodium levels get to normal range.

**Conclusions:** It would be necessary to think about what is hiding behind the main symptom in long term diseases and the initial diagnosis if the development is not the expected, as slow and progressive settlement of the pathology may get the patient to perceive as normal some aspects that are not and that would be helpful for diagnosis accomplishment.

## PS1.254

### Behind the weakness

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**Background:** 33 years old man with no allergies, renal insufficiency with nefrocalcinosis, congenital immunodeficiency (severe B white cellules deficit), type 1 Arnold-Chiari and ventricle peritoneal derivation, Stevens-Jhonsons syndrome and chronic lumbalgia. During the previous week the patient had been suffering from lumbar pain with increasing intensity despite the treatment. He started feeling weak and dizzy and even falling at home, so he had his derivation device checked and was transferred to his Hospital for observation. In the days that followed the weakness get worse, turning walk and stand up harder and showing urinary incontinence, disfgay and mental confusion.

**Method:** Physical exploration: Good overall status. Blood pressure 100/60 mmHg. Conscientious and orientated, no aphasia, facial asymmetry with right facial hypoesthesia, strength decreased in extremities, worsen in the more distal areas, with disproportional dissymmetry, dysestesia and abolished reflexes. Unstable sitting without ability to walk. No increased pressure at derivation device. Complementary tests: Blood test: urea 103, creatinin 2.11, C reactive protein 5.7, Leucocytes 12.320 (normal formula), IgA 183. Other determinations turned out normal. Cephalic raquideous liquid transparent with ADA 14, leucocytes 7, glucose 65, proteins 214, serological and immunological test negatives. Thorax abdominal CT and Cranial and cervical MR: no changes with previous. Electromiogram: proximal segments alterations in motor fibres conduction. Differential diagnosis: Infectious acute ventriculitis in derivation carrier, Meningeal infection, Derivation obstruction and hydrocefalia, inflammatory demyelinising acute pathology.

**Results:** Miller-Bickerstaff Syndrome. High range antibioterapy and endovenous immunoglobulins treatment were settled with a progressive remission of the motor symptoms and cognition. However a persistent facial paresis and slight sensibility alterations in feet get established.

**Conclusions:** Rare diseases diagnosis in chronic patients with multiple pathologies are often delayed due to confusing symptoms that could be related both to the acute and chronic process, leading to long term recoveries and sequels in patients.

## PS1.255

### Broken heart

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**Background and Aim:** 79 years old woman with acute three hours intense thoracic pain and tightness feeling with irradiation to the back and left shoulder associated with vegetative symptoms. Clinical features: obesity grade I, smoker of 15 boxes per year. Chronic treatment: Diazepam 5 mg. Physical exploration: Blood Pressure: 152/95 mmHg, Cardiac Rhythm 82 bpm, skin pallor and spontaneous crying with anxious behaviour. According to the patient she has been feeling low mood since the recent death of her husband.

**Method:** ECG: sinus rhythm 90 bpm with S-T segment elevation in V2, V3 and V4 with negative T deflection in V5 and V6. Thorax X-Ray: increased cardiac size. Analysis: raised troponine I (2,16-7,34-11,12 ng/ml) and Creatinkinase (227-487-436 U/L). Cardiac ultrasound: anterior, septal, medium-apical and posterior hypokinesia. Coronariography: significant injury in medium right coronary artery and proximal circumflex). Diagnostic ventriculography: medium-apical segments hypokinesia. At her arrival Captopril 50 mg is administrated lowering blood pressure level. Afterwards a conservative treatment is decided with further Electrocardiogram and cardiac ultrasound control. Differential Diagnostic: Acute coronary syndrome with S-T segment elevation. Tako-Tsubo Syndrome.

**Results:** Clinical judgement: Tako-Tsubo syndrome, stress induced cardiopathy, transitory apical dyskinesia

**Conclusions:** Tako-Tsubo syndrome is a not coronary reversible ventricular dysfunction disease that looks like an acute cardiac stroke with ST segment elevation. Characteristically present a left ventricle apex ballooning in the ventriculography with a normal coronaryography. Good prognosis with low rate or recurrence and complete recovery in four to eight weeks is the usual evolution, and unlike acute coronary, fibrinolysis should not be prescribed. We would finally like to emphasize the importance of clinical history in Primary Care to allow the diagnosis of recent appearance or under diagnosed diseases to improve its clinical management and the quality of life of ours patients.

## PS1.256

### Uncontrolled hypertension in the Primary Care Unit at Songklanagarind Hospital

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**Background:** Hypertension is a major health problem worldwide that emerged as a leading risk factor for cardiovascular diseases. Despite a dramatic improvement in hypertension therapy, uncontrolled hypertension is quite prevalent in many countries.

**Method:** We collected the latest systolic and diastolic blood pressures from 1311 hypertensive patients who visited the Primary Care Unit at Songklanagarind Hospital from October to December 2013. The primary outcome of this cross-sectional study was the prevalence of uncontrolled hypertension based on the Thai Guideline on the Treatment of Hypertension 2012, the 7th report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure (JNC7) and its recently released version, JNC8. The data of patients with controlled and uncontrolled hypertension **Results:** The prevalences of uncontrolled hypertension in the Primary Care Unit at Songklanagarind Hospital were 57.24%, 53.43% and 29.97%, based on the Thai guideline, JNC7 and JNC8, respectively. Throughout these three guidelines, the NCEP III for cardiovascular risk prediction level was the only variable with statistical differences that was consistently found between patients with uncontrolled and controlled hypertension. The distribution differences vary among the guidelines used concerning socio-demography, comorbidities and medication profiles in terms of their significance.

**Conclusion:** Given that the 2014 Thai health indicators and extensively-cited American leading health indicators suggested the proportion of patients with uncontrolled hypertension to be lower than 50 and 62.1 percent respectively, the prevalence of uncontrolled hypertension in our setting remained unsatisfied. Additionally, certain characteristics observed in patients whose blood pressure was uncontrolled might warrant further investigations in order to decipher underlying hurdles impeding successful control of hypertension.

**PS1.257****Sexually transmitted diseases in elderly patients: a challenge to family medicine***Nuno Santos, AC Guimarães, T Valle**USF Carandá, ACeS Cávado I, Braga, Portugal*

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Sexually transmitted diseases (STD's) have traditionally been associated with younger populations. However, family doctors are now facing a new reality, due to the ageing of the western populations and the improvements in healthcare delivery. As such, elderly patients may also live with STD's. This poses a new challenge for family medicine practice, since these diseases are often asymptomatic. In this communication, we aim at presenting a clinical case report regarding an 80 year-old recently widowed woman who was diagnosed with syphilis. The patient presented with symptoms of memory loss and muscle weakness in both legs, and denied any risky sexual behaviour. We conducted a study to exclude reversible causes of dementia, which included a clinical interview and blood tests. The follow-up showed a positive result for VDRL, and the patient was adequately treated with penicillin. This case was confirmed by Treponema-specific tests and was referred to the public health department for an epidemiological study. She was also referred to the local hospital, where she is being followed by Dermatology. This case report demonstrates the need for vigilance regarding elderly patients and is a call-to-action for family doctors. In our daily practice we should be aware that a healthy ageing often means an active sex life, which therefore may lead to risky sexual behaviours. It is the duty of family medicine practitioners to look for the warning signs and to inform their patients on how to live a healthy sexual life.

## PS1.258

### **Dermatological manifestations of polycystic ovary syndrome**

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**Background and Aim:** Polycystic Ovarian Syndrome (PCOS) is a common endocrine disorder in reproductive age, with a variable clinical presentation. Its etiology remains unknown, but there are genetic and environmental factors potentially involved.

This review aims to improve the overall approach of women with PCOS.

**Methods:** It was performed a research on Pubmed database of English and Portuguese publications (2004-2015), using the terms: “Polycystic Ovary Syndrome” and “Dermatological manifestations”.

**Results:** Hyperandrogenism occurs in 60-80% and presents with the following: hirsutism, characterized by terminal hair in androgen-dependent areas with a male distribution; acne particularly on the face, neck, breast region, shoulders and back; androgenetic alopecia, characterized by loss of hair in the central region of the scalp (frontal and parietal region). The combined hormonal contraception is the first-line treatment, being more effective with progestins with antiandrogenic activity. Antiandrogens (spironolactone, finasteride or cyproterone acetate) may be used, although only the latter is approved for PCOS. Other treatments are available: hair removal; topical treatments, isotretinoin and/or oral antibiotics for acne; topical minoxidil for alopecia.

Menstrual dysfunction with chronic oligo-anovulation is characteristic, with higher risk of infertility. Hormonal contraception or cyclic progestins are the first-line treatment for the control of the menstrual cycle. Metformin and weight loss can improve ovulation rate. Metabolic complications are common: obesity, insulin resistance, dyslipidemia and high blood pressure. Insulin resistance can be manifested by acanthosis nigricans, hyperpigmented and velvety thickened plaques and grooves, in neck and intertriginous areas. Lifestyle modifications are essential, particularly if obesity/overweight. Metformin and thiazolidinediones can be used.

**Conclusions:** It emphasizes the importance of early diagnosis and treatment, in order to prevent metabolic complications and the emotional impact associated with skin manifestations. The family doctor plays a key role in early diagnosis and managing the recommended multidisciplinary approach, including Dermatology, Obstetrics-Gynecology, Nutrition and Psychology.

## PS1.259

### The dual bronchodilation role in chronic obstructive pulmonary disease - evidence-based review

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**Background and Aim:** Chronic Obstructive Pulmonary Disease (COPD) reaches 14.2% of Portuguese population over 40 years old. It is characterized by persistent airflow obstruction, with chronic and progressive dyspnea, cough and sputum production, with impact on daily activities and quality of life. Exacerbations are an acute event characterized by a worsening of the patient's respiratory symptoms, associated with an accelerated decline in lung function and mortality increase. This review aims to determine, in the light of current evidence, the effectiveness of dual bronchodilation (anticholinergic and beta-agonist long-acting) in the treatment of COPD, compared with monotherapy, in dyspnea improvement, reduction of exacerbations and quality of life improvement.

**Methods:** It was performed a research of clinical guidelines, meta-analyses, systematic reviews and randomized clinical trials. MeSH terms were used "Pulmonary Disease, Chronic Obstructive", "Muscarinic Antagonists", "Receptors, Adrenergic, beta-2", "Drug Therapy, Combination" and "Bronchodilator Agents", published from January 2005 to October 2015, in English, French, Spanish and Portuguese.

**Results:** From 145 articles, five met review inclusion criteria. A clinical trial comparing dual bronchodilation (olodaterol plus tiotropium) with tiotropium monotherapy demonstrated significant improvement in lung function in the first group as well as in clinical status, but not enough to be considered clinically relevant (level of evidence 1). The four guidelines included demonstrated improvement in pulmonary function with dual bronchodilation, however, the clinical relevance of this benefit is not clear, such as in dyspnea, quality of life and exacerbations rate (strength of recommendation B to one of these, and A to the other three).

**Conclusions:** There is evidence of improvement in lung function with dual bronchodilation, but the clinical benefit is not clear (strength of recommendation A). It is necessary to perform more high quality studies, with homogeneous methodology and relevant samples, which support the evidence of patient-oriented outcomes improvement.

## PS1.260

### The evaluation of patient complaints in hospitals of Turkey

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**Background & Aim:** Patient-oriented care in health services is the basis in today's world. Health institutions have to regard patients' experiences to meet their expectations and needs. Patient complaint administration is a strategic facility which transports patients' experiences, needs and expectations to the institution. In this study, patient complaint administration systems of public hospitals in Turkey are examined and it is aimed to reveal the distribution of existing complaints regarding characteristic properties, types of hospitals, regional development levels, population and numbers of doctors.

**Materials & Methods:** Data obtained from patient rights units of 131 hospitals, from the ministerial web site and 184 phone line belonging to the Communication Center of Ministry of Health were gathered in the Branch Office for Patient Complaints between years 2004-2014. A total of 139,866 complaints were considered. Data were analysed by SPSS 20.0 programme for Windows. One way variance analysis and Analysis of Covariance (ANCOVA) were used to explore changes in complaints due to regional development levels.

**Results:** of the complaints, 77.697 were made by men and 62.169 by women, The age group over 41 complained the most. 33.7% of the complainants were university graduates, 1.3% were illiterates. The highest occupation group of complainants was the unclassified 'other' group, the second highest was civil servants group (19%). Polyclinic services (44.9%) followed by emergency and first aid services (16.1%) were mostly matter of complaint and the subjects were mainly 'general disbenefit from services'(45.2%) followed by 'lack of respect and comfort'(25.9%). Istanbul was the region with highest complaint rates and level of development was positively correlated with complaint numbers (<0,01).

**Conclusion:** The expectation for quality increases with the developing socioeconomic level and the positive criticism culture would positively affect the presentation of health services.

## PS1.261

### Quality-of-life assessment in patients with benign prostatic hyperplasia

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**Background & Aim:** Benign prostatic hyperplasia (BPH) is a common condition in men. The number of affected increases with age and is the most common in men over age 65. The impact of BPH on quality of life in patients is significant due to the disease symptoms (frequent urination, difficulty urinating, frequent urination at night, etc.). We aimed to assess the quality of life in patients with benign prostatic hyperplasia (BPH) in relation to patient age, duration of illness, the presence of comorbid illness and the number of prescribed medications.

**Methods:** This study was a prospective descriptive exploratory study conducted among patients of the six family medicine teams of the ECPM Polyclinic, Primary Health Centre Banja Luka. The study was carried out from January to May 2015. The International Prostate Symptom Score (IPSS) and questionnaire developed for this study were used. The study was carried out on the basis of analysis of the data extracted from patients' medical records and examinees-centred interviewing.

**Results:** The study included 110 male patients, age range 45 to 87 years. The vast majority of examinees reported moderate symptoms and partial satisfaction with the quality of life. BHP was usually diagnosed by urologist and most patients were treated with Alpha 1 receptor blockers. There was no significant correlation between patient age, duration of illness, the presence of comorbid illness and continued treatment and the quality of life in examinees, but a statistically significant correlation ( $p = 0.00$ ) between disease severity and quality of life in examinees was found.

**Conclusion:** The urinary symptoms associated with BHP significantly affect the quality of life in elderly patients. Adequate treatment and changing of basic lifestyle habits could be the proper approach directed towards reduction of symptoms, prevention of complications and improvement of the quality of life in patients with BPH.

## PS1.262

### Care and educational needs of general practitioners and primary care nurses to treat disabled patients

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**Introduction:** in the northern part of Belgium, 21 518 of 129 021 disabled patients (DP) are waiting to receive residential care (in 2013). Due to these waiting lists, Belgian government promotes a shift towards primary care. Consequently, this requires specific skills of primary care professionals (general practitioners (GPs), primary care nurses (PCN) and informal caregivers). The objective of this research is to detect care and educational needs of GPs and PCN to treat DP and their informal caregivers.

**Methods:** A questionnaire was constructed by a multidisciplinary team of primary care professionals (4 general practitioners and 20 PCN) in different consensus meetings. Disabilities are defined as a physical and/or intellectual impairment. These can be congenital or non-congenital. Sensory disabilities and impairments attributed to normal ageing process in the elderly are excluded. The questionnaire was sent electronically to participants. Analysis is performed using SPSS 22.0.

**Results:** Questionnaires were sent to 545 GPs and 1547 PCN, with response rates of 7% (n= 37) and 40% (n= 617). The average number of DP treated by GPs is 20 DP (+/- 26) and 5 DP (+/-6) for PCN. PCN most frequently deliver hygienically care and administering medication (+/-injections). GPs most frequently address vaccination status and a balanced diet. Educational needs are: dealing with behavioral problems (65% GPs; 84% PCN). 57% GPs prefer information about muscle diseases, 84% PCN about dealing with functional loss. GPs report inadequate knowledge about procedures for admission in residential care facilities, PCN declare lacking knowledge about responsibilities of Flemish Agency for persons with disabilities (VAPH) organizing care for DP.

**Conclusion:** There is a significant need for education of both GPs and PCN to care for DP. These results will be used to design educational programs improving the skills of GPs and PCN to ensure high quality care to DP.

## **PS1.263**

### **Medical practice in prisons: public health, ethical and legal aspects**

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It is increasingly being recognized that good prison health is good public health. Getting medical services to people who need them the most, especially to those who are the hardest to reach, is a continuing challenge as a high proportion of those with multiple health problems are incarcerated in prisons. The position of the prison doctor is a multitasking one. The physician is responsible for the health of the prisoners, deals with addicted inmates, psychiatric patients, hunger strikers and riots. In many occasions the doctor is also required to operate as a peacekeeping factor between the inmates and the warden, mainly in order to maintain the fragile relations existing in correctional facilities. The detection of serious communicable diseases such as HIV infection and tuberculosis, accompanied by adequate treatment and the introduction of harm reduction measures as necessary, contributes significantly to the health status of the communities from which the prisoners come and to which they return. Public health opportunities in correctional facilities, even in an era of more restricted healthcare, may result in a cost-effective way of controlling the prevalence of such illnesses. In addition, it is now known that substance dependence can satisfactorily be treated in prisons and imprisoned mental health patients may be helped. More recent developments include the real possibility that the time in custody can be used to promote healthier lifestyles, with better control over smoking and alcohol and perhaps over the use of violence in interpersonal relationships. Last but not least, the profound knowledge of such delicate issues as medical confidentiality, informed consent of the patient and the correct medical certification and documentation is absolutely necessary in the prison working environment.

## **PS1.264**

### **HIV-infected patients in Greece: retrospective epidemiological analysis (1984-2015) and documentation of access problems to the National Health System**

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The HIV epidemic challenges health systems worldwide despite our increased knowledge about the biology of the virus and the effectiveness of the available potent antiretroviral drugs. HIV/AIDS surveillance cumulative data reported in Greece from 1984 through 31.10.2015 include 15,109 incidents of HIV infection (82.7% men). 3,782 of those patients have developed AIDS and 7,700 are on antiretroviral therapy (ART). 2,562 deaths have been reported since 1984. From 1991 to 2010 there were about 4.6 new HIV infections per 100,000 population reported. In 2011 and 2012 there was a tremendous increase in the reporting rate of HIV that reached 8.6 and 10.3 new HIV infections per 100,000 of population respectively. This substantial upward shift was related to an emerging epidemic among Injecting Drug Users (IDUs) that accounted for up to 37.5% of total infections. The reporting rate of HIV infection, however, decreased in 2013 (7.8/100,000) and in 2014 (6.5/100,000) with male-to male sexual contact representing again the most frequently reported route of transmission (42.75%). The last decade access problems of vulnerable populations such as migrants, IDUs, sex workers, homeless people and people with no social security to the National Health System (NHS) have accumulated and intensified. In addition, the standard of quality of care has been undermined in specialized units for HIV/AIDS care and drug addiction treatment centers because of the increased workload and severe shortages of human resources. Primary health care is nearly absent -particularly in urban settings-, since community-based generalist care is far from being the cornerstone of the NHS. A posteriori, early diagnosis and a comprehensive package of care for HIV/AIDS patients belonging to socially excluded groups should be made available in order to control the disease, reduce the cost of ART and improve the quality of healthcare provided.

## PS1.265

### The health system as a complex adaptive system. Findings from literature review

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**Background & Aim:** Understanding complex adaptive systems and their behaviour has to become a required skill to solve the many problems facing GPs and the broader health system. As the Institute of Medicine pointed out: Health care is complex because of the great number of interconnections within and among small care systems... Health care systems are adaptive because unlike mechanical systems they are composed of individuals - patients and clinicians who have the capacity to learn and change as a result of experience. Their actions in delivering health care are not always predictable, and tend to change both their local and larger environment (Institute of Medicine, 2001: 63-64). What can general practice learn from the experiences of applying complex adaptive system thinking to clinical care and health system design? **Method:**

- Medline search using the keywords “(complex adaptive system)\*” and “(healthcare system)\*”, period to end of 2015
- Grey literature from reputable national and international agencies (e.g. WHO, King’s Fund, NIH)

**Results:** 39 papers met the inclusion criteria. The key findings include:

- A systems understanding views “health” and “health determinants” simultaneously as causes and outcomes
- Seamlessly integrated health systems have well-defined purpose, goals and values statements
- Meaningful changes to healthcare delivery require a whole system perspective
- Before implementing changes to service delivery one needs to carefully consider potential feedback that might contravene desired outcomes
- There are no of the shelf solutions that solve “the same problem” in different environments - every healthcare service is unique in its composition and behaviour.

**Conclusions:** Achieving more effective and efficient health care services and health systems requires leadership that constantly engages patients, health professionals, financiers and bureaucrats/politicians in the improvement process. History has proven that top-down improvement strategies are inconsistent with achieving these outcomes.

## PS1.266

### Stakeholders' perception of primary care in Switzerland: current state, anticipated development, and role of GPs

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**Background and Aim:** Health care costs in Switzerland are among the highest worldwide. Evidence suggests that strong primary care is beneficial in terms of health care costs. Recently, the Swiss electorate strongly strengthened primary care by approving an article of law in the Swiss Constitution. However, the implementation of the new provision leaves room for interpretation. In this context, the following questions arise: How do important stakeholders of the Swiss health care system (politicians, policy makers or insurances, proponents of medical associations, representatives of the universities) evaluate the current situation and its development? What is and might be the role of GPs?

**Method:** We conducted 13 semi-structured interviews with stakeholders in Switzerland (purposive sample). These interviews were recorded and transcribed verbatim. Results were analysed following the coding paradigm of Anselm Strauss' grounded theory (GT).

**Results:** Preliminary analyses show a consensus among stakeholders that health care costs need to be decreased; Stakeholders confirm the importance of GPs in the health care system and have very high expectancies in terms of GPs' skills, knowledge, and education. Yet, the future development of the system and the GPs' function and role in it varies highly. The expectations shift on a continuum between the "Nordic health care model" (tax-based funding, publicly owned and operated hospitals, universal access based on residency, and comprehensive coverage) on one end and the "US-Model" (based on managed health care i.e. cost reduction of providing health benefits and quality improvement of care through case management) at the other.

**Conclusions:** Thus, the stakeholders expect in future a cost reduction of care while maintaining a high quality education of GPs and high quality of services. How these goals should be accomplished varies considerably depending on professional affiliation and position of the stakeholder.

## **PS1.267**

### **Primary care intervention on systemic arterial hypertension and diabetes mellitus in elderly people**

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**Background and Aim:** The Systemic Arterial Hypertension and the Diabetes Mellitus can be associated to the elderly people, who are more susceptible to complications due to these diseases. The aim of this study is to describe an intervention organized by The Vila Velha University medical students with the Family Health Unity team, in order to elucidate the elderly on important subjects related to their chronic conditions.

**Method:** First of all, the students with the Health Community Agents performed home visits to invite the elderly people, to suggest themes for the meetings and to create professional-user bond. The educational activity was organized in two meetings, 40 and 57 participants, from 62 to 89 years old, respectively. The blood pressure and the capillary glycaemia post-prandial were checked. The themes discussed were: concepts, risk factors, prevention, chronic complications, and treatment adherence. Also, the students showed some foods, suggested some receipts and practices to be incorporated. At the end of each meeting, a dynamic intervention with body self-stretching techniques, breathing control and relaxing movements was performed, encouraging exercising.

**Results:** The participants felt better and motivated by the socialization with the students, the unity team and the other elderly people in their community. The exchange of experiences on a variety of subjects related to the diseases helped them to face them and their complications. 51 from the 97 participants (52,5%) showed values considered altered, and were conducted to the health team to assist them.

**Conclusion:** It was noticed that the participants had little information on the diseases, which reflects on the possible complications. Many participants showed values altered, demonstrating inefficacy on the follow-up of these patients. Therefore, interventions like the one described here, become pertinent in the Primary Health Care scenario, improving complications prevention and reducing public expenses.

## **PS1.268**

### **Hypertensive and diabetic patients' delivery of care: the importance of group activity in health promotion**

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**Background and Aim:** The Vila Velha University Medical students, with the public health unity professionals, promote preventive actions to the assisted population. The aim of this study is to describe a continuous hypertensive and diabetic's patients follow-up managed through the HiperDia group.

**Method:** It was organized three HiperDia Group meetings, once a month, in the Health Unity. The blood pressure and the post-prandial capillary glycaemia were checked. The medical handbooks were analyzed and the renewal of medical prescriptions was done. The first meeting, there were ten participants. It was performed a dynamic Myths and Truths questioning and an Educational Table showing the quantity of salt and sugar found in some common foods. The second meeting, Alcoholism and Smoking were discussed, as both cause and accelerator of the disease's natural course. There were five patients. At the last meeting, it was discussed gastric complications for this assisted group, with fourteen patients present.

**Results:** Both activities, the Myths and Truths questioning, and the educational table, were well received by the patients, who showed involvement and interest. In all meetings, the students answered several eventual questions about possible future complications of these chronic illnesses, enhancing the patient's comprehension of Hypertension and Diabetes ramifications in cardiovascular, renal, pulmonary and digestive systems. The health team, especially the doctor, described the activity as a great channel to show the patients the importance of health habits choice, done in a quick, easy way, catching the patients' attention.

**Conclusions:** Lifestyle changes are a challenge for health professionals on treating their patients. These educational activities show that working in a team facilitates achieving success on improving patients' quality of life. Achievement of adherence and support from the patients is critical in management of these diseases progression, with direct impact of the patient's well-being.

## **PS1.269**

### **Hansen's disease campaign: importance of early detection**

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**Background & Aim:** The Vila Velha University medical students attend an internship in the Public Health System, participating in all Family Health Unity activities, and collaborating to national campaigns organized by the Health Ministry. The aim of this study is to describe the medical students' participation in the Hansen's disease and Anthelmintic Administration National Campaign performed in a Public School, in Vila Velha, Brazil.

**Method:** The first day of the campaign, September 2nd 2015, the medical students went classroom by classroom promoting an educational activity, exposing information on Hansen's disease and anthelmintic administration, distributing the authorization forms and explaining about the campaign. On September 9th 2015, the medical students received the forms filled in by the children's parents, performed the physical exam on the students with disease suspicion, and administrated the anthelmintic to the students who parents authorized the administration.

**Results:** It was possible to inform the students and their teacher on Hansen's Disease and Anthelmintic administration, to demystify some taboos related to the disease, to administrate the medicament, to exam the students with suspect skin lesions, and to refer to the Health Unity the cases screened that needed the doctor's assistance. There were 395 students divided into 14 classrooms. All the students present received the anthelmintic. The students whose form was filled in by the parents indicating presence of skin lesion not related to birth were examined, only two cases were referred to the unity, and one case was confirmed as Hansen's Disease.

**Conclusions:** Early detection on Hansen's Disease is essential for disease control. National Health Campaigns are necessary and extremely important, especially with children from public schools, who have limit access to health information and medicaments.

## **PS1.270**

### **The challenge for family doctors to improve equality in health of patients with rare diseases**

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**Background & Aim:** A lot of general practitioners (GP) are less concerned about rare diseases. The aim of our presentation is to familiarize the GP with a specific approach to rare diseases, and to intervene in the inequality of care from which the patients with rare diseases suffer.

**Method:** in our international working group, the GP's lack of competence when it comes to rare diseases, was discovered with regrettable consequences to the concerned patients.

Therefore, we introduced a training program about rare diseases for the trainees, to evaluate the interest and difficulties with rare diseases, and the possibilities to improve our teaching.

A workshop at a GP congress allowed us to question a group of family doctors.

The later realization of the recommendations issued by these two events made it possible to obtain extremely encouraging results.

**Results:** The optimal approach to rare diseases by the GP requires the setting-up of an international platform with the collaboration of experienced specialists.

With the help of a distinguished specialist, it was possible for us :

- to create an international working group dedicated to the specific role of the GP when it comes to rare diseases
- to determine an efficient way of the GP's responsabilization concerning rare diseases by the way of adequate teaching
- to assure the incontournable place of family medicine in the care of patients with rare diseases and in the privileged relationship with the patient and their family.

**Conclusions:** in succession of our work we can affirm the decisive role of the GP in the fight for care quality and equality of patients with rare diseases.

## PS1.271

### The attitudes and behaviours of pregnant women against smoking

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**Background & Aim:** The aim of this study is to identify the cause of differences in attitudes and behaviors toward smoking between the smoker and non smoker pregnant women during pregnancy.

**Method:** A cross-sectional study was performed on 494 postpartum women who visited the primary care clinics in the city of Izmir. Mothers were assessed in the 6 months after delivery. A questionnaire consisting of questions about socio-demographic background and attitudes (obtained from focus groups) divided in four subscales, each assessing different aspects of women opinion; was applied. Each attitude answer consisted of a datapoint on a 1-5 likert scale (1=strongly disagree, 3=undecided, 5=strongly agree). Internal consistency were assessed using the Cronbach's alpha in 96 postpartum women. A value of  $\geq 0.70$  was considered as acceptable.

**Results:** The mean age was  $27.0 \pm 4.8$  years. A total of 15.2% of pregnant women continued smoking throughout their pregnancy, while 51.3% of women who were smokers before pregnancy quit smoking after they found out they were pregnant. Factors associated with smoking throughout pregnancy were; low educational attainment, mother's age above 30 who were smokers before pregnancy, married to a smoker, more frequent exposure to environmental tobacco ( $<0.05$ ). Pregnant smokers had significantly lower scores on most of the scale. On the whole; participants did not support pregnant smokers. Being married to a current smoker was the most important reason why pregnant women smoked. They belived they were unsuccessful to quit smoking because having low willingness but If they thought smoking during pregnancy can cause maternal and neonatal damage they quitted (median: 5; 4; 5; 5; 5 respectively).

**Conclusions:** A considerable number of pregnant women continued to smoke. They were not in agreement with non-smokers and quitters about the cause of smoking; while they had lower scores on different aspects of women opinions.

## PS1.272

### Antibiotic therapy in acute bronchitis

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**Background & Aim:** Acute bronchitis (AB) is one of the most common diseases that a family doctor has contact with. It's defined by the presence of cough lasting more than five days, but less than 3 weeks, which can be associated with sputum production. In some cases wheezing is also present. The vast majority of patients with this condition is treated with antibiotics. The aim of this paper is to determine if antibiotics should be used to treat AB.

**Method:** PubMed, Ovid and Cochrane database search using "acute bronchitis" and "bronchitis". We selected all the systematic reviews and meta-analysis published in the last 3 years. Of the total 94 studies we found we've selected, after reading the abstract, 12 papers. All the studies excluded were so because they didn't refer to the effectiveness of antibiotic treatment in AB.

**Results:** All the 12 studies show that antibiotic treatment has no effect on the cure rate of AB, because the vast majority of AB are caused by virus. Even when the etiology of AB is a bacteria, the wide spread of antibiotics for this disease have an unfavorable risk-benefit ratio. In those cases the agent involved is generally *Bordetella pertussis*, *Chlamydia pneumoniae* or *Mycoplasma pneumoniae*.

**Conclusions:** Based on the studies considered in this review, antibiotic treatment is not recommended to treat the majority of cases of AB. Antibiotics should be used only when we are certain that the etiology of the disease is a bacteria, but the tests to confirm it besides being expensive have also low sensitivity and specificity values. So in conclusion the treatment of AB should be symptomatic.

Disclosure: No conflict of interest declared.

## PS1.273

### A very special way of being

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**Background and Aim:** Asperger syndrome is considered to be an 'autism spectrum disorder' (ASD). ASD is characterized by a constellation of symptoms that includes deficits in reciprocal social interaction, social communication, and restricted and repetitive behavior. Atypical social development can be difficult to identify before four years of age. However, parental concerns can be present at the age of 30 months. The age of diagnosis may decline as the awareness of the autism spectrum grows. The aim of this paper is to discuss a case of late diagnose of ASD.

**Method:** We collected the clinical history direct from the patient and the clinical information from the clinical process.

**Results:** 23 year old, Caucasian, male patient with an irrelevant personal and family history. His mother presented to their Family Doctor (FD), in august/2015, concerned about her son behavior after observing a film about autism. She brought an extensive document written by herself about her son's life. She told us that her son has a different behavior since he was a kid: deficits in social interaction, communication, repetitive behavior and perseverative interests. Her concerns were always interpreted by her family has over-protectionism and has motivated marital conflicts too. After a refusal to come to an appointment with his FD, the patient was advised to consult a child psychiatrist and he accepted. He was diagnosed with Asperger syndrome/ASD and began multidisciplinary follow-up. One month later he came to an appointment with his FD. The comprehension and acceptance of this disease by the patient and his family, contributed to the end of conflicts.

**Conclusions:** This case highlights the importance of giving attention to the parents' concerns about their child. Despite being late, the diagnosis increased life's quality of the patient and his family.

No conflict of interest declared.

## PS1.274

### Do physical exercise during pregnancy increase the risk of miscarriage?

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**Background & Aim:** Pregnancy is an ideal time for lifestyle modifications, including increasing physical activity and choosing a more healthy diet. We, family doctors, are frequently asked about the effect of regular exercise during pregnancy. Thus, the aim of this review is to understand if there is an association between exercise and pregnancy loss.

**Method:** We conducted a PubMed search, with the terms “exercise”, “pregnancy” and “pregnancy loss”, for systematic reviews and meta-analysis, published in the last 20 years. We selected 11 articles after reading the papers/abstracts. All the other articles were excluded because the risk of miscarriage with the exercise wasn't evaluated.

**Results:** In the absence of medical or obstetrical complications, pregnant women should be encouraged to continue and maintain an active lifestyle during their pregnancies. Different studies found no relationship between exercise and pregnancy loss. Only the exercises with frequent crouching and increased intra-abdominal pressure demonstrated an increased risk of miscarriage. The American College of Obstetricians and Gynecologists and the Royal College of Obstetricians and Gynaecologists recommends: all pregnant women should participate in aerobic and strength-conditioning exercise as part of a healthy lifestyle during their pregnancy. Previously sedentary women, should begin exercise and increase it gradually. Pregnant women who habitually engage in vigorous-intensity aerobic activity can continue this physical activity under medical supervision. Some activities with high risk of trauma should be avoided.

**Conclusions:** Women with uncomplicated pregnancies should be encouraged to exercise as part of a healthy lifestyle during pregnancy. This period is an opportunity to start and maintain healthy changes in life. No conflict of interest declared.

## PS1.275

### Diagnosis of COPD in a family health unit

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**Background & Aim:** Chronic Obstructive Lung Disease (COPD) is a common respiratory disease characterized by a persistent airflow limitation, is a progressive and a major cause of morbidity and mortality. According to the “Global Initiative for Chronic Obstructive Lung Disease”(GOLD), a spirometry is required to make the diagnosis. A post-bronchodilator FEV1/FVC<0.70 confirms COPD. The aim of this paper is to evaluate and improve the quality of the COPD’s diagnosis in a Family Health Unit (FHU).

**Methods:** Type of study: Observational, descriptive, cross-sectional Population: all the COPD patients (coded with R95 by ICPC-2) Source of data: electronic clinical process from MedicineOne® Parameter Evaluated: FEV1/FVC<0.70 in the spirometry 1st evaluation: 30/10/2013 Intervention: Mars 2014 2nd evaluation: 30/10/2014 Statistic analysis: Microsoft Excel 2010®.

**Results:** On the first evaluation we obtained 166 patients classified has having COPD.From this patients, 19.28% had a requested spirometry, of which 48.9% confirmed COPD, 37.5% had a post-bronchodilator FEV1/FVC>0.70 and in 15.6% the result wasn’t registered.On the intervention, we presented this results and discuss improvement strategies.On the second evaluation, one year after, we obtained 85 patients classified has having COPD.From these, 68.2% had a requested spirometry, of which 58.6% confirmed COPD, 22.4% had a post-bronchodilator FEV1/FVC>0.70 and in 19.0% the result wasn’t registered.

**Conclusions:** We verified an improvement of the quality of COPD diagnosis. After our intervention there was an increase of use of spirometry to confirm COPD and consequently a decrease of patients classified has having COPD without confirmation. In conclusion, it’s important to sensitize the health care workers for the fact that the clinical symptoms are not enough to establish the diagnosis, being the spirometry the key step. No conflict of interest declared.

## PS1.276

### **The follow-up of diabetic patients in a family health unit**

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**Background & Aim:** Type 2 diabetes (DM2) is one of the major causes of early illness and death worldwide. It affects approximately 6,4% of the population, varying from 3,8 to 10,2% by region. Due to it's complications, mainly micro and macrovascular disease, it's essencial to follow this patients closely. The aim of this paper is to demonstrate how we follow DM2 patients in a Family Health Unit (FHU).

**Methods:** This is a clinical experience report, based on our daily routine in a FHU.

**Results:** In our FHU each family doctor (FD) is responsible roughly for 1900 patients. When a patient is diagnosed with DM2, he/she starts a follow-up plan with regular diabetes appointments. This consultations are free and are scheduled at least twice a year. First, the patient has a consultation with the nurse, where is availed the weight, height, BMI, waist circumference, blood pressure and glycemia. The examination of the diabetic foot is performed once a year and if some problem is identified, the patient can be referred for a specific consultation in the FHU. Following this consultation, the patient has another consultation with the FD where each year an analytic study is requested: complete blood count, fasting glucose, lipid profile, plasma creatinine concentration and microalbuminuria. Each 6 months, at least, the HbA1c value is determined. In these patients we also screen diabetic retinopathy once a year.

**Conclusions:** This multistep, multidisciplinary approach allowed us to achieve higher rates of disease controlled patients and mitigate some of the factors that contributed to the complications of DM2. With this follow up plan the patients are more aware of the consultations that they have and are also more motivated because they know they have someone to recur in case of doubts or difficulties.

No conflict of interest declared.

## **PS1.277**

### **Acute gastric volvulus**

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A 88 year old female was admitted to the emergency department with abdominal distention, vomiting, reduced urinary output and prostration for 3 days. Past medical history included type 2 diabetes, arterial hypertension, atrial fibrillation and hypothyroidism.

On observation, she was hypotensive, with diminished breath sounds on the left. The abdominal was distended, with decreased bowel sounds, painless. On chest and abdominal radiography, an intrathoracic stomach and marked colic distention were seen. Despite intensive resuscitation, the patient met criteria for hypovolemic shock. Multiple attempts at nasogastric tube placement failed.

Abdominal CT revealed gastric antrum and pylorus superior to fundus and proximal body, suggestive of mesenteroaxial gastric volvulus and rectal faecaloma with colic distension.

Due to the patient's hemodynamic status and comorbidities, a non surgical approach was taken, with an upper gastrointestinal endoscopy revealing nasogastric tube in the esophagus and a paraesophageal hernia, without ischemia of gastric mucosa. With the progression of the endoscope, the volvulus was successfully reduced, with normalization of the clinical status.

Gastric volvulus (GV) is rare, can be primary or secondary and paraesophageal hernia is the major cause of secondary volvulus. Mesenteroaxial volvulus is due to torsion around the transverse axis of the stomach. Acute GV presents with vomiting, abdominal pain and distention and is a surgical emergency to prevent vascular compromise. If surgical risk is high, an endoscopic reduction can be tried but does not treat the underlying pathology that predisposes to torsion of the stomach.

## PS1.278

### Fever - a diagnosis on the edge of the skin

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**Background & Aim:** A 58 year old female, who worked as a zootechnical technician on a dairy and cow breeding farm, with daily contact with cows, dogs and cats, presented to our outpatient clinic with four days of high fever (39-40°C), intense diffuse arthralgia and headache, which was poorly responsive to antipyretics and analgesic agents. On the day prior to observation, the patient mentioned the onset of a diffuse nonpruritic maculopapular rash, without sparing the palms, where it acquired purple discoloration. **Method:** Expositive, Poster, clinical case results. On examination, she was afebrile and hemodynamically stable. No lesions on the oral cavity were found. Meningeal signs were absent. Cardiac and respiratory examinations were normal. No palpable cervical lymphadenopathy or hepatosplenomegaly were identified. In addition to the above mentioned rash, a unique painless ulcerated papule with a red erythematous halo was seen on the right lower quadrant of her abdomen.

**Conclusions:** Given the epidemiology, the summer season and the clinical presentation, non-complicated Mediterranean spotted fever was assumed as the likely diagnosis, and the patient was treated with doxycycline and paracetamol as indicated, with adequate defeverescence. She was observed in the outpatient clinic three weeks later, with complete regression of her symptoms.

## PS1.279

### Review of hyperuricemia as new marker for metabolic syndrome

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**Background and Aim:** Many studies suggest that hyperuricemia may play a role in the development and pathogenesis of a number of metabolic, hemodynamic, and systemic pathologic diseases. In studies, therapies that lower uric acid (UA) may prevent or improve certain components of the metabolic syndrome. The aim of this work is to review the evidence about the pathophysiology of hyperuricaemia and its possible relationship to cardiovascular disease, metabolic syndrome, morbidity and mortality.

**Methods:** A search was conducted on MEDLINE, Guidelines Finder, The Cochrane Library, using the MeSH terms “hyperuricemia” and “uric acid”. The researches were limited to the articles published in the last 5 years in English, Spanish and Portuguese.

**Results:** From the research resulted 16 articles. They showed that there is an association between serum urate levels and hypertension, heart failure, the metabolic syndrome, obesity and cardiovascular events. UA is recognized as a marker of oxidative stress and its production includes enzyme xanthine oxidase which is involved in producing of radical-oxygen species (ROS). ROS have a significant role in the increased vascular oxidative stress and might be involved in atherogenesis. UA may inhibit endothelial function by inhibition of nitric oxide-function under conditions of oxidative stress. Down regulation of nitric oxide and induction of endothelial dysfunction might also be involved in pathogenesis of hypertension. Hyperuricemia represents a surrogate marker for high levels of damaging oxidative stress. The assessment of UA is widely available at low cost, which may be an advantage for widespread determination of this marker.

**Conclusions:** According to the most recent findings, hyperuricemia can be considered as a component of the metabolic syndrome. It's an independent risk factor for renal and cardiovascular morbidity and mortality rates. However, clinical practice still needs further clinical trials finalized to assess urate-lowering efficacy in the much more global context of disease prevention.

## **PS1.280**

### **Psoriasis - what is the role of family physician?**

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Psoriasis is a chronic inflammatory disease that affects approximately 2-3% of the worldwide population. It is now well accepted that it constitutes a systemic inflammatory disease that causes skin, ungel and arthritic lesions. Although its course is unpredictable, it usually evolves with exacerbations and lesion-free periods. The aim of this poster is to systematize the role of Family Physicians (FP) in these patients' approach. The first role of FP is to identify and diagnose this condition, mostly presented as well-defined erythematous scaly patches, papules and plaques that are often pruritic, typically localized in the extensor surface of the arms, legs, scalp and trunk. Once the diagnosis is suspected, the next step is to evaluate the extension of the skin disease as well as other organs lesions, namely in nails and joints. Those patients presenting with severe forms (more than 10% of body surface affected, involvement of hands, feet, face or genitals or extra-skin symptoms) should be referred to a specialist. However, most patients will have mild/moderate forms of the disease and, therefore, they may be treated by their FP using topical therapies (corticosteroids, vitamin D analogues and calcineurin inhibitors). It is also important to remember that psoriasis is a condition with a significant life-quality impact, causing problems at daily-life activities. So, FP should also evaluate this impact and minimize its consequences, explaining to the patients the natural course of the disease, alerting them about the triggers and risk factors and treating it properly, so that they can be lesion-free for as long as possible. Therefore, as FP are able to treat and monitorize most psoriatic patients, it is essential that they have clear notions not only about diagnosis, but also about treatment and extra-skin complications in order to help their patients reduce the disease's impact in their lives.

## **PS1.281**

### **How often do you ask... “Does your child snore?” - an approach proposal of children’s obstructive sleep apnea**

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Obstructive Sleep Apnea (OSA) is a breathing disorder during sleep that affects children and adolescents, but it is more frequent among 2-6 years old children. It is characterized by prolonged partial upper airway obstruction and/or intermittent complete obstruction that disrupts normal ventilation and sleep architecture. Without proper treatment, this condition is associated with significant morbidity such as cognitive impairment, behavior problems, growth failure and, less frequently, systemic and pulmonary hypertension.

The aim of this poster is to aware Family Physicians (FP) for this condition regarding its early diagnosis and to propose an easier and faster approach to these children.

According to American Academy of Pediatrics recommendations, the first step to diagnose OSA is by inquiring the child’s parents if he/she snores as part of routine health maintenance visits. If the answer is affirmative, FP should continue the investigation questioning about other typical nocturne and daytime symptoms, such as gasping, apnea episodes, frequent awakenings, headaches, poor attentiveness, irritability or other behavior problems. If OSA is suspected, the child should be referred to a sleep-specialist in order to obtain a polysomnogram. However, since the major cause of OSA in pediatric age is adenotonsillar hypertrophy and the first-line treatment in this case is to preform adenotonsillectomy, we propose that children over 2 years old, with OSA suspecting symptoms and adenotonsillar hypertrophy, without any other comorbidities, may be referred to otolaryngologist to be submitted to adenotonsillectomy, without previous evaluation by a sleep specialist. In conclusion, OSA is a common condition in childhood and may have severe consequences threatening the child’s normal physical, psychological and social development. Therefore, FP have an essential role in suspicion, diagnosis and early orientation of these children in order to relieve their symptoms, improve their quality of life and prevent sequelae.

## PS1.282

### **Bilateral renal infarction**

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**Background:** Renal infarction is typically caused by blood or cholesterol clots occluding the renal artery or branch vessels. Early diagnosis is difficult because the symptoms are nonspecific, prolonged, and resemble ischemia. Failure to diagnose early may reduce the potential benefits of correcting the renal artery occlusion.

**AIM:** This case report aims to alert the primary care physician about the importance of primary and secondary prevention as periodic chronic control of the cardiovascular risk factors.

**Method & Results:** A 65-years-old man, history of heavy smoking. Hipercholesterolemia with medical treatment (simvastatin); no Hypertension or Diabetes known. Previously healthy, he reported to consultation complaining of right lower-back pain, along with sweating, dizziness, and two bilious vomitus. His pain was not mitigated with oral and intravenous analgesic treatment, so he was derivated by his primary care physician to the hospital. Upon arrival at the emergency room, his abdominal examination revealed tenderness to palpation in the right lower quadrant, with no rebound, guarding, distention or organomegaly. Laboratory assessment revealed acute kidney injury with creatine of 138mmol/L and high LDH of 19.9U/L. ECG showed auricular flutter, and a ventricular frequency of 60. Contrast-enhanced CT showed partial thrombus of the branch of the right kidney artery with multiple patchy infarcts into the lower pole of left kidney. The patient was diagnosed with bilateral renal infarction with mild kidney injury and atrial flutter of unknown chronology. It was recommended conservative treatment with anticoagulation. Transesophageal echocardiogram showed thrombus in left atrial appendage of 9x9mm, so does not indicate ablation of flutter at that time.

**Conclusion:** There are several causes of renal infarction, including hyper coagulable state as atrial flutter, or renal artery injury. However, in some cases, the cause is not found. The optimal treatment for renal infarction is uncertain, but adequate anticoagulation in patients with medical history of atrial fibrillation or flutter, left ventricular thrombus, or a hyper coagulable state could prevent further damage.

### PS1.283

#### **Subnormal levels of urine albumin-creatinine ratio and glomerular filtration rate as risk factors of cardiovascular disease in patients with type 2 diabetes**

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Microalbuminuria is early symptom of diabetes nephropathy and endothelial dysfunction, that leads to angiopathy and cardiovascular disease (CVD). The aim of study - to determine the impact of subnormal levels of UACR and eGFR and other risk factors on the thickness of carotid intima-media (TCIM) and the cardiovascular system in patients with type 2 diabetes.

**Materials and Methods:** The 61 patients with type 2 diabetes and 40 patients without diabetes and diagnosed CVD participated in the study. The annual recommended monitoring of indicators, echocardiography, and carotid ultrasonography were conducted to the patients. Statistical analysis - Excel, SPSS.

The results showed correlation of subnormal levels UACR and eGFR with ejection fraction and TCIM in diabetes patients, which were significantly higher than indexes in patients without diabetes; it confirms their impact on the development of CVD regardless of the level of glycaemia. The both groups of patients had other risk factors such as high BMI, dislipidemia, high normal levels of CRP, uric acid, which also have a correlation with TCIM. The presence of atherosclerotic plaques with a slight TCIM confirmed the high importance of influence of estimated factors at the development and progression of CVD and angiopathy.

**Conclusion:** The importance of subnormal levels of UACR, eGFR in the development of CVD was proved, based on their correlation with ejection fraction, TCIM and the formation of atherosclerotic plaques. Subnormal levels of CRP, uric acid lead to cardio-vascular changes. The beginning active prevention measures at normal high levels of these indicators are needed in primary care.

## PS1.284

### Barriers in health care of patients with diabetes mellitus in Romania

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**Background & Aim:** In Romania as in Europe too, there is an estimated rising prevalence of diabetes mellitus (DM). Romanian Health Care System requires the diagnosis and therapy to be done by a DM specialist. The family physicians (GPs) can only repeat an established prescription for oral therapy and give new referrals every 6 months for Type 2 diabetes (GPs are not allowed to ask tests like HBA1c and to prescribe insulin). According to International Diabetes Federation (IDF), 7.99% of Romanians are diabetics. There are 386 registered DM specialists (and 334 residents) and 12.655 GPs. The aim is to identify weak points and to increase the quality of diabetic care.

**Methods:** We analyzed the data published in the 2014 National databases concerning DM health care and International reports and guidelines. We analyzed them according to Romanian regulations.

**Results:** The reported number of diabetics (20-79 years old) for 2014 differs according to different organizations from 1.530.250 (IDF) to 918.886 (registered in DM specialists practices) and 730.190 (in GPs practices). IDF estimates that almost 43.4% DM patients are not diagnosed. There were 65.179 hospitalized diabetics and 17.285 diabetics who died in 2014. In the rural area, inhabited by 46.1% of Romanians, 37% of GPs are practicing, but no DM specialists. The legislation allows just DM specialists to diagnose and establish a treatment plan for diabetics. **C**

**onclusions:** There are important differences of registered DM patients in different Romanian databases. Due to these differences, their health care delivery creates inequality. The access of all DM patients to health services is difficult so they are under-diagnosed and under-treated. As a direct consequence there is a high rate morbidity with high costs of care While trained FPs are able to diagnose and treat DM patients, a national consensus is required.

## PS1.285

### The relation between low ankle-brachial index and cardiovascular risk factors in Romania

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**Background & Aim:** It is known that risk factors for peripheral artery diseases (PAD) are similar with other atherosclerotic disease. Cardiovascular diseases (CVD) are at high risk in Romania. According to different international studies, PAD and low ankle-brachial index (ABI) are good predictors for cardiovascular events and mortality. We intend to determine if the prevalence of PAD in our study is comparable with other studies results; low ABI correlates with other CVD risk factors in prediction of CV events.

**Methods:** 800 patients from Family doctors (GPs) practices all over country were included in a cross-sectional study from November 2010 to February 2011. All patients over 18 years presenting at least one CV risk factor were asked to allow the measurement of ABI. ABI of  $< 0.9$  was considered as an indicator for PAD. The risk factors was identified from patient file and checked at first meeting with their FP. The results was analyzed in terms frequencies and correlations.

**Results:** 50% of patients included in study had ABI under 0.9. Average age was 60 years, and distribution by gender was balanced. Low ABI correlated with dyslipidaemia (84%), smoking (33%), coronary artery disease (35 %), cerebro-vascular diseases (19%) and PAD 17%). Out of patients founded with low ABI, 56% presented intermittent claudication, 43% decreased/absent pulse and 42% skin changes.

**Conclusions:** ABI is an affordable measurement for GPs in Romania. The higher prevalence of PAD found in our study compared to the literature could indicate a higher risk (50% compare with 29% in other studies). 75% of patients were diagnosed with symptomatic PAD (compared to 50% reported in the literature as it is) and yet only 17% of them were previously diagnosed with PAD. Should be of interest for future to check these findings in a more extended study.

## PS1.286

### **The challenge to be a female GP in Romania. Is burnout syndrome more frequent between female than male GP'S?**

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**Background & Aim:** In Romania there are 54956 registered medical doctors, 23.02% (12655) being GP's. Out of all Romanian GP's 77,14% (9762,07 ) are female and 30% (2928,62) of them are working in rural area. Most GP's work in the private system, in contract with NIH. GP's work only full time, there is no possibility of part time job. Besides specific factors of GP specialty (entrepreneurial, legal instability, work in rural areas, uninsured patients, the specific of specialty) female GP's are also wives, mothers, and housekeepers.

**Objectives:** To investigate the relationship between the presence of burnout syndrome at GP's in Romania and their gender and to find factors that influence this association.

**Methods:** In an observational study, data was collected on GP's Society site (available for all members), using "Maslach burnout inventory" - adapted. GP's completed the questionnaire based on their wish. Data was processed using SPSS. The relationship between gender and burnout syndrome was analyzed using bivariate and logistic regression analyses.

**Results:** The study is not finalized. We expect to get around 300 answers by the middle of February (both male and female GP's) and then to process them. We expect to find that local social condition and low professional satisfaction will influence the results.

**Conclusions:** Being a GP in Romania represents a challenge not only through specific specialty but through the management of the offices, which makes female GPs in Romania to be exposed to a series of additional risk factors.

## PS1.287

### **Cohesion and family adaptability of patients with diabetes mellitus type 2 controlled and uncontrolled**

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**Introduction and Objective:** to determine the difference in cohesion and family adaptability of patients with diabetes mellitus type 2 controlled and uncontrolled.

**Method:** Observational, transversal, descriptive and comparative. We included 147 patients with diabetes mellitus 2, who attended consultation in 33 family medicine unit, applied a metabolic control, and FACES III survey for family adaptability and cohesion.

**Results and Conclusions:** 71 out of control patients (48.29%) and 76 patients controlled (51.71%). Patients with metabolic control was found for family Cohesion: not related: 72.36%, Semi related: 15.78%, related: 6.66% and Aglutinada: 5.26%. for family adaptability: Rigid: 1.31%, structured: 9.21%, Flexible: 3.94% and chaotic 85.54%. for patients with metabolic disorder, was found: family Cohesion: not related: 85.93%, Semi related: 7.04%, related: 1.40% and Aglutinada: 5.63%. Family adaptability: rigid: 12.67%, structured: 1.40%, Flexible: 9.85% and chaotic 76.08%. for family Cohesion, was a chi square 5.39; 0.020 p. for family adaptability: Chi square 0.12; 0.726 p.

**Conclusions:** Families with diabetic patients tend to extreme cohesion, which is emphasized in the uncontrolled patients. Uncontrolled patients have rigid structures compared with the controlled. So the lack of cohesion and the rigidity of the family influence the lack of control of diabetes mellitus.

## PS1.288

### How can we improve the Hungarian Family physicians' and residents' attitude towards OSAS (Obstructive Sleep Apnea Syndrome)?

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**Background & Aim:** Family physicians often do not recognize OSAS in spite of its high prevalence and clinical significance. From the 1st April 2015 the screening of OSAS should be part of the regular medical checkup of the driving licence.

**Method:** 533 practicing family physicians (age: 54±9 years, mean ±SD, range: 27-79, 60% female) completed the validated OSAKA questionnaire. 50 residents of family medicine completed this questionnaire prior to and on completion of their course on sleep medicine. The respondent rate was 74%.

**Results:** The average score of female respondents was significantly higher compared to male respondents (12.5±2.4 vs. 11.4±3.1, p<0.001). The score decreased with respondents in higher BMI categories. Respondents exclusively treating adult patients reached higher values than those treating only children or a mixed aged population (12.6±2.7 vs. 11.1±2.9, p < 0.01). Physicians working in the capital and larger cities had the highest scores (12.5 vs. 10.4, p <0.01). Multivariate analysis revealed an inverse correlation between scores with family physicians' knowledge and responders' age and BMI value following adjustment for variables of the statistical model. A significant correlation between the number of specialties and physicians' knowledge was observed (regression coefficient: 1.28 (0.99-1.57, p < 0.001). The residents' average score 13.5±1.8 did not differ significantly from that of the practicing family physicians. Residents, however, exhibited lower self-confidence about recognition and treatment of OSAS. Their knowledge and scores increased significantly after education (15.4±1.9, p<0.001).

**Conclusion:** The knowledge of Hungarian GPs regarding the causes of OSAS is not sufficient. Practical education of physicians is important in order to diagnose patients with OSAS earlier and to treat them in accordance with the proper recommendations. Our result also demonstrated that the OSAKA questionnaire is suitable for the follow-up of the efficacy of the educational intervention in interdisciplinary sleep medicine.

## PS1.289

### Preterm delivery - what cause?

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**Background:** The follow-up of a low risk pregnancy is shared by a family doctor and an obstetrician.

Description: Female, 37 years old, married, unemployed, gesta III para I, with family background of heart disease.

Family evaluation: nuclear family of 4 persons, good relationship among them, phase II of Duvall Life Cycle; Middle-high class by Graffar Adapted Scale and highly functional family by SmilKstein Familiar Apgar.

She went to the emergency service on 15/9/2014 with moderate metrorragia and the sensation of high uterine tone after a walk, at 24 weeks+ 2 days. It was observed little fresh blood metrorragia, with clots. The ultrasound revealed probable total occlusive placenta. The patient stayed in hospital. She was treated with antibiotics, ferrum and dexamethasone protocol. The ultrasound suggested it was a probable aberrant cotilédone praevia. The 2nd quarter analyses were normal. At 27 weeks + 3 days started nifedipine as tocolytic. However, the day after she started labor, and had a normal but preterm delivery. Afterbirth was verified that the placenta had a probable aberrant cotilédone and it was sent to pathology.

The results only showed vascular changes (vellamentous insertion cord). The patient went home 2 days after delivery.

**Conclusion:** We intend to call the attention for health education of pregnant women, the teaching of red flags to go to the emergency service and the acessement of risk during pregnancy because preterm labor can occur even in cases without identified risk factors.

## PS1.290

### The paper of primary care on the war against cancer

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**Background:** More than 60% of all cancer deaths occur in the elderly and, overall, the new treatments have not improved the survival significantly. In addition to optimize the treatment in specialized services, our role in primary care is to act in the prevention and early detection of tumor process.

**Aim:** To determine the prevalence of cancer in the elderly population assigned to our Primary Care Center and the relationship with chronic diseases controlled from primary care.

**Methodology:** This is a descriptive, cross-sectional study. All patients over 60 years of age (N = 2523) were included and their medical records were reviewed to select cases with active cancer diagnosis. for data comparison chi square and Student test were used as necessary.

**Results:** A total of 269 cases (prevalence 10.6%) were observed. Tumors of the male genital tract, including prostate, were the most prevalent (24.5%), followed by abdominal tumors (17.8%), female genital tumors, including breast (13.4%), urinary (10.4 %), hematologic (4.8%), endocrine (4.5%), respiratory (4.1%), neck tumors (2.6%) and CNS (0.7%). The prevalence was higher in men (14.0% vs 7.7%,  $p < 0.001$ ), older age (7.4% in 60-69 years, 12.4% in 70-79 years and 15.8% in  $\geq 80$  years,  $p < 0.001$ ). Also was higher in patients with diabetes mellitus (12.9% vs 10.0%,  $p = 0.045$ ) or in COPD (15.0% vs 10.2%,  $p = 0.027$ ). No significant differences were detected for obesity, smoking and alcohol abuse.

**Conclusions:** In our population, the prevalence of cancer is in the lower range described for this age but has the same distribution pattern (more prevalent in old age and in men). Our results also point to an association with chronic diseases such as diabetes or COPD, although other risk factors already demonstrated, such as obesity, smoking or alcohol abuse not showed a significant association, probably due to lack of sample size. All authors declare no competing interests.

## PS1.291

### **Diabetic retinopathy screening in primary care: can we prevent blindness in our diabetic patients?**

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**Background and Aim:** The prevalence of diabetes mellitus in adults over 18 years is about 12% in Spain. Between 20 and 26% of diabetic patients have diabetic retinopathy. New technological developments allow diagnoses and monitoring of most of the patients on the primary care level, with the main aim of preventing blindness in the patients.

**Method:** We present the project carried out in a rural health centre in Valladolid, Spain, with 500 diabetic patients studied by a teleophthalmology system, in a coordinated way between primary care professionals and ophthalmology specialists. Patients who accept be included in the programme sign the informed consent document, and are examined using the retinograph, under pharmacological mydriasis. Professionals take photos of three fields of the fundus of the eye: central, superior and nasal, and the images are sent to the ophthalmologist, who diagnoses the presence or the absence of diabetic retinopathy and the conduct to follow. Patients without diabetic retinopathy or with mild degree of diabetic retinopathy are monitored in the health centre by primary care professionals, and patients with moderate or severe degrees are sent to the specialist. Besides, in the health centre, patients are questioned about the presence of other risk factors (hypertension, tobaccoism, hyperlipidemia) and about the time of evolution and their diabetes control degree, in order to study the interrelationship between the illness and these factors.

**Results:** Its will be presented at the Conference.

**Conclusions:** Based on the results obtained we can compare data of prevalence with other similar studies and implement measures to improve control degree of our patients in order to prevent cardiovascular complications. Besides, we will be avoiding unnecessary referrals of the patients to specialists and will be contributing to avoid the reference centres masification.

## **PS1.292**

### **The role of family doctors during the follow-up of hunger strikes of undocumented migrant workers in Belgium**

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Since the beginning of 21st century the living conditions of undocumented migrant workers in Belgium aggravated drastically. They started hunger striking because the Belgian government grants temporary residence papers to very sick people. Medical follow-up of these voluntary fasts was mandatory but a search of medical scientific literature yielded only information about the overall and specific tasks of health professionals during hunger strikes in custodial and hospital setting. The specific problems in non-custodial settings started with finding health professionals willing to voluntarily participate, work in difficult conditions and take care of vulnerable people whose health situation worsened daily. They had to work without an official health structure or funds because undocumented migrants only have a limited access to health care. The communication to the outside world was tough: emergency doctors didn't understand why people with hypoglycaemia had to be hospitalised, the media wondered when the first death would occur and doctors from government structures doubted the seriousness of the strike. In Brussels, from 2008 until the end of 2015, 1158 hunger strikers participated in 15 different hunger strikes, with participants coming from at least 18 countries. The hunger strikes lasted an average of 51 days. Medical records of the hunger strikers were analyzed and compared. After the last hunger strike in 2015 focus groups were organized to discuss with the health professionals what medical and ethical problems they encountered. This resulted in a deepening of the different CanMEDS roles of physicians, concluding that help from specialists was very welcome but that the overall competences of family doctors were the most needed to achieve this very demanding mission.

## PS1.293

### Importance of monitoring nonspecific symptoms for diagnosis in primary care

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**Background & Aim:** A case of a girl of 26 years where the longitudinal history, problem-oriented characteristic of primary care, was instrumental in the diagnosis of her pathology.

**Clinic Case:** 26 year old woman who complains of numbness in palmar region of third phalanx of first and second left hand finger several days of evolution, she related to the stress of being in testing period. In physical exploration light decrease in sensitivity was detected in described area and there is no clinical companion. It tells observation and back for help if no improvement or worsening. A month goes telling symptomatic improvement but she was treated in the emergency room with symptoms of vertigo, which disappears at 24 hours. Check back a month for persistence of occasional dizziness, then she is asked by numbness and she related that have appeared occasionally and also altering the flavors to eat. In that moment she was asymptomatic and normal neurological examination. With suspected Multiple Sclerosis clinic, it was decided to request RNM that confirms the diagnosis. We decided to admitted to hospital. There new symptoms appear: diplopia, nystagmus.. In current treatment with natalizumab, the patient progressed satisfactorily by the time without further outbreaks.

**Conclusions:** The medical history in primary care, allows a longitudinal follow-up, our problem-oriented history allows assess the presence of new symptoms and join with old ones. The nearby patient knowledge, detailed history and examination allow us to diagnostic approaches before using diagnostic imaging and analytical methods.

## PS1.294

### **Providing optimal care for frail elderly people: development of an integrated care pathway by GP's and community nurses.**

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**Background & Aim:** in the Netherlands, the number of frail elderly is growing fast. When care is needed, it is in most cases complex, and requires intensive cooperation between general practitioners, nurses and other professionals, and the elderly and their caregivers. Therefore, the Dutch College of General Practitioners and the Dutch professional organization of nurses V&VN made a nationwide agreement on co-operation and exchange of information in the care for frail elderly in the community.

**Method:** The agreement was formulated with a working group consisting of general practitioners, community nurses, a specialist in geriatric medicine, a social worker and a representative of the governing organization for associations of the elderly. After having formulated starting points, this working group made agreements on: patient-centered care, focus on quality of life, communication, coordination of care, case-finding, advanced care planning, shared-decision making and ways to stimulate a proactive attitude among caregivers.

**Results:** The agreement provides tools for professionals to improve their co-operation. In addition, the tools should enhance the overall experience of elderly people with the care they are receiving, supporting them in living independently and ultimately to improve their quality of life. We described conditions how to provide the best medical care aiming at the quality of life of the patient by the most appropriate caregiver, and how to assure continuity of care. Issues open to discussion are how to further improve the co-operation and exchange of information between health care providers, and what we can learn from other countries in order to improve the care for frail elderly living at home.

**Message:** Good care for frail elderly in the community needs good coordination and clear arrangements on tasks and responsibilities. A nationwide agreement between GP's and community nurses, made up in close cooperation with other relevant professionals, will contribute to the best possible care for this vulnerable group of people.

## PS1.295

### **The diabetic retinopathy menace. Changes observed in eight years follow up of a Spanish population**

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**Background & Aim:** More than 200 million patients have diabetes mellitus (DM), and it is predicted to rise by over 120% worldwide by 2025. The most important ocular complication is diabetic retinopathy [DR], a common cause of blindness in Europe. However, since 2011, we noticed important increases in the incidence of any-DR, especially in younger patients. This study aims to analyse these findings and evaluate the changes in DR risk factors through a population-based study of diabetes mellitus patients referred to our Health Care Areas (HCA).

**Method:** A prospective, Spanish population-based study of 16 HCA (247,174 inhabitants), was conducted from January 1st, 2007 to December 31st, 2014. 15,396 patients with DM were studied over an 8-year follow up period. Screening for DR was carried out with one 45° field retinography. If DR was suspected, further retinographies were taken, according to previous studies.

**Results:** The 8-year cumulative incidence [8-year-CI] of any-DR was 24.12%, a yearly mean value of  $8.37 \pm 2.19\%$  [8.09%-8.99%]; of advanced-DR 8-year-CI was 4.17%, a yearly mean value of  $0.46 \pm 0.22\%$  [0.03-0.78]. The DR incidence remained stable between 2007 [8.09%] and 2011 [8.11%]. Not occurring the same between 2012 (8.77%), 2013 (8.92%) and 2014 (8.99%), where we observe an increase. We noticed this especially in some age groups (for any-DR patients aged 41-50 and 51-60, and for advanced-DR patients aged 41-50, 51-60 and 61-70), which were related to an increase in HbA1c values or to patients treated with insulin.

**Conclusions:** The increase in incidence of DR over the last three years of our study is startling. We've found a very important increase in young people; most of which is related to bad metabolic control of the diabetes mellitus. If other studies done in different populations confirmed our results, we could expect more complications related to DR.

## PS1.296

### **Influenza vaccination coverage among elderly people - a quality study**

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**Background & Aim:** Seasonal Influenza vaccination is the primary method for preventing the influenza virus and its complications. The vaccine is strongly recommended for risk groups such as the elderly. The National Health Services are the predominant payment mechanism for the provision and administration of the vaccine. The World Health Assembly adopted a resolution to increase influenza vaccination coverage of all people at high risk and to attain coverage of 75% among the elderly by 2010. This aspiration was reaffirmed by the European Council. However, vaccination coverage for this group is low in many countries. In Portugal the National Health Directorate recommends the target of 60% vaccination coverage. The aim of this study is to evaluate and improve the quality of influenza vaccine coverage in people of 65 years or older from two primary health care facilities in the Central Region of Portugal.

**Method:** Qualitative study. Cross-sectional research evaluation of influenza vaccination from the season 2014/2015 in people of 65 years or older, from two Portuguese primary healthcare facilities. Type of intervention: educative. Another evaluation was undertaken in the season 2015/2016. The data collection was retrospective from Medicine One®, MIM@UF®, SINUS® programs and it was analysed using Microsoft Excel® 2010.

**Results:** In the season 2014/2015 the total number of people 65 years or older vaccinated against influenza was 2781 out of a total of 8275 people, which corresponds to influenza vaccine coverage of 34.5%. In the season 2015/2016, 3080 people 65 years or older were vaccinated and the influenza vaccine coverage was 36.9%.

**Conclusions:** The data obtained from the second evaluation shows that vaccine coverage was below the values recommended by the European Council and the Portuguese National Health Directorate. This suggests healthcare professionals should implement new and more effective strategies to educate the elderly.

## **PS1.297**

### **When memory is a family problem - the role of the family physician**

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**Background and Aim:** Dementia and cognitive impairment are growing health problems given the life expectancy increase in Europe. The Family Physician (FP) in Portugal not only participates in the management of patients with dementia but also provides support to the patient and the family, focusing on the care provider.

**Method:** The purpose of this case report is to highlight the role of the FP in the care of patients with dementia/cognitive impairment and their families.

**Results/Case Description:** We present a case report of a nuclear family composed of an 81 year-old man (Mr. B) and a 84 year-old woman (Mrs. A). Mr. B has Alzheimer's disease since 2013 and is regularly followed up and medicated by a neurologist. Mrs. A came to the health clinic to request the renewal of her husband's medication. She seemed confused, exhausted and did not know the name or type of her husband's chronic medication. The clinical record showed multiple prescriptions by different physicians and she admitted having lost most of them. Therefore, we reviewed and updated the medication list and contacted all the physicians involved. Mrs. A returned to the health unit a few months later where she presented with significant memory impairments and was referred to a neurologist and to the Portuguese Association of Alzheimer's Disease. We also recruited the help of the couple's sons.

**Conclusion:** Dementia is a challenging chronic disease that significantly impacts the patients and their families. The role of the FP includes the diagnosis, the care and support of the patients and their families, especially the main care provider, and the coordination of the multidisciplinary team involved. It is also of the utmost importance to use all the available resources in the community to enable the best care and improve our patient's quality of life.

## PS1.298

### **Adequacy of the urgencies and study of the most frequent reasons of consultation in emergencies of a primary care center**

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**Background and Aim:** To know the reasons of the patients to consult to an emergency service in a semirural primary care center. To establish the suitability of the urgent consultation. To describe the socio-demographic characteristics of patients, pathologies, prior and indicated therapies in consultation.

**Method:** Observational, cross-sectional, descriptive, pilot study. We studied 150 patients of 15 years of age or older, which consulted our Primary Care Emergencies, during 9 randomly selected evenings (from 3pm to 8pm) from November 15th to December 15th 2014, and who agreed to participate in the study.

Exclusion: telephone consultations and medical home care.

Variables: Age, sex, place of residence, working hours, assigned doctor, estimated time to get an appointment, programmable consultation, without an appointment, reason for consultation, personal who attended the patient, previous therapies, treatment, suitability.

**Results:** 57.33% women. Average 44,44 years old. Most frequent hours: 7pm to 8pm.

Working hours: mornings 32,67%, non-working hours 34,67%. Average delay time 5.29 days. Suitability 50,67%.

Reason for consulting Emergencies: prior appointment delay 19.33%, the patient always consults emergencies 14%.

Reason for consultation: pathologies 77.33%, others 22.77% (prescription 6%, bureaucratic 4.67%, health question 6%, and cures 4.67%).

Most common diseases: respiratory pathology 27.33%.

Treated by: nurse 35,33%, doctor 39,33%. Previous treatment: none 58,67%, drugs 36%. Administered: Intramuscular analgesic 11,33%.

Treatment at discharge: analgesics 36%, none 28%.

Referrals: 4%.

**Conclusions:** 23% consult Emergencies for non-medical issues. Half of the cases are not suited to the urgent demand. The most consulting population are women, from 30 to 40 years of age. The most frequent queries are due to respiratory pathology. 60% of the patients consulted directly to our service before making any prior therapeutic procedure. At discharge, the most prescribed treatments were analgesics and advices.

## **PS1.299**

### **European Medicines Agency (EMA) inspection: strategy to follow in clinical trials**

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**Background:** An inspection by regulatory authorities is always hard for researchers. It requires a lot of time and good preparation.

**Aim:** To instruct General Practitioners (GP) that participate in clinical drug trials how to prepare for an inspection.

**Methods and Results:** We recommend the following strategy: 1- To train researchers in the legal aspects of the country (in Spain a Royal Decree and the international Guide of Good Clinical Practices GGCP exist). 2- To review the protocol and the applied amendments. 3- To review and manage all documents of the study file. 4- To know the number of patients enrolled (randomized, screen failures, prematurely discontinued and retired...). 5- To know the adverse effects. 6-To know the protocol violations (errors in medication, mistakes related to temperature record, the timing of visits). 7- To provide certificates of all calibrated instruments used (balance, centrifuge, thermometers, blood pressure...). 8-To have GGCP certificates obtained in the two years prior to the beginning of the study. 9- To prepare a complete and updated Curriculum Vitae emphasizing the field of research (clinical trials and projects including those not paid for).10-To present his/her historical achievements and motivations. And 11- To teach researchers how to answer the inspectors' questions (precise, sure, confident, rigorous...).

**Conclusion:** An inspection of a clinical trial is useful for improving and preventing failures in the future.

## **PS1.300**

### **Informed consent form of a clinical trial in primary care: avoidable mistakes**

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**Background:** The Informed Consent Form (ICF) is one of the first documents of a clinical trial that inspectors of the European Medicines Agency (EMA) evaluate.

**Aim:** To teach how to explain and correctly fill in a ICF to avoid mistakes.

**Methods and Results:** The ICF is a written document that sponsor of the clinical trial writes to inform patients about all they need to know (the aim of the study, the voluntary participation and withdrawal, the number of patients who participate, the number of visits made to the center, the complementary tests, possible adverse effects, health insurance, drug characteristics,...).The research physician will inform the patients of all its content and gives it to read it carefully and then answer any questions that patients may have. Then both General practitioner and patient will sign it by mutual agreement, in his/her own handwriting twice. One copy is for the patient and the other is filled in the folder of the study. The ICF must also contain the telephone number of the medical team (with available 24 hours a day in case the patient has any problem). Inspectors check: missing data, mistakes in data (if patient names are filled in capital letters...),that the correct person has signed (some patients require the signature of a legal guardian)...

**Conclusions:** The ICF is very important in the study of a clinical trial document. The information that the patient receives must be clear and complete. The document is simple but can contain many spelling errors and missing data if it is not completed carefully and accurately to avoid mistakes. Been reviewed by a team member or monitor helps prevent the discovery of flaws in an inspection.

## **PS1.301**

### **Dealing with the crying patients**

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**Background & Aims:** At the end of this workshop the participants will be able to identify and to carry out, in real practice, the strategies in communication with crying patients.

**Methods: and Subjects:** The critical incident technique and small group work will be used as educational methods during the workshop. The participants are expected to be General Practitioners/Family Doctors or any other health care professionals working with the patients. The critical incident technique is based on the participant's experience; a description of the specific incident, patient's case that has happened to them in reality. They will be asked to describe their latest experience with a patient who suddenly started to cry within a consultation. Description will be in written form, and the following questions should be answered: Who was the patient? What were the reasons for crying? What did you exactly do (description of your behaviour, strategies) and why? How did you feel?

**Results:** The individual experience, patient's cases will be presented in small groups, followed by discussion. The expected results of the small group work are the formulation of the most appropriate strategies to communicate with the crying patients.

**Conclusion:** The workshop is a model of experiential learning and will allow the participants to share their experience in communicating with crying patients, as well as to share the emotions always present in such difficult consultation.

## **PS1.302**

### **Prevalence and factors associated with geriatric syndrome in elderly in Community Medical Unit 4 of Buriram Hospital**

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Advances in medicines have resulted in falling trend in mortality among the elderly population resulting in a longer life expectancy in elderly in Thailand. This study aimed to study prevalence and the factors associated with Geriatric syndrome in mid and late-elderly. This cross sectional descriptive and analytic study is chosen in the research for assesses prevalence and the factors with effected on Geriatric syndrome. The study was done among 144 mid and late-elderly in area of Community Medical Unit 4 of Buriram Hospital responsibility between 18 January - 3 February 2016. The instruments were Barthel ADL index, MMSE-Thai 2002, urinary incontinence scale, ACR clinical criteria for OA knee, Thai-FRAT and TGDS. The result found that prevalence of Geriatric syndrome is 79.86% (female 59.72 %): Urinary incontinence 50%, Falls 42.36%, Osteoarthritis 31.29%, Depression 16.62% and Dementia 13.19%. The factors associated Geriatric syndrome that we found the statistic significant in multivariate analysis are female about 4.86 times (OR adj. 4.86, 95%CI 1.07-22.66), elderly with chronic disease about 4.27 times (OR adj. 4.27, 95% CI 1.49-12.21) and obesity about 4.19 times (OR adj. 4.19, 95% CI 1.02-17.07) in Urinary incontinence. Aged 90 and older about 13.15 times compared with aged 70-80 (OR adj. 13.15, 95% CI 1.32 -130.18), female about 4.14 (OR adj. 4.14, 95% CI 1.61-10.63) and non-exercise elderly about 2.91 (OR adj. 2.91, 95% CI 1.35-6.24) in Falls. Normal BMI about 4.29 times compared with overweight (OR adj. 4.29, 95% 1.07-17.26) in Depression. Aged 90 and older about 10.74 times (OR adj. 10.74, 95% CI 1.18-97.83) and Diabetes about 9.55 times (OR adj. 9.55, 95% CI 2.40-38.06) in Dementia. Therefore this result leads to develop holistic health care system for elderly in community.

Key words: Geriatric syndrome, Osteoarthritis, Dementia, Depression, Falls, Urinary incontinence

### PS1.303

#### **Relationship between the health locus of control and treatment compliance among the T2DM patients**

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**Background/Aim:** DM is a chronic disease which affects millions among the World. in Today's condition we can't provide completely treatment in this disease. Reducing the shortterm and longterm complications is one of the major step of treatment. Treatment compliance of patients with T2DM is very important for this subject. The aim of this study is defining the effects of the health locus of control perception on treatment compliance of patients with T2DM.

**Method:** Participants were patients with T2DM at Endocrinology Clinics of Dokuz Eylul University Hospital. A questionnaire composed of demographic data, a form for metabolic follow which was prepared by researchers and the scale of "health locus of control". Data were analyzed by SPSS.15.

**Results:** of the 200 of participants, 121 were women. Range of ages were; 23-87 and %45 of participants had the age between 56-65. %36 of participants had T2DM diagnosis duration under 5 years. The participants who had higher educational level, had significantly higher internal locus of control ( $p=0,002$ ). Participants whose job was not about health or education, had significantly lower rates of internal locus of control ( $p=0,002$ ). Gender and marital status showed no relation with health locus of control. Patients with higher internal health locus of control, had also more responsible for their health, and they were also more active for healthy behaviors as physical exercise, healthy diet, compliance of medical treatment, regular physician visits ( $p<0,05$ ). We found that patients with higher chance locus of control, had poor healthy behaviors. Patients with higher perception of external health locus of control showed variability about their healthy behaviors.

**Conclusion:** This study reveals that patients with T2DM who have higher perception of internal locus of control, have higher compliance to treatment.

## **PS1.304**

### **Correction of imaginary illness will make healthcare more affordable**

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O sick person who is searching for a remedy for his ills! Illness is of two sorts. One sort is real, the other, imaginary. As for the real sort, the All-Wise and Glorious Healer has stored up in His mighty pharmacy of the earth a cure for every illness. It is licit to obtain medicines and use them as treatment, but one should know that their effect and the cure are from Almighty God. He gives the cure just as He provides the medicine. Following the recommendations of skilful and God-fearing doctors is an important medicine. for most illnesses arise from abuses, lack of abstinence, wastefulness, mistakes, dissipation, and lack of care. A religious doctor will certainly give advice and orders within the bounds of the lawful. He will forbid abuses and excesses, and give consolation. The sick person has confidence in his orders and consolation, and his illness lessens; it produces as easiness for him in place of distress. But when it comes to imaginary illness, the most effective medicine for it is to give it no importance. The more importance is given it, the more it grows and swells. If no importance is given it, it lessens and disperses. The more bees are upset the more they swarm around a person's head and if no attention is paid to them they disperse. If hypochondria continues a long time, it is transformed into reality. It is a bad illness for the nervous and those given to imaginings; such people make a mountain out of a molehill and their morale is destroyed. Especially if they encounter unkind 'half' doctors or unfair doctors, it further provokes their hypochondria. for the rich, they lose their wealth, or they lose their wits, or their health.' this topic will be explained and we will mention about how it makes the more affordable health care.

## PS1.305

### Towards general consensus on *Dientamoeba fragilis*: a case report

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**Background:** *Dientamoeba fragilis* is an anaerobic intestinal protozoan parasite. It is implicated as a cause of gastrointestinal symptoms characterized by diarrhea, vague abdominal pain. Worldwide prevalences of *D. fragilis* vary from 0.4% to 42% and whether the organism is commensal or pathogenic is still unclear. Treatment can be considered for patients with prolonged symptoms and provided no other causative agent has been found.

**Case Report:** A 13-year-old woman consults for a 2 years history of intermittent diarrhea with abdominal pain after travel to Spain. She had 3-4 episodes of diarrhea per year with normal health between them. In her medical history there were episodes of fever. She was in good general condition and the physical examination was normal. The blood analysis was normal and bacterial causes of infection were excluded by standard fecal culture. In fecal examinations, *D. fragilis* was detected by real-time polymerase chain reaction (PCR). With these findings, the patient was considered to be *D. fragilis* infected and received antimicrobial treatment with good clinical recovery.

**Conclusion:** Since the introduction of PCR, the detection of *D. fragilis* infection has increased. However its aetiological role in gastrointestinal disease is still debated. Furthermore, excluding another causative agent can make diagnosis and treatment more difficult. This case highlights a need for general consensus on the best management of *D. fragilis* in primary care.

**Disclosure:** No conflict of interest declared

## PS1.306

### **Patterns of complementary and alternative medicine use among Arab immigrants in Denmark: A qualitative study**

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**Introduction:** Migration patterns to Denmark in the last decades have led to increased ethnic diversity and associated challenges for the Danish healthcare system. Arab immigrants are the largest and fastest growing minority group in Denmark. This group may have different culture and health beliefs which may influence health-seeking behaviors and the decision to use complementary and alternative medicine. We aimed to explore patterns of complementary and alternative medicine use among Arab immigrants in order to increase insight into the hidden practices of this ethnic group. This insight will support general practitioners in provision of culturally competent care with likely impact on adherence to conventional medicine use.

**Material and Methods:** in this ethnographic study, 21 Arab immigrants in Copenhagen, Denmark were interviewed in Arabic. A saturation sample was recruited from mosques, a healthcare center for chronic diseases as well as snowballing. Semi-structured interviews were conducted, then audio taped and transcribed. Analysis was conducted according to Malterud's principles for systematic text condensation and guidelines for qualitative research.

**Results:** Different types of complementary and alternative medicine, referred as Arabic and Islamic medicine, used among this sample. These types included herbs and dietary practices; spiritual healing and cupping therapy. Arabic and Islamic medicine was mainly used for acute diseases; painful conditions; psychological problems and what emerged as conditions perceived to be related to possession, magic and the so-called "evil eye".

**Conclusion:** Arabic and Islamic medicine is a special form of complementary and alternative medicine, commonly used by Arab immigrants, which is deeply embedded in their cultural, religious and health beliefs. Healthcare providers should be familiar with diverse health practices and beliefs in order to provide culturally sensitive care and improve the quality of care delivered to ethnic minority patients.

## PS1.307

### Common intestinal parasites among children in Gharbya Governorate, Egypt.

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**Background and Aim:** Intestinal parasitic infections are widespread worldwide, especially among children. However, they can cause significant morbidity and mortality; parasitic infections are presented with nonspecific manifestations... The aim of this study is to determine the prevalence of intestinal parasitic infections among pre- and primary school children.

**Method:** A cross-sectional study was conducted among children up to 12 years, who visited 5 primary Health Centers at Gharbya governorate, Egypt from July 1 to December 31, 2015 that were chosen randomly. Socio demographic data and clinical presentations associated with intestinal parasitic infestations were collected using a semi structured questionnaire. A total of 239 fecal samples were examined microscopically to identify helminthes and/or protozoa by direct wet mount and formol-ether concentration techniques Data were analyzed using SPSS Statistics 20 software package.

**Results:** The mean age of the studied sample was  $6.4571 \pm 3.001$ . About one fourth (26.8%) of the studied sample showed a positive stool analysis for intestinal parasites. The most frequent parasites were: Entrobious vermicularis (37.5%), followed by Entamoeba histolytica (21.9%) and giardia (6.2 %), while the mixed infection represented 29.7%. Most of the infected children (60.7 %) were asymptomatic, while 24.3% presented with abdominal pain, 8.3% presented with diarrhea and 6.7% presented with Perianal itching.

**Conclusions:** Intestinal parasitic infections are common in this study and the Entrobious was the most frequent type. Screening and intervention programs are recommended.

Keywords Parasites, Intestinal, Infection, Children

## PS1.308

### Attitudes towards interprofessional collaboration among primary care physicians and nurses in Singapore

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**Background and Aim:** Interprofessional collaboration (IPC) has been shown to improve patient outcomes, cost efficiency and health professional satisfaction, and enhance healthy workplaces. We determined the attitudes of primary care physicians and nurses towards IPC and factors facilitating IPC using a cross-sectional study design in Singapore.

**Method:** A self-administered anonymous questionnaire, based on the Jefferson Scale of Attitudes toward Physician-Nurse Collaboration (JSAPNC) was distributed to primary healthcare physicians and nurses working in National Healthcare Group Polyclinics (N=455).

**Results:** We found that the mean JSAPNC score for physicians was poorer than nurses [50.39 (SD= 4.67) vs. 51.61 (SD= 4.19) respectively, (mean difference, MD=1.22, CI= 0.35 to 2.09, p=0.006)]. Nurses with advanced education had better mean JSAPNC score than nurses with basic education [52.28 (SD= 4.22) vs. 51.12 (SD= 4.11) respectively, (MD= 1.16, CI= 0.12 to 2.20, p= 0.029)]. Male participants had poorer mean JSAPNC score compared to females [50.27 (SD= 5.02) vs. 51.38 (SD= 4.22) respectively, (MD= 1.11, CI= 0.07 to 2.14, p=0.036)].

With regression analysis, only educational qualification among nurses was independently and positively associated with JSAPNC scores (p=0.018).

**Conclusions:** in conclusion, primary care nurses in Singapore had more positive attitudes towards IPC than physicians. Among nurses, those with advanced education had more positive attitudes than those with basic education. Greater emphasis on IPC education in training of physicians and nurses could help improve attitudes further.

### **PS1.309**

#### **Evaluation of the quality of the records of Barthel Index in a Portuguese primary healthcare unit**

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**Background & Aim:** Between 2001 and 2011 the elderly population in Portugal increased 19,4%, of which a high number are both physically and social dependent. Therefore it's essential that the GP pays attention to this vulnerable group among his patients, in order to identify those who might need special care and support. The aim of this study was to evaluate the quality of the registrations of Barthel Index, included in the Portuguese clinical data system, among patients aged 65 or more of one Primary Care Unit.

**Methods:** Dimension studied: Tehnical Scientific. Sample: Patients aged 65 or more from a Primary Care Unit. Data source: Clinical Records. Two evaluations were conducted, one in January 2015 and a second in January 2016. Evaluation: intern and retrospective. Criteria: Barthel Index registration in the last 3 years. Quality standards: Insufficient (<45%), Sufficient: (45-<65%), Good (65-<85) Very Good (85%). Intervention: Educational and structural.

**Results:** 1207 (60,3%) out of 2003 patients aged 65 or more had been evaluated with the Barthel Index in the first assessment, which was considered Sufficient according to the quality standard established by the Unit. By the next assessment one year after, 1321 (66,5%) out of 1988 patients had Barthel Index recorded, which corresponded to an improvement in the number of registrations and placed the results in the level of Good.

**Conclusions:** the results of the first evaluation showed the need to emphasize the importance of this parameter in the identification of functional status of the elderly in order to promote proper healthcare, namely home visits. After implementing some corrective mesasures, by the second evaluation a considerable increase in the number of records was found. The authors consider that these results could still be better and therefore a further evaluation will take place in July 2016.

## PS1.310

### Utilisation of dermatologicals in Croatian primary health care: longitudinal study, 2005 - 2014

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**Background & Aim:** Skin disorders are highly prevalent in primary care, including family practice, but rather neglected as research topic. The study aim was to investigate ten-year trends in the utilisation of dermatologicals in Croatia.

**Method:** Data were collected from the Annual reports of Croatian Agency for Medicinal Products and Medical Devices, 2005 - 2014; anatomical therapeutic chemical classification (ATC) is used and pharmaceutical utilization is expressed in Defined Daily Doses per 1000 inhabitants per day (DDD/TID) and financial spending in Croatian kunas. According to the ATC classification, dermatologicals belong to the group D, subgroups D01 - D11, and they are mostly (more than 95%) prescribed in primary care. They are mainly for topical use, DDD/TID cannot be given exactly, consumption is only presenting as financial spending.

**Results:** The financial spending on dermatologicals shares are between 2-3% of the total drug consumption in Croatia, with downward trend. Dermatologicals exhibits slightly increased trend. The largest share in utilisation (around 50%) is in sub-group D07 (corticosteroids), which since 2009 have a declining trend. It is followed by sub-group D01 (antifungal) with stable trend in about 20%, and the sub-group D08 (disinfectants and antiseptics) with about 15% share. The largest growing trend is observed in sub-group D03 (cicatrizants) and subgroup D04 (antiprurics); the spending for antiprurics increased in 1571.7%, and for cicatrizants in 1387.9%. The largest fluctuation is observed in the sub-group D10 (anti-acne drugs).

**Conclusions:** Utilisation of dermatologicals slightly increased, but in comparison to the total drug's utilisation, it shows decreasing trends. The most used are topical corticosteroids, and the most increasing trends are observed in the groups of cicatrizants and antiprurics. The quality of the utilisation of dermatologicals, should be, in the future, investigated within skin disorders morbidity trends.

## PS1.311

### Utilisation of corticosteroids in Croatian primary health care: longitudinal study, 2005-2015

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**Background & Aim:** Dermatitis, eczema and urticaria are the most frequent dermatological diagnoses in primary health care (PHC) in Croatia (around 53%), and topical corticosteroids are the most used drugs to treat. The aim of this study was to determine the structure of corticosteroid's utilisation in 10-year period.

**Method:** Data was collected from the Annual reports of Croatian Agency for Medical Products and Medical Devices, 2005 - 2014; anatomical therapeutic chemical classification (ATC) is used and pharmaceutical utilization is expressed in Defined Daily Doses per 1000 inhabitants per day (DDD/TID) and financial spending in Croatian kunas. According to the ATC classification, corticosteroids belong to the group D07, subgroups: D07AA-week (I), D07AB-moderately potent (II), D07AC-potent (III), D07AD-very potent (IV), D07B-in combination with antiseptics, D07C-in combination with antibiotics and D07X-in other combinations. They are mostly (more than 95%) prescribed in PHC and utilisation is expressed as financial spending; for topical use drugs, DDD/TID cannot be given exactly.

**Results:** In total utilisation of dermatologicals, the largest share belongs to the corticosteroids (around 50%); since 2009 with decreasing trend (by 15.5%). The plain corticosteroids (D07A) are the most used, with decreasing trend (50-40%), followed by the combination with antiseptics (D07B, increasing trend, 24-31%), and combination with antibiotics (D07C, increasing trend, 17-24%). Potent corticosteroids (D07AC) are the most used as plane (around 90%), as well as in combination with antiseptics (D07B, stable trend, around 90%) and with antibiotics (D07C, increasing 50-90%). Corticosteroids in other combination (D07X) are less used (6%), but mostly potent.

**Conclusions:** Utilisation of corticosteroids in Croatian PHC is in accordance to the morbidity, but with decreasing trend. The most utilised, plane or in different combinations, are the potent corticosteroids. These obtained results are the red flags for PHC doctors, prompting to think of changing their prescribing habits.

## **PS2.001**

### **Outcomes from a workshop on e-Health: smarter planet, smarter healthcare**

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**Background:** The term e-Health is relatively recent and broad. It encompasses implementation of information and communication technologies in the healthcare sector for clinical, research, educational, service delivery, and administrative purposes.

**Aims & Methods:** During the 2015 WONCA Europe (Istanbul) Conference, 72 Family Doctors participated in an e-Health workshop titled “Smarter Planet Smarter Healthcare, e-Health”. The aims were, 1) to outline e-Health resources and solutions that doctors have used, 2) to understand the advantages and disadvantages in e-Health, and 3) to build an e-Health experience-sharing platform. A series of presentations outlined resources available to help develop innovative e-Health applications; examples of the practical implementation of e-Health were also showcased through case studies. Participants subsequently self-divided into four groups, and in ‘round table’ sessions, four themes were discussed, namely Mobile Health, Medical Education, Social Media and Rural TeleMedicine. SWOT analysis formed the basis for discussion, and participants were invited to present personal insights into their own solutions from a multi-perspective viewpoint.

**Results:** Participants reflected on the impact of e-Health on their personal practice and the lives of their patients. A broad range of ideas were captured which illustrated potential e-Health solutions; the feasibility of these solutions was discussed in the context of available resources and current constraints. Participants were also provided with a powerful networking opportunity that facilitated knowledge sharing and the development of new interactions and partnerships.

**Conclusion:** Advantages of e-Health include the potential to reduce costs and improve quality of care, effectively track chronic patients, keeping doctors and patients updated, improve access to Primary Healthcare through online consultations, and drive innovative development in technology. Potential disadvantages and constraints of e-Health are lack of technological skills, an inability to empathise, overload of information and work, and possible issues around security. Additionally, there remains a lack of concrete evidence of its benefit.

## PS2.002

### Weight Gain: guilty or not?

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**Background:** Although the vast majority of weight gain can be attributed to behavioral features that affect diet and physical activity patterns, the history may suggest secondary causes that merit further evaluation. One of them, endogenous Cushing's syndrome, is a rare condition - prevalence is only 13 cases per 1 million people.

Case Report: 36-years-old caucasian married female. Without past medical history or chronic medication. She reported weight gain, about 8kg over the last two years, even with healthy diet and physical activity. Her physical examination revealed a body mass index of 25.9 (higher than that recorded 2 years ago: 23.4), rounded face and slight hirsutism. Laboratory investigation, with measurement of cortisol, documented endogenous hypercortisolism. Then, was requested renal and adrenal ultrasound, that showed: "...hypoechoogenicity in the left adrenal gland...". Renal computed tomography revealed: " a nodule in the left adrenal gland, with 2.5cm...".

The patient was evaluated by Endocrinology, at the local hospital, which confirmed the diagnosis of Cushing's Syndrome, due to Adrenal Adenoma, and underwent unilateral adrenalectomy.

**Conclusions:** Diagnosis of Cushing Syndrome can be very challenging, because patients can present with a wide spectrum of symptoms. Some of them are nonspecific findings and features seen commonly in the general population (like weight gain). So, a careful history and physical examination will be essential. And, this condition should be suspected, in some patients.

In such cases, Family Doctor play an important role and could be aware, even with subtle manifestations.

## **PS2.003**

### **A singular case of knee pain**

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The bone infarction is a calcified lesion that affects the bone marrow, is produced by bone ischemia and is it irreversible. It occurs in patients of advanced middle age. Insufficient blood supply causes necrosis of osteophyte, increased vascularity surrounding the focus of necrosis, necrotic bone resorption and subsequent re ossification. Etiology is idiopathic in many cases, but there are some predisposing factors for ischemia marrow and systemic disease that is associated with: trauma or hypercoagulable states (hemoglobinopathies, collagen, alcohol, fat embolism, pancreatitis, long steroid treatment, liver disease or kidney) that must be ruled out in these patients. The differential diagnosis is preferably raised with cartilage lesions forming as enchondroma Chondroblastoma as chondrosarcoma malignant lesion in early stages.

Clinical Case: 38 year old patient with a history of HIV, intravenous drug addict and smoker. After after accidental fall has mild pain slight edema without other injuies.

Exploration: Slight edema, joint effusion mild, full arch painful past degrees of flexion, pain is widespread with increased maximum flexion.

Differential diagnosis: Traumatic arthritis; Septic arthritis and tumor. Bone x-ray rare image condyles.

MRI: Intramedullary lesions heterogeneous morphology presented poly lobed peripheral halo localized intense hiccups compatible inner and outer femoral condyles with bone infarcts.

Treatment: Conservative anti-inflammatory and immobilization.

**Conclusions:** The bone infarction is a rare lesión that is often manifested as spontaneous pain at the site of injury, spontaneous fracture and apparent rapid growth in a partnership radiografíaa sarcoma is rare finally we say that the bone infarction is a benign lesion usually silent be a causal finding of plain radiography and the importance of addressing the primary care physician is to be able to do a careful differential diagnosis of the injury, risk factors associated rule and / or triggers systemic diseases and keep in mind that could occasionally degenerate into sarcoma.

## **PS2.004**

### **Epidermolysis bullosa or child butterfly**

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It is considered rare disease with low prevalence 2 / 1000,000 live births. It is an autosomal recessive / dominant inheritance by type. The problem is alteration of proteins epidermo-dermal junction that alters the binding of the epidermis to the dermis, resulting in blisters and skin and mucous erosions. There is a type associated with Crohn acquired and Lupus.

The clinic is characterized by fragile skin with blisters and ulcers that cause different alterations, from alopecia. nails, esophageal strictures that can alter nutrition with growth retardation, blindness and serious consequences depending on the type.

Diagnosis:

Clinical: blisters and sores on skin very fragile

Skin biopsy of affected skin and healthy skin

Search family involvement with consanguinity

The prognosis ranging from mild to severe, depending on the type of epidermolysis as the single or the slightest junctional which is the most serious. Infection is the most common complication and causing death.

The tto. is prevention with genetic counseling, care of the skin and prevent infections and complications.

Surgery of the aftermath of the flanges, scars, mergers fingers preventing the functionality of hand.

The tto rehabilitation is based on improving the arch joints from flanges and scars.

Clinical Case:

54 year old male patient suffering from dystrophic epidermolysis bullosa. He is the first in his family and his children (2 children) unaffected.

Clinic: MMss skin and lower limbs with great fragility that have caused scarring flanges hands with syndactyly of the fingers significantly deformed. (Pictures)

Esophageal stenosis esophageal dilations motivated to improve nutrition.

Currently the patient has limited extension fingers of both hands, fingers deformity, fist fully functional, but has important fragility of both hands and feet (photos)

Make an active life and work desk in school, always keeping minor trauma care to avoid abrasions/ulcerations.

## PS2.005

### Dementia vs. mental illness

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**Background and Aim:** A 85-year-old woman comes in our consultation room for a first visit in our primary care health centre. She comes in accompanied by her daughter. She has recently moved to her daughter's house because she has been having conflicts with her neighbours for the last four months. They have blamed her for being noisy, knocking at doors and walls at ungodly hours and shouting around. Her previous doctor has diagnosed her "senility with low degree cognitive impairment". **Method:** Patient's physical examination does not show any abnormalities. Patient is oriented in time, place and person. There are no focal neurological signs. She scores 28 points at the Minimental test (MEC-30) and 8 points at the Clock Drawing test. Nevertheless, despite having changed her address, she expresses persistent ideas of being « closely watched and disturbed by her neighbours ». Cranial -CT and biochemical analyses performed by her previous doctor do not show any abnormalities. Her daughter explains that her mother has always been a very suspicious person. Moreover, her daughter explains that patient's brothers and sisters, though not diagnosed of any psychiatric disorder, had also presented in the past this kind of behaviours.

**Results:** Considering patient's clinical picture, the information provided by her daughter and absence of remarkable findings in biochemical tests and physical and neurological examination, it is decided to refer the patient to the Mental Health Primary Care Unit, where she is finally diagnosed with schizophrenic disorder.

**Conclusions:** Considering patient's age, it is reasonable to consider diagnose of senil dementia as a first option. Nevertheless, provided patient's clinical manifestations (with presentation of at least two positive symptoms such as hallucinations and deliriums) and the information obtained from her relative -patient's personality and more than likely positive family history of psychiatric disorder-, we can not exclude from our differential diagnose other clinical entities, such as schizophrenic disorder. It is important to correctly and comprehensively evaluate clinical pictures presenting with behaviour disturbances, regardless of patient's age. As we have exposed in this case, not always the most prevalent disease needs to be the first diagnostic option.

## **PS2.006**

### **Who decides?**

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**Background and Aim:** A 14 year-old male patient, diagnosed in his childhood with dysplasia of the left mandibular condyle, has managed to live without important limitations until now thanks to splints and physiotherapy.

**Method:** The patient and his parents come to our Primary Care consultation. After check-up at maxillofacial surgery consultation, a surgical treatment has been proposed to restore temporo-mandibular joint function and aesthetic with prosthesis insertion. His parents are insisting him to accept the treatment, but the patient refuse the intervention.

**Results:** Are children personality rights subject to parental rights? The 9th article of the patient's autonomy basic Act 41/2002 establishes that the adult of legal age or the mature minor is the one who holds the right of voluntary and free informed consent once he or she has received the appropriate information, with the exception of three cases: public health risk, serious and immediate risk, and legally incompetent patient or a not mature minor under 16. Are we able nowadays to objectively asses if our patients are mature enough to assume this responsibility? According to the Psychological Development studies, the moral maturity is commonly reached between 13 and 15 years old. This is the essential fact that supports the "mature minor" doctrine.

**Conclusions:** A basic principle in the assistance to minors is that health workers should act as minor's defenders. The practice of defensive medicine and the ignorance of the applicable law make that final decisions concerning minor's treatment are chiefly left to parents, not allowing minors to make their own decisions and therefore apply their right of autonomy. It is our responsibility to know about the existing legislation and to make an effort to be updated in order to be able to preserve minor's rights.

## **PS2.007**

### **Child overweight and obesity among the population of patients of a Primary Care Unit - Do doctors recognize a problem?**

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Excessive weight in children is increasing, despite the educational and social measures being taken. Portugal has one of the worst scenarios in Europe, with studies reporting up to 33% overweight and 16% obese children. Given the problem is worst in socially deprived environments, like the one our Primary Care Unit is situated in, we decided to study our children. Our aim was to define the prevalence of overweight and obesity among the pediatric population of our unit and then determine if the situation had been formally identified as a problem. Children in our population were identified, excluding those under 2 years old. For each child body mass index percentile was analyzed according to age and gender, from the last clinical record. Children were then classified as “normal weight”, “overweight” and “obese”. For those who were above normal weight, clinical files were consulted in order to determine if the problem had been recorded on their problem list. During the analysis period our unit was following 2105 children from the ages of 2 to 17. Among these 26% were above normal weight range and 43.2% of these were obese. Considering clinical records, 28.8% of obese and 10.2% of overweight children had these problems identified on their files. These results are above the national and its causes need to be probed. The socio-economic struggle and population background account for the panorama. We also found our action as physicians to be deficient and part of the problem. Very few of these cases were labelled, which we believe is related to underdiagnosis. This is a problem in this community and for our unit. Self-sustaining solutions must be found inside the community to approach the problem. For our health unit a quality improvement intervention would be beneficial so we could intervene earlier, preventing consequences.

## **PS2.008**

### **Vitamin D and cardiovascular disease - an association? An evidence based review**

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**Background and Aim:** It has been reported that low circulating concentrations of vitamin D are associated with higher risks of cardiovascular disease (CVD) and all-cause mortality. In fact, the interest of vitamin D to human health seems to be growing, considering its pleiotropic effects besides the well-known consequences in bone metabolism. We aimed to perform an evidence based review about the association between serum vitamin D concentrations and cardiovascular disease and mortality.

**Method:** We searched Medline, Cochrane library, National guideline clearing house, NHS, Scielo and DARE database for review studies assessing the association of vitamin D or supplementation with CVD. From the 375 articles found after the first search by MeshTerms, were selected 11 complete papers to be analyzed. Data were extracted by two independent investigators and evaluated according to the SORT taxonomy.

**Results:** Nine of the eleven studies found an association between low serum concentration (25 - 50 depending on the study) of 25-hydroxyvitamin D (25(OH)D) and CVD and mortality. Vitamin D was associated with CVD in general and specifically with coronary arterial disease, stroke, hypertension, other cerebral vascular diseases and vascular mortality. It is to note that there is a large variability among methodologies used to evaluate vitamin D effects. It has also been difficult to identify the level that consistently defines deficiency. Furthermore, there isn't a population pattern according to which it is recommended to measure vitamin D. Although an association was found, the effects of vitamin D supplementation are weaker than expected and so it is not recommended to the general population. However there might be some advantages for elderly and institutionalized individuals.

**Conclusions:** Evidence from observational studies indicates a possible inverse association of circulating 25(OH)D and risk of CVD and mortality but there are still many inconsistencies. More randomized control trials are needed.

## PS2.009

### GP and erectile dysfunction: what is hiding beyond?

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**Background & Aim:** Erectile dysfunction (ED), as a most referred symptom by men, affects about 150 million of people in the world; it is associated with a reduction in quality of life and its prevalence increases with the age raising. The ED is a warning sign of silent vascular diseases, and its diagnosis could be the first valuation for prevention of misunderstood pathologies like diabetes, hypertension, atherosclerosis and metabolic syndrome. Aim of the study is to determinate, in the general medicine setting, the prevalence of ED in male patients, between 18 and 50 years, and to value comorbidities and therapies in place.

**Methods:** in a GP centre, during 3 months, randomized male patients (600), aged 18 to 50, were invited to complete an anonymous standardised questionnaire: the International Index of Erectile Function (15 items) [IIEF]. In the same time, GPs integrates patients' data in a specific schedule (e.g. BMI), presence of cardiovascular diseases (hypertension, diabetes, depression, dyslipidaemia), lifestyle (smoking, alcohol, diet habits, sport), and current medication. Then, both sets of questionnaires were analysed with chi-square test.

**Results:** of the 600 patients, 12% was affected by ED (IIEF-5 score < 21). In this population, 40% is obese, 60% does not practice physical activities [p=0,0006], 40% smokes [p=0.0010], 10% is affected by hypertension, 6% is diabetic, 30% has dyslipidaemia [p=0,0052], 32% has psychological disturbs [p=0,0001], 14% is already in treatment for cardiovascular diseases. In addition, the major difficulties are to keep the erection after the penetration (about 40%) and to have low personal satisfaction (35%).

**Conclusion:** These data suggest that erectile dysfunction and systemic vascular disease share many common risk factors. The early diagnosis of ED and the subsequent evaluation of underlying cardiovascular risk factors could become a powerful clinical tool to help patients. Family doctors should inquire about a patient's sexual function during a routine visit to recommend specific tests to discover underlined diseases.

## **PS2.010**

### **Communicating bad news in the context of primary health care**

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**Background and Aim:** Communicating bad news is an essential skill for any physician and not only for the specialists who deal with terminal diagnosis. In the Primary Health Care, the physicians must be able to manage the illness more than the disease, comprehending and respecting the social context to which the patients are connected as well as their fears about the newness. The aim of this study is to present situations in the context of Primary Care that require special abilities by the Family Physician to introduce a bad news.

**Method:** Literature review and observational and descriptive research, based on personal analyses and indirect notes about the communication of bad news presented into medical consultations, from November 2015 to January 2016, at Clínica da Família Victor Valla, at Manguinhos Community (Rio de Janeiro - Brazil).

**Results:** It was seen that many situations in the context of Primary Care - as the communication of an undesired pregnancy to a 15-year-old girl, or the introduction of early insulin therapy to a 32-year-old patient, or the information about a reactive screening test for HIV to a homeless 27-year-old woman - imply a particular sensitivity and altruism by the Family Physicians.

**Conclusions:** The patients that received such bad news they will need a longitudinal care management, once they may become so psychologically affected that it can perturb the adequate treatment. When it involves communities that are economically and socially vulnerable, the communication of bad news requires a special carefulness.

## PS2.011

### Acupuncture on allergic rhinitis - what is the evidence?

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**Background and Aim:** Allergic rhinitis is the most common cause of rhinitis and it's an extremely common condition, affecting approximately 20-30% of the European population. Although allergic rhinitis is not a life-threatening condition, complications can occur and the condition can significantly impair quality of life, which leads to a number of indirect costs. Current treatment options aim to alleviate symptoms and acupuncture is growing in popularity and so its demand by patients. This study aimed to determine, in the light of current evidence, the clinical benefit of acupuncture in the treatment of allergic rhinitis.

**Method:** Searches were conducted in the Pubmed, Cochrane Database of Systematic Reviews, National Guideline Clearinghouse. It was surveyed guidelines, systematic reviews (SR) and randomized controlled studies (RCTs), published in Portuguese and English, from January 2006 until December 2015, with the MeSH terms "Acupuncture therapy" and "Allergic rhinitis". It was used the "Strength of Recommendation Taxonomy" of the American Academy of Family to evaluate the evidence founded.

**Results:** After inclusion and exclusion criteria were applied, two SR and three RCTs were selected. The SR with meta-analysis suggested that acupuncture could be a safe and valid treatment option for allergic rhinitis patients. The trials compared acupuncture to a sham or inactive acupuncture treatment and to western medicine. Symptoms improvement in the active acupuncture group were often seen without any additional adverse events. However, the trials were generally of poor quality.

**Conclusions:** Although acupuncture treatment appears to be safe and is associated with low costs, there is currently insufficient evidence on the clinical effectiveness to support or refute its use in patients with allergic rhinitis. The strength of recommendation for acupuncture as an option treatment in allergic rhinitis is B (consistent but lower quality clinical trials).

## PS2.012

### Management of atrial fibrillation in family medicine practice

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**Background & Aim:** Atrial fibrillation (AF) is the most common cardiac arrhythmia. It impairs cardiac function and increases the risk of stroke which can be significantly reduced by anticoagulant therapy. The aims of this study were to estimate the prevalence of AF, CHADS2 score and prescribed therapy for AF in patients attended family care setting.

**Method:** This study was conducted in Family Medicine Teaching Center Tuzla and included 35/1492 patients with diagnosis of AF who were registered in family medicine team. We evaluated age, gender, duration and type of AF, CHADS2 score, comorbidity and prescribed medications (antiarrhythmic and anticoagulant drugs) for patients with AF.

**Results:** Prevalence of AF was 2.3% (35/1492). The most common type of AF was permanent (68.60), followed by persistent (36.6%) and paroxysmal (14.3%). There were 51.42% men and 48.58% women, without significant difference related to gender ( $p>0.05$ ). Prevalence of AF greatly increased with advancing age and majority of patients (54.28%) were  $\geq 75$  years. The mean duration of AF was  $4.21 \pm 7.46$  years. CHADS2 score 1 had 2.9% patients, CHADS2 score 2 had 37.1%, CHADS2 score 3 had 25.7%, CHADS2 score 3 had 11.42%, and CHADS2 score 5 had 2.9% patients. The most common prescribed antiarrhythmic drugs were beta-blockers (31.4%), amiodarone (28.6%), propafenone (17.1%) and verapamil (11.4%). Despite the fact that majority of patients had CHADS2 score  $\geq 2$  (77.14%), only 51.4% of patients used anticoagulant therapy. Overall 22.85% of patients had stroke, and only 75% of them used anticoagulant therapy. More than half of patients (62.5%) had stroke before AF was diagnosed.

**Conclusions:** Prevalence of AF was very high in family medicine settings. Systematic identification of patients with AF with high stroke-risk can help physicians to estimate stroke risk in patients and to prescribe oral anticoagulation to high-risk patients with AF in the primary care settings.

**PS2.013****Treatment of spondyloarthritis in Family medicine's ambulance**

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Summary: One of the most frequent patient's visiting it's family doctors are the joint' pains. The ordinary medical treatment by analgetics etc has not been followed by significant results. Searching for the course of the joint's pain, author developed it's own diagnostic approach and treatment using the simple appointment and basic laboratory urine and blood tests. In 81,6% the results presented asymptomatic urinary infection. As the infection has been treated, as the joint's pains diminished or has been significantly weaker. Conclusion is that there is certain immunology connection between hidden urinary infection and joint' pain which has to be discussed and investigated.

Key words: arthritis reactiva, urinary tract infection.

## PS2.014

### **Tobacco addiction in medical students and relationship with anxiety and depression**

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**Introduction:** Smoking is one of the well-known and preventable health problems in the world. It causes organic health problems and also leads many diseases with psychiatric effects. Tendency of smoking may increase with stress factors during the youth. Purpose of this study was to investigate the relationship between cigarette addiction state and anxiety depression at students of a medical school.

**Methods:** The 375 participants were attended to study. Sociodemographic data's and smoking status were asked. Fagerström Nicotine Addiction test was used for smokers and Hospital Anxiety and Depression Scale for all students. Data was analysed by using the SPSS for Windows 20.00 program. Student T, One Way Anova, Mann Withney-U, Pearson and Spearman correlation analysis, Kruskal-Wallis tests were used for statistical analysis.  $p < 0.05$  was accepted for statistical significance.

**Results:** The 375 student were participated to our study and 12% (45) of them were smoking. The mean of Fagerström addiction scale was found  $3.07 \pm 2.37$ . It was found that economical status was not effective for smoking. Male attendees anxiety score average was  $7.46 \pm 3.33$  and depression score average was  $7.14 \pm 2.45$ . Female attendees anxiety score average was  $7.92 \pm 3.37$  and depression score average was  $7.13 \pm 2.62$ . Smoker attendees anxiety score average was  $8.96 \pm 4.2$ , non-smoker attendee's anxiety score average was  $7.55 \pm 3.1$ . The mean of anxiety scores between smokers and nonsmokers was statistically significant ( $p = 0.03$ ). Second year and third year student's anxiety scores indicate meaningfully differences ( $p = 0.025$ ). Second year students' anxiety score was the highest among the other students.

**Conclusion:** Smoking can cause very important psychiatric problem like anxiety. We have observed that medical school students have high depression scores related to psychosocial stress and high anxiety. This study was local therefore it ncan not be generalized to the all medical school students. More sophisticated study is needed.

## **PS2.015**

### **Quality of child health surveillance in the 2nd year of life**

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**Background:** Preventive actions in child health are crucial for wellbeing promotion. The Portuguese National Healthcare Plan describes the best practices, ensuring effective healthcare and improving quality standards in primary care. In 2014, the proportion of children under 2 years of age with proper monitoring (performance indicator 60) in our Family Healthcare Unit (Unidade de Saúde Familiar - USF) was 74.55%, identifying improvement potential. In 2015, it was replaced by indicator 269 - "index of proper monitoring of child health in the 2nd year of life", which had a value of 0.858 in 2014.

**Aim:** Quality improvement in child health surveillance in the 2nd year of life, standardization of procedures and surveillance criteria.

**Method:** Technical and scientific quality was evaluated, using clinical records and the information systems SINUS, SClínico and MIM@UF. All children registered in the USF who were 2 years old in 2015, comprising the full period between 12 and 23 months of age, were included. Three internal evaluations were conducted, calculating indicator 269 for each individual physician and for global USF. An educational intervention was planned, applying the following corrective measures: presentation of variables under indicator 269, presentation of results and identification of children who didn't fulfill proper monitoring, allowing discussion and suggestions for improvement. Quality assessment cutoffs: excellent  $\geq 0,9438$ , very good  $\geq 0,858 < 0,9438$ , good  $\geq 0,7722 < 0,858$ , average  $\geq 0,6864 < 0,7722$ , insufficient  $< 0,6864$ .

**Results:** The value achieved in indicator 269 for the global USF was 0.82 in April and 0.91 in August and November. By the last evaluation, the minimum and maximum values attained by individual physicians were 0.56 and 1, respectively.

**Conclusions:** An improvement can be verified in the second evaluation: the global USF achieved very good results and three physicians achieved an excellent grade, which persisted until the last evaluation. The corrective measures implemented led to improvement for all the physicians and, ultimately, the USF as a whole.

## PS2.016

### Quaternary prevention - when to stop following the guidelines

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**Background & Aim:** Cardiovascular disease is the leading cause of death in economically developed countries. A rise in life expectancy leads to a high incidence of cardiovascular risks and events in the aging population.

Nowadays, patients have great expectations about health care and defensive health practices may be conducted, leading to excessive medical intervention and unnecessary costs.

**Method:** Description of a clinical case by consulting clinical records.

**Results:** This clinical case is about a 97 years old female patient who lives with her daughter and is moderately dependent in activities of daily living. Her past medical history includes hypertension and hypochromic microcytic anemia since 2008, osteoporosis, degenerative osteoarthritis and uveitis which caused her left eye blindness.

Health surveillance was always managed in domiciliary visits by her family doctor, due to functional limitations. She had consistently high blood pressure and didn't take furosemide because urinary side effects tremendously impaired her quality of life.

In October, the patient felt chest pain radiating down her left arm at rest and was diagnosed with non-ST-segment elevation acute coronary syndrome and atrial fibrillation. She was submitted to balloon angioplasty and was discharge from the hospital with the following prescription: clopidogrel 75 mg, apixaban 2,5 mg, bisoprolol 2,5 mg, ramipril 10 mg, spironolactone 12,5 mg, furosemide 40 mg and atorvastatin 10 mg.

**Conclusions:** This clinical case evidence the challenge between to intervene or to not intervene. When guidelines already defines less aggressive blood pressure targets for elderly people and when life expectancy was already exceed, the degree of intervention is questionable, and decisions should be cost-effective and be made taking into account in the best patient benefit.

## PS2.017

### Once again the brain can cause impotence

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**Background & Aim:** Primary Care and Endocrinology. Clinical case found at Primary Care visit. 47 year old male who complained about impotence and dysuria. The importance of this case highlights the value of a good differential diagnosis made by the General Practitioner with the materials of Primary Care assistance.

**Method:** On the first visit, the patient complained of dysuria and impotence. He showed neither signs of fever nor localized pain. Unsafe sexual relations. We ordered him laboratory tests with normal blood count, biochemistry and SPA, negative urine culture. We agreed that the best course of action was to wait for any evolution. Three months later the patient returned describing the same symptoms, so we decided to send him to the Urologist. They prescribed 160mg of Serenoa Repens per day, and another analytics and renal radiography that showed normal results except for high levels of prolactin in his blood. The test was repeated, finding even higher levels of prolactin in the blood. We sent the patient to the Endocrinologist.

**Results:** The Endocrinologist ordered a cerebral MRI where they found a pituitary macroadenoma. They prescribed 0.5mg of Cabergolina per day, and sent him to the Oftalmologist, another analytics and pituitary MRI were required. They found a pituitary macroadenoma with enlargement of the sella turcica. Optic quiasm: normal. Oftalmological evaluation: normal. They decide to review the patient in a year with new MRI. No surgical treatment was necessary. They continued treating the patient with Cabergolina showing good results until today.

**Conclusions:** The constant supervision of the General Practitioner was fundamental to monitor the symptoms of the patient, and recognize the need for a hormonal study on the second visit. This figure is important to follow the patient recovery and to guarantee a personal assistance as the general practitioner accompanies the patients throughout their lives.

## **PS2.018**

### **Burden of Dengue among the poor is more prevalent**

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**Introduction and Aim:** Globalization and travel has made our world a much smaller place. Diseases that were once endemic to only a specific region of the world are now in our hometown. Dengue is among the most important globally reemerging infectious diseases seen. Dengue has reemerged in United States in tropical and subtropical locales and threatens the temperate zones of the continental United States where mosquito vectors continue to expand in geographic range. Prevention is solely based on mosquito control. However, in the impoverished countries interventions are not as effective.

**Methods:** Information was gathered from existing recommendations from the CDC (Centers of Disease Control and Prevention) as well as other research sites were explored for their guidelines.

**Results:** Today about 2.5 billion people, or 40% of the world's population, live in areas where there is a risk of dengue transmission. Dengue is endemic in at least 100 countries in Asia, the Pacific, the Americas, Africa, and the Caribbean. Effective disease prevention programs must have several integrated components, including active laboratory-based surveillance, emergency response, and education of the medical community to ensure effective case management, community-based integrated mosquito control, and effective use of vaccines when they become available.

**Conclusions:** Prevention and control of dengue currently depends on controlling the mosquito vector where most transmission occurs. The most effective way to control the mosquitoes that transmit dengue is larval source reduction. The burden of dengue is high among poor people because they live in communities where mosquito vectors are not only abundant but also because interventions are less effective in disadvantaged populations. If we delve into the causes behind the screens we would be adequately providing more equitable and effective control strategies.

## PS2.019

### Clinical practice heterogeneity among general practitioners attending type 2 diabetes

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**Introduction:** Clinical practice variation is the different behaviour of practitioners faced to similar clinical conditions. In diabetes, the fulfillment of the goals of glycaemic control as measured by glycosylated hemoglobin (HbA1c), allows comparison among professionals in a similar working environment. **Objectives:** To determine the degree of clinical variability, based on glycemic control in type 2 diabetes (T2DM) followed-up in Primary Care and compare current data with a previous study conducted in 2008. **Methods:** T2DM population was analyzed in two Primary Care Centres (CS1 and CS2) with a population of 14,324 and 15,591 inhabitants, respectively, within the same health district. All patients with T2DM (n = 2,792) were included. Demographic variables, date and value of the last HbA1c and current treatment were retrieved from clinical records. Current data is compared with a previous similar analysis.

**Results:** The prevalence of T2DM in patients over 35 years was 8.80% and 9.95% respectively, being treated with insulin 25% of them. Last year HbA1c records were available in 74.10% and 85.20%. Regarding the degree of adequate glycaemic control (HbA1c <7%), 59.2% and 69% were the figures (p<0.05). If we assume that missing data from T2DM without A1c performed were poorly controlled, the figures change to 46% and 64% respectively (p<0.05). When metabolic control is analyzed on a individual basis, differences range between 89% and 15% for patients with A1c records and between 83.6% and 12.7% when the whole diabetes population was computed. Data from comparisons between year 2008 and 2015 will be showed. **Conclusions:** Despite an acceptable overall glycaemic control. When differences are analyzed on an individual basis, they are not acceptable. Our efforts must be focused to reduce the heterogeneity of clinical practice and investigate the underlying causes in order to improve health outcomes in people with diabetes.

## PS2.020

### Sepsis associated with difficulties of diagnostic and high costs

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**Background & Aim:** The difficulty to diagnose the initial stage of the disease is a major obstacle to the reduction of mortality from sepsis. The sepsis is also one of the most expensive diagnoses in the world. The aim of this study was to clarify treated septic patients clinical course and pharmaco economic analysis.

**Method:** The retrospective analysis of 72 patients` medical records was carried out. Data was described using means with standard deviations, median with interquartile range, Mann-Whitney U method, chi- square tests. Data statistical analysis was done in SPSS.

**Results:** At the prehospital stage, no patients received antibiotic therapy. Upon occurring at the hospital, procalcitonine rate for the dead patients was greater than to the survivors, it respectively was the 44.5ng/ml and 29.1ng/ml. The average duration of treatment at the sepsis clinic was 9.4 (SD 6.9) days. The respiratory system dysfunction was the most common 48 (66.3%), and renal dysfunction developed in 25 (34.4%) of cases. Artificial lung ventilation during hospitalization was received by 43 (59.7%) of patients, the renal replacement therapy 13 (18.1%) patients. for the dead patients, statistically reliably, (75%, p=0.01) the artificial lung ventilation was more required. Septic shock was observed to 34 (48.6%) of all the patients and 21 (60.0%) of them died. The most common final clinical diagnosis 34 (47.2%) was pneumonia. The total hospitalization costs by 72 patients are 160 236 euros. The average hospitalization costs per patient are 2226 (SD 1830) euros. We did not find a statistically significant connection between the cost of the survivors and the dead patients.

**Conclusion:** Our research data showed, that patients are hospitalized late and no patients received antibiotic therapy at the prehospital stage. The study results showed that patients with septic shock, the mortality rate exceeded half 60.0%.

## **PS2.021**

### **Monitoring risk of cardiovascular events, argument in increasing hypertensive patient compliance**

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**Background & Aim:** Finding arguments personalized advice to ensure their compliance monitoring therapeutic hypertensive patient is a permanent challenge in family medicine. Framingham score - account the risk of major cardiovascular events in the next 10 years provides a good visual landmark in understanding the dynamics of their own health problems.

**Method:** in May 2012, for the patient to "see" the size of their health problems was calculated score, from blood pressure and body mass index. Picture percentage of 26.4% compared with the normal 8.5% or 5.9% and the optimal vascular age over 85 years have made it more open to dialogue.

The patient was monitored clinically and paraclinically three months to six months, until March 2015. Framingham score was calculated every six months.

**Results:** The patient lost weight by 7% in six months, but it also has "seen" the abuse of salt, in December 2012 increased to 21.1% RCV (TA 150 / 110mmHg), then the average values of blood pressure were 135/85 mm Hg, pulse 70 bpm. Cholesterol reached 190mg / dl in December 2013. in March 2014 the patient is instructed in the technique of self-monitoring of blood pressure at home and at each visit presents diary.

Evolution is consistently favorable, with no complaints, although in June 2014 increase in weight again (quit exercise because you have to care for sick husband permanently), BMI 30.5 kg / m<sup>2</sup> in March 2015.

**Conclusions:** "View" health evolution increases the compliance of hypertension patients and ensure its optimal monitoring.

## **PS2.022**

### **New approach to obesity**

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**Background & Aim:** Obesity is an established cause of cardiometabolic disease and mortality worldwide with a prevalence that is of a true pandemic that respects no borders. It is strongly related to lifestyle, especially unhealthy eating habits, physical inactivity and psychosocial stress.

#### **Method:**

1. Presentation of European Association for the Study of Obesity (EASO) activities

Milan declaration,

- new Patient Council and its objectives,
- activities in ECO congress of the Patient Council, iv. 5 Key propositions to treat obesity for GP's, v.EASO experts round table in EU Parliament in Brussels in January 2016
- new connected technologies to treat or prevent obesity in children and adolescents (Pathmate)
- new approaches to decrease fat mass in obese patients

2. Presentation of national programs

3. Discussion

4. Conclusion

**Results:** The new approach to obesity associated problems will be presented, along with some examples of national preventive programs underway in EUROPREV member countries.

**Conclusions:** The beneficial effects of reduction of BMI and fat mass will be discussed and participants' experiences will be summarised. The potential for prevention based on healthy lifestyles, and appropriate risk factor management is well established.

## PS2.023

### **Sixty-six year old woman with causal diagnosis of pulmonary nodule on preventive clinical practice in primary care**

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**Background and Aim:** Patient with a history of allergy to vitamin-B; essential-HTA (2007) Controlled-treated with Valsartan-160mg+Hydrochlorothiazide-12.5mg/day; Sliding hiatal hernia and Helicobacter pylori Duodenal Ulcus (eradicated) with recurrent upper gastrointestinal bleeding (3) in 2000 with periodic reviews and Esomeprazole-treatment with 40mg/day; Intervened hemorrhoids (2008); Hypercholesterolemia (2010) Pitavastatin-treated with 2 mg/day; Endometrial polyp removed (hysteroscopy-2015); Benign colonic polyps removed (2015).

**Method:** in primary care, the patient is sent for review by gastroscopy under sedation for their digestive diseases and was performed preoperative, detecting on chest radiography a nonexistent Upper-Left-lobe (ULL) pulmonary nodule.

**Results:** Thorax-Abdomen CT-Scan: in the study, no significant growth in nodal axillary, supraclavicular, hilar or mediastinal size appreciated. Normal aorta caliber. The lung parenchyma showed the presence of pulmonary ULL mass of spiculated edges and pleural projections, with 3.2 cm distal atelectasis component and an adjacent lung nodule. No pleural or pericardial effusion could be seen. Sliding hiatal hernia. The study of abdomen, showed no liver damage or other organs significant abnormalities. Neither intra-abdominal lymphadenopathy nor free liquid is appreciated. PET-CT: suggestive study of viable tumor tissue injuries described at the level of the lung mass in the upper lobe of the left lung and the adjacent pulmonary nodule. Endobronchial guided-biopsy: Adenocarcinoma. Broncho-aspiration: Adenocarcinoma-positive. The patient underwent surgery being practiced left upper lobectomy with lymphadenectomy, and she is in a good state.

**Conclusions:** The monitoring and periodic reviews in primary care for chronic diseases is essential for prevention, and for being patients in good health as it is demonstrated in this case, since the intervention of the family doctor in the health control revisions allows early diagnosis of fatal prognosis diseases if their detection is late.

## PS2.024

### The decision support systems as a tool to facilitate the decision-making process in the selection of specialities in medicine

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**Background and Aim:** Although medical students get familiar to different specialties during the medical education, this is not always lead them to choose relevant area for them to practice. Choices they made depend on mostly what they want to be instead of what they really can. On the other hand there are limited sources to help graduates for a proper decision. Those are mostly profession tests which are based on psycometric scales and not specific to medicine. There are so many factors which should be taken into consideration when making a choice and human brain can not take into consideration more than two or three factor. The aim of this study was to create a tool which takes into account the features of different medical specialties and preferences of doctors to help them to make a rational choice for their futures.

**Method:** A methodological study is designed. for the first step 10 faculty members and 10 senior assitants are asked to determine the characteristics which differs the medical specialties from each other than 60 faculty members were asked to evaluate these characteristics. After an itery process, compromise is provided. Second step was arranging focus group session from last year medical students to understand what kind of considirations they have when deciding for specialty training. Third step was building a decision support system by using Analytic Hierarchy Process. Analytic Hierarchy Process - AHP) is developed by Thomas L. Saaty (1977) and it is a decision making technic which uses defined multicriteria.

**Results:** A tool have been developed and it will be shown during the presentation.

**Conclusion::** A useful technic for decision making may help more skillful and happy doctors.

## **PS2.025**

### **Experience of ultrasound diagnosis of abdominal aortic aneurysm (AAA) in risk patients in a primary care center in Huelva, Spain**

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Andalusian Public Health Care System (SAS, Servicio Andaluz de Salud) has not an established screening for AAA nowadays. The aim of this study is to investigate the prevalence of AAA in a risk group in Primary Care by means of ultrasound diagnosis. Observational, descriptive and consecutive study in a selected group of patients, N=73, margin of error 5%, 95% IC, for an estimated prevalence of 5%, from October 2012 till April 2013.

Inclusion criteria: Males and females with a direct family member affected/died after AAA, males between 60 and 75 years old who had hypertension and were smokers, females between 60 and 75 years old who had 3 or more of these diseases: Diabetes, obesity, hypertension, autoimmune disease, stroke, myocardial infarction, pulmonary embolism, DVT, smoker.

Exclusion criteria: BMI > 40, palliative patients, patients who do not belong to this Public Primary Care Center. We studied sociodemographic factors, quantitative factors such as weight, height, BMI, Ankle-brachial index, abdominal aortic diameter, time of consultation.

Ultrasound: Aloka Prosound 2, UST 9137 (AlokaGmbH, Germany). It was done by a ST4-trainee of Family Medicine trained in this technique. N 74, 46 females (62%) and 28 males (38%), average age 66,09 (SD 9,39). BMI 30,68 (SD 4,15). 100% caucasians. 5% with mild peripheral vascular disease. 2 people were pre-diagnosed and referred to Internal Medicine/Radiology for confirmation with an abdominal aortic diameter > 3cm. 1 AAA was confirmed. The average time of consultation was 24,51 minutes (SD 5,58). 1 case of AAA was detected in Primary Care by a Family Medicine ST4-trainee from a selected group of 74 people. Patient underwent surgery successfully. We think that ultrasound can be a new diagnosis weapon for Family Doctors.

## PS2.026

### West syndrome - a diagnosis is not everything

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**Background:** West syndrome or infantile spasms syndrome refers to a severe infantile epileptic encephalopathy, whose etiology often remains unknown. It starts in the first year of life, and is characterized by a triad including spasms, usually in clusters and often involving the extremities and head/neck, followed by regression of psychomotor development, and has in most cases a pattern of hypsarrhythmia in the electroencephalogram (EEG). This is a rare disease difficult to treat, whose first-line treatment is hormone therapy or vigabatrin and may be used alternatively other antiepileptics or ketogenic diet. The prognosis is poor, since most patients have neurocognitive delay, although it can be improved with early identification and treatment.

**Case description:** A 3-month-old girl began to present episodes of trunk flexion spasms accompanied by eye reversal occurring in several clusters per day. The objective examination showed a vague and weak interaction look. The family doctor referred the patient to a pediatric consultation. Suspecting that this is West syndrome started a multidisciplinary research in order to determine the etiology. The EEG revealed hypsarrhythmia. Several treatments have been used with apparent partial control of seizures without objective quantification. Currently under treatment with vigabatrin and ketogenic diet, it keeps daily seizures but more controlled, it has a delay in psychomotor development, and is still unknown etiology.

**Discussion/Conclusions:** This case highlights the importance of regular monitoring of the clinical course, quantifying the frequency and duration of attacks in order to evaluate the response to the different treatments used. Primary health care can have an important role given the proximity and greater accessibility, being in these situations a support assurance and monitoring the whole family in all its needs, despite the failure to meet their expectations regarding the treatment of patients with West syndrome.

## PS2.027

### **The 5 minute shoulder approach in general practitioner consult**

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**Background & Aim:** Shoulder pathology and pain represents a prevalent issue in the general practitioner consult.

The little congruence and small contact surface area of the glenohumeral joint make it susceptible to instability and injury.

The majority of this pathology is caused by peri-articular structures, which support and stabilise the articulation, or referred pain. The peri-articular structures include tendons (principally the rotators cuff), ligaments and bursas, that commonly are affected inflammation (acute or chronic) or rupture.

Most of this pathology is managed by nonsurgical treatments.

The purpose of this presentation is to make the general practitioner able to do a quick and systematic evaluation of the shoulder and manage its treatment.

**Method:** Presentation of a short and systematic evaluation algorithm of the shoulder pathology.

Starting with a small revision of important aspect of anatomy in shoulder region and nociceptive structures.

Systematic clinical evaluation with a focused anamnesis and objective exam.

An overview of common causes of shoulder pain and functional disability, and its treatments. (Rotator cuff injury, Labral tear, Adhesive capsulitis, shoulder instability, glenohumeral osteoarthritis). A quick reference of the most common causes of referred shoulder pain (neural impingement at the level of the cervical spine, peripheral nerve entrapment, diaphragmatic irritation and myocardial ischemia)

**Results:** Capacitate the general practitioner to evaluate effectively shoulder complains, guiding the investigation and the treatment, making the consult more usefull for the patient well-being.

**Conclusions:** With a simple algorithm and a systematic evaluation of the shoulder the objective exam is sufficient to suspect the diagnosis and start the treatment effectively, using just 5 min of consultation.

## **PS2.028**

### **5 minutes' hip disorders approach - common disorders, diagnosis and treatment in primary care**

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**Background & Aim:** Hip disorders are the disorders that affect the hip joint. The hip joint is comprised of a ball and socket that allows the thigh to move in different directions and it is composed of capsule, cartilage, ligaments, lubricated by the synovial fluid. Hip disorders can affect any of these parts and are often caused by developmental conditions, injuries, or chronic conditions. It urges to differentiate the sources of pain and its treatment/referral in a systematic way so that the best primary care treatment is offered.

**Method:** We present a short and systematic evaluation algorithm for hip pain pathology. After a revision of the important aspects of local anatomy, a systematic clinical evaluation with a focused anamnesis and objective exam is done. We overview common causes for hip pain, like Osteoarthritis, Developmental Dysplasia, Perthes Disease, Irritable Hip Syndrome, Soft Tissue Pain and Referred Pain, Slipped Capital Femoral Epiphysis. A systematic chart is used to gain insight into some common causes of hip, along with its common treatment and the eventual need for referral.

**Results:** An effective and straight-forward diagram for the primary care practitioner is presented, for a quicker and smoother consultation, and a better doctor-patient experience.

**Conclusions:** Using this focused evaluation, it is possible to grant the best possible hip pain management just with a 5 minutes consultation.

## PS2.029

### **Efficacy of Trimebutine therapy in patients with gastro-esophageal reflux disease and irritable bowel syndrome**

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**Background/Aims:** GERD occurs in 25-51% of IBS patients. Trimebutine has been effective in some IBS patients by modulating colonic motility. Furthermore, it increases gastric emptying rates, and controls esophageal motility. The aim of this study was to investigate the efficacy of trimebutine therapy in GERD patients with IBS.

**Method:** 69 patients with GERD and IBS underwent upper GI endoscopic, histologic and clinical evaluation prior to and 3 months post-treatment. H. pylori presence was determined by histology and CLOtest. Forty patients (Group A) were treated with omeprazole plus trimebutine for 3 months: in 32 H. pylori positive patients (subgroup A1), a standard triple eradication regimen was introduced. Twenty- nine patients (Group B) were treated with omeprazole for 3 months: in 24 H. pylori positive patients (subgroup B1), the same eradication therapy was employed.

**Results:** Specialised intestinal metaplasia of the gastro-esophageal junction was observed in 20% and in 17.2% of the patients in Groups A and B, respectively. Eradication rates were similar in subgroups A1 (84%) and B1 (83%). In Group A there was a significant improvement in GERD ( $P=0.003$ ) and IBS symptoms ( $P<0.0001$ ) as well as esophagitis ( $P=0.029$ ), when compared with Group B. **Conclusions:** Trimebutine appears to be effective in patients with GERD and IBS.

## PS2.030

### Evaluation of self-esteem, body image and childhood trauma in obese women over 18 years old

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**Background & Aim:** The aim of this study was to evaluate the effect of childhood trauma on development of obesity and the self-esteem and body image disturbance in obese individuals.

**Method:** In this case-control study, 156 obese patients who admitted to Obesity Center and 210 women with normal BMI values were evaluated. A survey including sociodemographic traits, Rosenberg Self-Esteem Scale (RSES), the Childhood Trauma Questionnaire (CTQ) and Body-Image Questionnaire (BIQ) were administered to participants.

**Results:** The mean age of obese women in this study was  $35,95 \pm 10,65$  years and the mean age of control group was  $35,49 \pm 10,48$  years. The average onset age of obesity in case group was  $27,37 \pm 11,32$  years old. The obesity rate was significantly higher in married individuals than singles ( $p=0,004$ ), in uneducated individuals than the educated individuals ( $p<0,001$ ), in unemployed individuals than employed individuals ( $p<0,001$ ), in women with low income than women with higher income ( $p<0,001$ ). It was observed that women married with uneducated men were more obese than women married with educated men ( $p<0,001$ ). The 71.1% of women on diet were obese while 35.2% of women who were not on a diet were obese ( $p<0,001$ ). Self-esteem was considerably lower in obese women than others ( $p<0,05$ ). Body image dissatisfaction was considerably higher in obese patients ( $p<0,001$ ). Exposure to childhood trauma was higher in obese patients than non-obese ( $p<0,05$ ). Physical neglect was higher in obese patients than non-obese ( $p<0,05$ ).

**Conclusions:** Self-esteem and body image was lower in obese individuals. Childhood trauma and neglect had a role in development of adulthood obesity. Thus, obese patients should be evaluated psychologically. Parents should be educated for the future adulthood problems originating from childhood trauma and insecure attachment forms.

## PS2.031

### Prevalence and degree of control of cardiovascular risk factors in patients enrolled in the study IBERICAN

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**Background and Aim:** The general objectives of IBERICAN are to determine the prevalence and incidence of cardiovascular risk factors and cardiovascular events in Spain. The aim of this paper is to analyze the baseline characteristics of the sample included in IBERICAN (n = 3,042).

**Methodology:** IBERICAN is a longitudinal, observational, multicenter study in which patients are being included, 18 to 85 years, treated in Primary Health Care consultations in Spain and will be followed during five years.

**Results:** of cross-sectional analysis of the first 3,043 patients are shown. Results. Mean age was  $57.9 \pm 14.6$  years, of which 34.7% were older than 65 years and 55.4% were women. The prevalence of hypertension was 47.4%, type II diabetes 19% and dyslipidemia 50.3%. The 27.3% of the sample met criteria for abdominal obesity. The 29.7% recognized not to make any physical exercise and 18% were current smokers, 28% former smokers. The degree of poor control of risk factors was 47.5% for hypertension, 23.6% for type II diabetes and 61.6% for dyslipidemia. 526 patients had all three risk factors and only 5.9% of them had all the risk factors in objectives. The cardiovascular risk estimated by SCORE was very high for 36.0% of the sample and high for 21%.

**Conclusions.** The patients are relatively young, but with a high prevalence of cardiovascular risk factors, which determines a high or very high cardiovascular risk in more than half of the sample that must be confirmed in follow-up of the cohort.

## PS2.032

### **Evaluation of the degree of control of INR in anticoagulated patients with atrial fibrillation, a year later, in the field of primary care in Galicia. Study of ANFAGAL Study+**

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**Aim:** Knowing what is the degree of control of INR in patients of ANFAGAL study a year later.

**Method:** The ANFAGAL + study, corresponds to the second cross-sectional analysis (437 patients) performed a year later over the original sample of ANFAGAL study (510 patients). The necessary variables were recorded to assess the quality of anticoagulation and it was considered good control when Time in Therapeutic Range (TTR) was higher than 65% calculated by Rosendaal.

**Results:** 437 patients were included. 40.1% of patients had a TTR by Rosendaal <65%. The rate of ischemic and bleeding events in the last year was higher in patients with poor control: 6,2% vs 1,7% (p=0,015) and 6,2% vs 0,8% (p<0,0001), respectively. Renal function measured by CKD-EPI was lower in patients with poor control (62,9±3,1 vs 69,1±2,4, p=0,002).

**Conclusions:** The TTR was similar to a year ago. Patients with kidney disease were again those with poorer control and the rate of ischemic and bleeding events were higher in patients with poor INR control.

## **PS2.033**

### **Dementia and suicide - the missing bond**

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**Background & Aim:** Dementias are a group of chronic neurodegenerative disorders that are currently incurable and usually lead to cognitive impairment and profound change of the personality with progressive loss of autonomy. Suicide is particularly prevalent in the elderly, representing a major public health concern. Suicide in dementia is under-investigated and findings on suicide risk and behavior are inconclusive. This review focus on the association of dementia and suicide in the elderly, describing the risks factors and the repercussions of the disease in the caregivers.

**Method:** Literature review through PubMed, from 2010 to 2015, using the MeSH terms “suicide” and “dementia”.

**Results:** Studies have shown that the risk of suicide is particularly high at the moment of the diagnosis of dementia and that it diminishes with disease progression. The elderly often employ lethal methods without prior statement of intentions. The risk factors analyzed include Caucasian race, male gender, age over 85, male widowhood, previous psychiatric comorbidity (particularly depression and hospitalization), psychotropic medication and higher academic qualifications. The contribution of the different types of dementia in the prevalence of suicide is still controversial, though it is described an increased risk in those where inhibitory impulses are abolished. As a result of cognitive and behavioral changes, care of an elderly with dementia represents a significant burden. A few studies conducted in caregivers describe higher rates of depression, anxiety and hopelessness which may be associated with suicidal behaviors but solid epidemiologic data is lacking.

**Conclusions:** Suicide in older adults is a major public concern, as the suicide rates in this population are alarmingly high, with devastating effects on the communities and the caregivers. Indicated prevention should include early detection/treatment of depression and cognitive impairment in Primary Health Care, supporting the families of demented individuals.

## PS2.034

### Attention-deficit/hyperactivity disorder - not only genetics

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**Background & Aim:** Attention-deficit/hyperactivity disorder (ADHD) is the most common neurodevelopmental childhood disorder affecting 5% of children and presenting with symptoms of inattention and/or hyperactivity/impulsivity. The genetic heritability is reported to be approximately 75% and environmental factors are estimated to account for 25% of the development of ADHD. This review describes the risks factors for ADHD, focusing on those that may have public health implications, because of their preventable nature.

**Method:** Literature review through PubMed, from 2011-2016, using the MeSH terms “Attention Deficit Disorder with Hyperactivity” and “Risk Factors”. It was included a total of 76 articles.

**Results:** During prenatal period, exposure to alcohol (even in binge pattern) and maternal/environmental tobacco smoke may be associated with ADHD. Untreated maternal thyroid dysfunction and gestational diabetes mellitus could also increase the risk of the disorder. Several studies have supported the association between perinatal factors (prematurity/poor fetal growth/low birth weight) and ADHD, suggesting that each gestational week has significance for neurodevelopment. Breastfeeding in the absence of parental psychopathology was a protective factor for the disease. Studies on psychosocial factors have associated the risk for ADHD with parental severe mental illness/maternal stress during pregnancy, postpartum depression, low socioeconomic position and changes in primary caretaker. A significant association between numerous comorbid conditions and the potential for ADHD development has also been identified in the literature, including mild traumatic brain injury, previous cardiac surgical procedure, epilepsy, asthma and allergic rhinitis, but the underlying mechanisms require further clarification.

**Conclusions:** Current data indicate that ADHD is the outcome of complex interactions between biological variants and environmental exposures. Longitudinal research aims to identify modifiable predictors of better developmental trajectories. Optimal ADHD care and prevention should include effective evaluation of co-existing disorders and modification of preventable factors with implementation of public health policies and careful follow-up of children at risk.

## PS2.035

### Family medicine training in Portugal

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**Background & Aim:** Family Medicine was first recognized as a medical specialization in Portugal in 1990. Since then, the training programme has been the object of some revisions, the last of which was done in February 2015. The authors intend to show the structure of the current programme.

**Method:** We researched official documents from the Portuguese Ministry of Health such as Portaria nº 45/2015 and also documents issued by the Regional Coordination of Family Medicine Training.

**Results:** in Portugal, Family Medicine Training lasts 4 years (48 months), divided between obligatory internships, optional internships and there is also the possibility of doing short internships, in order to acquire specific competences.

Obligatory internships:

Family Medicine 1 and 2: 14 months

Women's Health: 2 months

Mental Health: 2 months

Pediatrics: 2 months

Emergency Medicine (Internal Medicine, Minor Surgery and Orthopedics): 12 hours/week, for 10 months

Optional internships: 6 months

Family Medicine 3: 7 months

Family Medicine 4: 11 months

The final evaluation consists of a curricular evaluation, a written test with multiple choice questions and a clinical test that includes the discussion of a clinical case.

**Conclusions:** A Family Medicine specialist deals with all medical conditions regardless of the age, gender, or ethnicity of the patient; therefore, doing internships in other medical and surgical specialties is a fundamental step of the Family Medicine Training Programme. Obligatory internships in Family Medicine allow each trainee doctor to make a self-evaluation in order to identify gaps in his knowledge and therefore, choose optional internships in secondary care to acquire useful skills for clinical practice. On the other hand, Women's Health, Mental Health and Pediatrics are a requirement for all trainee doctors in Portugal because Family Doctors are also responsible for pregnancy surveillance, family planning/contraception, children's health surveillance and diagnosis and treatment of many Psychiatric conditions.

## PS2.036

### **Shynchronous neuroendocrine tumors: a case report**

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**Background and Aim:** We present a case of a primary neuroendocrine carcinoma of the fallopian tube that coexists with an appendiceal carcinoid tumor. No other similar cases were found in literature. Only three previous cases of neuroendocrine carcinoma of the fallopian tube have been reported to date. This case concerns a 77 year old woman, menopause at the age of 52 and nulliparity. She consulted with her general practitioner presenting a lump in the abdominal region onset 2 months. Medical examination revealed a non-painful hypogastric mass. At palpation the mass could be felt above the navel and the consistency was hard. The patient showed no other symptoms. The case was evaluated by Gynecology department and an exploratory laparotomy was performed.

**Method:** Ultrasound examination showed a large central abdominal pelvic mass. Computed tomography: enlarged uterus, a dilated endometrial cavity with numerous polypoid masses that invaded more than the 50% of the myometrium. Cervix invaded by one of the masses. No lymphadenopathies nor other signs of distant metastasis found. Histopathologic examination: neuroendocrine carcinoma of the fallopian tube, 20cm in diameter, poorly differentiate (G3) with high mitotic activity. Invasion of the total thickness of the myometrium and the stromal connective tissue of the cervix. Lymphatic tumor emboli were found. TNM stage over surgical removed piece pT3, pNx, pMX. FIGO Stage IIIB. Cecal appendix: carcinoid tumor well differentiated in apex, 4mm in diameter that invaded the total thickness with perineural affectation.

**Results:** Neuroendocrine carcinoma of the fallopian tube G3 FIGO Stage III. Appendiceal carcinoid tumor well differentiated.

**Conclusions:** Neuroendocrine carcinomas originate from endocrine cells of the diffuse neuroendocrine system, arising mainly in the gastrointestinal tract, lungs, and pancreas. They are rarely seen in the female genital system, and the localization in the fallopian tube is exceptional. It is also uncommon to coexist with another neuroendocrine carcinomas. The differentiation between these two tumors makes us establish that this is a case of synchronous primary carcinomas.

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## **PS2.037**

### **Different type of sciatica**

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**Background and Aim:** A 34 year-old man, from Mali, attends the general practitioner for lumbar pain that irradiates in the right leg for over a week, that doesn't improve with analgesics. Medical history: he receives a quadruple treatment with isoniazid, ethambutol, pyrazinamide and rifampicin for a tuberculous pneumonia diagnosed around 4 weeks before. Clinical examination: presents fever and refers pain in the lumbar L2-L3 vertebrae and the paravertebral muscles, which radiates in the right gluteus and reaches to the right knee. Lassegue and Bragard maneuvers are positive in the right leg.

**Method:** Lumbar x-ray: narrowing of the intervertebral space in the lumbar region, with lytic lesions of the vertebral bodies of the lumbar vertebrae Nuclear magnetic resonance: Spondylodiscitis from D12-S1 vertebrae with severe vertebral destruction, intraosseous abscess, lytic bone lesions in the right sacrum, S3 vertebral body and left iliac bone.

**Results:** Diagnosis: Vertebral tuberculosis - Mal de Pott Differential diagnosis: Myelodysplastic syndrome, Lumbago Evolution: the patient was remitted to the Orthopedic department so that the vertebral column may be stabilized.

**Conclusions:** The vertebral tuberculosis is a form of tuberculosis that affects the spinal vertebrae. Usually the primary infection takes place in the lungs and reaches other sites due to the haematogenous spread. It realizes a destruction of the vertebral body and can lead to vertebral collapse and spinal damage. Sometimes due to the extended bone damage, a surgical treatment is necessary to stabilize the spinal column. The antituberculous therapy must be initiated as soon as possible.

## PS2.038

### Snoring may reveal more!

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**Background & Aim:** A 57 year-old man attends his general practitioner for snoring, with apnea episodes, dysphonia and cough. Medical history: active smoker, diabetes mellitus, high blood pressure and dyslipidemia. Physical examination was without specific findings. He is remitted to the Pneumology department for the realization of a polysomnography test.

**Method:** Complementary tests: Chest X-ray: left parahilar mass Chest CT-scan: left pulmonary parahilar cancer, with extension in the right paratracheal lymph nodes (T4N3M1) PET-CT scan: viable tumor tissue in the left parahilar mass and left apical nodule. Blood analysis is normal. Bronchoscopy: mucous infiltration of the left lobar bronchi, compatible with non-small cell lung carcinoma The patient is remitted to initiate the chemotherapy treatment.

**Results:** Diagnosis: Large-cell lung carcinoma T4N2-3M1, inoperable Differential diagnosis: Pneumonia.

**Conclusions:** Pulmonary cancer is one of the most important issues of the medical system, causing more than a million death annually. It is important to perform a good clinical exploration and review of the patient, as the general practitioner is the first to evaluate the patients. Reaching the diagnostic in an early stage is mostly important because it reduces the mortality and widens the treatment options.

## **PS2.039**

### **'Learning whilst serving' - skills developed volunteering in Belize**

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I spent 14 weeks volunteering at the 'Hillside Health Care Center' in Belize in 2014. I created this opportunity as an 'Out of Programme Experience' (OOPE) whilst training in general practice. The skills I developed in Belize made me a better doctor hence my enthusiasm for encouraging others to create similar opportunities. 'Learning whilst serving' is the organisations motto which expresses the opportunities available to contribute to the running of the clinic whilst learning about global health. The clinic runs an educational course on global health delivered by professionals who have experience of volunteering all over the world. This put the challenges faced locally into a global context.

I enjoyed the multi-disciplinary approach to health care. As well as doctors there were representatives from physiotherapy and pharmacy as well as physician assistants in training on elective placements. The challenge of delivering health care in this resource poor setting fostered a great team spirit. This was especially apparent on the mobile clinics we undertook to the distant villages in rural Belize. Here time pressures and limited resources meant we had to work together to see all the patients and get the work done before we had to move on.

The experience of volunteering in Belize helped my development as a doctor in many ways. The lack of investigations available meant I had to rely on my clinical acumen much more so these basic medical skills became much sharper. I also noticed over time that I became more able to handle uncertainty; the lack of diagnostic tests meant decisions had to be made quickly based on the information available. Working with limited resources in challenging conditions also increased my resilience.

The views of a student on placement at Hillside are also considered. I strongly recommend volunteering abroad whilst training in general practice.

## PS2.040

### Improving skills in diagnosis of basalioma

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**Background & Aim:** Basalioma (also known as basal cell carcinoma or BCC) is the most frequent skin cancer worldwide. Exposure to sunlight is the most important risk factor. However, a multiple risk factors are described such as advanced age, light skin phototypes, family history of skin carcinoma and immunosuppression. BCC can also arise in scars, burn sites, ulcers and lesions of chronic inflammation. As consequence of its typical slow and asymptomatic growth it is referred by patients as a wound that does not heal. The purpose of this review is to improve the accuracy of diagnosis of BCC.

**Method:** A narrative literature review of relevant and recent articles was conducted. To enrich the review we used the iconographic record of observed clinical cases.

**Results:** There are multiple classifications based on clinical or histological findings. The simplest morphological classification of BCC includes nodular, ulcerative, pigmented, sclerodermiform or fibrosing and superficial subtypes. Although, there is disagreement with regard to the classification by some authors. The nodular form is the most common.

**Conclusions:** The diagnosis is usually clinical. The knowledge of clinical findings of BCC allows its early detection and referral, which will simplify the treatment by surgical excision. The education of community, regarding risk factors and self-examination, is essential for the prevention and to improve the prognosis, reducing morbidity and health system expenditures. Family medicine has a crucial purpose on education and early diagnosing.

## **PS2.041**

### **The role of family medicine in diagnosing and treatment of failure to thrive**

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**Background & Aim:** The term failure to thrive (FTT) is used to describe cases of growth failure or, more specifically, the failure to gain weight normally in children younger than 2-3 years. The aim of this review is to define failure to thrive and the principles of its approach.

**Method:** We searched review articles, published between 1997 and 2015, that carried out a review of the approach of FTT. We selected 13 bibliographical sources, preferring those published in the last five years, which were in agreement.

**Results:** There is no consensus regarding the definition of FTT. FTT is a physical sign that a child is receiving inadequate nutrition for optimal development and growth. The evaluation of FTT involves a careful medical history, a meticulous physical examination and a sensible use of diagnostic exams. In most FTT cases, no underlying medical diagnosis could be made and FTT is due to environmental issues. Before family doctors can investigate possible psychosocial barriers to adequate nutritional intake, they must make a therapeutic alliance with the family.

**Conclusions:** Early identification and treatment of FTT may help to prevent long-term developmental disorders. Family doctors are in a privileged position since the essential approach requires a close monitoring with periodic checks and a nutritional intervention. There are no FTT guidelines, which difficult the uniformization of attitudes. However, early diagnosis and approach will allow streamlining the referral to Pediatrics, minimizing the cost of unnecessary referrals.

## **PS2.042**

### **Characterization of absences to scheduled appointments in users from one family doctor file**

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**Background & Aim:** Absences to scheduled appointments (ASA) are a problem that generate costs, waste of human resources and prejudice the health care, doctor-patient relationship and medical education. Perceiving that there was a considerable number of ASA and since there are few national studies about this matter, the aim of this study is to characterize ASA and its respective users and to study possible factors associated with ASA recurrences.

**Methods:** Descriptive and analytic cross-sectional study in users from one family doctor file with scheduled medical appointment between July and September 2014. Absenteeism rate (%ASA) was calculated. Variables: date of ASA, age, professional situation, schedule initiative, type of consultation, number of previous consultations and other ASA during last year.

**Results:** %ASA was 13.6% (n=70 ASA). Users with ASA had mean age of 51.6+/-21.5 and a mean of 4.1+/-3.1 previous consultations during last year. Most of them were working (41.4%) or retired (35.7%), without other ASA during last year (65.7%). Appointments of Adult health (57.1%), Diabetes (18.6%) and Child Health (10%) programs had more absences. Comparing users without previous ASA versus those repeating ASA, there was a non-significant superiority of mean age and active users in the second group (32.6 vs 58.3%). Significant differences were observed between those two groups of users (p=0.023) in categories of number of previous appointments (0 to 3 appointments - 47.8 versus 66.7%; 6 or more appointments - 13.0 vs 25.0%).

**Conclusion:** There was a considerable %ASA. An association between age and ASA was not observed in opposition to results from other few studies. It would be relevant to assess the causes for those ASA, particularly in medical initiative and surveillance program appointments, and for the association verified between ASA recurrences and number of previous appointments during a year, in order to improve accessibility and quality of service.

## PS2.043

### Cervical cancer screening overview in pregnancy - evaluation and quality improvement

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**Background:** Cervical cancer (CC) is the sixth most diagnosed in Portugal (12.2 new cases and 3.6 deaths per 100,000 women). Peak prevalence of human papillomavirus (HPV) infection is 5 -7 years after sexual activity and can take 10-20 years to evolve through cancer. There are multiple opportunities to intervene early if CC screening is adequately applied. According to Portugal National Cancer Control Plan, pregnancy is one of those opportunities and it should be done until the end of first trimester. Eligible pregnant women are over 25 years old, who have never been screened or haven't been screened at more than three years ago after two negative annual screening results.

**Aim:** Evaluate coverage rate of CC screening of pregnant women, according to national guidelines of low risk pregnancy in two primary health care (PHC) units.

**Methods:** Descriptive and retrospective study including pregnant users aged over 25, guarded by family doctors of authors' two units. Data collected through Portuguese programs of electronic health records and statistics. Evaluation criteria: 1. First trimester of pregnancy included in evaluation period; 2. Age; 3. record of smear test done during first trimester of pregnancy or on time according with national guidelines. First evaluated period: year of 2012; reevaluated period: November 2013 to October 2014

**Results:** We included 100 women in first evaluation, with a screening rate of 65%; after presentation of results and national guideline and implementation of some educational measures, there was a discrete improvement at reevaluation period (screening rate of 71%).

**Conclusions:** Although these results are compatible with the goals for global coverage rates of CC screening at this region of the country, we expected to get better results, once this is a specific group of users of our PHC units. Improvement measures are being implemented and new reevaluation shall be done soon.

## PS2.044

### Obesity and hypertension in 11-13 years adolescents - reality of a health care unit

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**Background:** Obesity emerged as a serious public health problem and is nowadays the most common chronic disease in paediatric age and conditions more risk of developing psychological and social problems and also other morbidities during lifetime, namely cardiovascular diseases. It has been described a strong correlation between primary hypertension and overweight in children and adolescents.

**Aim:** to determine prevalence of overweight (OW), obesity (OB), prehypertension (PH) and hypertension (H) in 11 to 13 years old adolescents and to study if there is an association between variables of blood pressure (BP) and weight.

**Methods:** cross-sectional descriptive and analytical study in adolescents guarded in one primary health care unit (PHCU) aged 14 at December 2015, who performed global health consultation between 11 and 13 of age, with BP, weight and height records. The criteria used were those used by European Society of Hypertension for PH and H and by World Health Organization for OW and OB. Qui-square test was used to verify association between BP and weight variables.

**Results:** sample of 78 users (43 are male). The following prevalence rates were found: OW - 25.6%; OB - 16.7%; PH - 9.0%; H - 6.4%; all rates were higher in boys versus girls. There was no association between OB and H but there was a statistically significant association ( $p=0.013$ ) between excessive weight (OW plus OB) and high BP (PH plus H).

**Conclusion:** Despite heterogeneity of data observed in other studies and small sample size of this study, results point for a high prevalence of OW, OB, PH and H in this PHCU. Knowing that hypertension has a growing impact and frequency and that healthy lifestyle habits are formed during childhood and adolescence, early detection of these conditions and promotion of care and healthy lifestyle is essential at these ages in a short term.

## PS2.045

### **Amiodarone and thyroid function - Quality Assessment Protocol**

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**Background & Aim:** Amiodarone is an effective drug in the treatment and prophylaxis of cardiac arrhythmias, however it presents multisystemic toxicity, in particular in the thyroid gland. Most patients remain euthyroid, but you may see a thyroid dysfunction. Therefore, the General Health Directory (GHD) published guidelines that define the monitoring of thyroid function six in six months, in these cases. **Aim:** Assess and ensure the quality of monitoring of thyroid function, of patients taking amiodarone, according to GHD's guidelines.

**Method:** Observational, cross-sectional, internal evaluation of the technical and scientific quality. The study will take place during the year 2016, in two stages: 1 January to 30 June - 1st evaluation; 1 July to 31 December - 2nd evaluation. Population: adult patients treated with amiodarone, enrolled in three Family Health Units. Exclusion criteria: patients with diagnosis of thyroid disease prior to the initial prescription of amiodarone; patients who did not return to a medical appointment during the study period. Quality Criteria: prescription blood tests with TSH and free T4, according to the above mentioned GHD's guideline. according to the above mentioned GHD's guideline. Corrective measures: presentation and discussion of these GHD's guidelines; preparation of document summary of GHD's guidelines to support the medical appointment; analysis and discussion of the first assessment at a meeting of the medical team; brainstorming with teams on strategy implementation. Data source: computerized medical records. Data analysis: software Microsoft Excel 2010® and SPSS version 18.0®.

**Results:** The results will be reviewed in January 2017 and presented as soon as possible.

**Conclusions:** The thyroid pathology associated with amiodarone may appear as hypo- or hyperthyroidism. Therefore, it is essential that the family physician's role in the follow-up of these patients with specific needs, consists in making proper management of the chronic therapy.

Disclosure: No conflict of interest declared.

## PS2.046

### Prescribing oral anticoagulants in atrial fibrillation

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**Background & Aim:** Atrial fibrillation (AF) is the most prevalent sustained arrhythmia in clinical practice and affects about 1% of the population. Oral anticoagulant drugs (OAD) are the most effective antithrombotic agents and are highly recommended for the treatment of these patients, according to the current European Society of Cardiology guidelines.

**Aim:** characterize the prescription of OAD to patients diagnosed with AF.

**Method:** Observational, retrospective study. Population: patients with AF enrolled in two Family Health Units, and who had a medical appointment during 2015. For each patient, the prescriptions of 2015 were analyzed and identified the OAD prescribed: warfarin, acenocoumarol, dabigatran, rivaroxaban or apixaban. Data source: computerized medical records. Data analysis: Microsoft Excel 2010®, SPSS 18.0®.

**Results:** The study covered 112 patients with AF (59.8% of females) aged between 47 and 91 years (mean age 74.5 years). OAD were prescribed in 55.4% of patients with AF (50% above 65 years): 50% of males and aged between 50 to 91 years (mean 73.3 years). Of these, 56.5% was taking a vitamin K antagonist (94.3% warfarin and 5.7% acenocoumarol). The new OAD (NOADs) were prescribed in 43.5% of patients: 74.1% dabigatran, 18.5% rivaroxaban and 7.4% apixaban.

**Conclusions:** Only half of the patients were treated with OAD; however, this number may be underestimated, since the prescription was not recorded at the level of secondary healthcare. Although recent, the NOADs already comprise nearly half of the OAD prescriptions. Several studies have proven the effectiveness of OAD in preventing stroke in patients with AF, with the consequent reduction in mortality and morbidity. It is in this fundamental sense the role of the general practitioner, not only in the evaluation of thromboembolic risk patients, but also the appropriate treatment having always into account the current scientific evidence.

Disclosure: No conflict of interest declared.

## **PS2.047**

### **Use of $\alpha$ -adrenergic antagonists in renal colic - what is the evidence?**

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**Background:** The most frequent cause of renal colic is obstruction by calculi at the renal pelvis or at the ureter. Urolithiasis is common and has a high rate of recurrence. Because of the intensity of the renal colic, patients tend to go to the Emergency Services, where is administered effective analgesic therapy, in particular NSAIDs and opioids.

**Aim:** To assess the existing evidence on the effectiveness of alpha-adrenergic antagonists for symptomatic relief of flank pain compared to placebo and/or conventional analgesic therapy.

**Method:** for this review it were used electronic sites of Evidence Based Medicine and Medline for research of clinical guidelines, systematic reviews, meta-analyzes and randomized controlled trials (RCT's) published between January 2005 and May 2015, using the MeSH terms 'alpha adrenergic antagonists' and 'renal colic'. It was applied the SORT scale of the American Family Physician to classify the evidence.

**Results:** of the 48 articles were selected 1 guideline, 2 meta-analyzes and 1 RCT. After its analysis, it was found that the guideline recommends the use of alpha-adrenergic antagonists in the episode of renal colic to decrease its recurrence (Recommendation Force (FR) A), and it was attributed a level 1 evidence. The meta-analyzes were assigned evidence level 3 because the main objective refers to calculi expulsion rate, although both exhibit evidence that the use of antagonists has benefit in symptomatic relief. The RCT demonstrates that there is no significant difference between the use or not of tamsulosin; it was given a level 3 evidence.

**Conclusions:** Most studies presented favors the use of alpha-adrenergic antagonists in renal colic, although only the guideline has evidence level 1; for this reason it was attributed a B RF. One of the limitations is the heterogeneity of the studies. There are needed more homogeneous studies whose main objectives focus on efficiency in terms of symptomatic relief.

## PS2.048

### **The profile of women has impact on preconception evaluation - a case-control study**

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**Background and Aim:** Prenatal care measures have contributed to the maintenance of low infant mortality rates, but unplanned pregnancies still occur. The main objective of this study is to determine whether the profile of women is associated with the fulfillment of preconception consultation at a Primary Care Center (PCC); this profile includes characteristics such as sociodemographic, chronic disease, surveillance in family planning consultation, among others.

**Method:** This is a case-control study, conducted between October 2014 and October 2015. The population consisted of the patients enrolled in the PCC with at least one episode, in the years 2010-2013, encoded as W78, W79, W80, W82, W83 or W84 (ICPC-2), which corresponded to a total of 378 women. The case group consists of women who had preconception evaluation and the control group is composed of those who had not; the first has 113 patients and the second group 265. The data were collected from the electronic medical database. It was adopted a level of statistical significance of 0.05.

**Results:** The mean age of women in both groups was 30 years. 37.2% of the women who wanted to get pregnant had preconception evaluation. There were 36% of unplanned pregnancies.

Statistically significant differences were found between both groups in the following variables: education ( $p = 0.025$ ), profession ( $p = 0.010$ ), follow up in previous surveillance consultations ( $p = 0.000$ ) and surveillance of the pregnancy ( $p = 0.000$ ).

**Discussion:** Some of the results are consistent with the ones of the studies consulted, especially with regard to the differences between the education level of women who did or did not perform preconception surveillance. The total number of unplanned pregnancies is similar to the one in other studies conducted in Portugal.

Work limitations are present, such as the bias of information and registration, inherent to this type of study.

## PS2.049

### **Vulvar lichen sclerosus - an unusual cause of vulvar pruritus**

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**Background:** Vaginal pruritus is one of the most frequent symptoms reported by female patients. Although the majority of cases have an infectious etiology, there are other less common causes such as allergic reactions, dermatological conditions or autoimmune disorders.

**Case Report:** Woman of 57 years old that came to a family planning visit for cervical cancer screening, referring intense vaginal pruritus, dyspareunia and pelvic discomfort for several years with repercussions in her professional and family life. She was treated with fluconazole 150 mg PO and sertaconazole 2g/100mg cream in the past without symptomatic relief.

The vulvar examination revealed erythema with hypopigmented areas, fusion of small and large vaginal lips, itchy lesions and hyperkeratotic plaques.

It was admitted the presumptive diagnosis of vulvar lichen sclerosus and the patient was referred to Dermatology, where she was submitted to a vulvar biopsy which confirmed the diagnosis.

**Discussion:** Lichen sclerosus (LS) is a chronic inflammatory skin disease that mainly affects the anogenital region with higher incidence in females, and typically with a peak of onset in prepubertal and peri or postmenopausal women. The etiology remains unknown but it is thought that genetic factors may be involved as well as local, hormonal and immunologic abnormalities or autoimmune diseases.

Vulvar LS confers an increased risk for squamous cell cancer of the vulva development, therefore its essential an early detection, treatment and excision of hyperkeratotic areas resistant to treatment.

This case report illustrates the need of being aware of other less frequent causes of vaginal pruritus that may conceal potentially severe diseases, highlighting the importance of family physicians that are in a privileged position for the diagnosis and referral of these cases.

## PS2.050

### **Influence of individualized professional support on the breastfeeding rates in ten individual family practices from Romania**

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**Background:** Infant nutrition is an important public health issue. Breastfeeding, due to the protective nutrients of human milk, is considered to be beneficial for the health and wellbeing of infants, at a time when they are particularly vulnerable. According to a study conducted in 2010 by the Alfred Rusescu Institute for Mother and Child Care, the rates of exclusive breastfeeding up to six months were very low (12.6%) in Romania, placing our country amongst the last in the European area. There were two goals of this study: to reveal the impact of individualized professional support and education for families and caregivers on the duration of breastfeeding, and to investigate the reasons behind early discontinuation of breastfeeding.

**Methods:** The prevalence rates of exclusive breastfeeding and of overall breastfeeding were analysed in ten individual practices from six geographic areas (Bucharest, Cluj, Iasi, Bistrita, Targu Mures and Braila), on three cohorts of children, born in 2012, 2013 and 2014. Interventions sought to increase the duration of breastfeeding and professional support was provided during both the prenatal and postpartum periods. Family doctors involved in the breastfeeding education process tried to increase mothers' knowledge and skills and they helped them view breastfeeding as normal and beneficial for both mother and child.

**Results:** Non-supportive family, mothers' early return to work, infant inability to latch on to maternal breast, infant receiving supplemental feedings, prematurity, mothers' obesity, maternal anxiety or depression, previous history of breastfeeding failure, infant anomaly and inappropriate complementary feeding were some of the reasons for early discontinuation of breastfeeding.

**Conclusions:** Family doctors play a critical role in their practices and communities as advocates of breastfeeding. In order to increase the duration of breastfeeding it is important to develop targeted breastfeeding promotion strategies at a national level.

## **PS2.051**

### **Point of care testing in the West of Ireland - testing who cares**

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**Background:** Point of Care Testing (POCT) is defined as a ‘laboratory medicine service using small analytical devices (testing specimens like blood, saliva, urine and faeces) provided near the patient rather than in a traditional central laboratory’. There is a growing body of evidence to suggest POCT use in primary care may improve speed and accuracy of diagnosis, facilitate efficient clinical management and improve patient care. The aim of this study is to establish the level of support for POCT in principle amongst GPs in the west of Ireland, identify which POCTs would be of benefit and to assess the feasibility of POCTs. **Methods:** A quantitative cross sectional observational survey. We distributed questionnaires at Medical Education (CME) meetings in counties Galway, Mayo and Clare during the month of November.

**Results:** Our response rate was 70% (n= 143). 92% (n=132) of participants would like to introduce new POCTs in the primary care setting. Respondents felt POCTs would assist the prompt and accurate diagnosis of a wide range of acute and chronic diseases. The main perceived benefits were guidance in decision making 43% (n=61) and reducing referral rates 29% (n=42). The most commonly perceived disadvantages were cost 45% (n=64) and time 34% (n=48)

**Conclusion:** This is the first study in Ireland to assess the level of support for POCT use. Those surveyed felt that POCT would benefit patients, but there needs to be further research into their cost-effectiveness, and guidelines for their indications and implementation.

## **PS2.052**

### **The blue bracelet - first step towards dementia friendly community**

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**Background:** Dementia is increasingly common disease. Trend in treatment and community care is that patients remain at home environment with the support of relatives and service centers as long as possible. Patients are encouraged to perform independently all tasks they can and participate in public activities. for successful integration in public it is important to know dementia. Presenting bracelets and specifics of communication in the context of public events, media appearances and publications was the launch of blue story of the dementia in the community.

**Methods:** Design of blue bracelet as a discreet visual communication tool for patients who have difficulty in communicating with possible addition of contact and emergency numbers. Relatives were included in designing.

**Discussion:** Project of knowledge about dementia offers solutions that allow patients with cognitive decline to participate in public life as they alert to their difficulties in communication or behavior with blue bracelet. As bracelets are discreet, relatives and patients accepted them without concern of stigmatization.

**Results:** In three months we presented importance of proper communication with patients with dementia and promoted blue bracelets on twenty public events, among them European Conference on Alzheimer's disease, "Walks for the memory", numerous lectures on dementia for lay and professional public, book presentations on "mind training events", public projection of movie about dementia, appearances on radio, TV, regional and municipal newsletters. We launched 700 blue bracelets on market and donated them to patients with dementia in all regional retirement homes. Blue story continues next year with blue pendant.

**Conclusion:** Blue bracelet represents a modern and discreet communication tool to alert workers in public service to problems patient with dementia has and to facilitate communication. Promotional bracelets are part of blue story that raises public awareness about dementia. Awareness in the community leads towards system solutions.

## PS2.053

### **Outcome of andullation therapy in an elderly patient with Parkinson's disease**

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**Background and Aim:** Parkinson's disease (PD), the prevalence of which increases by age, is a progressive, complex neurodegenerative disorder causing difficulties in mobility and posture. As body function and daily activities deteriorate even with optimal medical therapy, rehabilitation therapies have been included as an adjuvant. Andullation, a biophysical therapy method based on oscillating all fluids in the body, has an effect on stimulating the autologous self-healing mechanisms and activate the blood and lymph circulation. Random whole-body-vibration was shown to improve motor symptoms in PD. Outcome of andullation therapy in an 81-year-old male patient with PD was presented.

**Method:** Medical history, findings of physical examination, diagnostic procedures, and outcomes of management of an 81-year-old male patient were given.

**Results:** An 81-year-old male patient was consulted to Physical Therapy and Rehabilitation and Neurology physicians for dizziness, stumbling, and right shoulder pain, three years ago. As range of motion was limited in both shoulders, he received 15 sessions of physical therapy and continued with exercises at home to preserve gait and balance. Bilateral rigidity, bradykinesia, and gait in anteflexion were found in neurological examination. Cerebral magnetic resonance imaging showed minimal cerebral and cerebellar atrophies. Vertebral arteries were normal and there was intima media thickness in both carotid arteries in Doppler ultrasound. He was diagnosed for Parkinson's disease and started on 0.5 mg of levodopa three times a day for a month, then continued with 1 mg of levodopa three times daily. No deterioration was found during annual follow-ups. He was recommended andullation therapy to improve the symptoms and received two 14-day sessions for PD with a 14-day interval. Rigidity and bradykinesia were slighter, and his movements were easier and faster after the sessions. There was no need to increase the levodopa dose after three years of treatment.

**Conclusion:** Andulation therapy may have a positive effect on the need to increase the levodopa dose after three years of treatment.

## PS2.054

### Report of practice - the psychodynamic psychotherapy in family medicine

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**Background & Aims:** Psychodynamic psychotherapy has its roots in Psychoanalytic Theory created by Freud and developed by many others, notably Balint, especially recognized in Family Medicine. Turns out to be an area of interest by the professionals who daily deal with psychiatric pathology. The prevalence of psychiatric pathology in primary health care is increasingly high. Reduce these patients approach to pharmacotherapy is a mistake. The vast majority benefits with psychotherapy, within which the dynamic approach is an option. The aim is to use principles of Dynamic Psychotherapy in the context of general practice consultation.

**Method:** The author concluded a specialization course in psychodynamic psychotherapy from the Faculty of Medicine of the University of Oporto. As a Family Doctor, you know that you can have a privileged role in the application of this type of therapy. By definition, the family doctor accompanies the individual throughout their life course, is in contact with several members of the same family, understand relationships and conflicts that would otherwise be inaccessible.

**Results:** The author began by using a more targeted approach in a particular case of a patient who seemed to benefit especially from this kind of approach. It was discussed with the patient the purpose of this type of therapy and how it would be developed. The patient, with a depressive/anxiety disturbance, maintains follow-up, with a bimonthly periodicity, with good results.

**Conclusion:** Through this approach we seek an understanding of psychic functioning not only by the understanding of the unconscious in mental functioning and psychic determinism, but also by the importance given to the developmental perspective. The author believes that this course of specialization has been an asset in her training, since it allowed her to adopt a more targeted and structured approach for patients with psychiatric pathology, with best results in health.

## **PS2.055**

### **Family medicine residents in end-of-life care: are they up for it?**

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**Introduction:** Residents are expected to convey unfavorable news, discuss prognoses, relieve suffering, and address do-not-resuscitate orders, yet some report a lack of competence in providing this type of care. Recognizing this need, Family Medicine residency programs are incorporating end-of-life care from symptom and pain control, counseling, and humanistic qualities as core proficiencies in training.

**Objective:** This study determined the competency of Family Medicine Residents from various institutions in Metro Manila on rendering care for the dying.

**Materials and Methods:** Trainees completed a Palliative Care Evaluation tool to assess their degree of confidence in patient and family interactions, patient management, and attitudes towards hospice care.

**Results:** Remarkably, only a small fraction of participants were confident in performing independent management of terminal delirium and dyspnea. Fewer than 30% of residents can do the following without supervision: discuss medication effects and patient wishes after death, coping with pain, vomiting and constipation, and reacting to limited patient decision-making capacity. Half of the respondents had confidence in supporting the patient or family member when they become upset. Majority expressed confidence in many end-of-life care skills if supervision, coaching and consultation will be provided. Most trainees believed that pain medication should be given as needed to terminally ill patients. There was also uncertainty as to the most appropriate person to make end-of-life decisions.

These attitudes may be influenced by personal beliefs about dying rooted in cultural upbringing as well as by personal experiences with death in the family, which may also affect their participation and confidence in caring for the dying.

**Conclusion:** Enhancing the quality and quantity of end-of-life care experiences during residency with sufficient supervision may lead to knowledge and skill improvement to ensure quality of care. Fostering bedside learning opportunities during residency is an appropriate venue for teaching interventions in end-of-life care education.

## PS2.056

### Smartphone interventions for chronic obstructive pulmonary disease: a systematic review of the evidence

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**Background & Aim:** People with chronic obstructive pulmonary disease (COPD) need support strategies to help them monitor their illness and participate in their own health management. Therefore, smartphones and health-related applications can play an important role as monitors with attached sensors, reliable information providers, and 24 hour enabled communication channels. The aim of this review was to determine the current state of research of smartphone use in COPD.

**Method:** The research on PubMed® was performed on December 2015, using the terms [internet, phone, smartphone, mhealth, social media, text messages, apps] combined with [chronic obstructive pulmonary disease]. Studies were included if they described a smartphone intervention targeted adults diagnosed with COPD, focused on self-management, frequency of exacerbations and lifestyle modification, in the last 5 years.

**Results:** of the 488 papers identified, 2 met inclusion criteria, both being randomized controlled trials. The first study demonstrated an increase in the daily activity level of COPD patients after a 4 week period using a smartphone application providing motivational cues for exercise. The second study demonstrated greater improvement in self-efficacy for managing dyspnea and greater perceived levels of support at an exercise program by the intervention group, wearing a smartphone and web diary for self-management of COPD during 12 months; there were no differences in dyspnea with activities, exercise behaviour, performance and health-related quality of life across groups in this study.

**Conclusions:** Smartphone strategies can provide a viable option for facilitating chronic obstructive pulmonary disease self-management. Further research is needed to develop more precise and complete applications aiming this chronic disease.

## PS2.057

### **Is medical school a mind changer? A longitudinal study of student's personality traits**

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**Background & Aim:** To determine if the six years of Medical Schools are accompanied by significant changes in self-perceived personality traits of medical students.

**Method:** In this longitudinal study, Revised NEO Personality Inventory was filled by 70 students from the Faculty of Medicine of the University of Coimbra, Portugal, at two moments: at the beginning of the university's first year and at the end of sixth year. Changes in personality domains and facets from year 1 to year 6 were calculated.

**Results:** There were significant changes in the average personality profile of this sample of medical students during the six years of Medical School. Neuroticism decreased significantly, while Agreeableness and Conscientiousness suffered small but significant decrease. This includes significant decreases in the average scores for the facets Anxiety ( $p < .01$ ), Depression ( $p < .05$ ), Vulnerability ( $p < .05$ ), Altruism ( $p < .05$ ) and Modesty ( $p < .05$ ). There was also a significant increase in Self-discipline facet ( $p < .05$ ).

**Conclusions:** Given the results we can conclude medical school influences students' personality traits' evolution. Students' decrease in their self-assessment of Anxiety, Depression and Vulnerability facets indicates they may perceive themselves as more stable, confident, hopeful and resilient in the end of the academic course. Their increase in Self-Discipline may point to an increase confidence in their ability to in the future continuously update the knowledge they received in order to provide always the best for their patients. However, their self-assessment decrease in personality's facets Altruism and Modesty could be concerning - these findings could suggest that medical students may have developed a more arrogant and overrated vision of themselves in relation to others, and also that they may have become more reluctant to get involved with others' problems.

## PS2.058

### **The primary health care response capacity: an experience of a department of family and community medicine teaching - care unit, Paysandú, Uruguay, 2014**

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**Background:** The primary care (PC) problem-solving capacity is an important attribute of health systems, because it affects service performance of other levels of health care. Uruguay, a small South American country, has insisted on the need of a resolving PC due to patient load experienced by the secondary care (SC) and the Emergency services, attributed to, inter alia, the low solving capacity of the PC (Peiró, Sempere & Oterino de la Fuente, 1999; Torné et al, 2003; Aranaz et al, 2004 y 2006; Loría, Flores Márquez & Valladares, 2010). Reviews of international and national literature show few scientific studies analyzing the issue, on a health system in general and / or in a particular provider (Rodríguez et al, 2005; Pérez et al, 2007; Silbermann et al, 2007; Fuentes & López, 2008; Franquelo et al, 2008; Alcântara et al, 2014; Antunez et al, 2014; Contreras et al, 2015). Aim: evaluating medical consultations by requiring referrals to Emergency Services and SC specialists for the Department of Family and Community Medicine teaching - care unit, in Paysandú (Uruguay), during 2014.

**Method:** observational, descriptive and cutting study, conducted in five Paysandu´s PC services using specific recording instruments.

**Results:** a total of 8265 consultations held, 75 required referral to Emergency Services (0.9%), predominantly in young adults, in June and September, mainly due to respiratory diseases, and requiring ambulance by 49%. 5% (n = 415) were referred to SC, predominantly in adults over 45 years old and due to Eye and annexes, Circulatory and Locomotive diseases.

**Conclusion:** Paysandu´s Department of Family and Community Medicine teaching - care unit response capacity is high, the skills on this discipline are particularly appreciated on this regard, and it can be improved by providing greater material resources to PC (eg: ophthalmoscope).

## **PS2.059**

### **Whooping cough in a 2 year old patient properly immunized. Medical reemergency of whooping cough in Spain**

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Case report: 2 year-old patient properly immunized consults at the urgency service because of an intense, irritative and wheezy cough intermittent with (periods of asymptomatic intercrisis) of 3 weeks of evolution. The crisis are becoming more intense in the last 10 days. Because of the symptoms we suspect a whooping cough, so we recommend a treatment with azithromycin and salbutamol. A PCR of *Bordetella parapertussis* and *Bordetella pertussis* are requested, the last one comes positive.

Conclusions: In Spain, despite of the decrease of the disease thanks to the vaccination since 2011 but in the last years there has been a rise of new cases. The outbreak of whooping cough has shown the risk of people not vaccinated, because of failures of the sanitary system or because of personal decision. The cases among well vaccinated children, even recent vaccination is specially worrying. It could be explained for a decrease of effectiveness caused by the antigenic divergency of *Bordetella Pertussis* and the components of the actual vaccines, although it would be necessary studies of molecular biology to prove this phenomenon. In an important epidemic in Australia at the beginning of 2008, they discovered genetic modifications that affect pertussis toxin and the pertactin. Also it was proved the existence of new strains with a larger production of pertussis toxin. The four strategies recommended in the last decade to prevent the disease is the systematic vaccination of the teenagers, the vaccination of adults, vaccination of pregnant women with TDPA vaccine and the Nido strategy (vaccination of the parents and people with direct contact with the breast-feeding baby).

## **PS2.060**

### **Sistemic onset of juvenile idiopathic arthritis in a 5 year-old patient. The importance of a quick suspicion in primary care**

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Motive of consultation: Pruritic exanthema and arthritis predominantly in the evenings. Febricula Case: Patient of 5 years-old with pruritic exanthema: Erythematous papular, symmetric lesions non pruritic. The exanthema increases along the day. Also presents tumefaction and knee, wrist and finger pain of the right side of the body. Febricula. Several treatments were proved (antihistaminic, oral and topic corticoids) with no improvement. Physical examination: Good general condition, afebrile. Papular erythematous lesions in legs and buttocks. Pain in right knee and wrist with manipulation. Complementary Test: Microhematuria. Negative Mantoux. Biopsy of the exanthema is not compatible with vasculitis. Genetic studies of autoinflamatory and immunological diseases came out negative. Diagnose: Juvenile idiopathic arthritis (JIA) with systemic onset. Treatment: The treatment were started with oral corticoids, anakira 40mg SC daily (antagonist of interleukin) and colchicine 0,45mg every 24h. Ankira is progressively increased until 100mg/24h SC and slowly removing the other treatment. Since the beginning of the treatment the patient suffers relapses more controlled, of less intensity and duration.

Conclusions: The JAI is defined by the presence of arthritis in one o more articulations in patients before 16 years-old and persist at least 6 month, with an unknown etiology. The systemic presentation also has extrarticulars manifestations: Spiking fever with bad response to antipyretic treatments, macular exanthema in face, limbs, and back, no pruritic that rises with fever. Also con appear lymphadenopathies, serositis and enlarge liver and spleen. The diagnose is made by exclusion of other pathologies. The systemic JIA is the severe presentation and has the worst prognosis. Due to the difficult diagnose is important to suspect this disease in primary care to achieve a better response to the treatment and a better prognosis.

## **PS2.061**

### **The emerge of alterantive treatments: are we ready?**

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**Introduction:** In the last years more and more alternative treatments are emerging, specially for treatments pain or anxiety. The classical were acupuncture or homeopathy, but this days we have plenty more. This a subject that we should be informed about, because not only some are included in medical guidelines, but also patients come to us asking about them.

**Discussion:** Treatments are evolving, people in europe specially are looking for other treatments wich do not include only pills or invasive techniques. This is getting to our daily practice. Maybe in our health centre some doctors use acupuncture for treatments of back or knee pain, some other may use osteopathy, homeopathy, moxibustion... do we know when to use this treatments? Do we have prejudices about them? If we are being asked about them by a patient can we give truthful information?

Acupuncture is one of the alternative treatments that have more studies and clinical trials. Actually is included in NICE guides for back-pain with a A level of evidence. But since then many had being getting focus on the media: tuina, accupressure, taichí, Gi gong, magnoteraphy....

**Conclusions:** We should be aware of the new updates of teh medical guidelines and research for the new treatments that we are not familiar with, so if a patient ask about them we can give truthful information. But not only looks in guides we should also stay updated in the “fashions treatments” to recommend them or not recommend them to our patients, not only for what we suppose or our thoughts but with solid information.

## **PS2.062**

### **Domestic violence: a new point of view needed**

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**Background and Aim:** After making laws to protect women from domestic violence, the number of deaths decreased, but still in 2014 25 million of women suffered domestic violence. Also in the past few years there has been a new arise of victims. Domestic violence is still a vital task to help this women get out of this situations, by empowering them and also giving them skills and resources to live with dignity once they decide to report to the police. This is a main task, because these brave women need help, but the problem stays unsolved: We need to focus on teenagers. Nowadays it is common to find a lot of teens victims of domestic violence even while they are not living with their couple yet. Mobile phone control, jealousy... they are the first steps and we need to teach them how to be aware of this behaviours and stop them, not only focusing on girls but also on boys.

**Method:** During our workshop we would like to make comparisons between countries: how has it been working out? Are they working on it? What strategies are they using? Do doctors in other countries go to schools and chat with teens about this problems?

**Results:** We will make a walk through this problems and how can we deal with it in our daily practice, but specially focusing on a powerful resource: prevention chats at schools. How can we approach it?

## PS2.063

### **Bibliographic review of knee pain treated with acupuncture**

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**Background:** Knee pathologies especially osteoarthritis is a very common and disabling condition specially in people over 50 years of age. First line treatments are NSAIDs, which has a lot of secondary effects, because of that non invasive treatments are being used as physiotherapy and acupuncture among others, but can we trust them?

**Method:** Systematic search in the main data base. We reviewed articles and clinical trials about knee pain treatment with acupuncture, focusing on the method followed, the use of placebo/sham acupuncture/other treatments and the results

**Results:** Acupuncture has shown in several trials an improvement of the functional limitation and the pain comparing to placebo. There are controversial results if we compare acupuncture and “sham” acupuncture, although both had better results than placebo. Despite all the evidences, it is a confusing factor and a discussion topic the method called “sham acupuncture”. This technique is sometimes a confusion factor in studies because it is not always the same method. In some studies when they use this term when they puncture in an area closet o the acupuncture point, puncture in the acupuncture pint but without stimulation, or sometimes puncture outside the channels. It is not the same so it is difficult to compare and sometimes this method produce effects itself. Trial like Scharf, compares the use of physiotherapy and acupuncture to placebo and acupuncture. The conclusion it reaches is that the difference is not significant in function or pain release. This seems to show that physiotherapy acts in a similar way that acupuncture does, so it should be used in trial simultaneously.

**Conclusion:** There is sufficient evidence for acupuncture to be considered as an option for treatment of chronic knee pain. Acupuncture is likely to provide a replacement for NSAIDs, being at least equally effective probably more cost effective and much safer.

## PS2.064

### Determinants of general practitioner's cancer related gut feelings - a prospective cohort study

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**Background:** General practitioners (GPs) use gut feelings to diagnose cancer in an early stage, but little is known about its impact.

**Aim:** To explore triggers and GP's action based on gut feelings, determine the predictive value of gut feelings and how this is influenced by patient and GP characteristics.

**Method:** Prospective cohort study of patients in 44 general practices throughout the Netherlands, from January 2010 till December 2013. GPs completed a questionnaire regarding gut feelings, patient and GP characteristics, if they noticed a cancer-related gut feeling during patient consultation. Follow-up questionnaires were sent 3 months later requesting information about the patient's diagnosis. Chi-square, uni- and multivariate logistic regression and multilevel analyses were performed.

**Results:** A gut feeling (N=366) is most often triggered by weight loss (24%, N=85) and rare GP visits (22%, N=76), but only gut feelings triggered by a palpable tumour (14%, N=53) was predictive of cancer (48%). Most GPs (95%) acted immediately on the gut feeling, either referring to a specialist or by performing additional medical tests. The average positive predictive value of cancer related gut feeling was 35%. This increases with 2% for every year a patient becomes older, and with 3% for every year a GP becomes older.

**Conclusion:** GP's gut feeling for cancer proves to be a useful tool in diagnosing cancer and its relative high predicting value increases if the GP is older or more experienced and when the patient is older or has a palpable tumour.

## PS2.065

### **Inguinal lymphadenopathy: lymphogranuloma venereum and gonococcal co-infection**

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**Background and Aim:** Inguinal adenopathies are generally caused by sexually transmitted infections (STI), and secondarily by cellulitis or lymphoma. Lymphogranuloma venereum (LV) is an STI caused by *Chlamydia trachomatis* serotypes L1, L2 or L3, it is endemic in some countries of Africa, Asia and South America and an increased incidence in Europe is being observed. The aim of this report is to explain the differential diagnosis of an inguinal lymphadenopathy.

**Method:** A 28-year-old man presented a 2 centimeters round and painful adenopathy at inguinal area for 5 days with no fever and good general health. He started anti-inflammatory treatment with no results. Blood test with serologies (hepatitis B and C, syphilis and HIV) and urine PCR (*Chlamydia trachomatis* and *Neisseria gonorrhoeae*) were performed with negative results. One week after, patient presented a second adenopathy in the same path and started mucoid and hemorrhagic rectal discharge and fever. Another blood test and urine PCR with a wider range of pathogens (*Chlamydia trachomatis*, *Neisseria gonorrhoeae*, *Mycoplasma genitalium*, *Ureaplasma urealyticum*, *Trichomonas vaginalis*), rectal and pharyngeal samples were performed to rule out other STI. With the suspicion of infectious proctitis, ceftriaxone 500mg intramuscular and doxycycline 100mg/12hours per 21days were prescribed empirically.

**Results:** Rectal sample culture was positive for *Chlamydia trachomatis* L1-L3 serotypes and *Neisseria gonorrhoeae*. Blood test showed leukocytosis and normal C-reactive protein. Patient was diagnosed of proctitis caused by Lymphogranuloma venereum and gonococcal infection.

**Conclusion:** Patient started to recover and 2 weeks after was asymptomatic and adenopathies decreased. Lymphogranuloma venereum is a STI that should be included in the differential diagnosis of an inguinal adenopathy and it is important to take in account that rectal sample may be needed to diagnosis.

## PS2.066

### **Retroperitoneal tumors: uncommon cause of low back pain - a three case series report**

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**Introduction:** Low back pain is a major health problem, as 60% to 80% of the population will experience it at some point of their lives. The differential diagnosis of lower back pain is extensive, but a history of constitutional symptoms or unusual signs should prompt a work-up for rare causes.

**Cases Presentation:** We present a case series of three patients (72-year-old woman, 63-year-old woman and 55-year-old man), who presented with mild to severe low back pain, with early onset and no response to empirical analgesia, associated with sudden weight loss. An abdominal tomography was performed on three patients and shown a bulky right mass, without defined origin. Patients were referred for surgical consultation and diagnosed with retroperitoneal tumor (RT).

Accordingly, they underwent staging that identified a malignant mass (right psoas and vena cava inferior sarcoma and right psoas schwannoma). Mass excision was performed.

**Discussion:** The incidence of RT is extremely low (0.01-0.2% of all neoplasias) and two thirds are malignant. One third of RT are sarcomas and only 1-10% are schwannomas. RT constitute an atypical and unrecognized cause of low back pain, so the diagnosis is delayed until tumor had a substantial size and invaded the intraperitoneal organs.

Complete surgical resection is the only potential curative treatment. The family doctor should be aware of rare causes for a common symptom, such low back pain, particularly if accompanied by red flags, and provide prompt referral to hospital care in order to increase the chance of cure.

## PS2.067

### **Overactive bladder: prevalence and impact on life quality**

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**Background & Aim:** Overactive bladder (ORB) is characterized by urinary urgency, with or without incontinence, accompanied by increased urinary frequency and nocturia, symptoms with major impact on life quality. The prevalence is 17% in adults and increases with age. ORB has a multi-factorial etiology and its diagnosis and monitoring by the family doctor is very important. Our goal was to characterize the symptoms associated with the ORB and to estimate its prevalence among the patients with more than 40 years, affiliated to the USF Tejo (a Lisbon Primary Care Unit).

**Method:** A descriptive, observational study. Population: patients with  $\geq 40$  years affiliated to the USF Tejo - 8435. Sample: convenience - patients with  $\geq 40$  years who responded to the adapted questionnaire for ORB Validation (OAB-V8™) - 174 Statistical analysis (Excel).

**Results:** We studied 2.1% of the population: 33.9% were male and 66.1% female. The most prevalent symptom 'urinate frequently during the day' was also the most uncomfortable. 56.3% had a score  $\geq 8$  (high probability of ORB); of these, 33.7% are male and 66.3% female. On average, females had a higher score ( $17.0 \pm 7.2$ ) than males ( $14 \pm 5.9$ ). Evaluating only the elderly ( $\geq 65$  years), the most prevalent symptom was 'waking up during the night because he/she had to urinate' and the more uncomfortable was 'urinate frequently during the day.' 58.4% had a score  $\geq 8$ ; of these, 57.6% were male and 42.4% female.

**Conclusions:** Symptoms of ORB are very common in patients of the USF Tejo, especially among the elderly. Most patients have a high probability of suffering from this condition, in particular females. However, if we consider only the elderly, the men are more likely to have ORB. The sample, although small compared to the entire population, allows us to infer the prevalence and impact of the ORB condition.

## PS2.068

### **The relation between Fagerstrom nicotine dependence and smoking starting age with patients who consult smoking cessation clinic**

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**Background & Aim:** At this research it is intended that the relation between fagerström nicotine dependence and smoking starting age with patients who consult Istanbul Sisli Etfal Training and Research Hospital Stop Smoking Policlinic of Family Medicine.

**Method:** In year 2015, 400 patients file were randomly analyzed who consulted smoking cessation clinic. Patients smoking starting age, education history, marital status, total cigarettes smoked a day and Fagerström nicotine dependence parameters were analyzed. Collected datas were examined at frequency and chi square in SPSS20.0 version.

**Results:** A total of 400 patients enrolled in the study and %35.8 (n:143) is female and %64.3 (n:257) is male. %48.8 (n:195) of the patients are low educated level and %51.2 (n:205) of the patients are highly educated. Percentage of smoking starting age under 18 is determined that %69.8(n:279). %30.8 of female patients and %22.6 of male patients determined as highly addicted to smoking. There wasn't any significant relation between gender, education history and smoking starting age ( $p=0.131$ ,  $p=0.587$ ). At both gender (%63.6- %73.2) and all education history smoking start age is under 18. %87.5 (n:14) of the patients who smoke over 40 cigarettes per day is male. It is determined that %62.4(n:88) of the patients with primary school graduate are difficulty comply with the smoking ban in closed ares. Under this circumstances it is determined that if level of education is lower, patients are difficulty comply with the smoking ban in closed areas.

**Conclusions:** We didn't assigned significant relation between FNAT test and smoking starting age. As a result, citizens shall be educated more about preventing smoking starting age under 18.

## PS2.069

### Voluntary termination of pregnancy in a Portuguese local health unit - 8 years after the law approval

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**Background and Aim:** Significant advances in Family Planning (FP) have been reached in the past years, and contraception is nowadays widely accessible. There was a reduction of unwanted pregnancies but, it is still expected 33 million women to become accidentally pregnant each year. Since 2007, Portuguese law allows voluntary termination of pregnancy (VTP), until 10 weeks of pregnancy. The aim of this study is to characterize population who carried out a VTP in a Portuguese Health Unit, between 2007 and 2014, for sociodemographic and obstetric variables, in order to identify strategies of FP improvement.

**Method:** This is an observational, descriptive, cross-sectional study. The study population includes women who performed VTP, until 10 weeks of gestation, between 2007 and 2014, in the Health Unit. Anonymized data were provided by the The Portuguese Directorate-General of Health.

**Results:** A total of 1571 VTP records was obtained. Most women are 20 to 29 years old (44.4%), have high school level of education (36.3%), are single (58.1%), and professionally active, while 14.3% are students and 20.3% are unemployed. 11.8% of women resorted to this method twice. It is also noted that 70.5% of women had no access to FP in the 12 months leading up to the VTP. After the intervention, long-term contraceptive methods account for 65.8% of the choices (subcutaneous implant, intrauterine device or sterilization). Recently, from 2013 to 2014 there was a reduction of 30.1% of VTP.

**Conclusions:** The accessibility of all women to FP is essential to improve reproductive health promotion in the future. Easy access to information and health education programs, directed to the target public, are important measures. The GP assumes a privileged role in monitoring the individual during the various stages of the life cycle, providing contraceptive methods that meet the specific needs of each couple.

## **PS2.070**

### **Sexuality in the elderly. Can we improve it?**

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**Background & Aim:** Sexual health in elderly has been over time a taboo topic. Increased longevity, the reconceptualization of sexual health and development of drugs that enhance sexual performance contributed to a change of attitude in elderly and in medical community, increasing the demand for help. The aim of this work is clarify what therapeutic measures have scientific evidence improving sex lives of elderly.

**Method:** Research of clinical guidelines, systematic reviews and original articles from January 2009 to December 2015, at Medline and Evidence Based Medicine, using the MeSH terms 'aged, sexuality, sexual dysfunction and therapeutics.' It was applied the scale 'Strength of Recommendation Taxonomy'(SORT) to classify the evidence.

**Results:** Were selected six articles (1 systematic review and 5 original articles). Several therapeutic strategies are currently available, which should be applied holistically. This approach involves basic counseling, correcting myths, discussion of sexual scripts and therapeutic purposes and a combination of biomedical and psychosocial intervention, individualized needs, values and clinical status of the couple(EN 1). The intracavernosal injection has good response in elderly patients with erectile dysfunction(EN 2). Treatment with sildenafil improved erection and the ability to penetrate in men with erectile dysfunction as well as the overall satisfaction of sexual experience in the couple(EN 1). Tibolone was superior to hormone replacement therapy in improving sexual dysfunction in postmenopausal women(EN 2). In women with atrophic vaginitis, topical estrogen proved efficiency improving vaginal dryness and dyspareunia. The androgen replacement with normalized levels of estrogen improves sexual function, coital frequency and libido in surgically menopausal women. Sildenafil doesn't improve sexual response in postmenopausal women(EN 2).

**Conclusions:** The overall approach of sexual dysfunction proves to be effective in improving sexuality and quality of life of the elderly(SOR A). Drug therapy studied for the elderly appears to be effective and is recommended for use(SOR B).

## **PS2.071**

### **False hematuria**

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**Background:** Vulvar melanoma is rare but it is the second most common neoplasm of the vulva. It is predominantly a disease of postmenopausal women.

Although the external location of the vulva should encourage early presentation, vulvar cancers are often advanced at the time of diagnosis.

Case Report: A 82-year-old woman presented to her general practitioner on April 2015 complaining about "blood in urine" with no other symptoms. Urine test strip showed positive nitrite. It was requested urine culture which revealed *Escherichia coli* infection and she was treated with nitrofurantoin.

Four months later she returned with vaginal pruritus, vulvar discomfort and keeping the blood loss. She was treated with dequalinii chloridum and was required renal and bladder ultrasound, which showed no alterations. In October she returned complaining about low back pain and "vaginal bleeding" and was referred to the emergency service.

The vulvar examination by the gynecologist showed an oval and ulcerated mass at the vaginal entrance which was biopsied for diagnosis. The histology revealed a malignant melanoma.

**Discussion:** Women with abnormal bleeding on genital area often complain about vaginal bleeding. Most women can identify the difference, however, conditions associated with urinary tract with symptoms such as hematuria can be mistaken with genital bleeding.

In this case the vaginal bleeding was described by patient as hematuria.

The physician when dealing with a situation of bleeding in genital area should make the differential diagnosis. Delay on diagnosis may be related to patient's embarrassment, reluctance to be examined or healthcare practitioners who prescribe topical medications to a patient with vulvar complaints without performing a physical examination.

This case emphasizes the importance of objective examination for proper management of patients. The gynecological observation, at first time should have allowed identification of the mass and timely referral to secondary health care.

## **PS2.072**

### **A daily headache**

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**Background & Aim:** A 34 year-old man with multiple consultations in the emergency department for right frontotemporal headache which causes sleeping problems, ongoing for 20 days. Former cocaine user with mental and behavioral disorder due to cocaine abuse.

Physical examination: The neurological examination is normal, except a slightly mydriasis of the right eye.

**Method:** Blood and urine analysis are normal, serology is normal.

Cerebral CT-scan: cystic image in the dorsal region of sella turcica, which communicates with the suprasellar cistern.

Cerebral MRI: informs of a solid-cystic lesion of 2.7X1.98X1.57 cm, in the right region of the sella turcica that reaches in the suprasellar region and to the sphenoidal sinus. Invades the posterior region of the right cavernous sinus. Left displacement of the pituitary gland.

**Results:** Diagnosis: Craniopharyngioma. Differential diagnosis: Supratentorial tumors (adenoma, meningioma).

**Conclusions:** The pituitary gland diseases are quite rare to be seen in the general practitioner's consultation, the tumoral cause being the most frequent. The patients could present depression and mental illnesses which can difficult the diagnostic. The role of the GP is crucial due to the fact that the history of drug abuse of this patient was masking the real cause of the consultation. It is really important in our work to look for the symptoms and not to misjudge a person for its past.

## PS2.073

### Lower leg pain

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**Background & Aim:** A 37-year-old man was referred to the Emergency room following a radiofrequency heart ablation procedure 5 days before the consultation. He reports that he has had pain, swelling and tenderness in his right groin and thigh since being discharged from the hospital and that these symptoms limit his ability to ambulate and that have worsened in last 24 hours reaching up his calf. He also reports difficulty getting in and out of bed.

Clinical Examination: Blood pressure: 108/72 mmHg. Well looking patient. Lower limbs: Haematoma in right groin area, swollen right thigh and calf perimeter, painful on palpation. Popliteal and dorsalis pedis right pulses are reduced. Homman's sign negative.

**Method:** Blood analysis: Glucose 126 mg/dl. Urea 38 mg/dl, Creatinine 1.02, K 3.8 mg/dl, Na 141 mg/dl, PCR 3.4 mg/dl. Haemoglobin 13.5 g/dl, haematocrit 39.2%, Leucocytes 13.86 x10<sup>9</sup>/L, Neutrophils 8.90 x10<sup>9</sup>/L, Platelets 109000, PTT: 1.2, PT 1.0, Dimer-D: 82074.

Thorax X-Ray: Normal.

Venous right lower limb duplex-echography: Third distal external iliac vein, common femoral vein, proffund femoris and superficial femoris vein thrombosis with extension to infra-popliteal veins.

**Results:** Diagnosis: Right limb deep vein thrombosis.

Differential diagnosis: Post-thrombotic syndrome, superficial phlebitis and superficial thrombophlebitis, acute limb ischaemia cellulitis, compartment syndrome, tendon and muscle injuries.

**Conclusions:** DVT (deep vein thrombosis) results from the interplay of three processes: venous stasis, hypercoagulability and changes to the blood vessel wall. DVT most commonly appears in the lower extremity affecting veins in the calf or thigh. DVT classically produces pain and limb oedema, but this is entirely nonspecific. The accurate diagnosis of DVT is an important topic in current clinical practice. A clinical evaluation alone is considered unreliable for the diagnosis of DVT, but it can be useful in conjunction with more accurate and specific diagnostic procedures, such as ultrasonography.

## PS2.074

### A long lasting tummy pain

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**Background & Aim:** A 62-year-old male is attended by his general practitioner for abdominal diffuse pain evolving over 5 months that has worsened in the last week, he also has diarrhoea without loss of blood, fever, or vomiting. Our patient has already been studied by a gastroenterologist and had the diagnosis of gastritis.

**Medical History:** Hypertension, ischemic chronic heart stroke revascularized with two stents on the right coronary artery. No NSAIDs or others painkillers used.

**Clinical Examination:** Blood pressure: 110/60 mmHg, pale mucosa and skin. Right lumbar region pain and tenderness on palpation and signs of diffused peritoneal irritation.

#### **Method:**

**Blood analysis:** Urea 89 mg/dl, Creatinine 2.04, K 3.7mg/dl, Na 130 mg/dl PCR 17 mg/dl. Haemoglobin 9.3 g/dl, Leucocytes 20.84 x10e9/L, Neutrophils 18.15 x10e9/L, Platelets, PTT and PT in normal range. Urinary sediment negative.

**Thorax X-Ray:** Normal

**Coproculture:** Habitual microflora.

**Abdominal echography:** Cecal wall oedema.

**Abdominal Scan:** Cecum distended with diffuse and concentric oedema of his wall of up to 1 ' 2 cm of maximum thickness. Unspecific colitis

**Colonoscopy:** Edematous mucosa, with ulcerations in cecum and ascending-colon. It looks like ischemic colitis.

**Results:** Diagnosis: Ischemic colitis.

**Differential diagnosis:** Clostridium difficile colitis, Actinic colitis, ulcerative colitis, colorectal cancer, acute diverticulitis.

**Conclusions:** Ischemic colitis occurs as the result of a compromise in intestinal blood flow that can produce a spectrum of injury from transient self-limited ischemia to fulminant ischemia or transmural infarction and represents the most common form of bowel ischemia (60-70%). Its diagnosis requires a high index of suspicion, and the clinician should consider the diagnosis in patients with acute abdominal pain and bloody stools. Although most patients improve within several days, with supportive care, others will require laparotomy with bowel resection.

## PS2.075

### Not another migraine

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**Background & Aim:** A 31 year-old woman, active smoker and taking birth control pills. Attends to her GP (general practitioner) referring headache, vertigo and nausea with no improvement after sulpiride treatment, instability, tinnitus especially during the night and partial vision loss. All the symptoms for around 4 weeks. Physical Examination: obesity, cardiopulmonary auscultation and abdominal exploration being normal. Neurological exploration shows an II nerve disorder with diminished visual acuity and bilateral papilledema.

**Method:** Blood analysis was normal. CT-scan: no acute findings.

Lumbar puncture: pressure of 36 cm H<sub>2</sub>O, without any alteration in the analysis. Cerebrospinal fluid: serology, culture test and cytology examination were negative.

Cerebral MRI: bilateral optic nerve sheath dural ectasia.

Campimetry test: visual impairment in the nasal field of the vision, more in the left eye

**Results:** Diagnosis: Benign intracranial hypertension (BIH), Pseudotumor cerebri (PTC)

Differential diagnosis: migraine without aura, cervicogenic headache, cerebral venous sinus occlusion, arteriovenous malformation, meningeal disease, toxic case.

**Conclusions:** BIH is characterized by an increased intracranial pressure (has an incidence rate of 0.9 per 10000 persons, more frequent in women, obese and between 20-40 years that use birth control pills). It can cause visual impairment due to papillary edema. The prevention and control of this disease must be done thoroughly, by controlling the cardiovascular risk factors, visual acuity and eye fundus examination. Around 80% of the cases respond to the conservative treatment by eliminating the risk factors and to Acetazolamide.

## PS2.076

### Risky cryotherapy

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**Background & Aim:** An 87-year-old woman, whose past medical history includes: high blood pressure, low-grade papillary urothelial carcinoma of the urinary bladder treated in 2010 with TUR (transurethral resection), atrial fibrillation, lumbar osteoarthritis. consultations with her general practitioner about a partially pigmented and painful lesion located on her right sole that appeared two years ago. She was initially diagnosed in another medical center with a plantar wart and treated with cryotherapy and keratolytics resulting-in partial improvement. The past two months she recounts sudden growth of the injury with secondary ulceration. Due to the suspicion of malignancy, her doctor decided a preferential consultation with dermatology.

**Method:** Light-colored friable and exophytic lesion (1.3x1 cm), surrounding erythema, located over the first metatarsal head. The dermoscopy examination shows numerous pinpoint (small dotted) vessels and regression structures with atypical pigment network. No other suspicious injuries of malignancy were found. Histopathological analysis revealed a stage 2C Melanoma (Clark's level 2, Breslow thickness was 4mm with an extended ulceration and there is no sign that it has spread to lymph nodes or other parts of the body).

**Results:** Diagnosis: Nodular Melanoma.

Differential diagnosis: Basal cell Carcinoma, Squamous-cell carcinoma, Merkel cell tumour, Atypical fibroxanthoma, early dermatofibroma, inflamed intradermal naevus, Pyogenic granuloma.

**Conclusions:** Pigmented skin injuries are frequent occurrences in general practice medicine. The melanoma constitutes the most relevant differential diagnosis in this scene and the correct diagnosis and an early treatment determines the prognosis of our patients. Therefore, it is essential to know the different clinical forms that a melanoma could present as well as know those cutaneous injuries that could simulate it.

## **PS2.077**

### **An epidemiologic study in patients with cardiovascular risk factors in primary care**

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**Background & Aim:** Knowing the prevalence of cardiovascular risk factors in our environment and its relation to diseases is essential to achieve good control.

**Methods:** A retrospective observational study in patients with cardiovascular risk factor was performed in 2015 in Distrito Sanitario Costa del Sol (Málaga, Costa del Sol)

**Results:** The sample was composed of 796 patients, 29% women and 71% men.

In this study we prove that 34,5% are diabetics and 44,6% are dislypemic. It is observed that 32,3% are never smokers, 20,4% current smokers and 32,3% former smoker. In the sample of this study we find 60,4% of people with high blood pressure.

Due to the fact that the most common reasons for hospitalization in patients with cardiovascular risk factor are acute coronary syndrome, heart failure, stable angina and nonspecific chest pain, we studied the prevalence of those in our sample. We found that 27,9% of the admissions were because of acute coronary syndrome, 19,5% stable angina, 14,4% heart failure and 13,8% nonspecific chest pain.

**Conclusions:** Among patients in our cohort, we found a minority of women, being three times more frequent in men, so we conclude that we should take a closer monitoring of cardiovascular risk factors in male population.

The most common cardiovascular risk factor in our cohort is hipertensión, followed by dyslipidemia. We found similar prevalences regarding diabetes and smoking.

Poor control of cardiovascular risk factors involves events that require hospitalization and a high impact on the quality of life, so it is very important our involvement in primary prevention.

## PS2.078

### **Evaluation of patients' satisfaction with the Continuity of Care Unit (CCU) consultation**

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**Objectives:** To assess the level of satisfaction of patients treated in the CCU, their knowledge about its functioning in its first year, and their suggestions for improvement.

**Methodology:** Transversal, descriptive study, by means of a survey (by telephone/in person) Sample: out of the total of those treated, those who had attended more than three times were selected: 134. Excluded: deceased(32), and others without possibility of contact. 102 who met the criteria, 64 were selected randomly Items: Satisfaction with CCU, staff behaviour, degree of resolution of the health problem, quality of life, knowledge about the unit, and suggestions for improvement.

**Results:** All patients, or caregivers, answered the survey 73% have good knowledge of the how the CCU. 27% have limited knowledge, although 95% know about the ways to access 77% consider that the health problem that caused the consultation was solved satisfactorily Quality of life: 98% of them consider that there has been and improvement since their inclusion in the process 88% of them are very satisfied with how they were treated. The level of satisfaction in the CCU is very good for the 88% of those surveyed. Suggestions for improvement more frequent check-ups, more flexible timetables, a more fluid communication between professionals, and improvements concerning physical space.

**Conclusions:** we consider that the acceptability and satisfaction of patients are very good. They identify reasonable suggestions for improvement: higher number of hours open, better communication, and spaces. Regarding the issue of 'more check-ups, we think that it is a sign of that culture of hospital follow-up this process intends to change, as it is the task of PC providers. It would be desirable to know the opinion of those patients who have not used the unit so much, as there. This is preview of a study that will be completed with an extension of the sample.

## PS2.079

### **A warning about intimate partner violence victims profile**

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**Background:** Intimate partner violence is a global public health and human rights concern. The ongoing assessment of accomplishment the actions taken regard to domestic violence, estimating the degree of implementation and progress in achieving strategic goals is necessary. Identifies best practices in order to secure effective intervention procedures and it will show the obstacles in its implementation. Goals: 1. Knowing the socio-sanitary characteristics of women victims of abuse. 2. Knowing the willingness to reveal the situation of abuse at Primary Care Provider.

**Method:** - Cross-sectional multicentric descriptive study, among women over 14years old, belonging to Primary Health Centres at Burgos in Spain. - Systematic random sampling, with an accuracy of 5%. - Woman Abuse Screening Tool (WAST) as 'Gold Standard' for diagnosing intimate abuse, we set it against the screening tool available on our Health Service. - The sample was integrated by 501 women. Data gathering was made by an interview.

**Results:** The average age of victims of abuse nowadays: 54.8 in the past: 48.3 nowadays and in the past: 29 - 82.9% Spanish 14.6% South American 2.4% Another one - Own health perception Excellent/Very good/Good 59,7% Regular 35,4% Bad 4,9% - HTA31,7% DM12,2% CAD2.4% HF4,9% Headache32,9% Backache43,9% Asthma/COPD14,6% Insomnia 48,8% Anxiety 54,9% Depression 36,6% Injurious Idea 19,5% Anxiolytics/Hypnotics 50% Antidepressant Drugs 19,5% - Influence of Gender violence on women's health: Victims nowadays Yes 97,3% Victims in the past Yes100% - Influence of Family Labour and Social disorders Family problems Yes 96,3% Labour problems Yes 80,5% Social problems Yes 61%

**Conclusions:** There is no association between exposure and poor perceived health. - Backache is the most prevalent disease. The prevalence of Mental illness is significantly higher. - Difference between consumption of Psychotropic drugs, reached statistical significance in Anxiolytics/Hypnotics. The percentage of Antidepressant is also higher. This consumption should raise alarms among health professionals. - 17.1% doesn't have anyone to confide. 94.7% currently living in the same household as her aggressor. 98.8% argues that exposure to abuse affects the health of victims. - Only 16.6% admits having been asked about the possibility of being or having been exposed to abuse. - Women's opinion is unanimous in favor of screening for domestic violence. It's management is considered work over the Physician.

## **PS2.080**

### **Myofascial pain syndrome: management strategies for primary care providers**

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**Background & Aim:** Myofascial pain syndrome (MPS) is a common, painful disorder that is responsible for many pain clinic visits. MPS can affect any skeletal muscles in the body. Trigger points (TrPs), which cause referred pain in characteristic areas for specific muscles, restricted range of motion (ROM), and a visible or palpable local twitch response (LTR) to local stimulation, are classic signs of MPS. They are classified as being active or latent, depending on their clinical characteristics. MPS is responsible for many cases of chronic musculoskeletal pain and the diagnosis is commonly missed. The lack of a clear approach often results in patients being passed from specialist to specialist, prescription of multiple drugs, delays in diagnosis, increased disability and increased healthcare resource utilization. It will be discussed the understanding of MPS, and recommend improvements in the management and treatment of MPS, highlighting the role of the primary care physician.

**Method:** The epidemiology, pathophysiology and management of MPS were reviewed by searching PubMed and references from relevant articles, and selected articles on the basis of quality, relevance to the illness and importance in illustrating current management pathways.

**Results:** The implementation of a framework for myofascial pain management in primary care would limit unnecessary, time-consuming, reduce diagnostic delay and improve patient outcomes.

**Conclusions:** Implementation of a well centred approach would allow patients with MPS, to be successfully managed in the primary care setting.

## PS2.081

### After all, it wasn't just Sinusitis...

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**Background:** Nasopharyngeal carcinoma (NPC) is a rare tumor arising from the epithelium of the nasopharynx. NPC is thought to be the result of both genetic susceptibility and environmental factors such as carcinogens and infection with Epstein-Barr virus. However, a clear etiology for NPC is still lacking.

**Aim and Methods:** Describe a case of a 41 year old male patient with a NPC diagnosis, using as main variables: symptoms, imaging methods and treatment.

**Results:** A 41 years old male patient with history of sinusitis went to a family medicine appointment on 06/08/2015 because of thick and purulent anterior and posterior rhinorrhea, sometimes with blood. He denied other symptoms, including fever. On clinical examination, he presented hyperemia of both the nasal mucosa and oropharynx, and posterior mucous rhinorrhea. Azithromycin 500mg, ibuprofen 600mg and mometasone nasal spray were prescribed. He returned for an appointment on 01/10/2015 and 03/11/2015 with the same complaints and clinical exam. X-rays of the paranasal sinus and thorax were ordered. The first showed opacification of the left maxillary sinus and thickening of the mucosa of the right maxillary sinus. CT of the paranasal sinus was also required and he was sent to an hospital otorhinolaryngology (ORL). The CT showed changes compatible with sinusitis and "hypertrophy of the nasopharynx leading to a reduction of the lateral recess". On 08/12/2015 he had an ORL appointment and was admitted to the hospital to study the source of the bleeding. A nasopharynx biopsy was made, revealing an undifferentiated NPC. A nasopharynx magnetic resonance and a cervical spine CT were ordered and he was sent to the Portuguese Institute of Oncology.

**Conclusions:** Family doctors have a privileged task on diagnosis. Patients' complaints shouldn't be underestimated. It is essential to investigate their cause and send patients to specific hospital appointments whenever necessary.

Disclosure: No conflict of interest declared.

## PS2.082

### **The importance of analyzing the population - sharing the experience of a family doctor trainee**

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**Background:** By analyzing the population followed by a Family Doctor it is possible to characterize it in terms of gender and age and to identify the vulnerable and risk groups among them.

**Aim:** To analyze a Family Doctor medical file - building a population pyramid and identifying the vulnerable and risk groups.

**Methods:** Study: observational, descriptive, cross-sectional Population/Sample: patients followed by one Family Doctor from a Portuguese Family Health Unit (FHU) Data source: digitally available clinical files (SAM®). Statistical analysis: Microsoft Excel 2010®.

**Results:** The medical file analyzed had a total of 1668 patients, 872 of which were female (52.3%). The most common age groups were 65 to 69 years and 70 to 74 years. A constrictive population pyramid was obtained. The obtained vulnerable groups were the following: children (0-9 years) - 5.7%; adolescents (10-19 years) - 9.1%; women in fertile age (15-49 years) - 20.8%; elderly ( $\geq 65$  years) - 29.6%. Considering the health problems registered in the digitally available records from the patients, several risk groups were considered: Patients with dislipidemia - 28.7%, patients with arterial hypertension - 25.6%, overweight or obese - 16.5%, with diabetes mellitus - 10,3% and smokers - 6%.

**Conclusions:** It is extremely important to analyze a medical file and obtain a population pyramid and establish the vulnerable and risk groups. This allows the doctor to plan future appointments and to try to guarantee a good accessibility and equality in health to patients. In Portugal we have specific appointments for hypertension and diabetes. I discussed with my tutor a future plan to consider not only these, but also the other above mentioned vulnerable and risk groups, especially considering that almost a third of our patients are elderly.

Disclosure: No conflict of interest declared.

## PS2.083

### Residents of family medicine (FM) of two family health units (FHU) in Arrábida

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**Background & Aim:** Residents of Family Medicine (FM) of two Family Health Units (FHU) in Portugal found that the consultation interruption, in addition to interfere with the doctor-patient relationship and increase the probability of medical error, cause unnecessary consumption of time. The study proposes to quantify the consultation time consumed by interruptions and characterize the type of interruption.

**Method:** Data were collected by FM residents through direct observation of consultations of fourteen General Practitioners. Subsequently were applied interventional measures giving preference to the use of non-face communication features.

**Results:** In 355 consultations, 132 (37.2%) were interrupted and the average of interruptions/consultations was 1.4. The average of time/consultation was 15 min and for an interruption was 47 sec. Consultation's time spent on interruptions was 146.8min (2.7%). The most common interruption was by telephone (54.0%) and then person interruption (42.9%). After the intervention defined above, it was found that in a total of 381 consultations 77 (20.2%) were interrupted. The average of interruptions/consultation was 1.1, time/consultation was 16.1min and for an interruption was 21.8sec. The consultation time spent on interruptions was 28.0min (0.5%). There most common type of interruption were person interruption and internal mail (36.5% both).

**Conclusions:** There was a decrease in the number of interrupted consultations (37.2% to 20.2%), less time spent by interruptions (47sec to 22seg). of the total consultations' time there was a reduction in the consumption of time spent by interruptions (2.7% to 0.5%). It is thought that these results produce benefit in the doctor-patient relationship.

## PS2.084

### Referral of oncologic patients to the palliative care

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**Background & Aim:** The cancer has becoming chronic, with more symptoms and functional decline. Palliative Care should be provided as soon as possible. It was intended to analyze the process of referral, particularly, through the survival and the time between diagnosis and admission, as well as characterize the population at the time of admission.

**Method:** A descriptive cross-sectional observational study. The clinical processes of all cancer patients referred to the Palliative Medicine Unit of the North Lisbon Hospital Center who died, were discharged or were transferred during the year 2013 were accessed.

**Results:** 242 patients (51% men, median age 69 years) were included; 46% had cancers of the digestive organs; median survival was 28 days; median time between diagnosis and admission was 16 months. This time was higher for cancers of male genital organs and patients in stage IV and a high level of PPS.

**Conclusions:** Compared to the other studies, survival was short and the interval between diagnosis and admission was long. The clinical characteristics show a state of advanced disease. All this seems to indicate a pattern of late referral.

## PS2.085

### **Individual common comorbidities and 5 year mortality in the oldest old of a community-dwelling**

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**Background and Aim:** Comorbidity has been associated with higher mortality. The objective of this study is to analyse comorbidity predictors of 5-year mortality in the oldest old.

**Method:** A community-based, prospective cohort involving 328 subjects aged 85 at baseline was analysed. Socio-demographic variables and data from the geriatric assessment were evaluated. Information on the presence of multimorbidity (>1disease) and sixteen common chronic conditions was collected: hypertension, diabetes mellitus, dyslipidemia, ischemic cardiomyopathy, heart failure, stroke, chronic obstructive pulmonary disease (COPD), atrial fibrillation, peripheral arterial disease, Parkinson's disease, cancer, dementia, anemia, chronic kidney disease (CKD), visual impairment and deafness.

**Results:** At baseline, 202 were women (61.6%) and the rate of multimorbidity was 95.1%. The mean (SD) number of comorbid conditions was 4.5 (3.5-5.4). The mean Charlson Index value was 1.5 (0-7). The only significant differences of disease prevalence according to gender were the greater number of men with COPD ( $p= 0.016$ ) and malignancy ( $p< 0.001$ ). During follow-up, 129 (39.3%) subjects died. The Hazard ratio (and 95% Confidence Interval) of death increased 2.28 (1.5;3.5) in subjects with dementia, 1.84 (1.2;3.0) in subjects with COPD as well 1.81 (1.2;2.7) in cases of malignancy.

**Conclusions:** Dementia, chronic obstructive pulmonary disease and malignancy are the best predictors among the individual common chronic conditions studied of mortality, in these oldest old community-dwelling subjects after a 5 year follow-up period.

## PS2.086

### **Patterns of multimorbidity and mortality in in the oldest old of the community. Five years of Octabaix Study follow-up**

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**Background and Aim:** Multimorbidity has been associated with higher mortality. The objective of the study is to explore the association between patterns of multimorbidity and mortality in an elderly population.

**Method:** A community-based, prospective cohort involving 328 subjects aged 85 at baseline with a follow-up period of 5 years was analysed. Socio-demographic variables and data on functional and cognitive status, comorbidity, nutritional and falls risk, quality of life, social risk and long-term drug prescription were evaluated. Information on the presence of sixteen common chronic conditions was collected: hypertension, diabetes mellitus, dyslipidemia, ischemic cardiomyopathy, heart failure, stroke, chronic obstructive pulmonary disease (COPD), atrial fibrillation, peripheral arterial disease, Parkinson's disease, cancer, dementia, anemia, chronic kidney disease (CKD), visual impairment and deafness. Hierarchical cluster analysis was performed.

**Results:** At baseline, the rate of multimorbidity (>1disease) was 95.1%. The mean (SD) number of comorbid conditions was 4.5 (3.5-5.4). During follow-up, 129 (39.1%) subjects died. Patterns of multimorbidity for two and three diseases showed a significant Hazard ratio (and 95% Confidence Interval) of death of 3.02 (1.6;5.6) for anemia and malignancy, 2.99 (1.7;5.3) for hypertension, CKD and malignancy, and 2.9 (1.7;4.9) for dyslipidemia, malignancy and visual impairment.

**Conclusion:** The most important pattern of multimorbidity that increased the risk of death was anemia and malignancy, in this oldest old community-dwelling subjects after 5 years of a follow-up period.

## PS2.087

### Depressogenic drugs: a review

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**Background & Aim:** Numerous drugs have been associated with the development of depression. Depression may occur either directly, through changes in neurotransmitter concentrations, or indirectly, by inducing fatigue, anorexia, and sedation, which may ultimately lead to depression. Causal relations are difficult to establish, as depression is more common in individuals with medical conditions and the data available are limited. The author aims to review the published evidence concerning the depressogenic effects of non-psychotropic drugs used in General Practice.

**Method:** A literature review was conducted on Pubmed using the terms “Depression/chemically induced” and “Depressive disorder/chemically induced”. This search was limited to articles referring to humans and published between 2011 and 2015. Articles concerning psychotropic drugs and other drugs not used in General Practice were excluded.

**Results:** Out of the 273 obtained articles, 29 were included. First-generation antihistamine drugs may negatively influence mood. Anti-hypertensive drugs can indirectly cause depression; combination therapy seems to increase the risk. Doxycycline, ciprofloxacin, and levofloxacin have been associated with depression in case reports. Finasteride might cause depression in predisposed individuals. Glucocorticoids frequently cause psychiatric adverse events. Data concerning hormonal contraceptives are conflicting, with recent studies suggesting beneficial effects on mood. Isotretinoin-induced suicidality has not been confirmed by recent studies; depression may be a rare idiosyncratic reaction. Montelukast therapy does not seem to associate with depression onset. Selenium exposure correlates with the presence of depressive symptoms. Finally, data concerning the association between statin use and depression are conflicting.

**Conclusions:** A number of cases of drug-induced depression have been reported; however, several of these associations were not confirmed in recent studies. The quality of the available evidence is modest. Nonetheless, implicated drugs should be used with caution in susceptible individuals and psychiatric adverse effects, namely depression, should be systematically assessed.

## PS2.088

### **Sleeping habits of an adolescents' population from a Rural Northern Portuguese city**

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**Background:** Sleep is an important physiological activity with a crucial role in several different functions in the human body such as repair, growth, memory consolidation, learning, physical and emotional development. Studies suggest that the adolescents should sleep between 9 to 9.5 hours per day. A poor or insufficient quality of sleep has immediate consequences such as the decreasing of academic performance, slow thinking, memory loss, sleepiness, mood swings, anxiety, low self-esteem and accident-proneness. In Portugal, a study was performed at a Lisbon school involving 470 children/adolescents between 11 and 15 years old (Moreno T., 2012) assessing sleeping habits and the diurnal sleepiness of the adolescent. The results showed that the majority of the children (60,5%) did not sleep more than 8 hours.

**Aim:** To assess the sleeping habits in the adolescents of a Northern portuguese city and understand how can we improve the quality of their sleep.

**Methods:** Data was collected through a questionnaire distributed to 8th grade students. The questions included amount and quality of sleep, sleeping conditions and others, regarding academic failure and health issues.

**Results:** The sample included 159 students (n=159) with ages ranging from 13 to 16 (medium=13,71; standard deviation (SD)=0,66). 81,8% of the individuals report sleeping well, with a medium of 8.33 hours of sleep during school nights (SD=2h05), where 76,73% sleep more than 8h per night. Data also shows a correlation between sleeping well and not sharing a bedroom (p=0,01).

**Conclusion:** The amount of hours of sleep of this group of adolescents appears to be higher than the national average. The identified factor related to poor sleep is sharing a bedroom and there's no statistical correlation verified between not sleeping well and academic failure, practising sports or having altercations at home.

Keywords: adolescents, sleep behavior, Chaves, Portugal

## PS2.089

### Adolescents' oral hygiene habits from a Rural and Northern Portuguese city

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**Background:** Oral hygiene (OH) is a behavior that adolescents should develop during their growth as its maintenance constitutes a health indicator. Ideally, adolescents should perform their OH 3 times a day and visit a dentist twice a year. OH is an important concern for education and disease prevention in the primary health care. Portugal has a government assistance program called Dentist-Check to improve oral care throughout childhood/adolescence. The check is granted at the family health unit and schools and it can be used in some assigned dentists. The ages included are 7, 10, 13 years-old, which are fulcral stages in dental development. Previous studies performed in Portugal revealed that 67,9% of eighth graders brush their teeth more than once a day.

**Aim:** To ascertain the OH habits of an adolescents' population of a portuguese city and detect if the dentist checks are being exerted.

**Methods:** Data was collected through a questionnaire distributed to 8th grade students, including number of dentist visits per year, number of daily teeth brush and previous tooth treatment.

**Results:** The sample included 159 students (n=159) with ages between 13 to 16 (medium=13,71; standard deviation (SD)=0,66). 99,4% reported at least 1 visit to the dentist. Concerning brushing frequency, 13,2 % brushed their teeth once a day, 57,9% twice day and 28,3 % reported 3-times a day. Regarding previous dental treatment, 44% stated having a treatment in the last 6 months and 20,8% in the last year.

**Conclusion:** From the results we can conclude that this sample appears to present better OH habits than the national average and most of the checks were used. However, the 3 times a day brushing frequency was not achieved. There's no statistical correlation between the frequency of dental brushing and other variables.

Keywords: adolescents, oral care, tooth brushing, dentist, Chaves, Portugal

## **PS2.090**

### **Pancoast tumor: diagnosis in primary care**

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Field of Study: Primary Care, Referral Hospital Appointment Motives: Accidental fall, right upper extremity pain, neck pain and dizziness.

Medical History: A 59 years old male patient, without known allergies, smoker of 80 packs/year and institutionalized by chronic alcoholism and Wernicke -Korsakoff syndrome, is brought to Primary Care because of an accidental fall. Other associated symptoms are right arm, neck and shoulder pain, dizziness, and weight loss. Personal history: Wernicke-Korsakoff syndrome; Depressive Syndrome; Dyslipidemia.

Physical examination: The patient suffered from anterograde amnesia and remained conscious in spite of spatiotemporal disorientation. Ptosis, anisocoria, unreactive right eye and miosis were observed. These symptoms were accompanied by a right arm muscle atrophy as well as pain when in movement. There was no evidence of fractures or bruises. Cardiorespiratory auscultation classified as unremarkable. No other significant findings were found.

Clinical judgment, differential diagnosis, problem identification, additional tests: After assessing the clinical and physical examination of the patient, the most likely diagnosis was a Pancoast tumor associated with Horner's syndrome. This led to an urgent chest X-ray, where a mass tumor was found in the right lung apex.

Treatment, action plans: After observing a possible Pancoast tumor, the referral hospital was immediately contacted to admit the patient and complete the process of diagnosis.

Evolution: Eventually, the patient was admitted into the Internal Medicine Service, and awaited for results of further tests and definitive results.

Conclusions: The primary care physicians are often time limited, with only a few minutes available for each patient's visit. However, a good clinical report with a detailed physical examination can lead the GP to suspect a major disease and immediately start the most efficient procedures to reduce misleading tests and shorten the diagnosis process.

Key Words: Neck Pain, Pancoast, Wernicke -Korsakoff.

## PS2.091

### **Do trainee doctors need to attend Medical Leadership School? A trainee led initiative in England developing leadership skills in doctors**

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**Background:** Medical leadership has been highlighted as a core component of medical education after public inquiries into serious failings of healthcare at NHS hospital trusts in England were undertaken<sup>1</sup>. Myths such as ‘born leaders’ and attitudes surrounding the nature and theory of leadership must be overturned in order to deliver healthcare in the 21st century. Incorporating leadership development in postgraduate curricula for clinicians at all levels in training is imperative.

**Method:** Trainee doctors established the Medical Leadership School in 2010 across the North West of England with the aim of encouraging trainees to learn about medical leadership. The North West postgraduate medical and dental team of Health Education England (HEE NW) funds and supports the Leadership Schools. HEE NW recognises the requirement of these skills within the postgraduate curriculum. The Leadership School committees have members from a wide spectrum of specialties and levels of training. A GP liaison officer role has helped the development of learning needs regarding leadership in primary care.

**Results:** Feedback from delegates attending the events shows support and recognition of the need for leadership development. The Leadership Schools organise evening lectures and workshops that have been facilitated by regional and national speakers from a variety of specialties. Themes discussed include shared leadership, change management, emotional intelligence, raising concerns and resilience in leadership. An annual conference offers trainees to exhibit their local projects, network and develop skills in leadership. Attendance is mostly good with some events over-subscribed; however trainee engagement poses a challenge. Committee members also access focused leadership development and support.

**Conclusions:** Trainees evidenced in feedback the educational value the Leadership Schools offer through events and networking opportunities. Learning outcomes for the committee include the need to organise the future committee and event calendar in advance and overcoming the challenges surrounding trainee engagement and attendance.

#### **References:**

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## PS2.092

### **Comparative characteristics of some parameters of diabetes mellitus among immigrant patients and Israeli-born patients**

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**Background:** There is a variety of native and foreign-born diabetes patients from all over the world in Israel. Combination of genetic and acquired factors leads to high-rate spreading of diabetes mellitus consequently, there exist certain differences in a number of features of the disease typical for Israeli-born patients and for immigrants.

**Methods of Research:** The research is retrospective which has been conducted within a population of diabetes patients aged over 40 years in a group of immigrant and a group of Israeli-born patients. (119 immigrants and 65 Israeli-born patients) Parameters checked were: background: diseases, family history, a kind of treatment, risk factors and complications.

**Results:** In the group of immigrants the percentage of male patients with negative family history was much higher than the percentage of male patients with positive family history of diabetes mellitus. (16.8% vs. 6.5% respectively) Relating immigrants with positive family history, micro-vascular complications were 3 times more prevalent than macro-vascular complications. (30.3% vs. 9.2% respectively) In the group of Israeli-born patients there was a significant difference in the level of micro- and macro-vascular complications among the patients with positive and negative family history. (32% vs. 12.3% for macro-vascular and 27.7 vs. 10.8% for micro-vascular complications).

**Conclusions:** 1. The percentage of males suffering from diabetes mellitus with negative family history is much higher than that with positive family history. (16.8% vs. 6.5%) 2. The level of micro-vascular complications among immigrants with positive family history is 3.3 times higher than the level of macro-vascular complications among immigrants with positive family history of diabetes mellitus. (30.3% vs. 9.2%).

## PS2.093

### **Hyperprolactinemia - clinical manifestations, diagnosis and treatment**

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**Background/Aim:** Hyperprolactinemia is a condition characterized by elevated levels of prolactin in the blood. Prolactin primary function is to increase the development of the mammary glands during pregnancy and induce the production of breast milk after birth. In women, the clinical presentation of hyperprolactinemia is more expressive and is characterized by irregular periods/amenorrhea and galactorrhea. Since the function of the ovaries is affected by hyperprolactinemia, infertility, decreased libido, dyspareunia and osteoporosis are common findings. In man, due to their inhibitory action on the production of testosterone by the testis, can also cause decreased libido or sexual potency as well as infertility, which often are interpreted by the patient as inevitable consequences of age. When the cause of hyperprolactinemia is an unidentified prolactinoma, other clinical manifestations related to tumor growth may emerge, including headache, vomiting and visual disturbances. Make a literature review on the topic 'Hyperprolactinemia' in order to better understand the clinical manifestations, diagnosis and treatment of this clinical entity.

**Method:** One research articles published from the last 10 years in Portuguese, English and Spanish, using MesH term 'hyperprolactinemia'.

**Results:** The treatment of hyperprolactinemia is directed to the cause of elevated prolactin and the aim of treatment is the resolution of signs and symptoms. If prolactin does not give any clinically relevant symptoms, reduction of prolactin levels is not necessary. The treatment of prolactinomas is primarily medical and is effective in about 80% of patients. The various treatment modalities will depend on the tumor volume producer of prolactin or the cause of symptoms, ranging from clinical surveillance, surgery, radiation or drug therapy.

**Conclusions:** The knowledge of this clinical entity and its various forms of presentation is of utmost importance to the family doctor in order to can establish a diagnosis and be able to follow or refer cases to the Secondary Care when needed.

## PS2.094

### **Diabetic eye screening: only diabetic retinopathy?**

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**Background & Aim:** Diabetic retinopathy (RD) is the leading cause of blindness in developed countries. Diabetes(DM) also increases the risk of cataracts and glaucoma. The aim of this study was to estimate the prevalence of eye diseases in diabetic patients detected by a primary care screening.

**Method:** N=398 diabetic patients by appointment on the agenda of diabetic eye screening (CROC) for ocular fundus examination with non-mydratic fundus camera,

A nurse practitioner performs the following techniques: visual acuity test(AV) by projection optotypes. Corrected visual acuity (CAV) with a pinhole occluder. Intraocular pressure(PIO) is measured with a Non-contact tonometry (or air-puff tonometry) and finally eye fundus pictures are taken with a non-mydratic retinal camera. The digital photographs are interpreted by trained readers family practitioners.

**Design:** A descriptive observational study

**Variables:** age, gender ,RD,PIO, visual acuity reduced(VAR) AV <0,6. Refractive errors CAV>=0,6. Ocular hypertension (glaucoma suspect) PIO >or =22mmHg.

**Results:** Excluded N= 26 patients. Exclusion criteria: RD diagnosed previously(6), exitus(2), no attend the appointment.(15) or absence of collaboration by underlying diseases(3).

Reviewed N= 372 Diabetic patients attended (93,46%) age average: 60.5 years. Age range (27-97). 50,8% women. Ocular hipertensión unknown: 46 patients (12,3%). RD: 40 patients(10,75%). VAR in 88 patients (23,6%). Refractive errors: 42patients (11,2%). Without corrected visual acuity: 46 patients(12,3%). 16 patients impossibility to read fundus eyes because opacity of the transparent means of the eyes

**Conclusions:** The prevalence of diabetic retinopathy using the non-mydratic fundus camera was 10,75%. Because of the opacity of the transparent means was not possible to evaluate fundus of the eye in 4,3 % of cases. Ocular hipertensión unknown in the 12,3% of the patients. Refractive errors: 11,2%. Abnormality visual without CAV; 12,3%. Screening for Primary Care suppose an important form to detect eye diseases in diabetic patients.

## PS2.095

### Feasibility and results of abdominal ultrasound in primary care

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**Background and Aim:** Abdominal ultrasound is a diagnostic tool used frequently in general practice. The aim was to study the results and feasibility of abdominal ultrasound in Primary Care.

**Method:** Cross-sectional study was performed in a urban health centre. 200 patients were included over a period of 23 months. Ultrasounds were performed by a general practitioner after an specific training. The protocol included the following variables: age, gender, reason for request (laboratory abnormalities, known pathologies' follow up, diagnosis of new pathology, and other reasons), and ultrasound diagnosis. Proportions were compared using Chi-square test and the mean with t-test.

**Results:** The mean age was 56.3 years (SD 17.1), 58.5% were women. The most frequent reasons for the request were: diagnosis of new pathology (49.5%) laboratory abnormalities (26.2%) and known pathologies' follow up (22.5%). The most prevalent results were: normal ultrasound (41%), fatty liver (15.5%), gallstones (11.5%), renal cysts (9.5%) and renal stones (8%). When new pathology was suspected the most common diagnoses were: normal ultrasound (53.5%), gallstones (13.1%), renal stones (8.1%), and renal cysts (7.1%). In the case of laboratory abnormalities the results were: fatty liver (37.7%), normal ultrasound (43.4%), gallstones (5.7%), renal cysts (3.8%), and bile polyps (3.8%). When known pathologies were controlled: renal cysts (22.2%), renal stones (15.6%), gallstones (15.6%), fatty liver (15.6%), and liver cysts (13.3%). Pathologic ultrasound was more common in men than women (72% versus 49.1%,  $p = 0.001$ ), without relation other variables.

**Conclusions:** Abdominal ultrasound in Primary Care is feasible, allows the follow up of known pathologies, and permits the diagnosis of new diseases.

## **PS2.096**

### **24 hours of sleep: tiredness or drug intoxication?**

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**Personal Background:** Female, 44 years. Allergic to primperan. Surgery for lumbar fusion. Anxious depressive syndrome. In treatment with tramadol, hydromorphone, diazepam, bromazepam, Midazolam. Pregabalin.

**Current Illness:** Attend an episode of sleepiness and fatigue during the previous 24 hours. No fever. No chest pain. No abdominal pain. No nausea or vomiting. Refers to the last six months has presented three similar episodes. It seems to relate with taking medication. The daughter often referred me to present these episodes after having a busy week. The daughter relates that the patient goes to bed late and get up early, during the day he stays with his grandchildren. So on until it is exhausted.

**Physical examination:** good overall condition. Auscultation unchanged. Neurological examination: Glasgow 15. No alteration of the cranial nerves. No signs of meningitis. Negative Romberg. Not cerebellar disorders. No alteration of force or sensitivity. No alteration in speech and gait. He is currently asymptomatic.

**Investigations:** The patient is asymptomatic so no emergency complementary tests are recommended.

**Evolution:** You are indicated to the patients who need to go to your family doctor for reassessment. The presenting symptoms may be due to the two situations tells us; the possibility of fatigue or the potential drug overdose. for proper approach to two possibilities are given guidelines for adequate rest and you are advised to attend social skills workshop that takes place in your facility. In addition it is recommended to start by reducing the dose of midazolam night, half with subsequent review and adjustment by your doctor.

**Conclusion:** This case presented, the performance of emergency is minimal because the patient did not require any intervention in the emergency department. The emergency physician must know the community activities that take place in health facilities to allow appropriate patient counseling. To do this we consider essential communication between primary care and emergency services.

## **PS2.097**

### **Emergency care to visual hallucinations**

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Personal Background: Male, 30 years. He denies history of interest. Smoking 15 cigarettes a day. He denies alcohol. Denies drug use.

Current Illness: You go to the emergency erythematous lesions, large raised, itchy him from two days ago. Also refers to believe that injuries are due to tiny bugs that have gotten into the skin. Says that these bugs can be seen with clarity. I taught in a sample query provides, bugs assumptions, on a napkin. No fever. Background refers not similar feelings.

Physical examination: In the napkin remains of hairs can be seen. No insects or other substances are appreciated. On examination of the skin large raised, erythematous, whitening pressure, hives support are appreciated. Scratch marks without signs of superinfection are appreciated.

Investigations: It offers blood tests that the patient refuses.

Evolution: In this emergency consultation we find two situations. One is that the patient actually have an allergic reaction, with obvious hives with exploration. Two, the patient reports feeling compatible with possible toxic consumption, alcohol or even a delusional pathology. Since the patient does not recognize having some pathology and can not get blood sample, assessment is agreed in consultation for their primary care physician and is derived query Mental Health, preferred.

Conclusion: Sometimes, in emergency visits, it is important to detect possible underlying pathology and allow appropriate orientation for correct diagnosis. In this patient, the multidisciplinary approach is essential, requiring active participation by your family doctor.

## **PS2.098**

### **Costal pain after hard movement. Pneumonia with pleural effusion**

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Personal history: Female 52 years. Background without clinical interest.

Current illness: Come to the emergency room for pain in the right hemithorax from a few hours ago after bending. Refer to the clinic gets worse with deep inspiration. Refer sensation of dyspnea and associated fever.

Physical examination: Tachypnea. O<sub>2</sub> saturation 92%. Fever 38.4°C. Auscultation: right basal hypoventilation with crackles in the middle third of the right lung.

Investigations: Blood test: leukocytosis 24800. D Dimer 1732 (normal <500). 90.6 PCR. Rx thorax: pleural significant law with underlying lung collapse spill is appreciated.

Evolution: The patient was admitted to observation area where she underwent thoracentesis and enters plant. The pleural fluid culture showed growth of *Morganella morganii*. The CT scan of the chest with right pleural effusion with atelectasis / condensation of the underlying lung. Perihepatic slight amount of free fluid is noted, showing an accumulation of the fluid in the post-liver and right kidney region, extending from the posterior subphrenic spaces. Treatment was initiated with antibiotics. At 3 weeks of income is chest CT scan of control: improvement of the right pleural effusion. Remains discreet packaging and average condensation of the right lung. Stay organized collection in the posterior subphrenic spaces. At discharge continues with periodic ultrasound controls disappearing collection at 4 months of income.

Diagnosis: right basal pneumonia with pleural effusion (empyema). Subphrenic abscess contiguity.

Conclusion: The initial clinical patient made us suspect a pathology of muscle characteristics. A proper physical examination directed us to an infectious disease. The additional tests in the emergency completed the study of the patient to an appropriate approach.

## **PS2.099**

### **Suspected stroke: presyncope secondary to medication change**

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**Personal History:** Woman, 69 years. Hypertension. Paroxysmal atrial fibrillation. Ischemic heart disease. Hypothyroidism. Treatment with beta-blocker (bisoprolol) of recent onset, eutirox (in regulation), amlodipine and anticoagulant.

**Current Illness:** Come to hospital emergency department following hypoesthesia in both hands and dizziness after box cold sweats and discomfort from two hours ago. Also presented hypotonia box but without loss of consciousness. No loss of sphincter control. Relates some improvement but persistent symptoms. No clinical infectious.

**Physical examination:** a note on neurologic examination, Romberg unstable with fall backwards and to the left. No other significant findings.

**Investigations:** Blood Tests: no significant findings TAC Skull Unclear hypoechoic image in the left cerebellar peduncle. Normal rest. Income for the patient decides to complete the study. Electrocardiogram: Normal

**Evolution:** During admission she underwent cranial MRI with diffusion: punctate white matter lesions suggestive of degenerative ischemic injury. No acute ischemic lesions are evident. She underwent Holter no evidence of pathology in heart rate. During his stay in the clinic floor disappears presyncope attributed to a change in regular medication for (bisoprolol).

**Clinical suspicion:** Table presyncope after strengthening cardiac treatment.

**Conclusion:** Clinical presented by patients at the time of consultation in emergency forces us to do tests to rule out diseases that cause significant sequelae. The recognition of warning signs is essential for proper patient care.

## **PS2.100**

### **Pain in the right upper limb: pulmonary thromboembolism in young women taking contraceptives**

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Personal Background: Female, 38 years. In hormonal IVF treatment for 18 days.

Current Illness: Attend pain in arm and right shoulder since last night that he radiates to neck and back. The pain increases with certain movements and deep inspiration. No fever or signs of infection.

Physical examination: good overall condition. No tachypnea. Afebrile. O<sub>2</sub> saturation of 98%. Heart rate of 100 beats per minute. Normal lung sounds. No tenderness of the muscles.

Investigations: You will be performed x-ray did not show signs of pathology. ECG: sinus rhythm without pathological findings.

Evolution: Because os taking contraceptives and clinical patient presenting a possible pulmonary embolism is suspected, so the patient was admitted to the observation area and are asked for blood tests: with Dimer D 8826 (normal value <500 ). She underwent pulmonary CT angiography evidenced filling defects distal to right pulmonary artery branches of the middle lobe, lingula and branches of both basal pyramids, compatible with pulmonary thromboembolism. Anticoagulant treatment is initiated with enoxaparin. Enter ground where he completed studies Ecodoppler of inferiors and echocardiogram members, both being normal.

Conclusion: In medicine, clinical history and are the most important parts in the assessment of pathology. Taking contraceptive treatment of IVF was the trigger that made us be alert for the diagnosis of an urgent pathology.

## **PS2.101**

### **Left posterior interosseous nerve syndrome**

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Personal Background: Male, 40 years. No personal history of clinical interest.

Current Illness: The patient came to the emergency room feeling diminution of sensation, numbness in the left arm, which is associated with decreased strength of several minutes. Similar concerns prior episodes that relates to the positions. No impairment of vision. No clinical infectious.

Physical examination: Doubtful hypoesthesia with paraesthesia in palm and forearm distal region of decreased strength in extensor carpi ulnaris. Decreased strength to the extension of the great toe.

Investigations: Blood Tests: no significant findings. Cranial MRI: No lesions in white matter, corpus callosum and brainstem are observed. No acute or chronic ischemic vascular lesions are identified.

Evolution: after normal cranial MRI was decided to perform NMR left arm: no compression at any level is observed; and electromyogram study: marked axonal peripheral neuropathy in radial nerve left for possible level compression channel with partial denervation humeral torsion in its tax neuromuscular territory. Signs of demyelinating peripheral neuropathy observed in the sensory component of the left median nerve compression by possible support with carpal tunnel syndrome. Valuation trauma indicating rest and vitamin B complex, registering the patient is requested. A month later the patient returns for revision of symptoms, physical activity can begin.

Diagnostic: posterior interosseous nerve syndrome. Carpal tunnel syndrome left.

Conclusion: A proper physical examination of the patient is essential to guide a correct medical diagnosis. The need for complementary to rule out more disabling disorders (demyelinating disease) evidence forces us to do more intensive patient monitoring and even hospitalization.

## **PS2.102**

### **Abdominal pain in the emergency department: the importance of the temporal evolution. Report of a case**

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Personal Background: Male, 58 years. No relevant medical history. Underwent surgery for cholecystectomy. No standard treatment.

Current Illness: The patient reported intermittent abdominal pain for 3-4 weeks ago. Refers to the pain subsides analgesia. Go to the emergency room for severe epigastric pain without irradiation but with sweating for two hours. Says it feel to expel gases. No fever. No chest pain. No alteration in bowel habit. No nausea or vomiting.

Physical examination: good overall condition. Afebrile. Normal lung sounds. Relaxed, soft and palpable abdominal mass was palpated not. Diffuse tenderness without signs of peritoneal irritation pain. Not Murphy. Not Blumberg. Bowel sounds preserved. Bloat percussion.

Investigations: Electrocardiogram with 65 beats per minute, normal rhythm. No acute changes are evident. Rx Abdomen: large amount of gas was observed in stomach. Remaining unchanged. Blood tests normal liver values. Remarkable with elevated lipase and leukocytosis 14000. Negative cardiac markers. Protein C with normal value.

Evolution: You will be given analgesia in the emergency room with partial improvement of pain. This enters the observation area for pain evolution. The patient spends the night without incident. New analytical control in the morning with improved value of the lipase is requested. Other analyzes with normal values. Bowel loops and normal gauge walls with little movement, liquid and gas content: Because control of abdominal pain analgesia is ineffective, abdominal ultrasound requested. Minimum amount of free fluid between handles and Douglas. We contacted with surgery to patient assessment. CT Abdomen where evidence is made enteritis. The patient enters Gastroenterology Unit for pain control.

Conclusion: Abdominal pain is one of the most frequent reasons for consultations in the emergency department. Given the large number of different diagnoses that can be included within this location, we believe that the time course and pain behavior are important data for proper handling. The abdominal pains few hours old may have initially normal in further tests. The observation and surveillance in the emergency of these pathologies is helpful.

## PS2.103

### Why do Chinese immigrants go to emergency departments in an European country?

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**Background & Aim:** The population with Chinese origins is growing in some cities and they are localizing themselves in specific neighborhoods. Limited information exists about their use of emergency departments—likely due to cultural and linguistic barriers.

**Objective:** Determining the Chinese population's motives for visiting emergency departments in a level three hospital.

**Method:** Analysis of 740 computerized clinical histories of patients with Chinese origins who were seen during 2013 in an Emergency Department. Study variables: age, sex, day, time of visit, motives, discharge diagnosis (International Classification of Disease), visit outcome. Data analysis: SPSS.

**Results:** The analysis revealed that 97% were under the age of 60. Female to male ratio: 57.7% to 44.8%. 44.8% of visits occurred during the afternoon and 17% occurred during the morning. 25% occurred over the weekend.

in 21% of the clinical histories, a reason for the visit was not listed. Most frequent visit reasons: digestive symptoms (17%), traumas (11%), ophthalmologic visits (7.2%), otorhinolaryngologic visits (5.5%). Most frequent diagnosis: traumas (17.7%), digestive diagnosis (14.8%) (within this category abdominal pains occurred at 5% and gastroenteritis at 3.9%). Musculoskeletal issues (9.1%) (nonspecific pain being the most frequent at 6.1%--followed by back pain at 2.2%). Ophthalmologic issues (8.4%). Respiratory issues 7.3% (with upper respiratory infections occurring at 3.9%). Women sought consultation more for abdominal pain and pathologic musculoskeletal conditions; men sought consultation for respiratory infections, gastroenteritis, and traumas. 88% were discharged and 3.3% required admission. No deaths were recorded.

**Conclusions:** The profile of the patient attended to in the emergency department is young and active with acute problems such as traumas, abdominal symptoms, respiratory issues, musculoskeletal issues, and these patients tended to have favorable outcomes. What is significant is that in 1 out of every 5 histories no reason for the visit was recorded.

## **PS2.104**

### **High dose statins in secondary prevention, between clinical guidelines and intravascular imaging**

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Patients diagnosed with coronary artery disease (CAD) have a high risk of subsequent cardiovascular events, including myocardial infarction (MI), stroke, and death. Modifications of risk factors can significantly reduce these recurrent events and premature death amongst these patients. This presentation aims to review the role and application of intravascular imaging in secondary prevention of CAD.

Coronary angiography has been the gold standard for detecting and guiding the treatment of coronary artery disease by providing two-dimensional projections of the contrast-filled coronary artery lumen. Despite quantitative coronary angiography (QCA) was developed to provide objective and reproducible measurements, this technique remains limited to merely reflecting the degree of lumen intrusion of atherosclerotic lesion. However, especially in the early stages of the disease, plaques can show an outward growth, known as positive remodelling (REF), without luminal compromise and cannot be detected by QCA. Optical coherence tomography (OCT) is a relatively new intravascular imaging technique that provides high-resolution, tomographic images of the coronary arteries. In addition to luminal measurements, its high resolution also enables measurement of fibrous cap thickness (FCT), an important determinant of future risk. Compositional changes with statins have also been investigated using NIRS (Near InfraRed Spectroscopy). Benefits of statins, particularly high-intensity statin therapy have been shown in larger studies, particularly in the setting of use of high-intensity statin therapy. Aside from these findings, high resolution images provided by OCT brought other insights into the mechanisms how statins might operate in stabilizing the plaque. These findings point to possible procalcific effects of statins, which are consistent with possible plaque-stabilizing effects of statins beyond simply their effects on atheroma volume.

Assessment of atherosclerotic plaque via intravascular ultrasound, OCT, NIRS provides to cardiologists, but also to general practitioners a good proof regarding high dose statins benefit in secondary prevention.

## **PS2.105**

### **An algorithm to follow in case of a positive score in the ADS screening test**

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**Background:** Statistics show that, worldwide, one in 68 people has autism. Based on the data from recent years, experts estimate that, currently, autism is a more common disorder than cancer, diabetes and Down syndrome. The consequences of this disorder on the family life are important. For parents it is hard to keep a balance between their existences centered on the autistic child, the other children of the family, their personal life and the society. Therefore, it is important that the family doctors identify autism from its earliest stages and possess a systematical strategy of monitoring it, in order to guide the family towards therapy. Therapeutic intervention must be early, daily, in a sustained regime and its outlines must be known and applied by the family.

**Methods:** retrospective analysis based on the experience gained in 2015 following the introduction of a screening test for ADS, adapted for Romania.

**Results:** an algorithm to follow in case of a positive score in the ADS, algorithm that would be useful for the GP in his daily practice.

**Conclusions:** General Practitioners and other health professionals in primary care have a significant role in the early recognition of the Autism Spectrum Disorder, because very often they are the first people meeting parents worried about the unusual behavior or development of their child.

Properly applied screening is an effective method of early detection, which can give these children a chance for a life as close to normal as possible.

The interdisciplinary team is very important for autistic child care and includes the family, the GP, the pediatrician, the psychologist, the psychiatrist, the teacher, the civil society and the decision-makers in healthcare.

## PS2.106

### **Tailored implementation strategy to improve the management of patients with chronic obstructive pulmonary disease in primary care**

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**Background & Aim:** Chronic obstructive pulmonary disease (COPD) extensively decrease life quality and expectancy. The evaluation of the medical care shows that variety of barriers hinder practitioners from adhering to evidence-based practice guidelines. Tailored implementation of guidelines can be effective, but the effectiveness interventions to improve it is unclear. We aimed to examine the effect of tailored implementation of an fourfold behavioural intervention in of COPD recommendations among primary care practices.

**Method:** Cluster randomized controlled trial was set in 16 general practices at city of Lodz in Poland comparing tailored fourfold program of educational interventions combined with provision of some practice prompts facilitating care, directed at general practitioners with COPD patients under their care, with usual primary care.

**Results:** After 9 months the records of fourfold intervention effects were identified in 1,58% of study group medical records comparing to none in the control group ( $p < 0.0001$ ; ICC=0.007)

**Conclusions:** The recommendations implementation rate was poor, however slightly better in intervention group.

**Competing Interests:** Authors declare no competing interests.

The study was part of TICD EU project funded by the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement no 258837.

## PS2.107

### **Factors associated with multi-ethnic Asian patients with type 2 diabetes mellitus achieving their LDL-cholesterol goal in a developed urban community**

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**Background and Aim:** Achieving LDL-cholesterol treatment goal amongst patients with type 2 diabetes mellitus (T2D) can reduce their risks of cardiovascular disease. This study aimed to determine the factors associated with LDL-Cholesterol (LDL-C) treatment goals amongst patients with T2D.

**Methods:** Adult multi-ethnic Asian patients with T2D were recruited at two primary care clinics (polyclinics) in north-eastern Singapore. Data of their demographic, clinical and self-reported health beliefs were collected in a questionnaire survey and correlated with their latest lipid profiles from their electronic health records. Descriptive results were reported for each participant characteristic. Chi-square or Fisher's exact test was used for categorical variables, of which  $p < 0.05$  was considered statistically significant.

**Results:** The study recruited 734 Asian patients (60.8% females) with T2D, stratified by ethnic groups comprising Chinese (31.2%), Malays (34.9%) and Indians (33.9%). Overall, 70.4% of them achieved treatment goal ( $LDL-C \leq 2.6$  mmol/L), with highest ratio amongst the Chinese (78.6%) compared with Malays (67.2%) and Indians (66.3%). Among the population age 60 years and above, 74.4% achieved lipid control compared to 65.3% of those below 60 years old. of the 711 (96.9%) patients treated with lipid-lowering medications, 98.9% claimed they have never or seldom missed their medications, yet 69.1% expressed concerns about these medications and given a choice, 63.2% would not want to take them. Ethnicity and use of lipid-lowering medications were significant factors in achieving LDL-C treatment goal but adding fenofibrate to statin did not seem to help.

**Conclusions:** At least 70% of patients with T2D in primary care were treated to LDL-C goal. Ethnic groups and their lipid-lowering pharmacotherapy were key factors. Ethnic-centric education programmes to clarify on treatment options should be developed to improve lipid health among this high risk population.

## PS2.108

### **An unexpected outcome from a large weight loss case**

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**Background & Aim:** Weight loss may be a presenting symptom in a variety of clinical conditions. That's why a complete clinical history and a full physical exam are essential to correctly diagnose.

Case Presentation: A 65 year-old men, with history of hypertension, atrial fibrillation, heart failure and alcoholism, complained in a routine consult with his family physician (FP) of weight loss and anorexia, without other symptoms. After observation, blood tests and an abdominal ultrasound (US) were requested.

After 5 months the patient returned to FP to show the test results, which were normal, however the complaints persisted. in the physical exam he just showed a 9kg weight loss. Furthermore, in this consultation an upper gastrointestinal endoscopy (UGE) and a faecal occult blood screening were requested.

The patient returned nine days later, displaying vomiting complaints after all meals and further weight loss, amounting to 12 kg since the onset of symptoms. Considering the increase in the complaints and the fact that the ordered exams have still to be carried out, he was sent to the Hospital's Emergency Department (HED).

At the HED a gastroenterologist performed an UGE, which revealed a dilated esophagus with retained food and secretions. As a result the patient was hospitalized, where a computed tomography and an esophageal manometry were done to him. The final diagnosis was achalasia.

**Conclusions:** Achalasia, a rare disorder, is a primary esophageal motor disorder of unknown etiology characterized by insufficient lower esophageal sphincter relaxation and loss of esophageal peristalsis. This results in patients' complaints of dysphagia to solids and liquids, regurgitation, and occasional chest pain with or without weight loss.

Notwithstanding the weight loss being initially misinterpreted as a malignant disease, it's always important for prognosis to remember to exclude this hypothesis first.

Conflicts of interest: The authors disclose no conflicts.

## PS2.109

### **Pacifier as a risk factor for acute otitis media: what is the evidence?**

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**Background & Aim:** Acute otitis media (AOM) is an extremely frequent condition, particularly in the pediatric population, and one of the most common reason for administration of antibiotics.

Between 60 and 80 percent of children have at least one episode of AOM by one year of age, and 80 to 90 percent by two to three years. A long the years a number of risk factors for AOM has been appointment. One of those is the use of a pacifier.

The aim of this work is to determine the evidence of correlation between the use of pacifiers and the development of acute otitis media.

**Method:** A search was conducted in the following databases: PubMed, Cochrane, National Guideline Clearinghouse, Trip Database, Guideline finders, written in the English and published in the last 15 years. The following MeSH words were used: “pacifier use” and “acute otitis media”. The search was conducted from November first till end of December 2015.

The Strength of Recommendation Taxonomy (SORT) scale from the American Family Physician was used to determine the level of evidence and strength of recommendation.

**Results:** 36 articles were found, of which 15 were included. Two systematic reviews, two guidelines, three reviews and eight original articles.

**Conclusions:** This review found evidence supporting that an association between the pacifier usage and acute otitis media is very consistent. However, more studies are needed, with more rigorous methodologies and long-term follow-up, in order to obtain more consistent results.

**Conflicts of interest:** The authors disclose no conflicts.

## PS2.110

### Ageing in Portugal: the inverted pyramid

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**Background & Aim:** Ageing is one of the greatest social and economic challenges of the 21st century. The last decades of last century saw a continuous increase in the elderly people number, turning the most developed countries in ageing societies.

The combination of low fertility rate with an increasing life expectancy are the main causes behind the slowing down of population growth, while population ageing accelerates.

The main objective of this paper is to analyse the population ageing indicators of Portugal.

**Method:** The statistical data was collected from Statistics Portugal (INE) and Eurostat. This study included data from 1970 to 2014. Data analysis was performed using the SPSS® and Excel®.

**Results:** in Portugal, between 1970 and 2014, the proportion of young population decreased 14%, the relative weight of elderly population increased 11% and the working age population increased 3%.

The number of elderly people exceeded the number of young for the first time in 2000, having the ageing index reached 141 elderly for every 100 young people in 2014. The old-age dependency rate increased continuously between 1970 and 2014, from 16 elderly per 100 people of working age in 1970 to 31 in 2014.

The renewal working age population rate and the number of people in potential age to exit the labour market have been declining, with the highest incidence in the last fifteen years.

According the latest data available Portugal is the 4th country in the EU with the highest proportion of elderly and the 5th with the highest ageing index.

**Conclusions:** Portugal is an aged country and healthy ageing is today a challenge to individual, physicians and society. Considering older people have different healthcare needs, health systems will need to adapt in order to provide adequate care and to remain financially sustainable.

Conflicts of interest: The authors disclose no conflicts.

## PS2.111

### What advice can we give our patients to optimize their odds of aging with better health?

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**Background & Aim:** The world's population is ageing rapidly, which will have substantial consequences. According to WHO: "healthy ageing is the process of developing and maintaining the functional ability that enables well-being in older age".

The aim of this work is to make a literature review on key measures that contribute to healthy ageing.

**Method:** A search was conducted in the following databases: PubMed, Guideline finders and Trip Database, written in the English and published in the last 10 years. The following MeSH words were used: "healthy ageing". The search was conducted from July first till end of December 2015.

**Results:** Based on the articles searched there are many measures with potential to achieve gains in healthy ageing such as prevention of falls; vaccination; regular physical activity, eating fruits and vegetables daily, drinking alcohol moderately; never smoking; prevention of social isolation and social exclusion; prevention of elder maltreatment; public support for informal care giving and create strategies to ensure the quality of care for older people.

**Conclusions:** Getting older can come with a variety of health challenges. in the daily practice of family doctor there are many effective interventions that can improve health and wellbeing in elderly people.

**Conflicts of interest:** The authors disclose no conflicts.

## PS2.112

### Curable hypertension: a case report

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Early detection of secondary hypertension is important because there is evidence that produces greater morbidity and mortality than primary hypertension and a third of cases are curable.

A 38-year-old woman acute to the primary care center reporting musculoskeletal pain. She had no past health. The physical examination revealed arterial tension 190/100mmHg with no other findings. When hypertension was confirmed, treatment with Amlodipine was started. Blood test: potassium 2.4 mmol/L and was otherwise normal. Additional test demonstrated aldosterone 399 pg/mL, plasma renin activity<0.2ng/mL/hr and microalbuminuria 35.5 mg/L.

Abdominal CT: 15mm right adrenal nodule compatible with adrenal adenoma. Amlodipine treatment was changed to spironolactone. The patient underwent surgery being practiced right laparoscopic adrenalectomy. The anatomical and pathological examination confirmed an adrenal cortical adenoma. After the intervention the patient normalized their blood pressure and electrolytes without drug treatment, thus maintained until today.

Primary hyperaldosteronism prevalence reaches almost 5%-20% of the population of hipertensive pacientes and it's underdiagnosed. The classic patient presents hypertension and hypokalaemia, but normokalaemia may be more frequent. The most common causes of primary hyperaldosteronism are aldosterone-producing adenomas and bilateral adrenal hyperplasia.

Hyperaldosteronism may be suspected if hypertension is associated with the followings situations: hypokalaemia, severe or resistant hypertension, hypertension with an adrenal incidentaloma, young onset of hypertension. Other situations: hypertension and diuretic-induced hypokalaemia, hypertension and family history of early-onset hypertension or cerebrovascular accident, hypertensive patients with a first degree relatives of those with primary hyperaldosteronism.

The screening should consist of documenting low level of plasma renin activity or plasma renin concentration and high level of plasma aldosterone concentration. To confirm the diagnosis, the demonstration of inappropriate aldosterone secretion should be requested with aldosterone suppression testing, although in our case these tests weren't ordered.

Adrenal CT should be the initial study to determine subtype (adenoma versus hyperplasia) and exclude adrenal carcinoma.

## PS2.113

### **Adenopathy and pregnancy: a case report**

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Detection of cytomegalovirus (CMV) infection is not included in the routine screening during pregnancy.

A 19-year-old woman was admitted to a primary care center (PCC) reporting asthenia, amenorrhea and some blackout episodes for 10 days.

Medical history: vitiligo. Three months earlier she had consulted in another PCC for mononucleosis syndrome and amenorrhea. Blood-test: positive cytomegalovirus immunoglobulin M(IgM) and immunoglobulin G(IgG) with low IgG avidity, positive Epstein Barr virus(EBV) IgM, AST 58, ALT 86 and positive beta-HCG urine test. Afterwards, the patient had a miscarriage.

On examination she had a painless, elastic and mobile right submandibular adenopathy of 1.5 cm. Beta-HCG urine test was negative. Blood test: positive CMV IgG of high avidity and doubtful levels of EBV IgM. A new beta HCG urine test requested was positive.

The patient had a primary CMV infection with EBV cross-react and had a miscarriage in the early infection. Two months later she gets pregnant again. She was monitored with ultrasound and amniocentesis was requested at week 21 but it is considered to have a low risk. Cytomegalovirus (CMV) infection is now the commonest congenital form of infective neurological handicap. The prevalence of congenital cytomegalovirus infection is 0.3% to 2,4%. CMV infected infants who are symptomatic at birth have a 5-10% neonatal mortality rate and, among survivors consequences may be severe and lifelong.

At the finding of positive CMV IgG or IgM in the first trimester of pregnancy, IgG avidity testing should be performed. Depending on the degree of avidity amniocentesis with CMV-PCR must be considered to determine fetal infection. If the CMV-PCR is positive management options may include CMV hiperimmune-globulin or termination of pregnancy.

The prevalence of infection in fertile women ranges from 60-95%. In this sense, efforts should be made to inform women who have a CMV infection not to get pregnant.

## PS2.114

### **A patch of hardened skin (localized Morphea)**

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**Background & Aim:** Morphea, also known as localized scleroderma, is a disorder characterized by excessive collagen deposition leading to thickening of the dermis, subcutaneous tissues, or both.

**Method:** A 40-year-old woman presented to our Primary Health-Care Attention with a one-year history of skin lesion at her back and other of recent appearance at her buttock. No known medical or family records. The patient referred that the lesion on her back begun as small patch of skin with loss of pigmentation and subcutaneous tissue that enlarged slowly. Physical examination showed two shiny-atrophic-pearly-painless plaques, one of 5cm at lumbosacral area and another of 1cm at the right buttock. Based on the characteristic of the lesions a Morphoea sclerodermia vs extragenital lichen sclerosus were suspected.

**Results:** Laboratory tests determined a complete blood cell account normal. Renal function, electrolytes, erythrocyte sedimentation rate, and level of C-reactive protein were within normal limits. Autoimmune diseases, and *Borrelia burgdorferi* infection were discarded. Previous online consultation from Primary Health-Care Center, the patient was referral our Dermatology Department. Skin biopsy revealed a dermal sclerosis, without inflammatory component associated; lesion suggestive type Morpheiform.

**Conclusion:** The incidence of morphea has been estimated as approximately 0.4-2.7 per 100,000 people. Morphea appears to be more common in whites patients. Women are affected approximately 3 times as often as men for all forms of morphea. Morphea is usually asymptomatic, and the development of lesions is typically insidious. Lesions of superficial circumscribed morphea often undergo gradual spontaneous resolution over a 3- to 5-year period. Limited disease can often be managed with topical therapy or lesion-limited phototherapy.

## PS2.115

### **Frontal fibrosing alopecia: alopecia of the Duchess of Urbino**

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**Background:** Alopecia is one of the main dermatological consultation at primary health-care attention. The most common one is androgenetic alopecia, but we should remember others less common like scarring alopecia. In this type we find frontal fibrosing alopecia.

**Case:** A 67 year-old woman, with a past medical history of dyslipidemia in farmacological treatment with lovastatina, presented to our primary care center with progressive hair loss in frontal area during the last two years. The patient was asking about family history: her mother had a general loss of hair, her father died in his youth and can't be considered.

**Physical examination:** a loss of frontal hair with recession of the frontotemporal hairline and reduced hair in eyebrow was observed. It was orientated as a frontal fibrosing alopecia. She was treated with topical corticosteroids. From primary care performed an online consultation with dermatology, who recommended referral for biopsy. Finally this was discarded. Patient has recived treatmeant with minoxidil 5% with some improvement, especially frontal and eyebrow, not in temporal hair.

**Comment:** frontal fibrosing alopecia is an unusual tipe of alopecia that appears in middle-age and older women. The diagnosis of this entity is clinical: recession of the frontotemporal hairline and sometimes eyebrow and axillary alopecia. Histopathology reveals an inflammatory infiltrate and perifollicular lamellar fibrosis. Corticoids, minoxidil and finasterida has been tested as a treatment, but none of them has clearly demostrated efficacy.

**Key words:** frontal fibrosin alopecia, scarring alopecia.

## PS2.116

### **Testicular self-examination and testicular cancer: the facts**

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**Background & Aim:** A 30 years old male, without toxic habits or medical history. Arrives referring us that two weeks before he felt something hard his right testicle. After tha he decided to begin self-examination and consulted when it not decrease.

**Method:** Exploration and Complementary Tests: Testicular exploration: both duc deferens were palpable, scrotal liquid level was not observed and in the upper pole of the right testicle had a palpable irregular stony mass. Given these findings on examination is we decided to refer the patient to urology service with a blood test for tumor markers (alpha-fetoprotein (AFP), human chorionic gonadotropin (beta-HCG) and lactate dehydrogenase (LDH)). In urology tumor markers were negative, but given the strong suspicion of malignity, a urgent testicular ultrasound was done and showed that the lesion corresponds to a calcified hydatid.

#### **Results:**

Clinical Trial: Calcified hydatid right testicle.

Differential diagnosis: Testicular cancer. Calcified hydatid.

**Conclusions:** Testicular cancer is the most common cancer in men between 15 to 35 years old. There are two main types of testicular cancer: seminomas and non-seminomas (most common and fastest growing). In most cases they are asymptomatic, causing great risks to the patient's life, it can cause rapid spread mainly abdomen, lungs and retroperitoneum. In our case, the patient benign diagnosis meant something totally unexpected by all professionals who value given the nature of the injury, but helped us to remember the importance and the few broadcast on testicular self examination (TSE). Society is raising awareness of the importance of breast self-examination for early diagnosis of breast cancer, but no campaigns on TSE, despite being a much less complex process. The correct information on how to do this and realizing this every month may help detect testicular cancer at an early stage, this being vital for the survival and effective treatment.

## **PS2.117**

### **Football matches and the emergency service visits**

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**Background & Aim:** There are many rumors about the decrease in visits to the Emergency Services when football matches are being placed. The aim of this study was to verify or disprove this idea, using attendance data during matches of the Spanish selection.

Design: Retrospective descriptive analysis.

Site: Emergency Services. Poniente's Hospital.

**Methods:** for the study, given the role of the Spanish team at the 2014 World Cup, we draw to the best football match that have taken place: World Semifinal 2010, World Final 2010, and Euro 2012. Given 2 hours pre-game, postgame and the game itself. As reference, we analyze the same hours just seven days after the match in the same month. We rate patients according the gender and priority. The Pediatrics and Gynecology visits were excluded to avoid statistical bias.

**Results:** We obtained a sample of 316 patients. The days that there was no match had around 10 patients more than the days that had. It was observed that on match days there was less visits of men during the match (2 Semifinal against 14 the comparative day).

**Conclusions:** With the analysis we postulate That there are no statistically significant Differences in terms of overall numbers, but In our hospital's zone there is a lot of immigrant population (the ethnic was not Considered as a variable). To Achieve statistical significance, we must expand Both the number of patients as variables to consider.

Keywords: ER, Football, Assistance

## PS2.118

### Diagnostic in the eyes - a case of Graves' disease

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**Background and Aim:** Graves' disease is the most frequent cause of hyperthyroidism. Other frequent symptoms are exophthalmia, goiter and dermatopathy. It is more prevalent in women between 30 and 40 years. The family physician must recognize the signs and symptoms of Graves' disease since many times the patients may disregard its impact.

**Methods:** We present the clinical case of a female (APSF), 32 years, 9th grade education, unemployed. She belongs to an extended family from a low social class. Medical history: ovarian cyst, anxiety disorder and infertility. Usual medication: ethyl loflazepate. In May 2015 while accompanying a family member to a consultation, the exophthalmia and goiter were observed. She also had insomnia and anxiety that she related with to her anxiety disorder. During the analytical assessment hyperthyroidism was also observed. She was treated with atenolol and referenced to endocrinology consultation where she was medicated with tiamizol. APSF also developed a thrombocytopenia associated with Graves' disease. In August 2015 she became pregnant and underwent a voluntary pregnancy termination. Currently she continues the treatment with improvement of symptoms. Exophthalmos remains unchanged.

**Conclusion:** Graves' disease has a good prognosis with long-term control and improvement of goiter and symptomatology. However, it may presents relapses and exophthalmia has a variable response to anti-thyroid treatments, therefore patients with Grave's disease should keep the follow-up in endocrinology consultation. This case highlights the importance of a continuous longitudinal care by the family doctor, allowing a better understanding and interpretation of patient's signs and symptoms that can sometimes be undervalued by the patient and that may reveal underlying medical conditions. This work contributes for the specific decision method of family medicine on the basis of prevalence and incidence of diseases in the community that can manifest themselves in an early form but have the need for urgent intervention.

## PS2.119

### Factors effecting the initiation of insulin therapy in type 2 DM patients in primary care: perspective of family physicians

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**Background and Aim:** Delay on beginning insulin therapy to the patients with type 2 diabetes causes the progression of complications, leads increases in health expenditures. GP/FPs should be effective at every step of the management of Type 2 diabetic patients. However, GP/FP s hesitate to start insülin therapy when it s neccessary. In this study, it is aimed to determine the the behavior of GP/FPs on initiating insulin therapy and reasons to avoid taking responsibility in type 2 DM.

**Method:** The study was designed as cross-sectional pattern. It was projected to reach 25% of 1141 GP/FPs who work at family health centers in Izmir. The questionnaire was prepared by the researcher based on the qualitative study conducted prior to this research. SPSS ver.15 was used for data analysis.

**Results:** 400 GP/FPs participated in the study. The mean age was  $47.35 \pm 5.68$ . 61,2% of them were male. 45,3% of them did not get any postgraduate training regarding with insulin therapy. 89,8% of them were usually able to start OAD therapy, 48,1% could easily switch between OADs.100% of them could advise life-style changes. On the other hand 82% of them could decide to begin insulin, but only 6,6% of them could begin insulin therapy. 2,1% of them could stop insulin therapy when it is neccessary. Although, 70,5% of them reported that GP/FPs should begin insulin therapy. The main obstacles for not to begin insulin therapy were lack of experience (61,8%), fear of hypoglycaemia (52,8%), lack of time (48,6%), fear of malpractice (48,3%). 75,6% of them remarked that beginning insulin therapy confidently could only be done by having a consultancy that could be reached easily.

**Conclusion:** GP/FPs admitted that they have an important role to begin insulin therapy. Lack of knowledge and experience were the main reasons for not beginning insulin.

## **PS2.120**

### **Testing for parasitic infections in traveller and migrants with eosinophilia in primary care**

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**Background and Aim:** Despite the high prevalence of helminth parasitic infections worldwide and a highly diverse international and mobile population in London, we neglect testing for parasitic infections in primary care. Previous research has demonstrated the significance of eosinophilia in these groups with 10-73% having a parasite infection despite a majority being asymptomatic. National guidelines regarding this are available however remain unknown or not used. The purpose of this project was to assess the impact of introducing parasitic testing in high risk groups (travellers and migrants) with eosinophilia in a medium sized London GP practice.

**Methodology:** A retrospective audit of all patients with eosinophilia demonstrated that none had been tested as per guidelines despite a large proportion having travelled or born outside the UK. Practice guidelines and a patient pop alert were introduced as well as an educational event. The audit was repeated six months later to assess impact.

**Results:** Since the implementation of the guidelines, 33 immigrants or travellers with eosinophilia have been tested and a resulting 12 patients (36.4%) had positive parasitic serology. Three patients had combined infections, one had positive schistosomiasis serology and eight patients had positive strongyloides serology.

**Conclusions:** Eosinophilia combined with a positive travel history is strongly indicative of asymptomatic parasitic infections and can be easily investigated in primary care. With an increasing migrant and travelling populations, there is a need to screen these high risk groups who have curable but if untreated, potentially fatal conditions.

## PS2.121

### Change of commuting mode and health behavior after parking lot closure in workplace

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**Background & Aim::** Increasing of physical activity has a positive effect on health promotion. Changing commuting mode to active transportation (public transportation, walking and cycling) makes good effect to health promotion. There have been mainly campaigns or promotion-like intervention related researches. We examined the commuting mode transition, related factors and physical activity that were made by parking lot closure in the hospital.

**Method:** From April, 2014 to August, 2014 about 4 months, there were parking lot closure in the hospital in Seoul. During that time, it is possible to use private parking lot beside hospital with more expensive charge. In the questionnaire, we asked about transition of commuting mode, commuting time, walking time during commuting, physical activity, interests about weight reduction or diet, etc.

**Results:** Among enrolled workers(175 persons), there were 50 passive commuters, becoming 21 commuting-mode changers, 29 non-changers. In mode changers group, there were increasing in walking time (average 5.4 minutes to 25.8 minutes per day during commuting time) and physical activity (average 413 METs-minutes to 613 METs-minutes per week). Long commuting distance (above 5 km) was related to less commuting-mode change. Attitude to weight reduction didn't have a statistical significance in relation to mode change.

**Conclusions: :** Parking lot closure in workplace makes passive transportation commuters to active transport commuters, with increasing walking time during commute and increasing physical activity. Commuting distance is the factor that has a statistical significance.

## PS2.122

### Spousal concordance for cardiovascular risks consisting of chronic diseases and health-related lifestyle in Korea

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**Background:** Cases of family clusters regarding cardiovascular disease have been studied in many countries. However, only little has been done in Korea even though Korea is considered to be ‘ethnically homogenous’ which may reduce the effect of ‘assortative mating’. Thus, this study was conducted to address the spousal concordance for cardiovascular risks in Korea.

**Methods:** The FACTS (FAMILY CohorT Study in Primary Care) was established to investigate the relations between familial environment and health. Subjects (as a couple) aged 40-75 years were recruited among people who visited 22 family physicians from 2009 to 2011. To evaluate the spousal concordance, we performed McNemar tests and logistic regression analyses adjusted for age, education and income.

**Results:** All the risks we examined (smoking, risk alcohol drinking, low physical activity, irregular diet, skipping breakfast, obesity, hypertension, diabetes, dyslipidemia, depression) have statistically significant spousal concordance. As a result of multiple logistic regression analysis, the odds ratios of husbands’ having a particular risk factor when their wives had same risk were as follows : low physical activity (OR = 2.47, 95% CI 1.54-3.96), irregular diet (OR=4.30 , 95% CI 2.26-8.20), skipping breakfast (OR= 6.84 , 95% CI 3.75-12.48), obesity (OR = 1.73, 95% CI 1.14-2.63), hypertension (OR = 1.88 , 95% CI 1.23-2.86), dyslipidemia (OR = 2.41, 95% CI 1.60-3.64), depression (OR = 5.54, 95% CI 2.19-13.96). The significant spousal aggregation inferred from the odds ratios of wives’ having risks when their husbands did were still observed on the same risk factors (low physical activity, irregular diet, skipping breakfast, obesity, hypertension, dyslipidemia and depression, OR from 1.72 to 5.14)

**Conclusions:** Spousal concordance for cardiovascular risks seems to exist in Korea. Therefore, primary physicians who evaluate patients for cardiovascular risks need to examine their spouse and encourage them to participate to prevent cardiovascular disease.

## PS2.123

### Short stature in men is associated with peripheral arterial disease

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**Background:** Peripheral arterial disease (PAD) affects approximately 202 million individuals around the world and associates with a high risk of myocardial infarction, stroke and death. Although there is a clear inverse association between adult height and the risk of cardiovascular disease, little is known about the relationship between height and PAD. The aim of our study was to assess the relationship between PAD and height.

**Methods:** A cross-sectional cardiovascular risk factor study was conducted in southwestern Finland from 2005 to 2006. Ankle-brachial index (ABI) and other risk factors were measured from a total of 972 cardiovascular risk subjects derived from general population. None of them had previously diagnosed diabetes, cardiovascular or renal disease or intermittent claudication. Subjects with an ABI  $\leq$  0.90 were categorized as having PAD.

**Results:** The average age of the study subjects was  $58.1 \pm 6.7$  years for men and  $58.8 \pm 6.9$  years for women. The prevalence of PAD among men was 5% (95% CI 3-7%) (23/455) and among women 5% (95% CI 3-7%) (26/517). The mean ABI was  $1.09 \pm 0.12$  and  $1.08 \pm 0.12$ , respectively. In men, there was an inverse association between height and prevalence of PAD ( $p < 0.001$ ) along with a positive association between height and ABI values ( $p < 0.001$ ). The associations remained significant after adjusting potential cofounders but did not exist among women.

**Conclusions:** Short stature in men is associated with PAD and lower ABI values.

## PS2.124

### Teenager - a challenge in family medicine practice

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**Background:** Adolescence represents a crucial stage of life for individual and a major period, to those who care for teenager-parents, doctors, teachers.

**Aim:** Short analysis of adolescent care in family medicine practice from Romania regarding:

1. Adolescence physiology
2. Adolescence pathology
3. Communication with teen

**Method:** It was conducted a small retrospective observational study, based on documents from practice. The evaluated period 1997-2006, included 640 teenagers ages 10-18 years. Report girls/boys= 0.96, provenance-urban 94% rural-6%, scooled 93%, organized family 74%, monoparental 11%, institutionalized 1.5%, 13.5%- care of relatives (parents abroad). The medical team received training in communication and prevention.

**Results:** They were evaluated elementary aspect of adolescence physiology -weight, height, blood pressure, seeing, hearing, puberty, sexualization, pathology: Still spinal disorders 30% from witch 20% kyphosis, sight disorders 35% -from witch15% without correction. Respiratory tract infections-medium 4 episodes/year, asthma 2%.Nutrition-obesity 25%, (BMI>30) associated with1.2% with hypertension Tooth decay 25%(13%- no dental examination in history). Behavioral disorders - 15%teenagers coming from dysfunctional families(anxiety, depression), suicide(4). Sexual debut-13,5years girls, 15 years boys, pill-free75% of cases. Unprotected sexual intercourse 50% of cases, unwanted pregnancies 12%. 21% of girls 1 abortion before age 18 Sexually transmitted diseases(STDs) 5%, urinary tract infections, B hepatitis, peak between 16-18years. Addictions-smoking- 30% from age of 12, from13 years- alcohol, drugs 0.5% (personal statements) 50% of them left school, non-compliant for treatment, absent income.

### Conclusions:

1. Adolescence is accompanied by physical and mental changes Strong recommendation- GP.s annual evaluation
2. The Adolescent Medicine require a National Educational Preventive Programs targeted on teenager problems, involving family medicine team, parents, teachers, Media, decidents
3. In order to prevent behaviors at -risk: STDs development, addictions, dropout, unwanted pregnancies, proper communication and adolescent permanent counseling is essential.

## PS2.125

### **The general ultrasonography as an experimental oncology screening and a comparative statistical analysis of different type of ultrasound methods (Triplex Doppler or Strain Elastography) who can be significant in primary care**

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**Introduction:** in the last years, big progresses have been made in oncology, both in therapy and in diagnostic. Ultrasonography is an investigation useful in the tumor diagnosis, establishing the topography, extension, consistency, tissues stiffness, vascular network analysis and even pathology elements connected to its nature. Our objective was early diagnosis and treat quickly in the earliest stages of malignant tumors through Oncology Ultrasound Screening at primary care level to the high risk population. The aim of this study is to establish a guide for the General Ultrasound Screening for differentiation "benign versus malignant" of tumors detected.

**Method:** We report a prospective oncology screening(abdominal, pelvic, breast, thyroid and soft tissues ultrasound) performed on a total of 5000 patients with oncology risk factors+, over 40 years, followed over five years, sex ratio=1:1. We used a questionnaire to identify presence of the risk factors as inclusion criteria. To patients aged 40-50 years, were made an ultrasound screening every two years and over 50 years annually, by an ultrasound guideline and archived into an electronic database designed by us. Positive patients had done the following ultrasound methods: Doppler with fractal geometry analysis, Elastography and „Malignancy Ultrasound Score”(M.U.S) developed by us.

**Results:** Were found a total of 310 patients with benign (n=157) and malignant tumors (n=153).The incidence of malignant tumors was 3.6% in the risk population. The sensitivity of screening was 81%,specificity 90,94% with a high accuracy of 90,54%, $p<0,01$ , 5-year prevalence was 6,2%, PPV=37,32%, NPV=98,68%. ROC analysis confirmed a higher level of diagnostic accuracy of elastography compared with Doppler Ultrasound, AUC=0,996,95%CI=0,981to1,00, $p<0.001$ . To ANOVA comparative analysis the very significant statistical method was M.U.S.,  $p<0,001$ .

**Conclusions:** Both Doppler Ultrasound and Elastography proves to be very efficient methods with a high accuracy 90% in oncology screening for the early detection of hypervascular tumors in asymptomatic stage, who can confirm malignancy and the need for biopsy.

## PS2.126

### Prevention of violence and aggression in German General Practice - an interprofessional qualitative study ("Safety GP")

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**Background and Aim:** International studies indicate that two-thirds of General Practitioners (GPs) experience violence or aggression (VA) in a 12-month period. Particularly home visits within out-of-hours care bear a higher risk of experiencing VA. Findings in Germany are in line with these results, concluding that 10% of GPs were exposed to a 'high' aggression level, e.g. physical violence or abuse/threats with objects or weapons. A decreasing feeling of safety during out-of-hour's home visits is described. Especially female doctors are affected. In Australia, a brochure addressing strategies to reduce VA in practices exists. Within this brochure items such as practice design, policy development, de-escalation strategies and tutorials are included. The objective of this study is to explore aspects of safety-structure and intrinsic safety in GP practices and during home visits in order to develop a cultural adapted curriculum to prevent VA against GPs and practice staff.

**Methods:** Interviews with 25 participants including GPs, GP practice staff, architects, policemen and de-escalation trainers will be held. Using a semi-structured guideline, information about personal experiences with VA against GPs and prevention measures will be collected. Interviews will be digitally recorded, transcribed and coded by two researchers. A consensus version of the codes will be discussed with a third, independent researcher.

**Results:** As the work is still under progress, results will be presented at the Congress.

**Conclusion: Results:** will be used to develop a cultural adapted curriculum to prevent VA against GPs and practice staff.

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## PS2.127

### Therapeutic cloning and Future prospective of regenerative medicine

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**Background:** In biology, cloning refers to the process of producing similar populations of genetically identical individuals that occurs in nature. In biotechnology, it refers to the processes used to create copies of DNA fragments (molecular cloning), cells (cell cloning) or organisms.

**Method:** Somatic-cell nuclear transfer (SCNT) can also be used to create embryos for research or therapeutic purposes. The most likely purpose for this is to produce embryos for use in stem cell research. This process is also called research cloning or therapeutic cloning (TC). TC is cloning specific human cells, genes and other tissues that do not and cannot lead to a human being. The goal is to harvest stem cells that can be used to study human development and to potentially treat disease. TC techniques are integral to the production of breakthrough medicines, diagnostics and vaccines to treat many diseases. They could also produce replacement skin, cartilage, bone tissue, retinal and spinal cord tissue by the technology of regenerative medicine. The process begins by removing the nucleus from an egg cell and inserting a nucleus from the adult cell to be cloned. In the case of someone with spinal cord injury, the nucleus from a skin cell of that patient is placed into an empty egg. The reprogrammed cell begins to develop into an embryo because the egg reacts with the transferred nucleus. The embryo will become genetically identical to the patient. The embryo will then form a blastocyst which has the potential to become any cell in the body. In SCNT, not all of the donor cell's genetic information is transferred, as the donor cell's mitochondria that contain their own mitochondrial DNA are left behind. We should keep in mind that every 30 seconds, a patient dies from diseases that could be treated with tissue replacement.

## PS2.128

### **Factors affecting secondhand smoke exposure at home and in workplace among non-smoking Korean adults**

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**Background:** Secondhand smoking (SHS) exposure is associated with many adverse health effects. The aim of this study was to evaluate factors affecting secondhand smoke exposure in nonsmoking Koreans in a representative sample of the South Korean adults.

**Method:** We used data from the Korea National Health and Nutrition Examination Survey in 2010-2012 (n=14,447). Predictor variables included age, gender, region, educational attainment, marital status, and household income. Outcome variable is self-reported secondhand smoking exposure among non-smoking adults. Multivariable logistic regression analysis was used to examine association between predictor variables and SHS exposure at home and in the workplace. Analyses were undertaken with SPSS version 21.0.

**Results:** SHS exposure at home was greater among female (16.8%) than male (4.9%). in contrast, SHS exposure at work among male (54.8%) was greater than female (38.4%). for men, marital status was independently associated with SHS exposure at home. in the workplace, higher odds SHS exposure was found among younger age group and higher alcohol dependency.

**Conclusion:** Despite of strengthening of smoke-free policy, secondhand smoking is relatively prevalent among Korean adults. Moreover, there were subgroups which were more vulnerable to SHS. Findings highlight the need for comprehensive tobacco control measures to promote smoke-free policy in Korea with more emphasis on vulnerable subgroups.

## PS2.129

### **Evidence based medicine in health care professionals' opinion. A pilot study**

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**Background & Aim:** Evidence based medicine (EBM) is the application of clinical medicine relying on the best scientific evidence available at time. Health care professionals practice medicine relying on their knowledge which is usually enriched by revising scientific bases while seeking adequate data in order to make right decisions. This study was undertaken to know the opinion of health care professionals from a university hospital and its primary care centers about their EBM competences and needs in 2016.

**Methods:** A self-completed questionnaire was designed for health care professionals. The questionnaire contained 6 sections (socio-demographic data, EBM formation, available access to EBM material, competences, needs and suggestions) and 36 variables. The variables were scored on a scale of 1-10 (low to high). A pilot study was performed. The present study was done in accordance with the Ethics Research Committee.

**Results:** Cronbach's coefficient >0.954. 31 health professionals responded the questionnaire (26 physicians and 5 nurses). 61% were females with average age of 46 years old. Participation was of 69%. Regarding their interest in access to Clinical Practice Guidelines (CPGs) databases they rated it of 8.35 points. of their competences, professionals choose as the best their need and interest in improving EBM (8.10 and 8.00 respectively). On the other hand, the worst rated was the possibility to apply EBM principles in daily practice (5.45 points). As for needs in EBM formation, they rated best their interest in access to on-line materials (8.35 points) and as 2nd best critical reading especially of treatment articles (7.97); they worse rated their possibility to elaborate CPGs based on EBM (7.39).

**Conclusions:** Health care professionals were very interested in EBM, especially in access to CPGs and other EBM materials. They also considered EBM as necessary in their daily practice, even with the multiple difficulties implicated while applying it.

## PS2.130

### **Blood group does not form a risk factor for tiger mosquito bite**

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**Background & Aim:** Since the arrival of *Aedes albopictus* to Spain a rise in medical consultation of mosquito bites in our primary care centers was detected. This mosquito can act as a vector of arbovirus causing diseases like Dengue or Yellow fever, among others. Such diseases were eradicated but can be considered of a probable recurrence in the XXIst century. It is known that the tiger mosquito has a preference for some persons than to others, even though till now there are only a few factors described, such as sex and age. In experimental conditions, *Aedes albopictus* show a preference to people with blood group O twice as much as to persons with a blood group A (Shirai et al., 2004). This study was undertaken to analyse blood groups of patients who sought primary care attention complaining of mosquito bite with *Aedes albopictus* and compare them with those of general population.

**Method:** A descriptive transversal retrospective study. Patients of whom their blood type was identified, were selected and classified in two groups: The first group formed by patients consulted during the period between 2002 and 2008 for tiger mosquito bite (n=73). The second is the general population group (n=1720) consulted in the same period.

#### **Results:**

- General population group: Average age of 35 years old, 90% females (n=1541). ABO blood group: 48% O (n=823), 38% A (n=660), 10% B (n=170) y 4% AB (n=67). 87% Rh+ (n=1498) y 13% Rh- (n=220).

- Patients consulted for *Aedes albopictus* bite: Average age of 22 years old, 94% females (n=69). ABO group: 45% O (n=33), 43% A (n=31), 11% B (n=8) y 1% AB (n=1). 87% Rh+ (n=63) y 13% Rh- (n=9). There was no statistically significant differences between both groups (p=0.645).

**Conclusion:** Blood type does not form a risk factor for tiger mosquito bite.

## PS2.131

### **Takayasu arteritis manifested as effort angina and diagnosed after detecting coronary ostial stenosis on CT scan - case report**

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Takayasu arteritis is an uncommon chronic vasculitis of unknown etiology which primarily affects aorta and its primary branches. We present a case study showing importance of suspicion of such a disease based upon clinical features which guide complementary tests for diagnosis.

A 47 years old caucasian female with history of hypertension, left renal atrophy and a miscarriage, presents episodes of oppressive chest pain coinciding with postprandial effort for two months. Her primary care doctor recommended adapting her life style; EKG done in consult was normal. Since episodes recurred, she referred her to a cardiologist who decided performing a coronary CT. It showed involvement of ostium of coronary arteries due to an inflammatory process of the aorta (aortitis) probably autoimmune. When admitted to her reference hospital an immunosuppressive treatment with corticosteroids and cyclophosphamide bolus was indicated. Physical examination: multifocal heart murmur and bruits audible over carotids, abdominal aorta and femoral arteries.

**Lab Results:** autoimmunity negative, normal CRP, mild iron deficiency anemia. Echocardiogram: thickening of ascending aorta, light pseudocoarctation of descending aorta. MRA confirmed lesions of supra-aortic trunk as changes suggestive of Takayasu arteritis. PET-CT: without abnormal signal. Cardiac stress test: clinically normal but with electrical changes at the end of 2nd stage of Bruce. She was discharged from hospital with strict recommendations of limited life habits.

She completed eight doses cycle of cyclophosphamide with descending glucocorticoid therapy. A coronary CT of control does not differ from the previous and it was decided to initiate anti-TNF(infliximab) treatment and also MTX to reduce dose of corticoides.

Getting to a diagnosis sometimes may result difficult and even take years especially when treating with a rare condition. As we know it is always important to make a differential diagnosis in order to reach the correct one, even though rare, excluding other diagnoses much more frequent.

## PS2.132

### Values and competencies in specialized medical training: healthcare professionals vision

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**Background & Aim:** Postgraduate teaching is a source of motivation and reflection. In this work we aimed to know the perception of healthcare professionals (residents, tutors and teaching collaborators) about the core values and competencies to develop their tasks.

**Method:** Tailor-made questionnaire aimed at healthcare professionals in nine health care centers and a referral hospital. 234 professionals participated. Pilot test: 45 professionals. Participation: 38 % residents (n = 61), 86 % tutors (n = 55), 40 % teaching collaborators (n = 118). Questionnaire: 3 sections and 48 variables (scale 1-10). The present study was done in accordance with the Ethics Research Committee of the MútuaTerrassa Hospital.

**Results:** Average age: 41 yo, 74 % women. Satisfaction was higher with healthcare (7.95 points) than with teaching (6.11 points), management (5.19 points) and research (4.66 points). On average, teaching was rated 0.9 points more by tutors than residents (95% CI, 0.2-1.6 points). Best rated values were work compliance (8.78 points), ethics in professional practice (8.67 points) and respect for your team (8.30 points). The best rated competence was communication with patients and families (8.16 points), followed by self-motivating leadership (7.91 points) and the practical application of medical and healthcare theoretical knowledge (7.83 points). Tutors rated 0.7 points more on average their theoretical knowledge than residents (95% CI, 0.3-1.0 points).

**Conclusions:** Healthcare professionals are particularly satisfied with the health care aspect, followed by teaching, and showed dissatisfaction with research. All professionals (residents, tutors and teaching collaborators) mostly share the same perception of the values and competencies that influence their professional development. On the whole, residents were more dissatisfied with teaching and their theoretical knowledge than tutors.

## PS2.133

### **Contents analysis of clinical preventive services delivery in out-patient clinic of department of family medicine**

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**Background:** Primary care practices are major sites for providing health promotion and screening services. This study describes rate of preventive service delivery during outpatient visits to family physician.

**Methods:** Data on patient characteristics and provided clinical preventive services by physicians were collected by medical record review. The subjects of this study were 972 patients who visited out-patient clinic of Department of Family medicine during 2013. Delivery of preventive services were compared with sex. Correlation analysis was conducted using the chi-square test.

**Results:** Preventive services were delivered 73.3% of 972 patients during first visits. The contents of clinical preventive services were consisted of recommendation of lifestyle modification(27.4%), disease prevention(43.0%) and Immunization(26.7%).

**Conclusion:** Family physicians take greater advantage of opportunities for the delivery of clinical preventive services during the illness visits of high-risk patients. The results of our study suggest that opportunistic delivery of preventive services can be increased by assessing patient characteristics and illness visits are important opportunities to deliver preventive services to new patient.

## PS2.134

### **Experiences of healthcare workers in dealing with TB patients in a primary care setting in Singapore: a qualitative study**

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**Background:** Tuberculosis (TB) continues to be a leading infectious disease killer worldwide. The global burden remains heavy, with majority of cases from Southeast Asia, Africa and Western Pacific region. As a standard of care and continuity of treatment, patients access primary care clinics to take their medications under the DOTS programme for 6-9 months. Healthcare workers facilitate TB treatment adherence through close patient monitoring to avoid disease spread, emerging drug resistance and treatment failure. In Singapore, TB rate increased following a small spike in cases in 2012 as a result of global migration and continued community transmission.

**Aim:** To understand the healthcare workers' experiences in managing TB patients in primary care clinics in eastern Singapore to make recommendations for improvements to this service.

**Methods:** A qualitative research was conducted based on an interpretative epistemology. Through purposive sampling, ten primary healthcare workers were recruited from polyclinics located in eastern Singapore. In-depth interviews explored their perceptions and experiences in managing TB patients under the DOTS programme. The data were subjected to a thematic content analysis.

**Results:** Three themes emerged. Barriers to TB care and control include a wide range of risk factors that can impact patient's treatment adherence & completion. Administrative challenges at the primary care clinics can cause treatment delay or possibly compromise infection control. A good healthcare worker-patient relationship is essential to support the TB patient throughout the therapy.

**Conclusions:** The healthcare workers' disease knowledge, working attitude, perceptions and views towards managing TB patients play an influential role to treatment adherence and completion. Their direct involvement in TB control and unique understanding of the multi-level factors which impact treatment adherence can help devise more effective and realistic strategies that can potentially minimise treatment defaults/delays in the primary care clinics and work towards eliminating TB in Singapore.

## PS2.135

### EQuiP Summer Schools

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**Background:** Summer Schools are a traditional method for teaching research in quality improvement in primary care settings organised by the European Society for Quality and Safety in Family Practice (EQuiP). The initiative started in 2008, as there was an interest in many countries for summer courses in English. The new tradition of summer courses, organised in different countries and on different locations, as to ensure people to have an easy access, started off successfully in Tuusula, Finland in 2009. It continued in Ghent, Belgium in 2011, Berlin, Germany in 2013 and Middelfart, Denmark in 2014. From 2013-2015, the EQuiP Summer Schools have also been conducted in French in partnership between EQuiP, the “Société Française de la Thérapeutique du Généraliste” (SFTG) and the “Fédération Française des Maisons et Pôles de santé” (FFMPS).

**Aim:** EQuiP wants to support and catalyse the training of researchers, trainees and family physicians/general practitioners by organising international summer courses. Summer Schools aim to bring knowledge about quality improvement (QI), initiate or improve a quality improvement project and share innovative ideas with other participants on QI in primary care.

**Method:** Summer Schools are organised in a four-day course, including a social program to support networking. The program alternates lectures, small group work, case studies, individual work and workshops. European experts on QI and research are engaged as teachers and participants from different background contribute to rich exchanges.

**Results:** The participants have to develop and present a personal plan/project of research in QI in primary care and perspectives. The participants have built a solid European network that ensures multiple feedbacks on their own project when needed.

**Conclusions:** The EQuiP Summer Schools offers a great opportunity to learn about research in QI, to exchange ideas and to get targeted feedback from very experienced researchers in the field.

## PS2.136

### The interactive ePDF to social media in family medicine

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**Background:** While many of us may find it difficult to remember a time before Facebook, Twitter, LinkedIn or WhatsApp, not all family doctors are engaged in social media. Despite widespread use of this new paradigm of interpersonal communication, “social media” remains in its infancy and many of us have a lot to learn. Whilst various national associations including a number of European medical organisations have published social media guidelines for healthcare professionals, we are aware of few comprehensive family medicine resources that empower users with the necessary tools and understanding to become proficient and effective professional users of social media.

**Aim:** Our aims in creating this ePDF, through using actual case studies in peer-to-peer social media usage, is to empower family doctors, GP trainees and medical students, enabling them to make good use of social media, and to develop professional social media strategies that support the maintenance of a healthy work/life balance.

**Method:** We had wonderful contributions from many individuals from inside and outside of EQuIP and VdGM. These strategic and experienced users of social media told us their stories; stories, which we hope will inspire and motivate readers to experience social media for themselves, whilst in a very practical and tangible sense, highlight the nature and functionality of social media.

**Results:** Areas, which are covered in the interactive ePDF, include social media myths, professional use of social media, social media trends and codes of conduct that will empower the reader with the necessary tools to enable skilful, proficient and effective usage of social media.

**Conclusions:** EQuIP and VdGM have gained immeasurably during the process of putting it together. Our knowledge and understanding of social media has grown during a process, which for those involved was a labour of love.

## PS2.137

### **Out-of-hours telephone consultations in a rural primary care setting of Northern Greece**

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**Background and Aim:** Primary care physicians play a central role as first-line providers of health care both during office hours as well as out-of-hours, due to an eventual urgent need for medical care. Aim of this study was to register common reasons for encounter via phone contact during out-of-hours, in a rural primary care setting.

**Method:** A total of 226 telephone calls from 136 persons were recorded at the electronic medical records of a primary care setting in Alonakia region, Northern Greece, from January 2014 until December 2015. Age, sex, reason for encounter and management were tabulated. ICPC-2 classification was used for codification. Descriptive statistics were carried out.

**Results:** Sixty males and 76 females with median age 68.4 years used a phone contact for medical services in a 2 year period. One hundred and sixteen calls (51.3%) were made by the patient himself and the remaining 48.7% by a family member. Phone calls for new-onset health problems accounted for 72.6%, for chronic medical conditions (22.1%) and for death certificate (5.3%). General and unspecified reasons accounted for 26.9% followed by respiratory (11.6%), digestive (9.4%), cardiovascular (8%) and mental health (7.1%) problems. Most common reasons for encounter were fever (A03) (9.2%), cough (R05) (8.4%), concern/fear medical treatment (A19) (8.4%), abnormal result investigation NOS (A91) (7.5%) and dysuria/painful urination (U01) (4.8%). A medical advice was given to 205 (90.7%) patients, a medical prescription to 36 (15.9%), further investigation with laboratory tests was recommended to 14 (6.1%) while 30 (13.2%) patients were referred to an emergency department.

**Conclusions:** Out-of-hours telephone consultations in a rural area of Greece appear to likely cover routine primary care needs. This finding could represent an indirect element that patient needs are not sufficiently covered by the daily services offered in primary care.

## PS2.138

### **Chest X-ray (signs and radiological patterns) - essential knowledge for a family doctor**

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**Background & Aim:** X-ray is a common imaging test that has been used for decades, and nowadays it keeps on being one of the most used tools by family physicians in primary care consultations and hospital emergency departments. Deep knowledge and intelligent management of this technology gives quality to our therapeutic work.

The low cost of the test, the speed of implementation, scarce harmfulness due to low level of radiation, good precision, high specificity and good sensitivity of x-ray to many pathologies, has turned the radiological study into a key element for identification, diagnosis and treatment of many types of medical conditions.

**Method:** Survey of the level of knowledge and needs of the workshop participants.

Definition of signs and radiological patterns in the chest X-ray with the help of visual tools.

Interactive work of recognition of learned signs and patterns on clinical cases and real x-rays with establishment of radiological diagnosis

Questions and answers.

**Results:** With our workshop we intend to assemble our assistants with a powerful diagnostic tool (making a paragraph on the rationalization of the request of complementary tests in our therapeutic work) making them capable of diagnosing unequivocally the main pathologies of chest.

**Conclusions:** Family medicine is one of the most complex specialties in the medical practice as a consequence of the broad field that includes.

The quality of health care we provide to patients depends on wide range of our skills and capabilities, among which a correct reading of the simple X-ray turns out to be among the most feasible. Its ability to save time, avoid costly tests and to provide a correct treatment, makes it one of the most powerful quality and cost effective tools, which guarantees the excellence of our therapeutic work.

## PS2.139

### **Factors associated with patients with hypertension achieving their LDL-cholesterol goal in a multi-ethnic Asian population**

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**Background and Aim:** Dyslipidemia is prevalent and a major cardiovascular risk factor. Achieving LDL-cholesterol (LDL-C) treatment goal in hypertensive patients reduces their risk of cardiovascular morbidity and mortality. This study aimed to assess the factors associated with achieving LDL-C goals amongst hypertensive patients.

**Method:** Adult multi-ethnic Asian patients with dyslipidemia were recruited in a questionnaire survey at two polyclinics in north-east Singapore. Demographic data, clinical characteristics and self-reported health beliefs were obtained from the questionnaire, while clinical lipid profiles were retrieved from the electronic health records. We assessed the factors that influence the lipid goals of dyslipidemia patients with hypertension using Chi-square or Fisher's exact test, followed by logistic regression.

**Results:** The results of 906 patients were presented, including females 60.2%, Chinese 33.0%, Malays 34.5%, and Indians 32.5%; 86.3% attained highest secondary education level and 72.8% had Type2 diabetes mellitus (T2D). Overall, 74.4% of them achieved LDL-C treatment goal, highest amongst the Chinese (83.3%) compared with Malays (70.9%) and Indians (69.0%). 93.5% of them were taking lipid-lowering medication(s), with 76.0% on statins alone. Similar to those on statins, >70% of those on diet control achieved LDL-C goal but only 56.2% of those on statins and fenofibrate achieved the same goal. Logistic regression showed that those of the female gender, Chinese ethnicity, lower education level and the absence of T2D were more likely to achieve LDL-C goal.

**Conclusions:** More than 70% of hypertensive patients in primary care achieved LDL-C goal. Those on diet control appeared to achieve similar LDL-C control compared to those on medications. Gender, ethnicity, education level and presence of T2D were also significant factors influencing LDL-C goal and ethnic-centric interventions may be useful to improve lipid control in these patients.

## PS2.140

### Differences in serum homocysteine levels according to seropositivity of *Helicobacter pylori*

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**Background & Aim:** *Helicobacter pylori* (*H. pylori*), a gram-negative and microaerophilic bacterium with worldwide distribution, has been known to cause atrophic gastritis, peptic ulcers, gastric cancer and other various diseases. According to previous studies, *H. pylori* infection could lead to vitamin B12 and folate deficiencies. These nutrients are needed to process homocysteine. For this reason, our study aimed to see if there were differences in serum homocysteine levels according to seropositivity of *H. pylori*.

**Methods:** For individuals who attended a health promotion center in a university hospital from January 2011 to June 2012 and were aged 20 years or over, anthropometric measurement, basic blood tests, and serum anti-*H. pylori* IgG were measured in the fasting state. The homocysteine levels and related variables were identified in the groups. Then, serum homocysteine levels were compared between two groups according to seropositivity of *H. pylori* after adjusting for those associated factors.

**Results:** The serum homocysteine levels were  $11.71 \pm 3.54$   $\mu\text{mol/L}$  and  $10.38 \pm 3.77$   $\mu\text{mol/L}$  in the groups with and without anti-*H. pylori* IgG, respectively. This finding of higher serum homocysteine levels in the group with anti-*H. pylori* IgG remained significant after controlling for related variables as follows: BMI, waist circumference, hs-CRP, AST, ALT, BUN, creatinine, triglyceride, LDL-cholesterol, fasting blood sugar, HbA1c, and free T4 ( $P < 0.001$  by ANCOVA).

**Conclusions:** When comparing the serum homocysteine levels between the groups with and without anti-*H. pylori* IgG, the group with the antibody showed higher serum levels of homocysteine than the group without it did.

## PS2.141

### **A group of general practitioners in charge of persons in mental health institutions: limits of the work and ethical reflexions**

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**Background and Aim:** Since 1981 a first GP was affected to a large neuro-psychiatric institution, which at that time was in charge of some 950 patients. Only 4 psychiatrists were working part-time for these patients and many people were hospitalized over months, even years. At present time, 23 psychiatrists and 5 GPs are in charge of a population decreased to some 420 residents.

**Method:** We as GPs are totally responsible for the somatic diseases and the population, which is separated in: 240 patients in the psychiatric rehabilitation hospital, 80 people with learning disabilities in sheltered houses, 45 patients in rehabilitation wards for addiction and some 50 psychiatric patients in living communities. The aim of our study was to analyse the different somatic pathologies we treated over the last year, knowing that for some life-threatening pathologies: cancer, advanced stage of liver cirrhosis etc. the treatment options were not always accepted by the patients.

**Results:** We classified the chronic diagnosis into several main categories: 27% hypertension; 22% overweight: often side-effects of psychiatric medications; 12% diabetes; 9% coronary insufficiency; 7% hepatic cirrhosis and 5% cancer. Our daily work consists of nutritional and physical activity advices (in collaboration with nutritionists and sport coaches) and in the regular supervision of the encountered diseases, as long as people are in our institutions.

**Conclusions:** Major limitations of our work is the fact, that we are not allowed to continue to follow these people if they are discharged from our wards and regularly they are addressed to outside GPs, but often lack to visit them. Several rehospitalizations occur during a year and for many reasons, the somatic diseases are not followed-up regularly: financial problems, precarious living situations or low insight due to the mental problem.

## PS2.142

### **Pruritus and skin disorders in elderly patients with type II diabetes mellitus**

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**Background:** Diabetes mellitus is a very common disease in the general population. Skin and soft tissue complications, related with diabetes, are frequently encountered by the primary care physicians. Aim(s) or **Purpose:** The aim of the study was to assess the incidence of various dermatologic disorders and pruritus in elderly patients with diabetes mellitus.

**Design and Methods:** Between February 2014 and December 2014 we studied patients who attended the Health Center with presenting complaint severe pruritus. The study included 22 patients older than 65 years of age (10 men and 12 women) and type II diabetes for at least 10-20 years. All patients suffered with various generalized or localized skin lesions. The reported pruritus was worse at bedtime and was associated with anxiety and sleep disorders. The pruritus was also closely linked with increased glycosylated haemoglobin, an indicator of poor glycaemic control in these patients.

**Results:** From the participants in the study, 10 patients (45, 4%) had diabetic dermopathy, 4 patients (18%) had cutaneous infections (scabies), and 4 patients (18%) had fungal infections and 2 patients (9%) had drug induced allergic reactions. They were treated with antihistamines, local and oral corticosteroids, antibiotics and benzyl benzoate. All patients were treated successfully and the symptoms resolved.

**Conclusion:** Optimal glycaemic control in type II diabetes is the key element in preventing diabetic dermopathy. Patients should also aim at very good skin hygiene and care with moisturizers, especially when the diabetic dermopathy is localized. They are strongly advised to visit their GP if their symptoms persist.

## PS2.143

### Whose decision? Antibiotic use in primary care

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**Background and Aim:** Antibiotic overuse and resulting antibiotic resistant bacteria are a growing problem both nationally and globally (ECDC 2014). Primary care physicians prescribe 90% of the antibiotics used for humans in Denmark, and 2/3 of these are prescribed for upper respiratory tract infection. However, many of these prescriptions are unnecessary and excessive (Bjerrum et al 2014:1; Jørgensen et al 2013; Llor & Bjerrum 2014; Hansen et al 2015). The reasons for overprescription of antibiotics are many, but here, the aim is to describe one: the importance of language for the treatment recommendation and its acceptance or rejection.

**Method:** The study uses Conversation Analysis and draws on a collection of 80 video-recordings of consultations in primary care in Denmark, collected during 2014-2015.

**Results:** This presentation will give participants knowledge of how treatment decisions are made in-situ, especially the subtle ways in which the communication between the patient and the doctor influence the decision to use antibiotics. It illustrates ways in which doctors can share or not share decision making with patients (e.g. by offering them a choice, or by treating the treatment decision as belonging to the doctor unilaterally) and it discusses implications of this on the problem of overuse of antibiotics. The benefits of actively including patients in decision about their health care improves patient health, satisfaction and agency, is cost-efficient, and efficient in lowering the use of antibiotics: When patient participation in treatment decision increases, and when physicians better elicit the expectations and concerns of patients, antibiotic use is lowered (Butler et al 2012; Cabral et al 2014; Coxeter et al 2014; Legare et al 2012).

**Conclusions:** Designing the treatment recommendation as an option which the patient is given agency to choose is suggested as a possible way to avoid (or reverse) antibiotic prescription in cases where it is medically safe.

## PS2.144

### **Nicaraguan war experience during contra-revolution is associated to functional dyspepsia and irritable bowel syndrome. A population-based study in Nicaragua**

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**Background:** Psychosocial and physical trauma are risk factors for functional gastrointestinal disorders (FGID). The most recent war experience in Nicaragua was lived during 1980s. The impact of FGID is poorly known in Central America.

**Aim:** to determine the association of war trauma and the subsequent development of functional dyspepsia (FD) and irritable bowel syndrome (IBS).

**Methods:** the study was conducted in San Pedro del Norte (rural population with live war experience, total population 4,719) and León (rural/urban population without live war experience, total population 174,051). A random sample was chosen utilizing HDSS from León and San Pedro del Norte. The validated Spanish Rome II Modular Questionnaire (R2MQ) was used. The war trauma instrument was previously validated in Nicaragua, with assessment of physical or psychological abuse, trauma, witnessed executions, forced recruitment, economic loss, and experiences of family members.

**Results:** in this population-based survey of randomly selected subjects 1,773 (León 1,617, San Pedro del Norte 156), there were (1,067 F, 706 M). Overall, 14.2% had war experiences (24.8% M, 7.2% F). The prevalence of FD and IBS were 13.2% (M 12.1%, F 13.9%) and 13.7% (9.7% M, 16.2% F) respectively. In the logistic regression model adjusted by sex and age we found an association between FD (OR=2.53, 95% CI 1.92 - 3.34) and IBS (OR=1.56, 95% CI 1.08 - 2.26) and having lived in areas with armed conflicts.

**Conclusions:** War trauma was associated with FD and IBS related to the contra-revolution conflict in Nicaragua. Military conflicts may result in gastrointestinal health care in a long term.

**Funding:** Rome Foundation

## PS2.145

### **Towards the goal of a healthy university in Hong Kong: The Pilot Health Promotion Projects**

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**Background and Aim:** Since the Ottawa Charta for Health Promotion in 1986, health promotion in higher education has gradually drawn to attention at the global level as universities play an increasingly important role in the society due to increasing proportion of adults receiving higher education. While network for Health Promoting Universities are well established in Europe providing mutual support at the organizational level, there is much room for improvement in enhancing Asia-Pacific Network including Hong Kong. This study aims at exploring the feasibility and effectiveness of organizing Pilot Health Promotion Projects with multidisciplinary coordination in a local university in Hong Kong.

**Method:** To start from University Health Service UHS, 6 health campaigns were organized in 2014/15 overall in-charge by the Senior Medical Officer. Each team was led by a Medical Officer, with members including Nurse, Chinese Medicine Officer, Allied Health members, University students major in health related disciplines, external departments and supporting staff.

**Results:** The 6 health campaigns were Travel Health Campaign, Well Women Campaign, Skin Health Campaign, Cardiovascular Health Campaign, Student Mental Health Week, and Campus Jog for Health. Campaign activities throughout the year included Health Talks, Exhibitions, Interactive Workshops, Health Check-ups and jogging around the campus. There were 20 departments within the University and from external bodies involved in the collaboration, with positive feedback from both students and staff received.

**Conclusions:** With the encouraging experience from the Pilot Health Promotion Projects organized by UHS, it is reinforced that the way of upgrading the previous ad hoc one-off health campaigns organized by individual unit in a University, to large-scale, systematic and sustainable movement by multidisciplinary units require strategic planning with the health policy at the organizational level and support from senior management.

## PS2.146

### **Vitamin D: a new therapeutic weapon for inflammatory bowel disease?**

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**Background & Aim:** The classical hormonal actions of vitamin D are related to mineral metabolism and skeletal health. However, some studies in the past have shown that vitamin D receptors are expressed in different tissues. This suggested that vitamin D had an entirely new facet, which includes actions on immune system. The purpose of this study is to clarify the association between vitamin D and inflammatory bowel disease (IBD) activity.

**Method:** We searched the PubMed, Science Direct and EMBASE databases, in order to make a literature review of the most recent articles including the keywords 'vitamin D', 'deficiency' and 'inflammatory bowel disease' in title and abstract.

**Results:** Several studies have shown that vitamin D deficiency has a high prevalence in patients with IBD. Hypovitaminosis D was linked to increased disease activity. Besides, it looks that vitamin D supplementation could be related to IBD symptoms amelioration.

**Conclusions:** Vitamin D has a role in the clinical disease course and severity of IBD. As vitamin D is affordable and has very few side effects, could be a promising approach for the treatment of IBD. However, further prospective trials are needed to determine the appropriate screening and supplementation of vitamin D in IBD patients.

## PS2.147

### Sick by what we eat?

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**Background & Aim:** To evaluate the relationship between the unfollow of the Mediterranean diet and the appearance of tumors

**Method:** We performed a Dietetic questionnaire validated by the PREDIMED trial (prevention with Mediterranean diet) to 100 patients of our Health Center with the diagnosis of any malignant tumors, attended in consultations of Family Medicine and nursing. The questionnaire consists of 14 questions. We consider a patient is following the Mediterranean Diet from eight or more points.

**Results:** A large number of patients who do not follow the diet is observed among patients with breast carcinoma. Its prevalence is increasing, maybe directly related to the unfollow of our Mediterranean diet. 84% of the followers of the Mediterranean diet do not take nuts in the week (provide antioxidant and unsaturated fat).

**Conclusions:** We should increase and improve the dietary advice in all our patients because it may be more efficient for the future of our health, than taking some drugs, without denying of course the effectiveness of these.

Key words: Predimed trial, Mediterranean diet, malignant tumors.

## PS2.148

### Not just a simple pain

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**Background & Aim:** A 29 year-old woman is attended by her general practitioner due to abdominal pain and non-bloody diarrhea of one month of evolution. Nourinary associated symptoms. No fever. Medical history: two normal childbirths. Actually in treatment with oral contraceptives. In the last 3 days the pain has increased and in clinical examination the pain is located in hypogastrium with no signs of peritoneal irritation. No amelioration with analgesic. Then she visits an emergency doctor who decides her hospitalization and more testing.

#### Method:

Stool culture: habitual microflora.

Thorax X-Ray: normal.

Colonoscopy: colon and ileum dispersed ulcers with fibrin exudate.

Pathological anatomy: unclassified colitis.

Abdominal scan: colon and distal segment of ileum wall thickening.

The pathology report on the surgical specimen (subtotal colectomy with ileostomy): transmural inflammation, deep ulceration, fissuring. No granuloma. Patchy involvement.

Serology: HIV, hepatitis C and B, EBV-ZVZ negative.

Viral load hepatitis B: undetectable.

**Results:** Diagnosis: ileocolic Crohn's disease

Differential diagnosis: ulcerative colitis, appendicitis, intestinal tuberculosis, yersiniosis, lymphoma, carcinoid tumors, amyloidosis, actinomycosis, histoplasmosis, giardiasis, amebiasis, celiac disease, diverticulitis.

**Conclusions:** The main symptoms of Crohn's disease may be confused with other conditions. These patients require long-term therapy and physician follow-up to treat symptoms, minimize complications of the disease, and avoid side effects due to therapeutic interventions. They need to take medications chronically with close follow-up with their habitual doctor. However, non adherence can have a serious impact on morbidity and mortality in patients with Crohn's disease. This case has a poor prognosis for the extent of disease and the age of the patient, as well as the radicality of the surgery.

## PS2.149

### A different type of hyperlipidemia

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**Background & Aim:** The glycogen-storage diseases (GSD) are caused by enzymatic defects of glycogen. Their global incidence is 1: 20000 newborns. The deficiency of the G6Pase causes GSD type Ia, the defect in glucosa-6-phosphate translocase (transporter) causes GSD type Ib and deficiency of the debranching enzyme GSD type III, which is measured in muscle and liver biopsy.

**Method:** 54 year old woman is seen for the first time in our primary care center for arthralgia. As medical relevant history, glycogenesis which was followed in another hospital until the age of 17, was not provided any clinical history. She remembers that a liver biopsy was held. Physical examination revealed swelling and pain in the right second metacarpal phalanx and in the right metatarsophalangeal area.

**Results:** Laboratory findings were leukopenia, hyperuricemia, hypercholesterolemia, hypertriglyceridemia, rheumatoid factor in 69,2 and hyperferritinemia. A consultation with rheumatology and after the assessment, laboratory tests in three months showed normalization of leucopenia, normal glucose-6-phosphatase (G6Pase) also normal x-ray of hands and feet. Prescribed celecoxib for the pain. They also made further consultation with Gastroenterology, who requested abdominal ultrasound because persistent hyperferritinemia with normal liver enzymes, still pending. We also did a consultation with internal medicine and nutrition for the multidisciplinary management.

**Conclusions:** GSD type Ia is the most frequent GSD and initial symptoms are due to hypoglycemia, liver may be enlarged at birth. With ageing the patient may present with poor growth, short stature as in our patient. In rare individuals with milder clinical manifestations, G6Pase enzyme activity can be higher. Laboratory abnormalities in addition to hypoglycemia are, lactic acidosis, hyperlipidemia (particularly hypertriglyceridemia) and hyperuricemia. Kidneys may be enlarged. Without effective treatment, long-term complications occur, namely hepatic adenomas, renal dysfunction and urolithiasis, osteoporosis and gout. Hyperlipidemia may cause xanthomas, pancreatitis and cholelithiasis. It is recommended abdominal ultrasonography with alpha fetoprotein and carcinoembryonic antigen levels every 3 months once patients develop hepatic lesions. Despite increased levels of triglyceride, VLDL and LDL in GSD-Ia patients, endothelial vascular dysfunction and atherosclerosis are rare.

## PS2.150

### **Breastfeeding and risk of breast cancer: what is the evidence?**

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**Background and Aim:** Breast cancer is the most common gynecologic malignancy in women. In Portugal, annually are detected about 6,000 new cases of breast cancer and 1,500 women die from this disease. Some studies suggest breastfeeding as a protective factor for breast cancer. However, this association remains inconsistent. The objective of this study was to review the evidence currently available on the association between breastfeeding and reduced risk of breast cancer.

**Method:** Research meta-analysis, systematic reviews and guidelines based on evidence, using the MeSH terms 'breastfeeding' and 'breast cancer' and the corresponding DeCS in the following databases: National Guideline Clearing House, National Institute for Health and Care Excellence, Canadian Medical Association Practice Guidelines, Cochrane and Pubmed. It was used the SORT scale (Strength of Recommendation Taxonomy) of the American Academy of Family Physicians for the allocation of levels of evidence and recommendation forces.

**Results:** From 79 articles, we selected 3 meta-analysis and 3 systematic reviews. Most studies show an association between breastfeeding and the risk of breast cancer, except for a systematic review which states that this association is not consistent. However, most of these studies have clinical and statistics heterogeneity, so most have a level of evidence two.

**Conclusions:** There seems to be some evidence regarding the association between breastfeeding and risk of developing breast cancer, which is limited by the quality of existing studies (SORT B). Will be needed more homogeneous studies about the methodology and interference of confounding factors and to evaluate other variables such as the duration of breastfeeding in reducing the risk of breast cancer. Even in the absence of strong evidence to protect against breast cancer, breastfeeding requires continued promotion due to their other benefits to mother and child.

## PS2.151

### Diabetic retinopathy and pregnancy

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**Background and Aim:** Diabetic retinopathy (DR) is a morbidity caused by diabetes and is a major cause of nontraumatic preventable blindness. Pregnancy is an independent risk factor for the progression of DR, with rates between 5-70%. According to an international study, 10.3% of pregnant diabetics without retinopathy had disease progression during or after pregnancy. The purpose of this study is identify the risk factors associated with the progression of DR; evaluate the importance and frequency of diagnosis of DR and the practice of physical exercise during pregnancy.

**Method:** A literature search of articles published in Pubmed, DGS and SPO was performed using MESH terms 'Diabetic retinopathy' and 'pregnancy'.

**Results:** The risk factors for progression of DR in pregnancy are: DM duration; the poor metabolic control and the severity of DR; rapid normalization of blood glucose levels during pregnancy and the presence of other cardiovascular risk factors. It is imperative that young diabetic women are observed by an ophthalmologist before becoming pregnant or at least in the first trimester of pregnancy to determine the severity of the DR. The following should be tighter in the long term diabetic with severe DR, with coexisting hypertension or kidney disease. In women with DR pre-conception severe proliferative, pregnancy should be delayed until the retinal disease is treated and stabilized. The most important approach is prevention. The patient should have good glycemic control and DR should be treated before pregnancy. Physical activity can be maintained during pregnancy, but with moderate intensity avoiding vigorous exercise. In proliferative or severe non proliferative DR, vigorous exercise is contraindicated.

**Conclusions:** The approach to women with diabetes who want to get pregnant needs to be multidisciplinary. Good metabolic control is the major pillar in reducing the risk of progression of DR and prevention of fetal malformations.

## PS2.152

### **Renal cysts in adults: an approach in primary health care**

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**Background and Aim:** The renal cortical cysts correspond to a heterogeneous group with different clinical and imaging features. It is intended to carry out a decision algorithm in to be an approach to the level of primary health care.

**Method:** A literature search of articles published in Pubmed, National Clearinghouse, Canadian Medical Association, Cochrane using the MeSH terms: 'Kidney cystic'.

**Results:** The Bosniak classification is a widely used tool for diagnostic guidance and therapy of cystic renal lesions. The Bosniak criteria are based on Computed Tomography (CT), Ultrasound being considered adjuvant. Cysts kidney Type I represent lesions with benign features, with nearly 100% probability of being simple cysts. They are the most frequent and its diagnosis are usually accidental. Cysts Type II are more complex and may have septa and calcifications but they are benign yet. Like the previous, doesn't require surveillance. Cysts Type IIF correspond to a group similar to previous injuries, however with discrepancy between ultrasound and CT. They are of questionable benign, having an approximate risk of malignancy of 5%, so they need surveillance. The monitoring time interval in an initial phase is not consensus, but most studies suggest repeat CT at 6 and 12 months, followed by an annual assessment for 5 years. Cysts Type III group the malignancy of suspicious lesions in the surgical approach should be considered and should be referred to the urology service. Cysts Type IV are neoplastic lesions with significantly increased risk of malignancy requiring surgical exploration, and should also be referred to the urology service.

**Conclusions:** The Family Doctor in the course of an investigation for another purpose is often faced with the presence of kidney cysts accidentally. The detected renal cysts have variable significance and may be oriented according to Bosniak classification. The size alone is not referencing criteria.

## PS2.153

### **Diabetes mellitus, when and how to evaluate the foot**

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**Background and Aim:** Diabetic foot is one of the most frequent complications of Diabetes Mellitus. There has been, in recent years, an increased number of hospital admissions, also the total number of lower limb amputations with this complication. Thus, it's important for adequate prevention and systematic treatment performed by multi-disciplinary teams.

**Objectives:** To alert the various health professionals involved in providing care to the diabetic, to the importance of a correct evaluation of the diabetic foot.

**Methods:** Research articles published in medical databases Medline / Pubmed and clinical guidelines.

**Results:** Examination of the foot should be made five years after the diagnosis of individuals with type 1 diabetes and at diagnosis in individuals with type 2 diabetes and subsequently should be done annually or more frequently if they are present various factors risk. The examination involves the evaluation of the type of footwear used that is a major trauma factors, foot inspection, palpation of the dorsalis pedis and posterior tibial pulses. Pressure sensitivity should also be evaluated (monofilament 10g) and at least one sensitivity and vibratory sense (pitch 128 Hz), tactile (cotton), allergic or thermal also the research of osteotendinous reflection and evaluation Ankle Brachial Index. No less important is the education of the patient and family and good glycemic control.

**Conclusions:** A correct assessment of the diabetic foot, such as the control of risk factors, possible to prevent one of the most feared and severe complications of diabetes.

## PS2.154

### Healthy communities - nationwide project in Slovakia: "The work we do, the support we need"

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The main goal of the Healthy Communities is the improvement of health Roma communities by increasing the levels of education the levels of education and employment. The most extensive project activity is the daily systematic work in field. The main pillar of the project are the health mediators and coordinators who work in cooperation with healthcare providers (doctors) and municipal governments.

Given the conditions, work in the field - where most of the activities are carried out - is considered to be very challenging. The work requires preparation, experience, ability to make decisions, professional knowledge, specific communication skills. By the end of 2015, the number of health mediators and coordinators will reach 288. Health mediators will be working in 264 different locations. Activities are focused on segregated Roma communities, mainly women and children. In project cooperates: 725 primary contact healthcare providers (general practitioners, pediatricians), elementary school teachers, mayors, special helping professions in target settlements (804 totally in Slovakia).

Thanks to the project by October 2014 achieved the following **Results:**

- Increase the assesment of Roma health Increase health literacy and health care access Improve human resource capacity, personal and communal hygiene in settlements
- Increase vaccination rates and preventive healthcare acces for children and adults
- Establish contacts and improve communication among general practitioners, pediatricians, local councils and the Roma community
- Increase sexual health awareness, reductions in transmittable diseases (hepatitis A and B).
- Through positive examples we increase interest and motivate community members into increased activity in addressing the adverse health and social situations.
- The benefits of the project are:
- The place of work is the field itself.
- Building and improving the quality of social capital in segregated settlements. Improving relations between the minority and the majority. Cooperation and synergy with other professionals providing assistance.
- Addressing long-term unresolved or neglected areas, i.e.lack of clean water,waste water disposal.
- Monitoring of the state of health of the local Roma community.

[www.zdravekomunity.sk](http://www.zdravekomunity.sk)

## **PS2.155**

### **Autism, a different reality - Case report**

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The Autism Spectrum Disorders (ASD) represent a group of conditions, classified as a neurodevelopmental syndrome which affects the normal development of the child. The first signs tend to appear in the first three years of life and include three main areas of disturbance: social, behavioural e communicational. It is prevalent in an estimated 60/10,000 inhabitants. Currently, a reliable diagnosis of ASD can be established at 18-24 months of age, thus it is essential to identify the warning signs, as early as possible, for a more effective intervention and better prognosis for the child.

Male patient, 2 years of age, Caucasian who lives with his parents and twin sister. Child of normal (eutocic) childbirth after in-vitro fertilization, with an overall psychomotor development that has been within the normal range. The child was referred by his family doctor to a paediatric appointment due to the setback and regression in language, social isolation, disinterest in others and little social interaction. After being evaluated by paediatricians and therapists, autism was found to be the basic diagnosis hypothesis. Occupational therapy was started, with some results. The parents are still looking for more means of support

Usually children with autism have difficulty in using or understanding verbal and non-verbal language. Some have difficulty related to other people, things or events, including problems in making friends, difficulty in reading facial expressions and making eye contact. Typically, they also exhibit repetitive body movements or stereotyped behaviour, such as clapping their hands and echolalia.

Therefore, family doctors play a crucial role in ensuring for careful assessments in the suspicion of autism, through the detection of the first signs, the referral to a specialist, and by clarifying to the parents and caregivers what to expect. They also have an important role in integrating the family in the community, as they face a major challenge in adjusting their future plans and expectations to the day to day limitations in question. It is therefore essential to monitor not only the children concerned, but also the family, namely on a psychological, social and community level.

## **PS2.156**

### **Machado-Joseph disease**

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Objectives: To exhibit the main features of MJD; the framework theme and its significance in the area of Ataxia. MJD is an inherited neurodegenerative disease which occurs by autosomal dominant transmission and is highly disabling. Its prevalence in Portugal is the world's highest (3.1 / 100,000), particularly in the Ribatejo region and the Azores. The gait ataxia (abnormality) is usually the first symptom, manifesting itself from 30-40 years of age.

The diagnosis, although genetic, is based on the diversity of the clinical evaluation. Progressive motor disability, may be associated with dysarthria, dysphagia, hyperreflexia, spasticity, dystonia, tremor, Parkinsonism, parapraxis and diplopia. Other symptoms "non-motor" such as sleep disturbance, depression, chronic pain and dementia are also important in the assessment.

A study was conducted of review articles; Meta-analyzes and supporting articles to research in PubMed / MEDLINE database. The search was limited to studies published in the last 10 years, in English and Portuguese, using the MeSH terms "Machado-Joseph disease". From the articles obtained those that encompassed the defined goal were selected.

Of the 275 articles found 5 were selected: 4 review articles and one article for research support.

There is no current cure for JDM. The treatments provided are for symptomatic relief and to delay of progression of the disease.

Thus the Primary Care Services have an important role in the early detection of the most common symptoms of the disease, especially when it comes to Ataxia. When this occurs, it is advised that an imagery and genetic study be carried out. Family research, screening for other JDM cases that may benefit from symptomatic treatment is essential; and secondly, it is important for genetic counselling, since there is a 50% chance of inheriting the mutant allele.

The family doctor's role is denoted essential, because this disease leads to major functional disability, being indispensable coordination with the resources available to family, social and psychological support to these users and family.

## PS2.157

### **A lost cause after a right search**

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**Background & Aim:** A 36-year-old man, who does not report any toxic habits, nor other relevant history. He denies taking drugs. He came to the health center for edema and painful skin lesions in lower limbs about a week ago. It began in the posterior left ankle, then extending to the right knee and right foot, associated with fever and joint pain. Physical examination: 37,0°, high blood pressure 110/60 mmHg, heart rate of 60 beats per minute, normal cardiopulmonary auscultation. Erythematous skin lesions similar to nodules, which are painful when they are palpated, located in the pretibial surface of both legs.

**Method:** X-ray was normal. Blood general analysis, serology and autoimmunity study were normal. Mantoux test was negative. Biopsy: septal panniculitis without vasculitis.

**Results:** Diagnosis: idiopathic erythema nodosum Differential diagnostic: superficial thrombophlebitis, non-specific panniculitis, erysipela.

**Conclusions:** Erythema nodosum has a limited and benign prognosis with a cure that doesn't have consequences. On one hand, our work includes making the diagnosis and on the other hand, to search for the etiology of erythema nodosum because it may be multiple. Therefore, it is important to make an early diagnosis in primary care. Most often the cause is idiopathic, as this clinical case. It prevails in women between fifteen and thirty years old, in winter and the beginning of spring. In most cases it is not necessary to do a biopsy of the lesion for diagnosis, but it is the most reliable method.

## PS2.158

### Whispering pain

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**Background & Aim:** A 59-year-old Caucasian man with a history of hypertension and psoriasis. He does not report any toxic habits, nor other relevant history. About six months ago he came to the health center complaining of dysphagia, also in the last six months he has experienced a difficulty in speaking, a burning sensation and regurgitation. Physical examination: dysphonic speech and gurgling sounds after neck palpation (this is known as Boyce sign). Normal cardiopulmonary auscultation. The neurological examination was normal.

**Method:** EKG: sinus rhythm, heart rate of 72 beats per minute, axis at 45 without acute changes in repolarization. Blood general analysis was normal. Plain radiograph of neck showed a triangular lucency in the prevertebral tissues, with the apex at the level of the cricoid cartilage. Esophagram barium: posterior midline pouch arising just above the cricopharyngeus muscle. Gastroscopy with biopsy: esophageal tissue and lamina propria with vascular congestion.

**Results:** Diagnosis: Zenker's diverticulum. Differential diagnostic: cricopharyngeal achalasia, Charcot-Marie-Tooth with structural malformation, Plummer-Vinson syndrome, esophageal cancer.

**Conclusions:** Zenker's Diverticulum is an uncommon disease. It is an esophageal pouch that develops in the upper esophagus that causes debilitating dysphagia and regurgitation of food. It is more common in males and in the elderly, between seventy and ninety years old. Secondary consequences and potential complications of Zenker's Diverticulum include pneumonia secondary to aspiration, medication ineffectiveness, malnourishment and unintentional weight loss. Therefore, an early diagnosis is very important in primary care. The only treatment is surgical and is recommended to be performed in all patients because almost all of Zenker's diverticulum grow over time.

## PS2.159

### Diagnostic accuracy of ultrasound in Carpal tunnel syndrome

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**Background and Aim:** Carpal tunnel syndrome (CTS) is the most common compressive neuropathy, caused by median nerve compression (NM) in the carpal tunnel. Most cases are idiopathic and its prevalence varies from 1 to 5% in the general population. During the last years there has been an increasing interest in the use of ultrasound in the diagnosis of CTS. The aim of this work is to evaluate the available evidence on the diagnostic accuracy of ultrasound in idiopathic CTS, compared to electrodiagnostic tests or clinical diagnosis of CTS.

**Methods:** An article search (meta-analyzes, systematic reviews, original studies and clinical guidelines) was performed using published works between 1 January 2009 and 30 June 2015 in the databases National Guideline Clearing House, Canadian Medical Association Practice Guidelines InfoBase, Cochrane Library, DARE, Bandolier, Evidence based Medicine Online, Trip Online Database and PubMed. The search was performed using the MESH terms 'carpal tunnel syndrome' and 'ultrasonography' and was limited to articles in Portuguese, English and Spanish.

**Results:** We included 12 original studies, which included 953 cases and 341 controls. The specificity of the ultrasound is between 60 and 99% and the sensitivity between 56 and 96%. The area under de curve as a value between 0.71 and 0.99. A systematic review published in 2009 pointed out the value of ultrasound in the diagnosis of this entity.

**Conclusion:** Ultrasound is an exam with good accuracy in the diagnosis of CTS. However, the absence of a diagnostic protocol to establish the location and other technical aspects limits its applicability.

## PS2.160

### Interstitial cystitis - review of the medical treatment approach

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**Background and Aim:** Painful bladder syndrome (PBS), also known as interstitial cystitis, is a poorly-understood and debilitating chronic condition seen predominantly in women and characterised by bladder pain, urgency, frequency and nocturia. The diagnosis of PBS should be made based on the patient's clinical history, excluding other pathologies with similar symptomatology. Treatments for PBS include dietary/lifestyle interventions, oral medication, intravesical instillations and, in some cases, surgery. Success rates are generally modest. The purpose of this review was to assess the effectiveness of the behavioural and pharmacological therapies in restoring normal bladder function, preventing symptom relapse and improving patients' quality of life.

**Method:** Systematic review of the literature using the MEDLINE®, National Guideline Clearing House and Cochrane Library databases, was conducted using the MESH term "cystitis interstitial" to identify meta-analyzes, systematic reviews or clinical guidelines published between 2010-2015. The primary outcomes measures were clinical and urodynamic parameters.

**Results:** We included 2 meta-analyzes, 13 systematic reviews and 2 guidelines. Overall, conservative therapies should be performed on all patients (including behavioral modifications, manual physical therapy techniques, stress management practices). No single treatment has been found effective for the majority and acceptable symptom control may require trials of multiple therapeutic options. Multimodal pain management approaches should be initiated. Amitriptyline, cimetidine, hydroxyzine, pentosan polysulfate or immunosuppressant therapy may be administered as oral medications. Dimethyl sulfoxide, oxybutin, hyaluronon or resiniferatoxin may be administered as second-line intravesical treatments. Neuromodulation and surgery has been suggested as a possible treatment for refractory pain.

**Conclusions:** Limited evidence exists for the few oral treatments for PBS, although the knowledge on the topic continues to evolve. The lack of definitive conclusions is due mainly to heterogeneity in methodology, symptoms assessment or duration of treatment or follow-up. The most effective approach for a particular patient may be best determined at the individual level.

## **PS2.161**

### **How should i ask for consent?**

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**Background & Aims:** Recently, focus of medical education in clinical contexts has increased. This led to a diversification of learning interfaces, in order to make the process of identifying anatomic structures and pathologies easier. On the other hand, the number of students in medical training has also increased and some legal and ethical issues about the asking for consent have been theme for discussion on medical community. Then, how should we properly ask for informed consent?

**Methods:** In this paper, we explored the importance of asking for consent for purposes of investigation and medical education and its limitations, as well as its moral and legal implications, performing a revision of the published literature of different countries, including Portugal.

**Results:** There are various interests and rights of different people involved. Above of that all, we need to take in account all the connections with the laws and normatives of the country and religious and moral questions and take a position about the principle that may prevail, the autonomy or the benevolence. This situation provokes, naturally, profound moral conflicts.

**Conclusions:** It seems clear to us that changes should be performed in the actual legislation in order to conciliate the principles of autonomy and benevolence and explain the methodology for getting informed consent. Finishing, this can only be done after an education of the population that may be achieved by inserting this topic in basic education.

**Keywords:** Consent, Informed Consent, Medical Education

## PS2.162

### **Hypochondria - the lost diagnosis?**

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**Background & Aim:** Among the many changes that we found in the DSM-5 we can verify the exclusion of Hypochondria, partly because of the pejorative nature that involves the diagnosis. The Hypochondria term may have been lost forever in the current classification but, with this or other name, it is important to early diagnose and treat it because of its prevalence and psychosocial impact. The aim of this work is to review that pathology in order to help the GP (General Practitioner) identify, evaluate and guide this patients.

**Method:** This work is based in a literature review using the Mesh term 'hypochondria', carried out using textbooks, published review articles in scientific databases and clinical standards websites.

**Results:** It is defined as a misinterpretation of one or more body sensations or symptoms that lead the patient to persistently believe that he/she has or will contract a serious illness, despite adequate medical evaluation. The prevalence of hypochondriasis is 0.02%-7.7%. Onset is most common in adults and rarely starts after 50 years. The disorder occurs in both sexes in a ratio of 1: 1 and is not associated with marital status. It is more common in people with less education and is often accompanied by depression or anxiety. The pathophysiology of Hypochondria is not well known and psychosocial etiologies have been better studied than the biological/genetic ones. It's considered pathological when the concern for health causes clinically significant distress. The gold standard treatment is psychotherapy (cognitive behavioural therapy) and the main objective is to improve the way the patients deal with the symptoms rather than to eliminate them. Additionally, patients should feel that their concerns are understood.

**Conclusions:** The GP generally plays a central role in the management of these patients and the Mental Health physician, as the medical consultant, guides the pharmacotherapy/psychotherapy required.

## PS2.163

### A misleading anemia

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**Background:** Infection by *Helicobacter pylori* (HP) is associated with chronic gastritis in infected and asymptomatic children, but sometimes related with recurrent abdominal pain, dyspepsia or duodenal ulcer. There are reports of iron deficiency anemia in children without evidence of blood loss.

Report case: Young male, 17 years old, single, resident in Tarouca, belongs to a nuclear family, stage V Duvall Cycle and Class III Graffar. Without relevant medical history. No smoking/drinking habits. No relevant family history. On August/2015 went to the Urgency per episode of a rectal bleeding in slight amount. Analytical study revealed microcytic and hypochromic anemia. Given this, was discharged with instructions to study it on the General Practitioner (GP). Three days after appeared in consultation per asthenia, anorexia and myalgia in the lower limbs with a progressive evolution in three months. Also episodes of epigastric pain associated with eating foods high in fat, during last 3-4 weeks. No weight loss. Without bleeding history. Denied homosexual contact or sexual risk behaviors, ingestion of drugs or herbs. On physical examination revealed left angular cheilitis. On that day did new blood test which revealed worsening. It was referred to the Pediatrics Urgency with subsequent hospitalization. Made iron therapy EV and various endoscopic examinations showing macroscopic changes. Later, the anatomic-pathologic examination revealed positive HP. Made antibiotic therapy. Remains at the hematology consultation.

**Conclusions:** This case shows that anemia by iron deficiency in adolescents with no evidence of blood loss or malabsorption syndromes, should put the chance of infection by HP. It is important to research the daily nutritional intake, gastrointestinal losses and clinical manifestations compatible with celiac disease/disorder of the digestive tract. Thus, it is intended to inform the diagnosis of HP in adolescents, highlighting the role of the GP on suspicion of diagnosis and proper guidance of these patients.

## **PS2.164**

### **An extraordinary discovery**

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**Background:** The vision of General and Family Medicine develops in a context of interaction between the Family Doctor and the Patient, the latter being the purpose of the first. This Doctor establishes a global and multidisciplinary approach. This clinical case aims to describe the diagnosis of a rare disease.

Report case: Female of 30 years, caucasian, unmarried; belongs to a nuclear family in the stadium VI Duvall cycle and class III of Graffar. She's dependent for daily life activities, with good social-familiar support. Personal history of left ipsilateral thyroidectomy in 2009; hypertension medicated since 2008, and carrier of cognitive delay not studied (delay in the psycho-motor development). Irrelevant family history. In May of 2015, after a transfer of her clinical process to another Family doctor, she underwent a Hypertension consultation, that detected blood pressure (BP) of 130/80 mmHg and microcephaly. It was performed an extensive study to detect the etiology of this alterations. In a scheduled consultation were observed and recorded these tests, whose results were normal except the brain computerized tomography, which showed 'hypoplasia of the lower and middle thirds of the cerebellar vermis associated with apparent cephalic rotation and dilation of the fourth ventricle with direct communication with the magna cisterna, and the cerebellar hemispheres are far apart laterally' - pathologic findings suggestive of Dandy Walker spectrum - classical disease Dandy Walker.

**Conclusions:** The Dandy Walker syndrome is a rare congenital brain malformation that occurs during embryonic development. Its clinical manifestations and physical signs depend on the degree of hydrocephalus. In conclusion, this patient has essential hypertension controlled and a neuroanatomical change, that should be referenced to Neurosurgery. This case highlights the importance of a holistic approach towards the Patient, and the Doctor should keep in mind uncommon causes of psycho-motor development delay, that can integrate underdiagnosed diseases.

## **PS2.165**

### **Are we meeting needs of children with complex health needs in the primary care UK**

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In the UK, while GPs continue to improve their health services in terms of care and capacity to make their patients feel healthier. But there is group of population particularly growing British children who for various reasons suffer from complex medical problems has shown a dissatisfying experience of health care in the primary care. This is further complicated by rigid appointment system in the general practice which can be frustrating for the families with children with complex health needs and disabilities. This not only affects the quality of care provided to this focused group but also negatively influence the healthy relationship of these patients with their GPs. This experience led us to conclude that having needs unmet in the general practice, these children were using disproportional amount of resources in the secondary care. This creates an additional constrain on the National Health Services of the UK and fragmented continuity of care at primary and secondary care.

This important theme was identified in our patient satisfaction surveys, talking to the patients and reviewing our feedback and complaints. We wanted to address this issue by re-organising how we work. That included a team work of strategic planning, involving secondary care professionals, and community nursing team to bring up innovative ideas to provide quality of care to this focus group near to their homes.

To support their ongoing medical needs, each individual in the focus group is given a unique 'health passport' designed to address their current health issues and avoid delay in their treatment. This passport entitles them an 'Open access' in the general practice' where these individuals are seen by their GPs immediately to avoid deterioration of their condition and subsequent hospital admissions.

This bright idea reflected positively in subsequent patient surveys and local health statistics. Hence, an hurdle in the health care of this focus group is overcome by changing our working pattern and providing more passionate service to our patients. This fascinating effort has helped us to establish a strong working links among multidisciplinary team and enjoy better doctor-patient relationship.

## PS2.166

### **Polymorphous light eruption: an underdiagnosed photodermatosis**

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**Background & Aim:** Polymorphous Light Eruption (PMLE) is an idiopathic recurrent photodermatosis in which a cutaneous rash appears following sunlight exposure. The lesions range from erythematous papules and plaques to erythema multiforme-like lesions and occur in skin surfaces exposed to sunlight, particularly the ones normally covered. It has a 10% prevalence in the United States, it affects women more often than men and the onset usually is in the first 3 decades of life. PMLE has a significant psychosocial impact and can lead to emotional distress. We report this case in order to raise awareness to this underdiagnosed pathology and to show how family doctors can help to improve their patients' life quality.

**Results:** A 49 year old male, surfer in spare times, with a history of hypertension, dyslipidemia, renal lithiasis, cervical hernia and smoking habits, medicated with amlodipine, telmisartan and atorvastatin presented to his family doctor for a 2 year long skin eruption in his back. The rash was non pruriginous with annular papules ranging from 1 to 2 cm, some of which coalesced forming plaques. The rash worsened in the summer, never disappearing completely in the winter. Considering PMLE, cutaneous B-cell lymphoma, granuloma annulare or urticariform vasculitis we referred the patient to Dermatology. Subsequently a skin biopsy confirmed PMLE and he started prophylaxis with Solderm Ioox® (beta carotene, resveratrol and vitamin D and E). It revealed helpful in the winter because his rash decreased and we are looking forward to evaluate his symptoms in the summer.

**Conclusion:** A photodermatosis in a patient with frequent sunlight exposure due to his hobby has a significant impact in his psychosocial health. The diagnosis of PMLE allows a suitable approach that decreases the intensity of the rash as well as prevents new flares, minimizing the impact of PMLE on the patient's life.

## **PS2.167**

### **An evolving case of a myeloproliferative disorder in a youngster**

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Essential Thrombocytosis (ET) is a myeloproliferative disorder (MPD) in which an increased megakaryocytic proliferation leads to abundant platelet production. It has a prevalence of 1-2 cases/100,000, 50% of which express JAK2 mutation. ET can evolve to another MPD such as Polycitemia Vera (PV). We report this case to raise awareness for MPD in youngsters. A 28 year old woman with a history of asthma, obesity and smoking habits who was diagnosed with an asymptomatic thrombocytosis ( $548 \times 10^9/L$  &#8594;  $820 \times 10^9/L$ ), leucocytosis ( $14,2 \times 10^9/L$ ) and neutrophilia ( $9,24/\mu L$ ) in routine blood tests, with the haemoglobin concentration in the upper limit. Further exams revealed normal renal, liver and thyroid function with no increase in inflammatory parameters, excluding reactive thrombocytosis. The abdominal ultrasound (US) showed a slightly enlarged spleen. Considering a MPD we referred the patient to a haematologist who confirmed the results, prescribed acetylsalicylic acid and further investigated. He found normal serum levels of iron, ferritin, vitamin B12 and folate, decreased erythropoietin and JAK2 V617F heterozygous mutation. The bone marrow biopsy (BMB) showed hypercellular bone marrow (haematopoiesis 80%), megakaryocytic hyperplasia with increase in size and number and enlarged dysmorphic cells, no abnormalities in other lineages or evidence of blast cells and was negative for bcr-abl mutation, which allows the diagnosis of ET. The patient maintained acetylsalicylic acid and was encouraged to lose weight and quit smoking to reduce the risk of thrombotic events. Nonetheless, due to borderline haemoglobin and to low erythropoietin levels, we consider the possibility of a pre-polycitemic stage of PV. The workup enabled the exclusion of reactive thrombocytosis and myelodysplastic syndrome. Considering the presence of JAK2 mutation, borderline haemoglobin and low erythropoietin levels, there's a high probability of this TE evolving to PV, which forces us to be alert to raising haemoglobin, thrombotic events and blood dyscrasia.

## PS2.168

### **Addison disease - how to get there?**

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**Background & Aim:** Adrenal insufficiency is a rare disease caused by primary adrenal failure (Addison's disease) or by impairment of the hypothalamic-pituitary-adrenal axis. This hormonal deficit occurs with development of nonspecific signs and symptoms, which favors the late diagnosis with prognostic implications. The purpose of this work is to raise concern about the clinical presentation that should alert to a possible diagnosis of Addison disease in Primary Health Care, preventing possible complications.

**Method:** A case analysis in the context of the literature.

**Results:** A previously healthy 34 year-old caucasian male presented to his family physician with insidious onset of malaise and progressive weight loss (over a month). He denied recent travels or animals contact. His blood pressure was low (90/60 mmHg) and he was apiretic. He was discharged home with symptomatic measures and general advice. Four days later he went to the Emergency Department (ED) with the same complaints. The complementary study didn't reveal any significant alteration so he was diagnosed with dehydration. In the following weeks he returned another three times to medical attention, with the same symptoms plus anorexia and nausea with occasional vomiting. He made a comprehensive laboratory investigation which revealed hyponatremia (129 mmol/L) and hyperkalemia (5.2 mmol/L). Because of progressive clinical deterioration that limited his everyday life, he was sent to the ED. He made a complementary study with cortisol and ACTH which revealed adrenal insufficiency and stayed 8 days at the hospital. He was diagnosed with Addison disease and discharged home with corticotherapy.

**Conclusions:** Addison disease is frequently missed due to nonspecific presentations and rarity of the condition. The delayed diagnosis is almost always responsible for increased morbidity and mortality. Outcomes may be improved with a higher index of suspicion for the disease, even in primary care setting, with prompt investigation after exclusion of other common diagnosis.

## PS2.169

### Does internet addiction make us obese? Cross-sectional study in university students

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**Background:** The aim of this research was to investigate the effect of internet addiction(IA) in development of obesity.

**Methods:** This study was planned as cross-sectional analytical study. The research was conducted at the faculties of Dokuz Eylül University(DEU) The study population was first grade students of faculties of DEU and aged between 18-25. Study sample is selected by cluster sampling method. for data collection questionnaire consists of Online Cognition Scale(OCS) developed by Davis, along with demographic data and variables that cause obesity. Chi-square test, t-test, correlation analysis and logistic regression analysis were used to analyse data.

**Results:** In research, 2105 students has been evaluated. 43.8% of respondents(906) were male, 56.2%(1,162) were female. The average age of participants was  $20.46\pm 1.99$  (min=17-max=46). When the participants from OCS evaluated according to their score of  $85.03\pm 33.07$  total score was (min=36-max=222). As we look at the Sub-scales, mean score of social support scale was  $27.85\pm 12.19$ , mean score of loneliness depression subscale was  $13.53\pm 6.67$  and mean score of decreased impulse control subscale was  $24.02\pm 10.62$ . Mean score of distraction subscale was  $19.66\pm 8.97$ . BMI was found to be correlated with the OCS score and the subscales score in a positive direction. BMI was also associated with OCS score. These findings were more prominent for the male gender.

**Conclusion(s):** IA among university students has been found as a factor in the occurrence of obesity. IA describes the interest of internet which is out of control and harmful use of the Internet. As in other types of addiction, but not yet fully drawn frame is not a diagnostic and assessment criteria. The impact effect of the formation in obesity, IA is very important. To fight against the formation of the obesity which is one of the health problems. In Turkey, it is necessary to increase the interest about this subject.

## PS2.170

### Utilization reasons of complementary-alternative medicine (CAM) on patients who have chronic diseases in primary care settings

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**Objective:** The aim of our study is to determine prevalence and reasons of complementary-alternative medicine (CAM) utilization on patients who have chronic diseases in primary care settings.

**Methods:** As being conducted as a cross-sectional analytic study, our study was completed on 462 participants who applied to 30 Family Care Centers which were selected by cluster sampling method among 11 central administrative districts of Izmir province. Inquiry form that would be used within the study was created in consequence of focus group conversations and literature review. Inquiry prepared about utilization of CAM methods was consisted of sociodemographic data, chronic disease status, CAM utilization reasons, patient's conversation about CAM method utilization with his/her doctor and by which means he/she reached CAM therapy methods. Data were collected within Family Care Centers by face-to-face conversation method and were assessed by SPSS program version 15.0. While evaluating data, descriptive analysis and chi-square analysis were used and  $p < 0,05$  was accepted as significant.

**Results:** Mean age was  $50,25 \pm 11,48$ . 58,2 percent of the participants were female ( $n=269$ ) and 41,8 percent were male ( $n=193$ ). 53,2 % of the participants who have chronic diseases were using any other CAM methods. The most frequent used CAM therapy method (89,5%) was herbals. The participants who have cancer, thyroid disorder and osteoporosis and any other psychiatric disorder were using CAM therapy methods more ( $p < 0,05$ ). If we assess the reasons of which CAM therapy methods were being used, it was found that most probably the effect of the environment (31%) and despair-hopelessness (30,3%).

**Conclusion:** More than half of the patients were using alternative therapy methods, most of herbal therapy. It is obligated that a doctor should be aware of the frequency of their patients' -who have chronic diseases- alternative therapy utilization and the factors leading patients to these kind of therapies.

## PS2.171

### **An exploratory trip in the training needs of General Practitioners (GPs) in forecast of the new organizational structure**

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**Background & Aim:** A practice-based learning, realized for all the 430 GPs of Local Health Authority TO3, highlighted problems related to the difficulty of being group and working as such. To focus these issues, it was organized an 'Outdoor Training Experience' addressed to their representatives of the Regional Team, identified as facilitators between GPs. At the end of the course it was given a questionnaire to explore the related lived experiences.

**Method:** The open answers of the questionnaire were analysed with Conventional Content Analyses, with comparisons between the two authors, in order to find generalizable categories and meanings.

**Result:** Four main areas were identified: 17 % of reports about communication and team building, 25% team working and problem solving, 10% proactivity / creativity, 48% leadership. All these areas were under articulated in critical issues and solutions. Reported as significant / useful elements: awareness of the role, development of teamwork and ability to listen to everyone with respect, learning from the mistake and development of hetero centism. Two conflicting lines of thought were revealed: the priority is the group over targets versus using the group to achieve the objective.

**Conclusion:** Experience has shown that it is possible to learn to cope with complex relational situations and bring out also not aware training needs, worthy of attention and care: it could be that the issue of pro-activity / creativity, fundamental in impending reorganization of the GPs, may have been considered less significant because it needs more time for reflection and processing.

## **PS2.172**

### **The knowledge from the experience: the voice of caregivers in the family care**

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**Background & Aim:** The continuous care of a dependent patient has an important impact on the psycho-physical balance of both his family and the caregiver. The psycho-physical needs of caregivers were highlighted through the analysis of the experiential aspects, using a narrative-based qualitative research, to propose actions to support home care.

**Method:** A table for biographical, social and clinical data, the 'Coop Wonca' questionnaire for symptoms of caregiver stress and a narrative interview for experiential aspects were used. Caregivers were divided into family members and formal once, with and without a professional nurse support. It was used conventional content analysis in triangulation between the two authors.

**Results:** Twelve caregivers were female and only one a male. Ten were Italians and three Romanians. All of them were full-time and taking care of patients followed by the same General Practitioner (GP). Coop Wonca questionnaire highlighted a tolerable psychological well-being with the exception of the extreme clinical situation of death supported by his wife. The interview analysis identified six themes: impact of the diagnosis, evolution, everyday life (subthemes: critical issues and solutions), rewards and teachings, suggestions and specific training (Training Course, Group Auto-Mutual Help). The categories more represented are emotions, the re-organization of everyday life, the relationships. The differences between family and formal caregivers are more evident in everyday life.

**Conclusions:** Assisting a not self-sufficient patient involves also taking care of his caregiver in order to have: a better therapeutic alliance, a good quality of life and health. It is essential to support formal and informal caregivers through differentiated actions because they express different needs.

## PS2.173

### The health needs assessment in clinical office and at home: observational study

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**Background & Aim:** This study analyses the health needs of patients taken to the clinical office and at home, resulting from observation of the increased workload of the General Practitioner (GP), related to: the progressively ageing population, the increase of chronic diseases and comorbidities, the unavailability of secretarial and nursing staff due to the regional block at the start of new GPs associations and not enough services provided by Local Health Authority.

**Method:** The study was conducted three days a week in March, April and May 2015, in a medical office of a GP with 1559 patients in the province of Turin. For all patients, there were evaluated: age, gender, health problems and solutions, and frequency of visits in a year.

**Results:** 525 visits conducted in 22 days: 456 in the clinical office and 69 at home. The average age was 59 years. The sample analysed consists of 322 women (60% of patients). The problems were 983 (whereof 93% clinical and 7% bureaucratic). In the clinical office, 63% of patients had from 2 to 5 problems. The 88% of patients came back to the clinical office from 5 to 22 times in a year. 46% of patients which came back to the clinical office within the first 20 days, did it to show the results of analyses prescribed by GP.

**Conclusion:** 54% of the time spent at home is dedicated to 14 fragile patients, with a average age of 86 years: might a nursing support be useful? 1/4 of the visits in the medical office is for analyses required by GP: what is the induction level and the effectiveness of the directions from guidelines for disease or to monitor the side effects of certain medicines? It's important to improve the paths of effectiveness shared by GPs and specialists.

## PS2.174

### **Primum non nocere: the ethical volunteer**

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**Background & Aim:** Medical volunteering in resource-poor settings is often perceived as an altruistic pursuit for many family physicians and trainees. However, the increase in popularity has been met with an increase in concern about potential harm, amongst other ethical pitfalls. By highlighting these issues, this poster aims to prompt an ethical consideration by any Primary Care practitioner planning on volunteering in a resource-poor setting.

**Method:** We present a review of some key literature from the emerging field of ethical volunteering, along with reflections from our own organisations' experiences in facilitating and participating in such placements.

**Results:** Lessons from the literature and experience, summary of 'pros' and 'cons' of volunteering, some practical guidance and some possible solutions from social research are presented as an answer to the ethical dilemmas.

**Conclusions:** With reflexive adherence to practical and theoretical ideals, volunteering can generate mutual gains and be strongly supported by the ethical pillars of autonomy, justice, beneficence and non-maleficence.

## PS2.175

### Adequate prescription of anticoagulant direct action in a health area of Andalusia, Spain

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**Background & Aim:** Atrial fibrillation (AF) is the leading cause of death from stroke in Spain and Europe. Its prevalence; 4.4% increase with age (18% > 80 years). 75% of FA should anticoagulate. The Ministry of Sanidad / Spanish Consumption (IPT) wrote ACOD indications and contraindications. In Andalusia a visa for your prescription is required.

**Method:** Descriptive retrospective observational study. ACOD patients (thromboembolism prevention (TEP) in FA. 2010-2015 in the Primary Health Care (PHC), Córdoba, Spain. We study quality and relevance in prescription (AVK intolerance, inability to access the INR, hemorrhagic risk in ischemic stroke, irregular INR (Time-Rosendaal therapeutic range), correct dosage.

**Results:** 111 preselected. 39 losses (duplication, outside zone or no data, knee / hip surgery, TEP prevention). N = 72. 1. 28 full visa and 44 incomplete visa but with enough data. Indications: 9 poorly controlled, 8 AVK allergy (only one documented allergy), 11: no access to INR (0 confirmed cases), 1: without cause. 1 two simultaneous. Creatinine clearance 18/28. Professional prescriber: 17 cardiology, medical AP 9, 2 internal medicine. Dosage: 6 Rivaroxaban (2: 15mg / 24 six 20mg / 24h Dabigatran 11 (1 150mg / 12h, 2 150mg / 24h, 7 110mg / 12h 1 75mg / 12h) apixaban 9 (7 5mg / 12h, 2 2.5mg / 12h. 18 correct dose (IPT); 10 wrong dose (7 cardiology, 3 AP). 2. Incomplete visa 44: Directions: 43: unknown. 1 INR poor control. Professional: 28 cardiology, 14 AP, 1 internal medicine, 1 ER. Dosage: Rivaroxaban 21 (10 15mg / 24h 11 20mg / 24h Dabigatran 27 (9 150 mg / 12 h, 3 150mg / 24h, 20 110mg / 12h, one 75mg / 12h (unauthorized dose) apixaban 4- (2 5mg / 12h.. 2 2.5mg / 12. 34 correct dose (IPT), 10 erroneous (9 Cardiology 1 AP).

**Conclusions:** 1.- Indication(IPT) often not observed in history 2.- Dosing errors in 27% (80/20 cardiology / AP). 35% of erroneous prescriptions cardiologists / 17% AP 3.- significant deficiencies in records 4.- No previous analysis 5.- Is the visa necessary?

**PS2.176****A GP community facing overdiagnosis**

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The general population's health demands are often conditioned and encouraged by economical interests and cultural habits. Italian General practitioners are nowadays under pressure for patient's increasing requests of screening and treatments which, according to the scientific literature, may have questionable value or even be harmful. In this context, the Trento's school of GP vocational training has undertaken an educational project (FRIDA) developed through literature review, classroom meetings, internet file sharing and a "field investigation" with research thesis. The FRIDA project's aim was to update both the GP student and the local GP community on over-treatment and over-diagnosis issues and facilitate a peer to peer review of common practice on these arguments. Some of the covered topics were: Breast cancer screening decision aid; Woman's perception of the benefits of mammography screening; Practice of opportunistic PSA screening; Practice of opportunistic carotid arterial stenosis screening in asymptomatic patients; Global cardiovascular risk assessment in asymptomatic adults; NSAIDs prescription in patients with heart failure or chronic renal disease; Tumor markers measurements in diagnosis and monitoring of cancer; laboratory test prescribing in estrous-progestin treatment; Practice of screening in pregnancy. This "community experience" has allowed to identify some critical issues: widespread misconception of benefit/risk ratio in common clinical practice, progressive increase of potentially inappropriate opportunistic screening, high rates of inappropriate multi-prescription to frail patients, urgent need of developing decision aids to help patients choices.

## PS2.177

### **Compliance of hypertensive patients to management In Kurdistan region, Iraq**

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**Background & Aim:** Hypertension forms a major public health problem in Kurdistan region, Iraq Good compliance to antihypertensive drugs is a key factor in controlling blood pressure. To study compliance of patients toward management of hypertension in Duhok city, Iraq.

**Methods:** A cross-sectional study design was conducted during four months period in 2007. The inclusion criteria were patients eighteen years of age and above who known to be hypertensive for not less than one year. Information was obtained by direct interview. A Moriskey-Green test was adopted to assess compliance to medication.

**Results:** A total of 707 patients were recruited for the study. The study revealed a 54.6% compliance rate. Statistically significant associations were found between compliance rate by Moriskey-Green test and old age, female gender, low level of education, average socioeconomic status, long history of disease, knowledge of using medication, perception of hypertension as a health risk, presence of associated illnesses and practicing of life style changes.

**Conclusions:** More attention should be paid by health authorities and patients to the hypertension problem. Patients should be aware about the importance of compliance to medications.

## PS2.178

### **Starting from back pain as symptom, to a diagnosis of lymphoma. A clinical challenge.**

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Case description: 59 year old woman, obese, dysthymic, who asks for lumbar back pain. It began 15 days ago and has been worsening, linking it up to forced positions while working: she's a seamstress. The pain starts in left gluteal area and radiates to left limb.

Exploration and complementary tests: No warning signs. Mobility, sensibility and strength preserved in column and lower limbs. Lassegue sign negative, Bragard sign negative. No improvement with NSAIDs and muscle relaxant drugs.

Lumbar Xray: degenerative signs, generalized osteoarthritis.

She comes three months later claiming for a worsening in pain, higher in recent days. The pain wakes her up at night. She also refers weight loss and asthenia, but she's dieting and relates these symptoms to it.

Analytical with blood count, biochemistry, and rheumatoid reactants normal, except for C-reactive protein (25.3mg/mL) and erythrocyte sedimentation rate (21 sg)

As back pain remains, she starts with abdominal pain

Exploration: globular abdomen, soft, depressible, painful epigastric tenderness, no masses or organomegaly, no signs of peritoneal irritation. Murphy sign is negative.

Abdominal pain accentuates during the following weeks, radiating back. Also complaints anorexia and dysphagia. Weight loss is up to 12 Kg in 4 months and keeps going, despite she quited dieting 2 months ago.

Abdomen ultrasound is requested as well as being referred immediately to Gastroenterology. Oral endoscopy: Normal. Abdomen US: left pyelocalyceal dilatation with suggestive images of lymphadenopathy. Abdominal CT: mass surrounding vena cava and renal vessels and including left ureter.

Diagnosis by biopsy: Diffuse High-grade lymphoma B CD20

Conclusions: Symptoms refractory to treatment should make us wonder if there is something more than what a first-visit clinical symptoms may seem. Family doctors need sometimes to redirect the clinical case in light of the development of the case.

## PS2.179

### **De-mystifying the vaginal examination. Experiences and attitudes of medical students towards learning and performing vaginal examinations**

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**Background and Aims:** Vaginal examinations are an important skill to be comfortable with performing in primary care/family medicine, both for the experience of future doctors and patients. Our project aims include:

- a. To explore the attitudes of medical students towards vaginal examinations and gain an insight into their first experiences of performing this intimate examination.
- b. To gauge an idea of the socio-ethnic/gender background of medical students and consider whether this may have an impact on their experiences and attitudes towards performing vaginal examinations.
- c. To explore the role of Gynaecological Teaching Assistants (GTAs) in medical education, and how the teaching of vaginal examinations can be improved in medical schools

**Method:** Questionnaire based survey (19 Question Survey Monkey) sent to 5th Year University College London medical students currently on or having completed their Obstetrics & Gynaecology Module Block 2015-2016 (estimate 50-75 respondents)

**Results:** Questionnaires have been sent out and we are currently in the process of collating and analysing results

**Conclusions:** We hope that the results from the survey will help identify key themes that might be influential in shaping medical students' attitudes and experiences of learning and performing vaginal examinations. We feel that these insights might help suggest possible improvements in the way in which vaginal examinations are currently taught in medical schools.

## PS2.180

### **An epidemiologic study in diabetic patients with cardiovascular events**

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**Introduction:** Knowing the prevalence of cardiovascular events in our diabetic population is essential for the multidisciplinary approach of diabetes.

**Objective:** To describe the prevalence of cardiovascular events in diabetics in our area.

**Methods:** A retrospective observational study in diabetic patients with cardiovascular events was performed in 2015 in Distrito Sanitario Costa del Sol (Málaga, Spain).

**Results:** The sample was composed of 275 patients, 27.3% were women and 72.7% were men, and the average age was 68.5 years. In our cohort 76% had a Hb1Ac value higher than 7% with a total average value of 6.9%. In this study we prove that 43.3% showed coronary lesions in coronary angiography. In relation to acute coronary syndrome we found 8.4% of patients with ST elevation and 26.9% with non-ST segment elevation event. It is observed that 5.5% had chest pain effortless and 2.2% had it in relation with physical effort. In our sample we found 8.7% of the patients with peripheral vascular disease and we see that 8.4% suffered a transitory ischemic accident or cerebrovascular accident.

**Conclusions:** Among patients in our cohort, we found a majority of men, so we conclude that it is required a closer follow-up and monitoring of our male diabetic patients to avoid those cardiovascular events that are more common in this group. The most common cardiovascular event in our cohort is the coronary lesion found in coronary angiography. We find a majority of non-ST segment elevation events in patients that suffered an acute coronary syndrome. A bad Hb1Ac control develops a high risk of important cardiovascular events that compromise the patient life and has a big impact on quality of life, so it's very important our proper management of diabetes in Primary Care.

## PS2.181

### Doctor I have a lump in my neck

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**Background:** Female 39 year old with no medical history who complains of recurrent tonsillitis. On examination diffusely increased thyroid gland is palpated. Cervical TC was made with the result of multinodular goitre. The PAAF showed follicular proliferation. Total thyroidectomy was performed and the anatomic pathological result was multinodular hyperplasia and multiple adenomatous nodules that recommended discard Cowden Syndrome although PTEN was negative.

**Method:** S Genetic study confirmed Cowden Syndrome. Study was completed by dermatological exploration, mamography, endoscopy and colonoscopy, chest-abdominal TC, uterine ultrasound, vaginal and urine cytology, and encephalic MNR.

**Results:** The skin inspection showed multiple lentigos, seborrheic keratosis, and various trichilemmomas. The colonoscopy result was four polyps, three of them were hyperplastic polyps and only one was an hamartoma. All the other diagnosis test resulted normal.

**Conclusions:** Cowden disease is an autosomal dominant condition with variable expression that can be associated with a mutation in the PTEN gene on arm 10q, that causes hamartomatous neoplasms of the skin and mucosa, GI tract, bones, CNS, eyes, and genitourinary tract. Skin is involved in 90-100% of cases, and the thyroid is involved in 66% of cases. The prevalence is estimated to be approximately 1 case per 200,000 population; however, it is likely more prevalent because many features of Cowden disease are found in the general population and the diagnosis may be overlooked, which leads to underdiagnosis. Penetrance is thought to be nearly complete; it approaches 90% by age 20 years. The importance of the genetic advice and early diagnosis resides in its primary association with increased frequency of malignant tumors, 25-50% breast cancer, 3-10% thyroid cancer and 5-10% endometrial cancer principally.

## PS2.182

**Background & Aim:** Gout is a common inflammatory arthropathy caused by articular precipitation of monosodium urate monohydrate crystals. It leads to self-limited arthritis but under-treatment can cause disabling chronic tophaceous gout. It usually affects the first metatarsophalangeal joint and less commonly other joints, such as wrists, elbows, knees and ankles.

We report the case of a 63-year-old Caucasian man with acute on chronic tophaceous gout.

**Case Report:** A 63-year-old Caucasian man with arterial hypertension, obstructive apnea syndrome and a long-standing history of tophaceous gout with several recurrent episodes of arthritis presented in January 2016 with a flare of gout. Five days before, a tophus on the left elbow had become painful, red and swollen. The lesion ruptured spontaneously over the next few days, exuding a pasty material.

On physical examination, he had a fever and the above mentioned joint was swollen with associated tenderness and erythema. There were other tophi on the right elbow, second, third and fourth metacarpophalangeal joints of his left hand, second and third metacarpophalangeal joints of his right hand and knees.

Antibiotic treatment with levofloxacin (500 mg/day), azithromycin (500mg/day), naproxen/esomeprazole (500+20mg/twice a day) and acetaminophen (1000mg/three times a day) was initiated and he was referred to a general surgical doctor.

**Discussion:** Gout is the most common crystal-induced arthropathy. It has a male predominance and occurs more frequently over the age of 35. Over time, gout may evolve into a chronic polyarthritis with or without acute flares of arthritis and monosodium urate crystal deposition in soft tissues or joints.

Our patient presented with a relatively unusual finding of ulcerated gouty tophi on an uncommon localization. This case shows how important it is to control hyperuricemia and other risk factors in order to prevent the disabling effects of chronic gouty arthropathy.

## PS2.183

### Experience of quality improvement projects in primary care: the Equip-inspired French summer schools

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**Background and Aims:** The European Society for quality and safety in family medicine (Equip) has developed since 2008 Summer schools as a method for teaching research in quality improvement (QI) in primary care to support the training of healthcare providers.

The Société Française de la Thérapeutique du Généraliste (SFTG) organizes since three years french-speaking Equip-inspired summerschools on quality improvement where many projects were born from participants with diverse backgrounds (GPs, pharmacists, nurses).

Learning goals:

- 1) Raise the awareness about the Summer courses
- 2) Promote the importance of diverse backgrounds participants in enriching the exchanges
- 3) Understand how summerschools can help in achieving a quality improvement project
- 4) Display breathtaking Quality Improvements Projects (QIP) from the summer schools

**Methods:** Three 4-days summer schools took place in a charming place near Paris during the summer. The summer schools are held in French language and are not restricted to GPs.

Experts on quality are invited for interactive plenary sessions and to facilitate workshops « à la carte » in small groups. Workshops on individual QIP are gathered per topic to allow exchanges and sharing ideas including self working time.

The french participants are financially supported by the national organism for continuing medical education.

**Results:** From 2013 to 2015, there were approximately 16 participants per summer school (total of 49 participants: with mostly GPs or GP trainees and nurses, pharmacists, healthcare managers), 7 European Quality experts invited. Participants were from Belgium, Switzerland and France. A total of 24 QIP dealt with: patient safety, therapeutical education and chronic diseases, set up of a healthcare centre, social inequities reduction, etc.

**Conclusion:** The SFTG summer schools are a relevant work-catalysing QI tool in primary care.

## PS2.184

### Subacute granulomatous thyroiditis - a clinical case

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**Background & Aim:** Subacute granulomatous thyroiditis is an uncommon disease that most often occurs in middle-aged women. A painful thyroid following an upper respiratory tract infection is often a sign of this disease. When a 34-years-old man presents with enlarged thyroid and changed laboratory data, subacute granulomatous thyroiditis is not the first suspicion.

**Method:** Patient observed in Castro Marim health center, in Primary Health Care. Clinical data were collected from personal clinical file with patient consent.

**Results:** 35-years-old man, previously healthy, presents in the consultation with asthenia, palpitations and low fever (38°C) over 2 months. Refers thyroid enlargement with occasional dysphagia, after episode of acute tonsillitis treated with antibiotic. Laboratory data showed suppressed levels of thyroid stimulating hormone (TSH) and elevated thyroxine (T4). Ultrasonography reported gland enlargement to approximately twice its normal size, with multiple nodules. We called a colleague Endocrinologist in Hospital de Faro that recommend new laboratory data and an aspiration biopsy. Patient started ibuprofen 400mg 8-8h. Serial analysis showed a TSH and T4 fluctuation and aspiration biopsy revealed undetermined significance injury; sample with moderate cellularity, scarce colloid and follicular cell aggregates unchanged. After 6 months follow-up, this patient has no symptoms and presents normal thyroid function. He has been followed in Endocrinology with regular laboratory and ultrasonography evaluation.

**Conclusions:** Subacute granulomatous thyroiditis is a self-limited disease that often resolves spontaneously, usually without subsequent thyroid function abnormalities.

## PS2.185

### Voting for better health in deprived communities

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**Background:** The Global Health Exchange Fellowship is a pilot project, designed to make global health real through experiential learning for UK and Kenyan trainees in family medicine/general practice and public health.

**Methods:** Using Qualitative research methods, a health needs analysis was performed in two deprived areas—a rural Maasai community in Kenya and an inner city in the UK. Health issues identified were categorised into themes, which were prioritised by the community using an innovative voting methodology developed by the fellows. The same methods were applied in both countries. The voting method allowed each community a voice, in prioritising their health needs. Using the Capability Approach sustainable solutions were sourced within the community. Findings were presented to local health authorities to inform local resource allocation, improve health and reduce inequalities.

**Results:** The fellows learned a great deal about global health challenges in both high and low income countries. A methodology of community voting was established, providing insight to the true health needs of each community.

**Conclusions:** This methodology provides new understanding from the perspective of two communities on global health, including social determinants of health. There is remarkable potential for its widespread use. Similarities in themes in areas of deprivation in low and high income countries is noteworthy. In Kenya, access to health care was the number one priority. Had we taken an epidemiological approach, we may have found ourselves tackling specific diseases. However, the voting method identified the needs that were much closer to those of the community. This was particularly important in Kenya, where there was no data available for our community. In the UK there is a wealth of data, therefore this project sought to address the “Why” and the “How”, thus developing sustainable strategies to address health needs, whilst encouraging community ownership through Sen’s Capability Approach.

## PS2.186

### Inspiring primary care trainees through the Global Health Exchange Project

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**Background:** The Global Health Exchange Fellowship was piloted as a six month project aimed at making global health real through experiential learning for UK and Kenyan trainees in Primary Care.

**Methods:** The fellows performed health needs analyses using Qualitative research methods in two areas of deprivation- a rural Maasai community in Kenya, and an inner city in the UK. Health issues identified were organised into themes which were prioritised by the communities, using an innovative voting methodology developed by the fellows to promote community engagement. Findings were presented to local health authorities to inform resource allocation, improve health and reduce inequalities.

**Results:** Each fellow experienced remarkable personal and professional development including; transferrable problem-solving skills (working with each community to develop context-specific sustainable solutions), and a greater understanding of global health, the socio-economic determinants of health, the similarities in themes in areas of deprivation in low and high income countries, the impact of poverty on health, competence in working within community-oriented teams, the structure and economic limitations of healthcare systems, and the roles of other professionals involved in health-related community policies. They developed competence in academic writing and established international professional networks.

**Conclusions:** The project is a true exchange between Primary Care professionals practicing in low and high income countries in terms of location, knowledge and experiences. It involved a multi-professional and multi-cultural team including a newly qualified Family Physician, two GP trainees and a Clinical officer. Research shows that education is most effective when learners work in groups, challenge ideas and collaborate to achieve solutions to problems. Experiential learning is “learning through reflection on doing”, which focuses on the learning process for the individual, as demonstrated by this innovative pilot project. “for the things that we have to learn before we can do them, we learn by doing them”. (Aristotle)

## PS2.187

### Is it possible to delay vascular aging?

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**Background and Aim:** Vascular age is the age of the apparent blood vessels, especially arteries, as compared to what is considered normal in a healthy population. During aging, even in the absence of disease, certain anatomical and physiological changes in the cardiovascular system, such as increasing the thickness of the arterial wall, increased heart weight and endothelial level, depend exclusively on age. However, in most cases, the decline in this system is the sum factors of cardiovascular and non-cardiovascular factors. The aims of this work are to research and enumerate factors that may contribute to and/or accelerate vascular aging and, if so, assess their effects.

**Methodology:** Electronic research articles and newspapers and magazines of reviews, particularly in the area of Cardiology, such as the Portuguese Society of Cardiology, the ESC (European Society of Cardiology), the AMA (American Heart Association), the American College of Cardiology and the American Journal Cardiology. Review of the literature on Pubmed data base, without language restriction, with the following key words: "vascular aging", "vascular age" combined with "risk factors".

**Results:** It was found that smoking, obesity, hypertension, hypercholesterolemia and hyperglycemia are risk factors for vascular aging.

**Conclusion:** The behaviors and lifestyle, in addition to their age, can contribute to heart and cardiovascular changes, at the anatomical and physiological levels. Through various mechanisms, the above risk factors promote the acceleration of vascular aging, contributing to the increase in chronological age of the individual in relation to biological age, at the level of this system. In order to prevent, control and/or combat these negative impacts, the adoption of a healthy lifestyle is crucial, with or without pharmacotherapy. Thus, the answer to the question of this work is positive because it is never too late to achieve healthy aging.

## PS2.188

### Topical capsaicin for pain in osteoarthritis – an evidence based review

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**Background & Aim:** Osteoarthritis (OA) is the most common joint disorder worldwide and a significant cause of disability. The predominant symptom, pain, is most often treated with acetaminophen or oral non-steroidal anti-inflammatory drugs, although they are associated with a significant risk of side effects. Topical capsaicin may represent an effective and safe alternative in some patients. The aim of this review is to examine the evidence for the efficacy of topical capsaicin in the management of pain caused by OA. **Method:** Databases were searched for guidelines, meta-analysis, systematic reviews and randomized controlled trials, published between January 2004 and January 2016, in Portuguese, English or Spanish, using the search terms “capsaicin” and “osteoarthritis”. To evaluate the level of evidence and the strength of recommendation, the Strength of Recommendation Taxonomy (SORT) of the American Academy of Family Physicians was used. **Results:** We found 120 articles, of which 6 (3 systematic reviews and 3 guidelines) fulfilled the inclusion criteria. These studies support the benefits of topical capsaicin in reducing pain from OA, as compared to placebo. They demonstrate its safety profile with few adverse effects. **Conclusions:** Available evidence of the analgesic efficacy of topical capsaicin in osteoarthritis recommends its use. However, the studies have some limitations, like the short duration of randomized controlled trials, the difficulty of treatment blinding and samples of reduced size, so further studies are needed in this area. It is attributed to the review the strength of recommendation B.

## PS2.189

### Alpha-1 antitrypsin deficiency - Family study

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**Introduction and Purpose:** The World Health Organization (WHO) estimates that by 2020, chronic obstructive pulmonary disease (COPD) represents the 5th leading cause of death worldwide.

The Global Initiative for Chronic Obstructive Lung Disease (GOLD) draws attention to the need for systematic research of alpha-1 antitrypsin deficiency in a subset of patients with COPD at a young age or who have significant family history. The alpha-1 antitrypsin deficiency is a hereditary disease caused by a genetic mutation located in the long arm of chromosome 14 and although rarely diagnosed, it is one of the most prevalent genetic disorders.

Case Presentation: Female patient, Portuguese, 42 years old, married, unemployed. History of Chronic Obstructive Pulmonary Disease, with no known family history.

Come to an appointment with her family doctor because of shortness of breath, especially during physical activities, not totally responding to pharmacology therapy with Fluticasone + Salmeterol, 500+50ug/dose; Salbutamol, 100 ug/dose; Glycopyrronium Bromide + Indacaterol, 43ug+85ug. Physical examination was normal, included a normal pulmonary auscultation, with any signs of respiratory difficulty.

Blood tests to check alpha-1-antitrypsin deficiency were asked and on the next appointment the diagnosis of alpha-1 antitrypsin deficiency was confirmed. It was explained to the patient that this is a family genetic disorder and that all family members should be investigated.

All her consenting first degree relatives were seen and had a history taken, an examination, measurement of serum alpha-1 antitrypsin concentration. All had Alpha antitrypsin concentrations, so as they were oriented to a specific appointment in the hospital to a better genetic orientation and therapy.

**Conclusion:** In the case of the patient we presented first the diagnosis was performed later in life and in which other factors could be also responsible for clinical manifestations. However in relation to the descendants the study was conducted in a timely manner, even before any symptoms and at a very young age what is good prognostic indicator because either changes in lifestyle, such as smoking cessation, or therapy replacement can be initiated at once and avoid the early onset of the disease.

## PS2.190

### Evaluation of motivational interviewing training for family medicine residencies: Atatürk University Medical Faculty sample

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**Background & Aim:** Motivational interviewing is a directive, collaborative patient-centered counselling approach. It aims to engage the patient in the process of problematic behaviors. Training of family medicine residencies in motivational interviewing; can be a cost-effective way that provide exploring and resolving patient's ambivalence and improving their intrinsic motivation like addiction, obesity, hypertension conditions. Thus, the aim of the study is to design and implement a motivational interviewing training for family medicine residencies studying at Family Medicine Department, faculty of medicine, Atatürk University and to evaluate the results of this training.

**Method:** 22 participants attended to the motivational interviewing training. 15 (68,2%) of the participants were women and 7 (31,8%) of them were men. There were 6 (27,3%) participants whose ages were between 17 and 26, 9 (40,9 %) participants whose ages were between 27 and 28, and 7 (31,8 %) participants whose ages were above 29. Participants filled a Motivational Interviewing Information Survey (MIIS) before and after the training. Survey had 9 questions. The results of the survey evaluated descriptively based on questions.

**Results:** According to pre-MIIS results, the participants answered minimum 2, maximum 5 correct out of 9 questions. The mean, median, and mode of pre-MIIS values were 3.59, 4, and 4 respectively. According to post-MIIS results, the participants answered minimum 5, maximum 9 correct out of 9 questions. The mean, median, and mode of post-MIIS values were 7.59, 8, and 8, respectively.

**Conclusion:** According to findings, it has been seen that the knowledge levels of family medicine residencies have increased after taking motivational interviewing training. Before training, the lack of knowledge has been shown up about motivational interviewing techniques and transtheoretical model. The knowledge levels on these subjects have been increased after the training.

## **PS2.191**

### **The increase in healthy life years in Portugal - a comparison with Norway**

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**Background & Aim:** The healthy life years after 65 years correspond to the number of years that a person with 65 years can expect to live healthy. According to the European Commission, Portuguese people have an average of 6 and 6.6 years of healthy life after 65 years for males and females respectively, which is significantly low when compared to Norway (15.9 and 15.4 years for males and females respectively). Both health systems presuppose universal health access, but these two countries grow apart in what concerns to health public expense which is about 6.1% of GDP for Portugal and 8.9% of GDP for Norway. Alongside this difference, in Portugal certain diseases are more frequent and have higher mortality rates such as Diabetes Mellitus (DM). The DM prevalence and its percentage of the health budget is 4.7% and 6% in Norway and 13% and 8% in Portugal. The question that arises is what can Portugal do to reach similar values to Norway?

**Method:** Review of literature.

**Results:** Norway has a strong primary care system which minimizes the hospital admissions of chronic diseases as DM. Furthermore, out-of-pocket payments are significantly low compared with Portugal. Norway has been doing a great effort since 1970 in order to promote healthy lifestyle and to strengthen the primary care system. Its promotion is multifaced and the measures include incentives, education actions, regulations, health programs and nutrition policies.

**Conclusions:** All measures implemented by Norway have contributed to decrease DM prevalence and consequently to the increase in healthy life years for Norwegians. Portugal's commitment to primary health care may result in increased costs in the short term as it will entail a restructuring, but in the long run will result in a costs' reduction and maybe it is the path to increase healthy life years after 65 years.

## PS2.192

### **Distribution of cardiovascular risk factors according to renal function in a population with low incidence of coronary heart disease**

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**Background and Aim:** Chronic kidney disease (CKD) has been defined as a marker of cardiovascular risk susceptible to therapeutic intervention. Distribution of traditional risk factors may play a role in this association which has been little studied in populations with low incidence of coronary heart disease (CHD).

**Aim:** To describe the distribution of traditional risk factors according to different glomerular filtration rate (GFR) categories in a population with low CHD incidence.

**Methods:** Retrospective descriptive study of a population-based cohort of 1,079,272 people aged 35 to 74 years. Main variables: Age, sex, Hypertension, Dyslipidaemia, smoking status, obesity, diabetes, 10-year CHD risk estimation, medication and GFR.

**Results:** The mean age was 49 (11.7) years, and women constituted 51% of the cohort. Diabetes was present in about 7% of participants, obesity in 31%, hypercholesterolemia in 20% and hypertension in 21%; about one third were smokers. Mean 10-year coronary risk was 3%. The most frequently prescribed medications were antihypertensives (16.3%), followed by statins (9.1%), antidiabetic agents (4.6%), and aspirin (2.8%). The proportion of all these factors increased as GFR decreased, apart from patients in GFR category G5. Mean GFR was 93 ml/min/1.73m<sup>2</sup> (SD: 17.1). However, the distribution was skewed and 1,043,069 patients in GFR categories G1 and G2 accounted for nearly 97% of the total population. There were 36,203 (3.4%) participants with a GFR below 60ml/min/1.73 m<sup>2</sup>; 30,648 (85%) of them belonged to GFR category G3a.

**Conclusion:** in general population with low incidence of CHD only about 3% of the population had a GFR below category G3a. in general, the proportion of all traditional risk factors increased as GFR decreased. Thus, traditional risk factors may play a role in the excess of cardiovascular risk in CKD.

## PS2.193

### A look inside a retirement home

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**Background & Aim:** To Know the profile of the institutionalized patients in our environment.

**Method.:** Retirement home in a rural environment. We study all the patients collecting data of gender, age of entry (AE), current age (CE), average stay (AS), marital status, children, reason for admission (RA), financing, degree of dependence (Barthel's scale) at entry (BE) and current (BC), limiting associated pathologies: Dementia, Alzheimer, psychiatric disorders, cerebrovascular disease (ECV), use of diapers and psychotropic drugs. We use the G-Stat statistical program with Excel as a database. We will describe the study in which the results express the average and standard deviation

**Results:** Female 56,4% Male 43,6%. AE: 75.85±1.28years CE: 78.97±1.3years, AS: 3.32±0.328years. Married 16.9% ,single33.8% divorced12.67% widowed 36.62%. 74,7% of the patients have one or no children. 60.56% of the patients entered for a social cause, 33.8% for neuropsychiatric disease and 5.63% for physical dependence. 77.46% have public funding. 45,07 % present some kind of pathological cognitive impairment, of which 62 % (28.17 % of residents) corresponds to patients with Alzheimer's disease. 22.5 % of residents suffered a stroke and at least 26.7 % of patients experience some psychiatric disorder. Dependence (BE/BC) Independent (8.45 / 5.63%) poor Unit (7/ 1.5 %) Moderate (25/21,13%) Severe (28 / 29.58 %) Total (31/42.25%). 88.7% use diapers, 84.5% use psychotropic drugs.

**Conclusions:** Resident profile studied is usually a woman, 79 years old, who has lived in the residence for 3 years. Widowed or single usually has one or no children and enter for a social cause with public funding. More than 70 % have severe or total dependency and more than 85% use psychiatric drugs and diapers.

## PS2.194

### What the hell am I doing here? Gender

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**Background & Aim:** To Know the profile of the institutionalized patients in our environment and gender relevance.

**Method.:** Retirement home in a rural environment. We study all the patients collecting data of gender, age of entry (AE), current age (CE), average stay (AS), marital status, children, reason for admission (RA), financing, degree of dependence (Barthel's scale) at entry (BE) and current (BC), limiting associated pathologies: Dementia, Alzheimer, psychiatric disorders, cerebrovascular disease (ECV), use of diapers and psychotropic drugs. We use the G -Stat statistical program with Excel as a database. The statistical significance of the differences we have performed using the Student t test for quantitative variables and the Chi -square with Fisher exact test to compare qualitative variables

**Results:** Age of entry. Female(F) 78.18±1.71 Male(M) 72.87±1.82. p=0.0398 Current Age (F) 81.42±1.7 (M) 75.8±1.8. p= 0.0313. There is no difference in average stay. Barthel at entry (F) 45.5±5.24 (M) 50.6±6.58. 65% of female have a severe/total dependence at entry, male 51%. This is not a significant difference. Marital status: Singles 51% (M) 20%(F) 16%(M) 52% (F), p=0.0074. Alzheimer 35% (F) 19,35 (M) no significant. ECV 15%(F) 32%(M) no significant, Psychiatric disorders 25%(F) 29% (M), no significant. Use of diapers 92%(F) 83,8%(M), no significant. Use of psychotropic drugs: 75% (F) 96%(M). p=0.0119.

**Conclusions:** Women enter the residence before and with a greater level of dependence than men. Being a widow seems to be a risk factor for admission for women and unmarried men. No significant differences in associated diseases but, surprisingly, increased use of psychotropic drugs in men.

## PS2.195

### What the hell am I doing here? Why?

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**1Background & Aim:** To Know the profile of the institutionalized patients in our environment and the relevance of the reason for admission

**Method:** Retirement home in a rural environment. We study all the patients collecting data of gender, age of entry (AE), current age (CE), average stay (AS), marital status, children, reason for admission (RA), financing, degree of dependence (Barthel's scale) at entry (BE) and current (BC), limiting associated pathologies: Dementia, Alzheimer, psychiatric disorders, cerebrovascular disease (ECV), use of diapers and psychotropic drugs. We use the G -Stat statistical program with Excel as a database. The statistical significance of the differences we have performed using the Student t test for quantitative variables and the Chi -square with Fisher exact test to compare qualitative variables

**Results:** Age of entry: Social reason 73.5±1.52 years Neuropsychiatric disease and physical dependence 79.39±2.13. Significant. p=0.025. Current Age: Social reason: 76.8±1.54 Neuropsychiatric disease and physical dependence 82.21±2.18. Significant. p=0.043. Average stay: No difference. Marital status: Psicophysical dependence: Widowed 60% Single 17% Social reason: Widowed 20% Single 45%. Significant. p=0.0006. 0-1 child: Social reason 86% Psicophysical dependence 57%. Significant. p=0.0062. Barthel at entry: Dependence Severe/total 89% (Neuropsychiatric disease and physical dependence) 39,5% (Social reason). Significant. p<0.0001. Current Barthel: Severe total 96% (Neuropsychiatric disease and physical dependence) 55,8% (Social reason). Significant. p<0.002. Dementia: Psicophysical dependence 67% Social reason 30%. Significant. p=0.0018 Alzheimer: Psicophysical dependence 46% Social reason 16%. Significant. p=0.005.

**Conclusions:** People with social reasons for admission enter younger and have got better results of dependence than the rest, an important percentage are singles, they have usually one or no children, and have less incidence of dementia and Alzheimer.

## PS2.196

### **Describing sleep apnea as a less known preventable association of stroke in a young man**

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**Background:** Extensive studies strongly suggest that Obstructive sleep apnea (OSA) causes secondary hypertension. It is also well known that uncontrolled hypertension causes hemorrhagic stroke. Here we describe a young gentleman with subclinical OSA which could have contributed to hemorrhagic stroke.

**Method:** A 33 year old gentleman (BMI 23.3), presented to the emergency department following sudden onset of focal neurological deficits after sexual intercourse with his wife. His past medical history was insignificant. He did not have any stressors at home or work, nor prior history of somnolence or fatigue. His father was advised to undergo sleep study in view of presumptive OSA by his primary care physician which he declined. Family history was otherwise noncontributory. On arrival, patient's Blood Pressure (BP) was 135/93 mmHg, (which is in the pre-hypertension reference range for his age). Neurological examination showed right hemiparesis and facial deviation.

**Result:** Initial imaging of Brain with Computed Tomography showed a 1.7x3.9x3.6 cm acute intraparenchymal hematoma in the left basal ganglia, later confirmed with Magnetic Resonance Imaging brain. No obvious etiology of stroke was identified despite a thorough workup. Though sexual intercourse has been reported to be a trigger for stroke, the reason why this gentleman was at high risk was intriguing. In view of this unexplained cause of stroke, a sleep study was done, which showed an apnea-hypopnea index of 15, suggesting moderate sleep apnea, however, he was clinically asymptomatic.

**Conclusion:** This stroke could have resulted from hypertension likely secondary to OSA. Timely interventions like lifestyle modifications and continuous positive airway pressure could address his OSA and resulting hypertension. Regular BP monitoring is thus important. Family Physicians must be aware of the potential catastrophic consequences of undetected OSA, which will help to prevent not just long term consequences but short term consequences too as evidenced in this case.

## **PS2.197**

### **Stroke versus simple partial crisis a purpose of a case report**

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Personal History: No known allergies. Smoker.

Current disease: 54 year old man fallen into public road with open eyes but unable to speak. On arrival ambulance, obsessed and bewildered by presenting high pressure values dealing with labetalol intravenous. At the hospital the patient recovers residual dizziness. He refers while walking sudden dizziness and blurred vision, falling to the ground. He also noted that he moved his right leg alone, which was stiff and could not get up. Refers not to have lost consciousness and after weakness in that Member he ascribed to a previous fall. Physical examination on arrival at hospital: MID stands monoparesis 3/5, patellar and plantar cutaneous hiperreflexya.

Additional tests:

Analytical: without findings.

Rx ray: normal.

EKG: no findings.

Skull CT: hypodense lesion compatible with ischemia centers semioval left.

Evolution: Rated by neurology and entered clinical trial to study abrupt episode of blurred vision, loss of postural tone and movement in MID in context of hypertensive emergency, to assess simple parcial crisis. Occupying lesion left front space. During admission, after performing NMR is diagnosed with low-grade glioma.

Conclusion: Noting that as a fundamental tool, a good history is what will guide us to make a proper diagnosis. Initially, in context of an emergency HTA first neurological focus on what we would think it is a ACVA, even initially is corroborated by the TAC. But only appropriately questioning the patient could be detected suffered an involuntary movement of MID in a first assessment unnoticed and at the end, it was essential, together with the other data, to approach it as a possible simple partial crisis.

## OPPS2.199

### **Urinary infection: correctly treated? Let's find it out!**

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**Background & Aim:** Family doctors daily face many cases of urinary infection. For this reason we think that's important to treat patients the best way as possible, choosing the most effective and efficient treatment according to clinic guidelines to avoid overspending and wasting unnecessary number of tablets.

**Method:** Descriptive study in the ambit of primary health care that took place in our urban health care centre (28.000 users). We checked out medical records with the diagnosis of cystitis/ urinary infection. Urinary infection in men, complicated ones and in pregnant women were excluded.

**Results:** n= 113. Predominant age range > 75 years old (30,97%) 15-35 (27,43%) 36-49 (26,54%) 50-74 (23,89%). Recurrences 23,89%. Properly prescribed antibiotic 88.49% among them 65% where first choice antibiotics and 35% alternative treatment. Correct dosage regimen 22%. Surplus tablets 424.

**Conclusions:** Urinary infection has been mostly treated with the right antibiotic. It is a common disease that we know how to handle correctly but the treatment regimen is excessive in more than 2/ 3 of patients. This affects increasing spending and above all it affects patient's safety. Only in Fosfomicine, the container conforms to the dose. In most of cases, boxes of medicines do not meet doses. There is a surplus of tablets which involves unnecessary expense and risk of self-medication. It is essential to adapt the content of the containers to treatment guidelines.

## **PS2.200**

### **What do you carry in your medical briefcase?**

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Our purpose with this study was to know if home care doctors of different primary care centers conform to the provisions on its content based on the list of the Spanish society of family medicine. Determine missing materials, according to the reference list. Knowing list that health personnel sees no need in the case. Identify how often doctors organize and verify the material of the case.

**Method:** A descriptive, transversal, medical (5 schools primary care). Review Study briefcases Check list content based recommendations. Identify unnecessary materials. Variables: age, job title, work area, Sex, briefcases Spanish society of family doctor's materials List.

**Results:** We conducted survey to check the briefcases of non-urgent home care among peers. N 17, women 64.7 %, 58.8 % in range 36-45 years, we note that 100 % of respondents did not have the complete case according to literature recommendations, the materials section 63 % was full, not carrying specula 82%, regarding the medication is observed in 73.5 % incomplete. 25.6 % of professionals are unnecessary materials list highlighting the speculums 70.5 % and 47.2 % ophthalmoscope. Regarding medication 50 % see unnecessary. One of the reasons why the case has not completed, the professional fits the case depending on the subject of care, medication Forfeiture is a handicap for Keep it in the briefcase. for 11.7 % of respondents, the case should be provided by the company.

**Conclusions:** The professionals interviewed do not have complete briefcases, reducing materials section stethoscope, sphygmomanometer, depressants, thermometer and glucometer. As for the most of medication it takes depending on the urgency arises. The shelf life of products and the cost of dry chemical bàsica (glucose strips, urine, etc.) limit the availability of our briefcases. We must implement recycling circuits / upgrade for adequacy of our briefcases.

## **PS2.201**

### **Feet in multiple paths - diagnosis of multiple myeloma in primary health care**

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Multiple Myeloma it is a neoplasm of plasma cells, accounting for 1% of all cancers and 13% of haematological malignancies. Fundamentally affects men with an average age of 68 years. The main cause of death in these patients is infectious. 97% of diagnoses show a monoclonal peak electrophoresis of proteins. Being 20-30% asymptomatic, it is essential that the GP, following his patient basis, have this diagnosis in mind before symptoms of recurrent bone pain, frequent infections and blood counts with anemia normocytic normochromic and increased sedimentation rate. Man, 67 years old, married and retired. January presents to your GP cough and hemoptysis. Faced with an altered hearing, are asked to x-ray of the chest demonstrating deletion of costo-phrenic right breast. It is sent to the Pulmonology Diagnostic Center urgently, discarding the hypothesis of pulmonary tuberculosis. Analytically it is noted NN anemia 10,3gHg and VS133 mm/h. Antibiotic therapy was initiated at the first contact and when he return four days later, presents itchy, bleeding and necrotic lesions on both legs, which associates the possible allergy to nylon and/or antibiotic. Carried out an urgent referral to a dermatology consultation, being diagnosed leukocytoclastic injuries of the lower limbs. After this diagnosis, his GP asks to repeat hemogram and electrophoretic urgent proteins. Already in the hospital context and through the analyzes performed on an outpatient basis referred to above, it is concluded that the diagnosis of multiple myeloma, monoclonal IgG peak associated with hyperviscosity syndrome. The patient is hospitalized urgently, starting chemotherapy cycle. The Multiple Myeloma is a serious disease that is not diagnosed only in the hospital setting. Primary health care and the doctor-patient relationship established in the general practice consultation are critical for early diagnosis of this type of less frequent pathologies.

## **PS2.202**

### **Time consumed by interruptions in FM consultation**

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**Background & Aim:** Residents of Family Medicine (FM) of two Family Health Units (FHU) in Portugal found that the consultation interruption, in addition to interfere with the doctor-patient relationship and increase the probability of medical error, cause unnecessary consumption of time. The study proposes to quantify the consultation time consumed by interruptions and characterize the type of interruption.

**Method:** Data were collected by FM residents through direct observation of consultations of fourteen General Practitioners. Subsequently were applied interventional measures giving preference to the use of non-face communication features.

**Results:** In 355 consultations, 132 (37.2%) were interrupted and the average of interruptions/consultations was 1.4. The average of time/consultation was 15 min and for an interruption was 47 sec. Consultation's time spent on interruptions was 146.8min (2.7%). The most common interruption was by telephone (54.0%) and then person interruption (42.9%). After the intervention defined above, it was found that in a total of 381 consultations 77 (20.2%) were interrupted. The average of interruptions/consultation was 1.1, time/consultation was 16.1min and for an interruption was 21.8sec. The consultation time spent on interruptions was 28.0min (0.5%). There most common type of interruption were person interruption and internal mail (36.5% both).

**Conclusions:** There was a decrease in the number of interrupted consultations (37.2% to 20.2%), less time spent by interruptions (47sec to 22seg). of the total consultations' time there was a reduction in the consumption of time spent by interruptions (2.7% to 0.5%). It is thought that these results produce benefit in the doctor-patient relationship.

### **PS2.203**

Reason for Consultation: Fever and headache.

History: 7 years old, she went to our primary care center from two days to present fever of 38° C, papular rash with (0.5 cm diameter) on the trunk and extremities with involvement of palms and soles. The patient explained that one week ago she had tick bite in a left outer ear. She lives in a rural area and she has a dog.

Exploration: conscious and oriented, erythematous pharynx without tonsillar exudate cardiorespiratory auscultation normal. Normal lung auscultation. No focal neurological signs, reactive isochoric pupils. Papular rash lesions on the trunk upper extremities, palms and soles. In a left outer ear has a bite forms with a black ulcerous crust (tache noir).

Analysis: presents reactive C protein 40 mg/dl, leukocyte 9, erythrocytes 4, hemoglobin 120 g/L, hematocrit 39%, neutrophilia of 80%, prothrombin 90%.

Serology: CMV IgG positive, CMV IgM, parvovirus IgM, HHV-6 IgM and IgM, IgG EVB are negative.

Bacteriology: *Rickettsia conorii* IgM positive (1:640), IgG positive *conorii* *Rickettsia*, IgM and IgG *Borrelia burgdorferi* negative.

Clinical Trial: The first suspect was boutonneuse Mediterranean Fever, so the patient was treated with Claritromicine (5mg/kg/dia 5 days).

Evolution: With the results of serological tests, the patient was treated properly and the outcome was favorable with disappearance of rash and fever.

Differential Diagnosis: During the first days, diagnosis is difficult without the rash. Differential diagnosis: Q Fever, Rocky Mountain spotted Fever, Meningococcal infections, Measles.

Applying to the Primary Care: There are abundant rural zones around Barcelona. It is an interesting case because we can find cases like this and the children between 3 and 5 years old are more susceptible. The incidence is observed in Countries of the Mediterranean Basin and, above all, in summer period, where it coincides with the biological cycle of its vector.

Mediterranean boutonneuse fever is an infectious disease caused by *Rickettsia conorii* which generally has a benign course, although only 10% generally have serious complications.

## PS2.204

### Contraception in hypertensive women: a quality improvement study

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**Background & Aim:** Cardiovascular diseases are the leading cause of mortality in European population. Arterial hypertension, in turn, is a major cardiovascular risk factor.

According to World Health Organization (WHO) 2015 criteria, combined hormonal contraceptives (CHC) are not recommended (category 3) in adequately controlled hypertension or blood pressure (BP) levels  $\leq 159/99$  mm Hg, and are contraindicated (category 4) for BP levels  $\geq 160/100$  mm Hg or vascular disease. Progestogen-only pills or implants and intrauterine devices are adequate for hypertensive women (category 1/2).

This study aims to evaluate and improve the quality of prescription for contraceptives in hypertensive women, in a primary health care centre of Portugal.

**Method:** This is a quality improvement study, which includes a retrospective and descriptive study. It was performed an internal evaluation. Unit of study: physicians of the primary care centre. Patients in study: all hypertensive women receiving their management at the centre, aged between 18 and 49 years old, not pregnant nor hysterectomized or postmenopausal. Electronic patient records were consulted and registered in a Microsoft Excel® database.

Study variables: age, BP level, CHC prescription.

Intervention: results of the first evaluation were presented and discussed at a primary care centre meeting; the authors developed and distributed a decision flowchart for contraceptive prescription in hypertensive women.

**Results:** 73 hypertensive women were included. CHC were prescribed in 54,8% of them at first evaluation.

**Conclusions:** First evaluation showed the importance of an intervention at this level. Corrective measures were applied and second evaluation will be performed in May 2016.

## PS2.205

### **Patients with Bariatric Surgery Criteria: a primary care study**

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**Background & Aim:** Cardiovascular disease (CVD) remains the major cause of premature death in Europe, even though its mortality has fallen over recent decades. It is also an important cause of disability, inducing inherent health costs. Hypertension is a major CVD risk factor.

A risk estimation system such as Systematic Coronary Risk Evaluation (SCORE) allows making logical management decisions, and may help to avoid both under and over-treatment.

According to guidelines, adults aged between 40 and 65 years must have their CVD risk assessed. The aim of this study is to evaluate and improve the quality of the assessment and registration of CVD risk in hypertensive patients from two primary health care centres of Portugal.

**Method:** This is a quality improvement, retrospective, descriptive study, regarding hypertensive patients receiving their management at one of the primary care centres, aged between 40 and 65 years. Electronic patient records were consulted and registered in a Microsoft Excel® database.

Study variables: gender, age, assessment and record of CVD risk in the last 36 months. Quality patterns: very good ( $\geq 90\%$ ), good ( $\geq 80\%$  but  $< 90\%$ ), sufficient ( $\geq 60\%$  but  $< 80\%$ ) and insufficient ( $< 60\%$ ).

Intervention: results of the first evaluation were presented and discussed at both units; the authors developed an oral presentation about the importance of the assessment of CVD risk.

**Results:** The study included 396 patients. At first evaluation, assessment and record of the CVD risk was performed in 76% of patients from the first unit and in 74% of patients from the second unit.

**Conclusions:** First evaluation showed a sufficient quality pattern of records in both centres. However, because of the importance of CVD risk assessment for the management of hypertensive patients, it is still necessary to improve this outcomes. Second evaluation will be performed in May 2016.

## PS2.206

### **Assessment and record of cardiovascular risk in hypertensive patients: a quality improvement study**

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**Background & Aim:** Cardiovascular disease (CVD) remains the major cause of premature death in Europe, even though its mortality has fallen over recent decades. It is also an important cause of disability, inducing inherent health costs. Hypertension is a major CVD risk factor.

A risk estimation system such as Systematic Coronary Risk Evaluation (SCORE) allows making logical management decisions, and may help to avoid both under and over-treatment.

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**Method:** This is a quality improvement, retrospective, descriptive study, regarding hypertensive patients receiving their management at one of the primary care centres, aged between 40 and 65 years. Electronic patient records were consulted and registered in a Microsoft Excel® database. Study variables: gender, age, assessment and record of CVD risk in the last 36 months. Quality patterns: very good ( $\geq 90\%$ ), good ( $\geq 80\%$  but  $< 90\%$ ), sufficient ( $\geq 60\%$  but  $< 80\%$ ) and insufficient ( $< 60\%$ ).

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**Results:** The study included 396 patients. At first evaluation, assessment and record of the CVD risk was performed in 76% of patients from the first unit and in 74% of patients from the second unit.

**Conclusions:** First evaluation showed a sufficient quality pattern of records in both centres. However, because of the importance of CVD risk assessment for the management of hypertensive patients, it is still necessary to improve this outcomes. Second evaluation will be performed in May 2016.

## **PS2.207**

### **Pain management, long-term care and palliative care in home visit teams**

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**Background & Aim:** Pain is considered by some the 5th vital sign and defined as an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage. A correct approach to pain management should be a main concern of all areas of healthcare whether for acute situations as well as in chronic and end-of-life care, providing quality of life and dignity. The aim of this oral presentation is to share the experience in our area of influence of what is being done in the areas of pain management in primary healthcare working together with long-term care (LTC) units, home visits teams (HVT) and hospital pain management services.

**Method:** Brief introduction to the definition of pain management, LTC, HVT and palliative care; description of the services provided by all groups involved in these areas that we work with in the area of Loures, near Lisbon. Promote the sharing of experiences from the audience in this subject.

**Results:** Awareness of pain management importance and demonstration of how primary care interacts with the diversity of services and healthcare groups, working together for the patients and their families.

**Conclusions:** Pain affects everyone whether individually or as part of a family or social group. It is more than a reflection of a disease or a disease in itself. Pain acknowledgment should be a priority among family medicine practitioners to identify its implication on their patients and families and to interact more efficiently with all other healthcare groups involved in pain management.

## PS2.208

### Attitudes of Portuguese women concerning breast cancer screening exams - a population-based nationwide cross-sectional study

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**Background & Aim:** Although breast cancer screening may save some women from breast cancer death, it also has important harms like exposing women to false positive results, overdiagnosis and unnecessary treatment. This study aims to assess which breast cancer related medical tests are deemed necessary by adult Portuguese women.

**Method:** This is a cross sectional study. 520 Portuguese women were surveyed by computer-assisted telephone interviewing and randomly selected from national landline telephone lists and NUTS II regions. Proportions and prevalence estimates of the Portuguese population were determined for mammography and breast ultrasonography having women answered on whether they consider they should do, the periodicity they should do it and if they use to do it.

**Results:** 520 women were interviewed; 97.70% (95% CI 94.7 to 99.00) of women aged 50-69 considered they should undergo mammography; 58.4% (95% CI 51.00 to 65.50) of the non-target for screening age group of 18-39 years old having the same opinion. Breast ultrasonography, was referred an intervention they should do by 100.00% of women aged 50-59 years old (N=75), with 79.60% (95% CI 69.70 to 86.80) affirming they usually do it. Obese women were more likely to consider they should undergo mammography. Results were similar when excluding women with personal or familiar history of cancer.

**Conclusions:** A big proportion of Portuguese women consider they should undergo mammography, even younger women, who are not a target in the National Screening Program and most of them say they usually do it. Ultrasonography, which is not recommended for breast cancer screening is pointed as an intervention they should undergo by an unexpected high number of women. Pondered information of real benefits and harms may help reduce false positives, overdiagnosis and unnecessary therapies.

## **PS2.209**

### **ADHD or just plain rudeness: what's the GP's role? About a clinical case**

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**Background & Aim:** Attention deficit hyperactivity disorder (ADHD) is one of the most common childhood disorders and can continue through adolescence and adulthood. It has two categories of core symptoms: hyperactivity/impulsivity and inattention and this behavior results in evidently impaired functioning in multiple settings as symptoms affect cognitive, academic, behavioral, emotional, and social functioning. The complaint regarding symptoms of ADHD may originate from the parents, teachers, or other caregivers.

**Methods:** Data was gathered from interviews with the child and her mother, analysis of patient's clinical records including medical history, physical examination, diagnostic procedures, treatment and evolution. A literature review about the subject was also performed.

**Results:** 10-year-old boy, normal birth and development history. Mother refers being exhausted with his rudeness and claims his older sister has had the same education and doesn't have that behavior. Refers difficulty waiting turns, remaining seated when sitting is required, maintaining attention in play, school, or home activities, interruption or intrusion of others and seems not to listen, even when directly addressed. He was referred to a specialist and had the diagnosis of ADHD, started psychotherapy and medication with good outcomes.

**Conclusion:** Most children get distracted, act impulsively, and struggle to concentrate at one time or another. Sometimes, these normal factors may be mistaken for ADHD. On the other hand, adults may think that children with the hyperactive and inattention subtypes just have emotional or disciplinary problems. Diagnosis and therapy for ADHD is complex and should be done by experts in this field. However, there's room for GPs. Children can be offered professional support within the primary care setting, provided sufficient knowledge and expertise is available and there is collaboration with other health care providers. The main task of the GP is making the right choice concerning when to refer for further diagnosis and treatment.

## **PS2.210**

### **Violet project: tools and tips**

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**Background and Aim:** in Italy every three days a woman is killed by her husband, partner or ex-boyfriend, often before children. Underestimated Istat data show that one in three women in her life has been victim of violence.

**Materials and Methods:** The Simg Dauna, with the help of AslFg and Fimp, has promoted an initiative aiming at activating training courses on domestic violence addressed to primary aid doctors. Such venture is supposed to provide the addressees with a toolbox as it follows:

1. Simg poster - purple bow. A very quick and effective tool, aiming at catching the surgery patients' attention.
2. Brochure. A practical tool for general practitioners and pediatricians, due to recall as quickly as possible the warning signs and the patients' clinical conditions.
3. Software. in Excel format for general practitioners and pediatricians, in hard copy for 118 and continuity of care.
4. Purple Day. It is a day dedicated to enhance the entire population awareness about how domestic violence can seep through ordinary life.

At the same time may represent a chance for the population to see how health care workers, legal authorities and ordinary people can relate to each other and debate.

**Results:** in 2 years, 16 of the researches involved have identified 126 cases of domestic violence, they have become vigilant sentinels and reliable, supportive reference points for all the women and children they care of.

**Conclusions:** A physician who is really aware and trained on domestic violence can be efficiently supported by all the tools described above. Such toolbox might be responsible for a great change affecting society and victims as well. All the people suffering from this kind of violence are supposed to be rescued from their dramatic stories with the help of the local service network.

## PS2.211

### Primary health care for inhabitants with mental disorders in state social care center

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**Background & Aim:** There are many stigmas in Latvia surrounding people with mental disorders. Patients of State social care centres (hereinafter - SSCC) are highly dependent of the care centres health care policy. The aim of our study was to find, whether the principles and tasks of Primary health care in SSCC are being fulfilled.

**Method:** In a retrospective cross-sectional and analytic, epidemiological study 122 mentally ill individuals of the SSCC "Zemgale" branch "Lielberze" were included [admitted to the centre between January 1, 2000 and October 1, 2013]. An exclusion criterion was patients, who had more than one clinical diagnosis of mental disease. Available patient medical records were gathered and thereafter analysed with the SPSS 21.0 program. Pearson Chi-Square and One-way ANOVA tests were used to compare the data.

**Results:** Family physicians visited patients to SSCC ~10.86 times a year. The mean age of study entrants was 49.47 years. The study participants with severe mental retardation were visited by family physician ~8.75 times per year, with moderate-8.70 times, with mild-13.33 times and with schizophrenia-13.68 times ( $p < 0.05$ ). Overall, in a two-year period none of the patients did a faecal occult blood test for colorectal cancer, meanwhile screening for breast cancer was performed in 56% of females, aged 50-69 years. The issue of absence of colorectal cancer screening should be addressed in the context of limited adherence of patients with mental disease due to various levels of understanding and cognition, still, should be explored further.

**Conclusions:** The amount of family physician visits in SSCC is high; however there is a statistically significant difference in the number of visits among different mental disorder diagnoses. State organised screening program has been realized partly in SSCC. Multidisciplinary approach and increase in the staff resources are needed to better completion of colorectal cancer screening programs.

## PS2.212

### Preventive check-ups - problems and challenges in the rural areas - experience from the Republic of Serbia

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**Background & Aim:** Health systems from all over the world are recognizing the importance of investments in preventive check ups.GP must use health resources efficiently and find the right measure between rationality and competency.

**Method:** Summary of current situation in preventive area of work, in rural practices, with close one on one particular health center, as representative.

**Results:** Around 82% of Serbia are rural areas and 42% of inhabitants live there.Coverage with primary health clinics defers hugely,depending on the country region (87% North to 20% Southeast). Roughly, 11% of rural population don`t have health insurance. Some 52% of children in rural areas were regularly vaccinated,compared to 62% in urban areas. Percentage of women,aged 40-69,who underwent mammography is 6,8% in rural and 13,2% in urban areas. As Pap tests go,25,6% of women aged 20-69 ,in rural areas did it,compared to 41,8% in urban areas. Health center-Krusevac,(Central Serbia),primary care facility, provides health care for about 130 000 inhabitants and we have around 118 000 registered patients.Primary care physicians-PCPs (there are 62 of them and the third are specialists in general practice) provide health care for all inhabitants from 19 years of age and older. The center has got 8 clinics in the city and 24 rural clinics.PCPs provide around 400 000 curative exams and 15 000 preventive check ups per year.Since 2005. the Center has also got Preventive center and Diabetic advisory clinic,available for all diabetic patients.As a part of Children` clinic there are Advisory clinic for children development and Youth advisory clinic. Preventive services in PC practice mostly include general physical examinations,flu immunization, AT immunization and lately colon cancer screening (Hemoccult test) since 2013.All these preventive services are equally available in rural and in urban areas.

**Conclusions:** Our suggestions to improve the situation: use every patient`s visit to give proper health advice, try to contact people who are not insured through local authorities (they rarely or never pay visits to doctors), contact local media for support and organize gatherings with locals with topics of interest.

## PS2.213

### Vitamin D deficiency

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**Background and Aim:** Vitamin D deficiency is a common condition, and this can be seen at any age. Our aim is to determine the incidence of vitamin D in patients at our Family Medicine Center.

**Method:** We examined the Vitamin D levels of the patients who underwent routine blood test, between 1 January 2016 and 29 February 2016 in our Family Medicine Center.

**Results:** Vitamin D test performed on 73 patients. 59 (82%) of them levels <20 ng/mL, 7(9%) of them is between 20 and 30 ng/mL, 7(9%) of them bigger than 30 ng/mL.

**Conclusion:** Vitamin D deficiency has negative effects on cardiovascular, endocrine, immun systems, growth and development. Family Physicians can detect Vitamin D deficiency and can be treated for a quality life.

## PS2.214

### Therapeutic efficacy in acute bronchiolitis: salbutamol or adrenaline?

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**Background & Aim:** Acute Bronchiolitis (AB) is a common health related issue potentially serious with little therapeutic window. This is an infection from the lower respiratory tract that affects children under 2 years old. The main cause is the Sincitial Respiratory Virus (around 60% a 80% of the cases). The therapeutic measures with nebulized salbutamol in the A&E is controversial in what refers to the children clinical score.

**Method:** Literature search and PubMed databases of review papers published in the last 10 years in portuguese, spanish and english with the following search MeSH terms: “salbutamol bronchiolitis”, “epinephrine bronchiolitis” and “treatment Acute Bronchiolitis”.

**Results:** 25 papers matched the criteria selection and out of these 7 were included for this work. An adequate treatment can reduce the symptoms and numbers of hospital admissions. Despite the fact that it is not the frontline treatment, bronchodilators are the type of therapy used the most for the relief of crises in infants. The physiopatological mechanism of obstruction in the airways is related to the edema from respiratory mucosa and with the production/accumulation of secretions, more than bronchoconstriction. This explains the downfall of the treatment. The studies are controversial. The use of short-acting B-2-agonists does not show any therapeutic efficacy. However it was verified opposing findings in specific subpopulations like children over 6 months or with atopy. Nebulized adrenaline used in selected patients showed some clinical improvement. Despite the facts, the main therapy for AB are the main general ones.

**Conclusions:** The short-acting B-2-agonists and adrenaline are drugs used as therapeutic efficacy in Acute Bronchiolitis but their efficacy is uncertain. However, nebulized adrenaline showed an improvement in children treatment efficacy.

## **PS2.215**

### **Genetic case in Creutzfeldt-Jakob disease**

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Creutzfeldt-Jakob disease (CJD) is a rare, degenerative, invariably fatal brain disorder. It affects about one person in every one million people per year worldwide. CJD usually appears in later life and runs a rapid course. Typically, onset of symptoms occurs about age 60, and about 90 percent of individuals die within 1 year. In the early stages of disease, people may have failing memory, behavioral changes, lack of coordination and visual disturbances. As the illness progresses, mental deterioration becomes pronounced and involuntary movements, blindness, weakness of extremities, and coma may occur.

There are three major categories of CJD:

- In sporadic CJD, the disease appears even though the person has no known risk factors for the disease. This is by far the most common type of CJD and accounts for at least 85 percent of cases.
- In hereditary CJD, the person has a family history of the disease and/or tests positive for a genetic mutation associated with CJD.
- In acquired CJD, the disease is transmitted by exposure to brain or nervous system tissue, usually through certain medical procedures.

There is no evidence that CJD is contagious through casual contact with a CJD patient. Since CJD was first described in 1920, fewer than 1 percent of cases have been acquired CJD. About 5 to 10 percent of all CJD cases are inherited. These cases arise from a mutation, or change, in the gene that controls formation of the normal prion protein. While prions themselves do not contain genetic information and do not require genes to reproduce themselves, infectious prions can arise if a mutation occurs in the gene for the body's normal prion protein. If the prion protein gene is altered in a person's sperm or egg cells, the mutation can be transmitted to the person's offspring. All mutations in the prion protein gene are inherited as dominant traits. Therefore, family history is helpful in considering the diagnosis. Several different mutations in the prion gene have been identified. However, not all people with mutations in the prion protein gene develop CJD.

## **PS2.216**

### **Primary care follow-up of chemotherapy/radiotherapy receiving cancer patients**

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**Background & Aim:** Worldwide the incidence of cancer continues to rise, while the cancer mortality decreases. This will increase the survivorship and the number of cancer patients significantly. The demand for cancer care is expected to increase by 40% during the next 20 years, whereas the number of oncologists will only grow by 25%. Furthermore, patients want care that is close to home and that is coordinated between primary care, hospitals, cancer settings, and palliative care services. More and more cancer patients will be followed-up in coordination between their oncologist and primary care physicians. To improve this integration of care, primary care physicians must have access to the necessary information and skills to play an active role in cancer care.

**Method:** Case reports, plucked from real-life encounters with patients, will be presented to the participants. An active attitude for solving the problems presented in the case reports will be expected. Five subjects will be presented:

- 8) The interpretation of lab results after chemotherapy,
- 9) Neutropenia – neutropenic fever,
- 10) Management of nausea or diarrhea,
- 11) Approach to pain,
- 12) Mucositis and other side effects of radiotherapy.

**Results:** The participants will achieve confidence in dealing with patients receiving chemotherapy. They will know what to do in the case of neutropenia or neutropenic fever. They will be able to start appropriate treatment for nausea, diarrhea and pain. They will learn how to manage mucositis and skin reddening after radiotherapy. Finally they will be shown where to find more useful information about the subject.

**Conclusions:** Since primary care physicians are expected to play a more active role in the follow-up of cancer patients receiving chemotherapy, they must be armed with the necessary knowledge and skills to do this.

## **PS2.217**

### **Managing my patellofemoral pain' - the creation of an education leaflet for patients**

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**Background and Aim:** Patellofemoral pain (PFP) is a heterogeneous and often persistent knee condition. More than one third of patients with PFP still report symptoms despite receiving evidence-based treatments that are initially effective. Appropriate patient education is an essential component of effective management of patellofemoral pain. However, there are currently no published educational resources for clinicians and researchers treating individuals with PFP to help translate current evidence into clinical practice. The purpose of this study was to develop a brief yet comprehensive evidence based education leaflet to be used as an adjunct in the management of PFP through consultation with both experts (clinical academics) and individuals with PFP.

**Method:** The study design was qualitative and included consultation with international experts and patients. A preliminary education leaflet titled 'Managing My Patellofemoral Pain' was created using information from the 'Best Practice Guide to Conservative Management of Patellofemoral Pain' and educational content used in published research. Feedback was sought from 21 experts (clinical academics) for accuracy, adequacy, and clarity of the information in the leaflet using a semi-structured questionnaire, and a number of suggested modifications were made as a result. Further feedback was sought from 20 patients diagnosed with PFP regarding the clarity and adequacy of information contained in the leaflet, and to determine additional educational resource needs.

**Results:** The leaflet created is titled "Managing My Patellofemoral Pain" and the main topics of the leaflet are "What might cause my knee pain?" and "Treatment options" which is divided into exercise and additional treatments. Patient feedback was positive, and included a number of considerations for further education resource development.

**Conclusions:** The 'Managing My Patellofemoral Pain' education leaflet may provide a valuable resource for patients, clinicians and researchers to assist the provision of education and translation of the current evidence.

## PS2.218

### Subclinical and established target organ damage in patients enrolled in the study IBERICAN

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**Background & Aim:** The general objectives of IBERICAN are to determine the prevalence and incidence of cardiovascular risk factors and cardiovascular events in Spain. The aim of this paper is to analyze the presence of target organ damage in the sample included in IBERICAN (n = 3,042).

**Method.** IBERICAN is a longitudinal, observational, multicenter study in which patients are being included, 18 to 85 years, treated in Primary Health Care consultations in Spain and will be followed during five years. Results of cross-sectional analysis of the first 3,043 patients are shown.

**Results:** Mean age was  $57.9 \pm 14.6$  years, of which 34.7% were older than 65 years and 55.4% were women. 24.7% of patients (n = 752) showed some LOD and 15.6% had a history of ischemic heart disease. The high pulse pressure in older than 65 years was present in 30.3%, ventricular hypertrophy in 4.6%, the left bundle branch block in 2.1%, atrial fibrillation in 5.5%, heart failure in 2.9%, ischemic heart disease in 7.8%, stroke in 4.6% and peripheral arterial disease in 4.4%. The 9.0% had eGFR less than 60 ml/min, microalbuminuria 9.6%, proteinuria 0.6% and 2.6% had both eGFR less than 60 ml/min and microalbuminuria or proteinuria.

**Conclusions:** The patients included in the sample are relatively young, but the fifth had cardiovascular comorbidity and another fourth part showed subclinical injury; both situations are related to an increased cardiovascular risk condition that should be confirmed in follow-up cohort.

## PS2.219

### **Evaluating the degree of adherence and satisfaction with oral anticoagulant treatment with AVK, according to the degree of INR control in the field of primary care in Galicia. ANFAGAL + Study**

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**Background & Aim:** Knowing what is the degree of adherence and satisfaction with the treatment with AVK, depending on the degree of control of INR in patients in the ANFAGAL study, one year later.

**Method:** The ANFAGAL + study, corresponds to the second cross-sectional analysis (437 patients) made a year after over the original sample of ANFAGAL study (510 patients). A subsample of 272 patients answered the Morisky-Green questionnaires, to evaluate adherence, and SAT-Q, to evaluate their satisfaction with anticoagulation.

**Results:** 437 patients were included. 40.1% of them have a time in therapeutic range by Rosendaal <65%. The Morisky-Green questionnaire showed similar results between the two groups ( $3,6\pm 0,1$  vs  $3,5\pm 0,2$ ,  $p=0,505$ ). The SAT-Q test showed differences in dimension of satisfaction for the good control ( $8,3\pm 0,3$  vs  $7,8\pm 0,3$ ,  $p=0,060$ ). The other dimensions did not show statistically significant results: adverse effects ( $5,7\pm 0,4$  vs  $5,9\pm 0,5$ ,  $p=0,565$ ), forgetfulness ( $3,1\pm 0,2$  vs  $3,2\pm 0,3$ ,  $p=0,477$ ), effectiveness ( $6,9\pm 0,4$  vs  $6,9\pm 0,4$ ,  $p=0,973$ ), convenience ( $6,8\pm 0,4$  vs  $6,8\pm 0,4$ ,  $p=0,956$ ) and health care provided ( $5,5\pm 0,4$  vs  $5,7\pm 0,4$ ,  $p=0,673$ ).

**Conclusions:** Despite the clinical differences between patients right and wrong controlled patients in terms of oral anticoagulation with AVK, in our sample there not seems to be differences in adhesion between both groups but neither the patient has different level of satisfaction treatment administered despite being familiar with poor control.

## PS2.220

### Long term anticoagulation therapy management in Primary Health Care: a one year experience

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**Background & Aim:** Long term anticoagulant therapy for the prevention of Strokes in patients with atrial fibrillation is crucial. Although nowadays new oral anticoagulants may be an alternative to classic therapy with Vitamin K antagonists, its high price is still a barrier for many patients. General and Family Physicians can play an important role in monitoring the anticoagulation therapy given the proximity from the residence of their patients.

**Method:** Data regarding patients with the diagnosis of non-valvular atrial fibrillation with anticoagulation consultations in the Family Health Units (USF Salvador Lordelo and UCSP Tarouca) during the entire year of 2015 was studied. We analyzed data of these consultations, the patients and the control of International Normalization Ratio (INR) levels between the months of January and December of 2015.

**Results:** There were in total 120 patients with non-valvular atrial fibrillation registered in the Units. of these, 30 (25%) monitored their INR in these Units during 2015 with an average age of 73 years. There was a total of 389 consultations, an average of 13 consultations per patient. of the total INR results obtained, 66% were within the therapeutic target.

**Conclusions:** The data obtained indicates that it is possible that a large proportion of patients with non-valvular atrial fibrillation can be managed at a Primary Health Care Unit, in order to follow-up and control their anticoagulation therapy with economic benefits for the patients and for the National Health Service.

## **PS2.221**

### **The complementary imaging exams in rheumatology "perspective of family medicine"**

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Rheumatic diseases are a major part of the clinical routine of the Family Doctor. The clinical history, analytical assessment and radiological profile are vital components for the diagnosis of those diseases. Although most of the imaging complementary exams are performed by Radiologists, it is important for the Family Physician to be acquainted with the major findings. In this regard, we aimed to identify the main findings detected in imaging studies considered in the diagnosis of rheumatic diseases, with particular emphasis to X-rays.

**Method:** It was carried out a scientific review with information taken from rheumatologic and radiologic databases.

**Results:** An approach was made to systematize the following points:

- When to order the imaging exams
- Which of the exams should be requested
- Identify the findings that are part of the rheumatic diseases spectrum
- The specific characteristics of the most common pathologies
- How to differentiate findings suggesting inflammatory arthritis and osteoarthritis
- How to correlate imaging findings with the clinical history and analytical alterations

**Conclusions:** Through this work, it is intended that the Family Doctor is able to improve the ability to diagnose rheumatic diseases."

## PS2.222

### Severe hypertriglyceridemia and successful approach in lifestyle modification, a clinical case

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**Background & Aim:** Hypertriglyceridemia is defined as triglyceride levels (TG) > 150 mg/dL. After the age of 20, the prevalence is about 25-35%. Severe forms (TG > 1000 mg / dL) increase the risk of pancreatitis and the presence of metabolic syndrome should be evaluated. Although undervalued, the role of lifestyle modification and family intervention are paramount towards disease control.

**Methods/Results:** We describe the clinical case of a 52 years-old female patient, with type II diabetes mellitus (DMII), with parsimonious control under oral antidiabetic treatment (HbA1C 10,8mg / dL), obesity, large waist circumference, high blood pressure, documented atherosclerotic disease, severe hypertriglyceridemia despite treatment with fenofibrate (TG >2000 mg / dL) and a history of pancreatitis. Regarding family history, she referred a sister with severe hypertriglyceridemia and DMII and their father died at age 43 from acute myocardial infarction.

A plan was carried out in order to promote lifestyle changes, with a focus on diet and exercise. Treatment with insulin was also initiated and the patient was observed regularly. Three months after the initial intervention, there was a significant decrease in weight and improvement in TG values and HbA1C. Nonetheless, the patient was referred to Endocrinology.

**Conclusions:** Hypertriglyceridemia is an important cardiovascular [CV] risk factor and besides pharmacologic treatment, the lifestyle measures are essential to prevent the occurrence of events. Additionally, the control of other risk factors, like DM, is of crucial value.

Finally, the presence of severe hypertriglyceridemia in first-degree relatives or appearance of early CV disease should prompt family study and intervention."

## PS2.223

### **Advantages of a new healthcare model to attend chronicity in primary care**

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**Background & Aim:** The progressive aging of the population has resulted in significant challenges for health administrations. In Catalonia, 80 % of health resources are used in the care of chronic patients. The goal is to establish a model of collaborative care between different devices and healthcare areas (health and social) that advance a model of quality care

1) Determine the attention characteristics for patients in situation of complexity: Complex Chronic Diseases (CCD) and patients included in the Advanced Chronicity Care Model (ACCM); observing origin (Case Managers, Palliative Care Units, Primary Care), type of management (home visit or telephone consultation), and destination (home or hospital).

2) Determine the causes of referrals to hospital.

**Methodology:** Cross-sectional study of multidisciplinary care provided to Complex Chronic Diseases patients (CCD) and patients included in the (ACCM) recorded in the database (e-CAP) of our Attention to Chronicity Unit (UFACC) during the period between 02.01.2013 and 09.30.2015.

**Method:** Healthcare processes were recorded from the CCD agenda of L'Hospitalet de Llobregat recording data of home visits (D) or telephone consultations (CT); origin of the patients (Palliative Care Units, Case Managers, Home Care, Primary Care, Emergency Medical Services) and resolution (transfer to hospital or not).

**Results:** Since the creation of the Chronicity Care Attention Service (SEVIAC) in 2013, there has been a significant increase (57.3%) of referrals from Primary Care Teams through the figure of the Case Managers in 2015.

The total procedures performed at home or by telephone contact showing a clear increase in telephone negotiations resolved in 2014 (64.4%).

Since the beginning of the SEVIAC program in 2013 to the present, an increase in telephone negotiations addressing health problems were resolved (97.9%) and hospital referrals significantly decreased (2,3%).

**Conclusion:** Multidisciplinary assessment and ongoing attention allows an optimum management of social-health resources according to the patients needs.

## PS2.224

### Evaluating health seeking behavior of patients regarding ARI in patients older than 19 years

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**Background:** Acute respiratory infections (ARIs) are commonly experienced in primary care, adults 2-4 ARIs a year and children 6-8. The perception, knowledge, attitude and practice of patients play an important role in the reduction of morbidity in patients older than 19 years.

**Aim:** To evaluate the health seeking behavior of patients, regarding ARI in patients older than 19 years, and to assess the attitude, practices and estimate the knowledge of patients, regarding ARI. **Methodology:** Data are used from national project (cross sectional study) conducted in November 2014, at Primary care settings in Republic of Macedonia as a part of E quality program. 81 physicians were included. Data were entered and analyzed on SPSS 19.

**Results:** Group of 3643 patients, >19 years, were analyzed. The duration of illness was less than 2 days in 21,1%, 3 days in 25,7% of patients, 4 and 5 days in 10,8 and 11,2%. Leading symptoms were cough with 58,9%, fatigue 37,8%, sore throat 31,6%, pain during swallowing and runny nose 30,0%. 21,4% were diagnosed as Acute bronchitis, 20,6 as Common cold, 16,7 with Acute tonsillitis and 14,0% Acute pharyngitis.

**Conclusion:** Overall, the study showed that the level of knowledge among patients with ARI is low. Interventions like health education sessions, media campaign, banners etc. are needed to improve situation.

## PS2.225

### The effect of specific foods in the reduction of frequency and/or severity of migraine attacks - an evidence based research

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**Background and Aim:** Migraine is a common and potentially debilitating disorder that often fills consultations in primary care. The literature recommends identification and avoidance of precipitating factors - triggers, including dietary modifications. Our purpose with this research is to verify the evidence of specific foods in the reduction of frequency and/or severity of migraine attacks compared to a no restriction diet.

**Methods:** We searched for meta-analysis, reviews (R), clinical practice guidelines, clinical trials, randomized controlled trials (RCT), observational studies, cross-sectional studies (CSS) published between January 2010 and 2016 in Portuguese, English, Catalan and French, through Medline, National Guideline Clearinghouse, Canadian Medical Association Practice Guidelines, Cochrane Library and Trip Database, using the MeSH terms "migraine" and "diet". To rate levels of evidence and recommendation strength we applied the Strength of Recommendation Taxonomy.

**Results:** We found 344 articles, from those 21 met the inclusion criteria by title, and 12 by full reading- 4 R, 1 evidence-based review, 5 CSS and 2 RCT. The results from both RCT suggest that low lipid diet significantly reduces migraine attacks. Two CSS aimed to identify migraine dietary triggers; most of the inquired patients reported susceptibility to specific foods, but with great variation from patient to patient. The other 3 CSS were design to identify significant associations between dietary patterns and migraine but reached diverging findings. The reviews supported low lipid diet and consistent daily caffeine intake to prevent migraine and the multiplicity and personal variability of dietary triggers.

**Conclusions:** Evidence tell us that a low lipid diet prevents migraine attacks and reduces its severity, although it is not clear if the benefits are due to a specific food diet or the consequent weight loss. There is also evidence to recommend avoidance of caffeine withdrawal or high consumption. The data on particular potential triggers is still controversial.

## PS2.226

### Aggressive fibromatosis: a case report

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**Introduction:** Aggressive Fibromatosis is a rare condition that occurs when fibroblast cells undergo mutations and become desmoid tumors. Despite their benign nature and their slow-growing musculoaponeurotic evolution, they have no metastatic potential. However, aggressive fibromatosis is locally aggressive. These tumors are associated with women fertile age, especially during and after pregnancy.

Case Report: A 46-years-old female patient presented with low back pain radiating into left glute in March 2012. It was first assumed as a muscle contracture and medicated with analgesics and anti inflammatory drugs. On April 2012 she came again to Primary Care due to the same reason and we've sent her to an Orthopedic specialist who recommended physiatric treatment. in January 2014 she returned but now with a widespread pain so we've tested her for Fibromyalgia and she had >9 painful tender points. At this time we've decided to initiate Duloxetine 60mg and Diazepam 5mg. in October 2014 the low back pain radiating to left glute came back again, more severe this time, we've suggested an ultrasound scan that revealed a 8cm mass with some inflammatory signs, without contracture characteristics. At this time a MRI was recommended and the result was a neoformations process up to 5cm in the left lumbar region compatible with extra abdominal aggressive fibromatosis. The patient was sent to the Oncology group and a wide local excision was proposed.

**Discussion:** Extra abdominal desmoid type fibromatosis arises from the connective tissue of muscle and its overlying aponeurosis or fascia. It is a non-metastasizing fibrous tumour and characterised by infiltrative invasion of soft tissues and a high propensity for local recurrence after surgical extension.

**Conclusions:** Low back pain is extremely common in primary care. Although the main causes are benign and treated with anti inflammatory drugs, a recurrent low back pain should require further investigation.

## **PS2.227**

### **Evaluation of the knowledge of the use of adrenaline pen in a medical emergency - research protocol**

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**Background & Aim:** Anaphylaxis is a medical emergency with a high mortality rate that can be drastically reduced if treated immediately and effectively. The treatment is based on the administration of adrenaline, so it is vital to have a precise knowledge of the use of a pen containing this drug. Recognition of the clinical signs of a potentially fatal situation proves to be a priority before the administration of epinephrine. Thus, health professionals and other professionals of the school community should have the adrenaline pen and know how to use it. **Aim:** evaluate the practical demonstration of the use of the adrenaline pen and knowledge of the situations which require the administration by: family physicians, pediatricians, teachers and educational assistants.

**Method:** Study: observational, multicentered, analytical and cross-sectional. Population: family physicians, pediatricians, teachers and educational assistants. Inclusion criteria: professionals available to participate in the study. Sample: not random, convenience. Statistical analysis: descriptive and analytical. The researchers will apply a questionnaire to the participants in the study, which will include: demographic data of the participants, knowledge of situations that require adrenaline administration and fulfillment of the various steps of use of the epinephrine pen. This study will be conducted after obtaining authorization by the Ethics Committee, Family Health Units, Pediatric Services and Schools.

**Results:** The results will be presented after the data collection and subsequent analysis.

**Conclusions:** This study will allow the assessment of knowledge of the various selected professional groups. The results could serve as a motive for accomplishment of educational sessions for health among them. These sessions will have the main goal of raising awareness of an emerging situation in which the immediate administration of epinephrine may improve their prognosis.

**Disclosure:** No conflict of interest declared.

## PS2.228

### Characterization of vaccination extra National Vaccination Program

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**Background & Aim:** There has been, in recent years, a remarkable decrease of morbidity and mortality due to infectious diseases targeted by vaccination, with consequent health gains. The National Vaccination Program (NVP) is a universal program, free and accessible to all residents in Portugal. In addition to the NVP vaccines, there are others in the market, recommended by the Portuguese Society of Pediatrics.

**Aim:** to characterize the extra-NVP vaccination in users under the age of 18.

**Method:** Observational, retrospective and cross-sectional study. Population: users born between 01/01/1996 and 12/31/2014, belonging to three Family Health Units (FHU). Data source: computer program Sinus®. Inclusion criteria: administration records of at least one dose of each of the following extra-NVP vaccines: - Vaccine against meningococcal group B (MenB) - Pneumococcal polysaccharide conjugate vaccine 13 valences (Pn13) - Vaccines against rotavirus (ROT) - Vaccines against hepatitis A (HAV) - Vaccines against varicella (VAR).

**Results:** The pediatric population in the three FHU corresponds to 8149 users, of which 51.7% are male. Regarding Pn13, 47.3% of the children were vaccinated, and 52.2% were male. They were vaccinated with MenB 2.7% of children, in which 56.2% were male. Regarding ROT, 13.4% of children were vaccinated, and 51.6% were female. As for VHA, 20.6% of children were vaccinated (54.4% male). None of the children were vaccinated with the VAR.

**Conclusions:** The use of extra-NVP vaccines should be considered after discussion with the pediatrician and / or family physician. The decision of the extra-NVP vaccination is the responsibility of parents, leaving the family doctor the key role of information and assistance in this decision process. This is an issue that may cause many repercussions on the health of children but also in the family and to the society in general. Disclosure: No conflict of interest declared.

## PS2.229

### Knowledge and attitudes of family physicians of Northern Portugal health centers regarding pain

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**Introduction:** Pain is one of the most frequent problems that health professionals have to deal in their daily practice. The International Association for the Study of Pain defines pain as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage”. Pain is a complex subjective experience that is very hard to evaluate. To do that health care providers need to use their knowledge acquired during their academic path, specific formations and scientific events. Yet, many professionals still have difficulty to manage pain accordingly, especially using opioid medications. Aims: To determine the attitudes, beliefs and knowledge of family physicians and interns of Northern Portugal health centers regarding pain.

**Methods:** It was implemented an online questionnaire based on Ferrell’s instrument: “Knowledge and Attitudes Survey Regarding Pain” throughout June 2015.

**Results:** A total of 39 surveys were return (45%, 39/86). The typical respondent was a female ages 20-29 having between 2 to 5 years of practice experience. The majority of the professionals doesn’t have any pre or post graduated formation in pain. Knowledge gaps were uncovered in the areas of physical dependence of opioids, sleeping with severe pain, the effectiveness of acetaminophen and nonsteroidal anti-inflammatory agents in the treatment of painful bone metastases, the time peak effect for morphine given orally and the recommended route of administration of opioid analgesics for patients with persistent cancer-related pain.

**Conclusion:** This survey revealed some gaps on the knowledge and attitudes towards pain by the ACE’s family physicians and provides a valuable insight into the attitudes and knowledge’s about pain of this professionals.

## **PS2.230**

### **Heart attack in a young woman - all about genetics!**

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**Introduction/Aims:** Cardiovascular diseases, such as acute myocardial infarction (AMI), are the leading causes of mortality and morbidity in the world. The pathophysiological mechanisms of AMI are multiple, but 50% results from thrombus formation from an atherosclerotic plaque rupture. The role of the fV mutation in the arterial disease is controversial, but several studies suggests that this mutation contributes to AMI in young people and in those with cardiovascular risk factors (CVRF). Diagnose is made by searching for the fV mutation and the anticoagulant treatment is indicated in the acute phase after the thrombotic event. Keeping anticoagulation depends on the risk of recurrence and on the bleeding risk.

**Methods:** A search for articles using the MeSH terms factor V Leiden mutation, thrombophilia and acute myocardial infarction published between January and December 2015 was conducted. Case description: Caucasian woman with 37 years old, dyslipidemia, did oral contraceptive since she had 20 years old. Maternal grandfather and paternal grandmother were deceased by AMI at the age of 60 and her father passed away at the age of 44 from a stroke. At 36 years old she went to the hospital with AMI clinic which was confirmed. During her staying at the hospital were requested the genetic study of prothrombotic mutations that revealed a heterozygous fV Leiden mutation. She was discharged medicated with double anti-aggregation and with the indication to change the contraceptive.

**Conclusion:** The association between fV mutation and arterial events is controversial, but one of the studies showed that the heterozygous fV mutation is associated with a significantly increased risk of AMI in 2-3 times, especially if coexists cardiovascular risk factors. The Family Physician plays a key role in the management of chronic diseases, especially in young patients, due to its impact on everyday life and the necessary changes in lifestyle.

## PS2.231

### Graves' disease - the hyperthyroidism in exhibition

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**Introduction/Aims:** Graves' disease is an autoimmune disease relatively frequent, which is influenced by a combination of environmental and genetic factors. Approximately 60-88% of the cases of hyperthyroidism are due to Graves' disease. The presence of a diffusely enlarged thyroid gland, thyrotoxic signs and symptoms, together with evidence of ophthalmopathy or dermopathy, can establish the diagnosis. The clinical suspicion normally takes place at Primary Care and to make the definitive diagnose is necessary to assess the thyroid function and the specific antibodies and do a thyroid ultrasound. Treatment involves the correction of the thyrotoxic state with antithyroid medications and sometimes it's even necessary surgery.

**Methods:** A search for articles using the MeSH terms Graves' disease and hyperthyroidism published between January and December 2015 was conducted. Case description: 53 year old woman, went to the doctor's appointment with pain and nonspecific eye complaints. At examination, she had exophthalmia and enlarged thyroid, without palpable nodules. The analysis revealed a TSH 0.005mIU/l, Ft4 74µg/dL, antithyroid antibodies 213UI/L, antithyroglobulin antibodies 1626UI/L and a enlarged thyroid with a 4 mm nodule. 23 year old woman, went to the doctor's appointment with weight fluctuations, excessive sweating and anxiety. At examination she had a palpable thyroid, without nodules. The analysis revealed a TSH 0mIU/l, Ft4 1.5 µg/dL, antithyroglobulin antibodies 28091UI/L, antithyroid antibodies 327,47UI/L. The ultrasound revealed a heterogeneous and hypoechoic thyroid, with a 8 mm nodule in the left lobe. Both of them started Propylthiouracil.

**Conclusion:** It's a quite obvious presentation but it can easily led us to think about others pathologies, so it's really important to do a thorough objective examination and study the thyroid function. After diagnose, the Family Physician's role is to prevent the cardiologic and pulmonary complications, maintain the euthyroidism state and to educate the patient about the hyper/hypoadrenergic states.

## PS2.232

### **Adequacy of contraception in women with hypertension**

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**Background:** Women with arterial hypertension (AHT) who use combined hormonal contraception (CHC) have an increased risk of heart attack and peripheral artery disease when compared to non-users. According to the World Health Organization (WHO), a systolic blood pressure (SBP)  $\geq 160$  mmHg or a diastolic (DBP)  $\geq 90$  mmHg in women with AHT is an absolute contraindication (CI) to the use of CHC; and a SBP  $>140$ -159 or DBP  $>90$ -99 mmHg, a relative CI.

**Aim:** determine the prevalence of CHC in women with AHT and evaluate its adequacy.

#### **Method:**

Type of study: observational, descriptive

Population: women with AHT registered in the Family Health Unit (FHU)

Exclusion criteria:  $>56$  years; no surveillance at the FHU; unknown contraceptive

Variables: BP, contraceptive, smoking, weight, diabetes, stroke, myocardial infarction

Data source: clinical process

**Results:** From the 1.116 hypertensive women, we obtained 167 individuals, of which 37 had reached menopause, 33 used a progestogen, 26 took CHC, 31 had undergone tubal ligation, 9 were hysterectomized, 10 used condom and 19 didn't utilize any contraceptive.

Ten women had absolute CI to CHC, wherein one was taking an estroprogestative; 25 women had relative CI, in which 3 used CHC.

Within the users of CHC, 4 were smokers, 9 obese, 3 had diabetes and 1 suffered a stroke.

**Conclusions:** There is a careful prescription of CHC. A large proportion didn't need hormonal contraception (63,5%). About 19,8% took an isolated progestin, a preferable choice in women with increased cardiovascular risk; and 15,6% used CHC. Prescription of CHC was inadequate in 19,2% of the 26 users.

As a limitation of this study, we point out the fact that the categories established by the WHO don't take into account the presence of other cardiovascular risk factors.

With this work, we hope to remind that hypertensive women are still Women, needing a multifaceted approach.

## PS2.233

### **Cord blood stem cells banking and clinical use**

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**Background and Aim:** Umbilical cord blood offers an easy access to hematopoietic stem cells (SC). Several cryopreservation banks, trying to benefit from this discovery, emerged with aggressive and obscure marketing strategies, exploiting the feeling of parental guilt.

This work aims to guide physicians in clarifying parents' doubts about SC donation and banking.

**Method:** Literature search in the Pubmed database with the terms: "Stem Cells", "Cord blood". Review of national and international recommendations.

**Results:** The only validated application of cord blood stem cells (CBSC) is the allogeneic transplant for the treatment of hematologic malignancies. Medical applications of mesenchymal SC, from the cord and placenta, are still experimental.

In Portugal there is a public bank working with an international database for allogeneic use. There are also over 8 private banks that facilitate SC collection by the price of 995€ to 2.400€. Units are reserved for family use, favoring autologous transplants and the unit's viability is only determined when required for use.

The probability of having a disease in childhood potentially treatable with transplantation is 1:15.000. Autologous use of stored units in children is 4:1.000.000. The probability of using a sample of the public bank is 100 times that of the private bank.

Several countries recognize that private conservation for autologous use is useless. Italy, Spain and France banned the existence of private banks.

**Conclusions:** Caution is required towards promises of unreasonable applications. SC transplantation is currently limited to certain hematological diseases and the probability that a child benefit from an autologous transplant is extremely low.

It's not recommended the storage of CBSC as "biological insurance" against future diseases. Blood stored will most likely be used by the brothers of donors than by the donors themselves. If the child is born in a hospital that works with a public bank, donation should be encouraged.

## PS2.234

### Quality assessment of the application of fecal occult blood tests in a health unit

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**Background and Aim:** Colorectal Cancer (CRC) is the third most common type of cancer in men worldwide and the second in women. The recommended screening strategies consider two groups: analyzes of feces, and imaging and/or endoscopic examination of the colon and rectum. In Portugal the recommended screening is through the realization of fecal occult blood tests (FOBT), beginning at age 50 and performed annually. The aim of this work is to verify the correct performance of CRC screening by FOBT's, according to 'Opportunistic Screening for CRC' guideline nº003 / 2014 from Direção Geral de Saúde from Portugal.

**Methods:** It is a cross-sectional observational study, conducted in April 2015, in which all users between 50 and 74 years old belonging to the lists of the family physicians of the health unit were study. Through the SINUS program we obtained a list of the users within these ages (3092) subsequently inserted into Microsoft Excel 2010 program and randomized. It was then obtained a sample of 620 users of which 324 were excluded for not meeting the inclusion criteria. The evaluated criteria was the proportion of clients with FOBT performed in the last 12 months. The quality standard assigned to the criteria n was rated 'Good' if ? 70% of the users from the sample had performed FOBT in the last year; 'Reasonable' if 50-69% had performed FOBT in the last year and 'Insufficient' if <50% had performed FOBT in the last year.

**Results:** From the sample used in the evaluation (352 users), we found that 36.6% had FOBT held last year, having been awarded a pattern of insufficient quality.

**Conclusion:** Based on the inadequate results, several educational measures were implemented. In April 2015 we will evaluate using the same criteria and methodology, and if necessary nem measures will be implemented.

## PS2.235

### **Erythema multiforme, a diagnostic challenge**

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**Background:** Erythema Multiforme is an acute skin and/or mucosal disease, that is considered to be an hypersensitivity reaction associated with medications, infections (most cases related to herpes simplex vírus infection) or idiopathic. It is characterized by target form lesions accompanied by sintoms of pruritus and fever.

**Methods:** Clinical case of a 34 years old pregnant woman, previously healthy, with Erythema Multiforme.

**Results:** Female, 34 years old, caucasian, teacher. Set in a nuclear family in fase II of Duval cycle. Thirty weeks pregnant of her second son. Medicated with with Folicil and Yodafar since the beginning of her pregnancy. Without personal history of relief.

On 2015, October 30th, she seeks her doctor by na eritematous skin lesions, localized on her lower members associated with pruritus. She was medicated with atarax.

On 2015, Novembe 4th, due to worsening of symptoms she was referenciaded to dermatologist. Had spread of macular/papular exanthema, with multiple, confluent, target-like papules, predominantly on the dorsal side of hands and thighs. The pruritus didn't relief with atarax. She stoped Yodafar.

The laboratory tests shows negative serologies for hepatitis, histoplasmosis, EBV, HSV and mycoplasma. The biopsy reveal "Inflammation characterized by perivascular mononuclear infiltrate, edema of the upper dermis; apoptosis of keratinocytes with focal epidermal necrosis and subepidermal bulla formation."

She started oral corticoterapy, with clinical improvement in four days, with macular and papular target-like lesions less erythematous, with centrifugal desquamation. Without pruritus. Complete healing two weeks after start treatment.

**Conclusons:** There are multyple causes of pruriginous erythemas in pregnant women. The family's doctor must be alert to etiologies of cutaneous erythemas and for the diagnosis hypothesis of Erythema Multiforme.

## PS2.236

### A clinical case of late complication of gastric band

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**Background and Aim:** Gastric band is an effective method in weight loss. Improves co-morbidities related to obesity, survival and quality of life of obese patients. Its characteristics are: low morbidity and mortality, reversibility and absence of physiological changes on digestive tract.

The aim of this presentation is to alert to complications of bariatric surgery (namely gastric band) that may arise to Family Doctors.

Case Description: 50 year old woman, single, assistant in kindergarten, obese (grade 2). In 2007 was submitted to placement of gastric band. Kept gaining weight, and pressure of the band has been adjusted several times. Since 2013 several consultations by episodes of epigastric pain, nausea and vomiting. Episodes interpreted as acute gastroenteritis due to epidemiological context (work in kindergarten). In December 2015 maintained a BMI of 45 kg/m<sup>2</sup>. Because of persistent epigastric pain was submitted to upper endoscopy, which was observed intragastric migration of the band. Currently is waiting surgery to remove the band and performing bypass.

**Discussion:** The probability of gastric band complications increases with time, about 3 to 4% each year after surgery. Intragastric migration is rare (0.6-10%) and may be early or late. It is often late (starting from 30-86 months) and consists in the erosion of the band through the gastric wall by a process of destruction and regeneration, with minimal infectious process. The main etiological factor is the pressure applied to stomach wall, which causes ischemia and local necrosis. The pressure may be external (excessively inflated band) or internal (excessive food intake).

**Conclusion:** The intragastric migration of the band can present by episodes compatible with repeated acute gastroenteritis. The review of the personal history of the patient, including the possible complications of procedures they have undergone, are important in the diagnostic evaluation.

## PS2.237

### Exploring why quality circles work in primary health care: a realist review

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**Background:** Quality Circles are commonly used in primary health care in Europe to consider and improve standard practice over time. They represent a complex social intervention that occurs within the fast-changing system of primary health care. Numerous controlled trials, reviews and studies have shown small but unpredictable positive effect sizes on behaviour change. Although Quality Circles seem to be effective, it is not clear how the results are achieved and which of their components result in behaviour changes of health care professionals. This realist synthesis examines how configurations of components and contextual features of Quality Circles influence their performance.

**Methods:** Stakeholder interviews and a scoping search revealed the processes of Quality Circles and helped describe their core components and underlying theories. A purposive and systematic search followed by selection and extraction of appropriate data helped identify configurations of contexts and mechanisms which influence Quality Circle outcomes. We grouped studies by similar propositional statements in order to identify patterns. Chaining of outcomes helped developing a program theory that was tested among stakeholders using realist interviews and focus groups. The revised theory was then tested in literature and compared to existing theories in the literature.

**Results:** The findings of the synthesis should enable the improvement of Quality Circle performance. Context-Mechanism-Outcome (CMO) patterns reveal how Quality Circles work and how contextual factors interact to influence their outcome. Stakeholder interviews revealed a preliminary program theory that could be refined iteratively using literature and further interviews with stakeholders.

**Conclusion:** Due to stakeholder participation the research question could be narrowed. Interviews fostered identification of preliminary program theories and improved the understanding of CMO patterns that were revealed in the literature search. This deeper understanding of the program components and importance of contextual features should facilitate the improvement of Quality Circle performance.

## PS2.238

### Allergic reaction to the antigen (dried fruits) and its treatment - a case report

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**Background & Aim:** Six years old boy, 18.4 kg, with no pathological history of interest and mite allergy and nuts (family Colilaceae, hazelnuts). The patient goes to the emergency room for redness that causes itching all over his body and abdominal pain after eating a small amount of ice cream accidentally. The case was oriented as immune IgE-mediated adverse reaction to traces of nuts that may have contained the ice cream. 6 mL Atarax® syrup was given without improvement and worsening of symptoms, so it was decided to administer corticosteroids and Polaramine®, which presented good response soon after starting treatment. At discharge, Atarax® was prescribed once daily at night for the next 10 days. The same night, the child reconsults, because of clinical worsening after the first dose at home. When the doctors decided to use Atarax® syrup, the parents specify that the prospectus specifies that it has hazelnut as one of its components.

**Method:** Exploration and complementary tests. The examination revealed a stable triangle of pediatric, hives and rash in limbs and trunk. No respiratory clinic. No uvula edema. Gentle palpation of the abdomen was normal, deep palpation of abdomen the patient without signs of peritoneal irritation. The rest of the examination was normal.

**Results:** Clinical trial. The case was oriented as immune IgE-mediated adverse reaction to traces of nuts present in Atarax® Syrup. Differential diagnosis:

- Hives in the first 24 hours caused by anaphylaxis reaction to food, exercise, drugs and inhalant allergens;
- Urticaria several days of evolution as rash diseases caused by infection,
- Kawasaki disease Sd.
- Stevens-Johnson and adverse reaction.

**Conclusions:** Drug products may contain excipients that may be allergenic. It is important to suspect this type of allergy, consult the prospectus and notify the reaction.

## PS2.239

### **Improvements in online medical consultations between primary care service and its specialists**

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**Background & Aim:** Two years ago in an online platform was created for consults and queries between the Primary Care Physician and the specialists of the hospital. A first study analyzed the types of resolution of all queries the first 6 months of operation identifying strengths and weaknesses. Now in this 2nd study we pretend to evaluate the new outcomes after the improvements from the first study.

**Method:** A cross-sectional descriptive study conducted retrospectively in an urban health center (24.000 inhabitants). Interventions after the first study: -Presentation of the first study on the management of our area, -Training sessions at the center of the platform, -Detection of incidents and manage them by the Commission's Quality Center. We analyze queries the last 6 months (June 2014-November 2015). Study variables: age/gender patients, medical consultation issuer specialty consulted, response time, response time (categorized resolution Generation classroom visit or not answer). SPSS 15.0

**Results:** The number of queries were 397 (in the first study were 204). Average age of the patients consulted 59 years(18). Sex 54% women. Held consultations with all family physicians (n=14), 3 pediatricians (4), Intern Doctors (n=3). The two doctors wich performed more queries made 61 consultants (30%), the third 56 (14%). The specialties most consulted: Trauma 79 (20%), Cardiology 71(18%), Endocrinology 29 (7%), nephrology 29 (7%). Queries Answered 365 (92%), 333 (91%) before 7 days. Average time to answer 3.6 days. 166 (42%) were resolved electronically. There was no response in 32 (8%).

**Conclusions:** We found a clear increase in the use of online consultation forms and it is more uniform among general practitioners regarding the first study. A response was obtained in most cases and a delay less than 7 days The electronic consultation has solved almost half of the cases avoiding presencial visits. The lack of response from the specialist hospital has been halved.

## PS2.240

### **A new method to contact specialist from the primary care: creating a virtual platform online for medical consultations. Does primary care use it?**

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**Background:** The virtual platform that allows communication from Primary Care to hospital specialists has been created as a tool to optimize communication and to improve the clinical resolution in Primary Care. **Aim:** Describe the electronic consultations conducted between specialists from our reference hospital and its resolution.

**Method:** Cross-sectional study; Primary-Care Center (24,000 inhabitants). 6 months of electronic consultations were analysed (November 2012-March 2013). Variables study: sex/age patients, medical issuer consulted specialty, type of response (resolution, generation classroom visit, not resolution) response time. Statistical analysis SPSS 15.0.

**Results:** The number of inquiries was 243. Average age patients 55 years; 53% female; consultations from Primary care doctors 13 (from 14 total), 1 paediatrician (from 4) and one intern doctor (3). The doctor who made more consults was 73 (30%), the second 27 (11%), the third 24 (9.9%).

The surveyed specialties: Cardiology 49 (20.2%), Endocrinology 22 (9.1%) Urologia 20 (8.2%); Internal Medicine 19(7, 8%); Neurology 19(7, 8%); Nephrology 18(7, 4%). Questions answered 204 (84%). 131 consults (53.9%) were resolved electronically; 73 generated visits (30%). No response was obtained in 39 (16%). Average time response 3.9 days (3.4). The queries answered within 7 days, 180 (86.5%). The specialties which had more lack of answers were: Internal Medicine 47%; 22% Nephrology, 14% Cardiology and 13% Endocrinology.

**Conclusions:** We found heterogeneity in the use of electronic consultation. The three most consulted specialties: Cardiology, Endocrinology, and Urology. The three specialties with the largest number of unanswered: MI, Nephrology, Cardiology. Most cases were answered and with a standby time of less than seven days in almost all of them. The electronic consultation was decisive in more than half of the cases consulted avoiding classroom visits.

## PS2.241

### Management of patients with ischemic stroke

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**Objective:** Analyze the characteristics of patients diagnosed with ischemic stroke in our hospital during 2014, type of revascularization treatment applied and neurological sequelae following treatment.

**Design:**

- Descriptive observational study.
- Site
- ICU and hospital emergencies

**Materials and Methods:** Sample of 97 patients admitted with ischemic stroke during the 2014 to receive revascularization treatment. Epidemiological variables are collected, received treatment (intravenous fibrinolysis, endovascular treatment or both), neurological deficit at admission and discharge (NIHSS), mortality and complications. SPSS statistical software was used.

**Results:** 97 patients (63% men), mean age of 64 years (DS13), moderate initial deficit (42% NIHSS 6-15). A systemic fibrinolysis was performed 25, 26 and 43 both intra-arterial. At discharge 38% were without deficit, minimal or mild deficits (NIHSS 0-5), 36% had moderate deficits (NIHSS 6-15) and 16% with major or severe deficits (NIHSS greater 15-20). 13% had hemorrhagic transformation and malignant infarction 9%. Overall mortality of 9%. We found no significant relationship between treatment performed and neurological outcome or treatment and hemorrhagic transformation and responsible nor between neurological outcome and mortality or artery.

**Conclusions:** There are several characteristics in a ischemic stroke patient that physicians should take into account in order to avoid complications and get a neurological improvement: received treatment (intravenous fibrinolysis, endovascular treatment or both), neurological deficit at admission and discharge (NIHSS).

## PS2.242

### **Knowledge, attitudes and practice of primary care professionals about the approach of alcohol: preliminary results**

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**Objectives:** To evaluate the knowledge, attitudes and practices of physicians and nurses of Primary Care (PC) in the implementation of preventive interventions of the Programme of Preventive Activities and Health Promotion (PAPPS)<sup>1</sup> regarding to patients with excessive alcohol consumption.

**Methods:** A descriptive, cross-sectional observational study conducted in health centers of the Spanish National Health System (SNS).

**Results:** from January 2014 to December 2014, 1116 health professionals (86% graduates in medicine and 14% nursing graduates) have completed an online survey, with an average age of 45 years (SD 9.3). 81% of all claims to know the recommendations described in the PAPPS, although only 67% of them recognized they had received specific training in the management of patient with excessive alcohol consumption in the last 5 years. 65% of professionals assured to do a systematic examination quantifying alcohol consumption through questionnaires, with a follow-up rate after detection of 72%.

**Conclusions:** our preliminary results indicate that the level of specific training that health professionals have received in the last 5 years about the approach to patients with excessive alcohol consumption is low. The diffusion of the recommendations outlined by the PAPPS on the clinical practice that health professionals have to perform in primary care setting about alcohol consumption detection and management is critical and is a priority for the Spanish health authorities.

## **PS2.243**

### **European code against cancer: knowledge of the Spanish population**

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Cross-sectional, observational, multicentric study using self-administered surveys. 10 people, between the ages of 15 to 69 years old, were enrolled by each participating primary care professional in their respective surgery consultations.

**Results:** This study used 2058 people who were recruited by 205 professionals from 106 Health Centres. Their average age was 41.5 years old (52.2% women). The majority believe that smoking (94.1%; CI95%:93.1-95.2), sun exposure (91%; CI95%:89.7-92.3) and alcoholism (72.1%; CI95%:70.1-74.1) are factors related to cancer. The least relevant are infection by the hepatitis B virus (25.7%; CI95%:23.8-27.7) and having multiple sexual partners (25%;CI95%:23.1-26.9). 86.7%(CI95%:85.2-88.2) have never heard of the ECC.

**Conclusions:** Patients adequately identify the cacogenic effect of tobacco, alcohol, or sun exposure. And they inadequately identify having Hepatitis B and multiple sexual partners as being related to cancer. A large majority of people have not heard of the ECC, which raises the need to conduct outreach campaigns at an institutional level and/or through scientific associations and postulate and activities promoting health education among primary care professionals.

## **PS2.244**

### **Psychiatric emergency management**

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**Objectives:** Analyze the major psychiatric disorders who are seen in emergency Mental Health Unit, determining the profile of patients demanding psychiatric care, paid medical intervention and referral to psychiatry if necessary.

**Material and Methods:** Descriptive, cross-sectional study. Scope: Unit of Mental Health Santa Victoria, Cordoba. Population: Patient require psychiatric care in this Unit in the months of September 2014 to September 2015. for an alpha error of 5%, an accuracy of 4% and a proportion of professionals who know the CECC 50% would require support the study at least X. descriptive and inferential statistics (p <0.05 bivariate and multivariate analysis) will be made.

**Applicability of the Expected Results:** The results of this study, our hypothesis if proven, will help us to implement the programs or suggest health authorities to increase the knowledge of health professionals Primary Care of the main psychiatric conditions that require medical attention.

## PS2.245

### Misdiagnosis, happy ending

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**Background & Aim:** Woman, 38 years old. Unknown drug allergies. Unremarkable backgrounds. She comes to consultation by overall poor condition; associated difficulty walking, blurred vision, anxiety, xerostomia and palpitations, recent onset. She denies consumption of toxics. Physical exploration: conscious, agitated, overall poor condition. Cardiopulmonary auscultation rhythmic 120 bpm, preserved vesicular murmur without superadded noise. Abdomen soft and amenable pressure, without masses or organ enlargement. Neurological examination: Glasgow 15, very mydriatic and lazy unresponsive pupils. No signs of meningitis. Rest unrelevated.

**Method:** Given the affectation of the patient, she is derived referral hospital testing to complete studio. Supplementary test: anodyne. Toxic negative urine. Patient is questioned about epidemiological backgrounds and she mentions that she had ingested a drink made of boiled lupins just one hour earlier to lower her choledterol. The toxicology report informs.

**Results:** The patient is misdiagnosed with lathyrism and she receives treatment to support her vital functions and to lower her agitation level and she is discharged home 24 hours later.

**Conclusions:** Although the patient's favorable evolution, the misdiagnosis could have killed her due to an insufficient treatment. This case requires two differential diagnoseis of poisoning legume poisonings. Lathyrus sativus can be fatal due to kills by neuronal over--excitement. Lathyrus sativus Acutely produces an acute a spastic paraparesis or paraplegia. Laboratory tests and neuroimaging only serve to differential differentiate diagnoseis, since the diagnostic results are shown by exclusion diagnosis. Treatment: Discontinue intake of legumes to stop disease progression. However, Lupinus albus is toxic by alkaloid. It produces an anticholinergic syndrome inhibiting cholinergic neurotransmission in the central muscarinic receptors and/or peripherals. Neurological clinic: disorientation, extrapyramidalism, ataxia, hallucinations, convulsions, mydriasis... Others: tachycardia, blurred vision, hyperthermia... Diagnosis of exclusion, and studying toxic urine. Supportive therapy, electrocardiographic monitoring, gastric lavage and oral intake of activated charcoal orally, benzodiazepines for the central symptoms, and physostigmine in case of if very exacerbated neurological uninteresting.

## PS2.246

### Chronic illness, stress, heart-healthy habits among health worker area 8

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**Background and Aim:** In Spain about 60% of deaths are caused by cancer, heart and cerebrovascular disease, chronic lower respiratory diseases and diabetes. We intend to quantify toxic, heart-healthy habits, the prevalence of chronic disease and stress that causes us our job. We intend to intensify programs for early detection and intervention to prevent morbidity and premature mortality, starting with us: health worker.

**Method:** Cross-sectional study made with total health workers in the four Health Centres área 8 Mar Menor (146). Using a questionnaire previously validated of 19 items. Statistical Analysis T-student, G-STAT 2.0 software, considered significant at  $P < 0.05$ .

**Results:** Sex: men 36.30 % ,women 63.70 %.Media aged 48.2. Professionals: doctors 46.58 % , nurses 36.30 % , 17.12 % auxiliaries. Years in practice 24.5. Chronic illness: 35.62 % , taking drugs for disease 30.82 % . Chronic diseases increase with age  $P < 0.0001$ . Psychotropic drugs: 4.79 % . Smoking 21.23 % , 38.36 % social drinker. Perform a sport 70.55 % . 91.10 % heart-healthy diet. In daily practice to 66.44 % suffers stress, and 19.86 % are considered 'burned' (Burnout Syndrome), attributingit 43.84 % to overcrowding in our consultations. There is an association between stress and sex, in favor of women, with  $p = 0.006$ . We found no statistically significant relation between 'burned' or 'stress level' and work center or years of practice professional.

**Conclusions:** It is necessary to emphasize training on healthy habits (diet, in Spain there is a 23% obesity, or physical exercise, in Spain only 56% of the population does some sport), as well as decrease the consumption of toxic (in Spain smokes 24% of those over 15 years, about alcohol each Spanish consumes on average per year of 11.62 liters).Not forgetting to take care of our professionals.

## PS2.247

### **AMI (Acute Myocardial Infarct). Emergency in primary health centre**

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**Background & Aim:** We often have emergencies in our Primary Health Care Centre. Sometimes there are myocardial infarcts, and when there is an elevation of ST segment, we activate AMI Code (acute myocardial infarct). This protocol is working in Catalonia since June 2009, with high decrease of mortality caused by AMI. It consists in contacting a particular hospital where they can practice revascularisation treatment instantly. We want to show how this protocol works.

#### **Method:**

Clinical case: 80 years old patient, waiting to be visited, has syncope without prodromes.

Clinical history: He had no symptoms, only a few days ago he noticed difficulty to breathe and chest pain, with not really intensity and for a few minutes.

Pathological history: former smoker. Nothing else.

Physical examination: Blood pressure: 180/90,

Cardiac auscultation: arrhythmical auscultation, with tachycardia.

EKG: Flutter with elevation of ST segment.

After inserting the catheter in the right arm, the rhythm became sinus, but the elevation of ST continues.

Procedures: First of all call emergencies and activate code AMI. Insert catheter in the right arm, oral administration of clopidogrel 300 mg and aspirin 250 mg.

We can make a differential diagnosis between different causes of syncope: cardiogenic, neurogenic, vasovagal, hypoglycaemia, psychogenic, hyperventilation, epilepsy, intoxication, TIA.

**Results:** After calling emergency services the patient was transferred to Sant Pau Hospital, where they practiced angioplasty at the moment he came, revascularisation and they inserted two stents. Today patient has a good life quality and he still plays sport.

**Conclusions:** This patient had a really quick treatment in the nearest and most appropriate hospital, with a good coordination between primary health, emergencies and hospital, and he got a quick revascularisation with optimal results. The "AMI code" works well and is really useful in the daily practice.

## PS2.248

### **Jundice: a symptom to be considered**

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**Background & Aim:** in primary health care it is really important to consider the symptoms. We have many patients with chronic diseases, or with slight pathology. in our context it is important to consider the fact that some of our patients with a severe pathology come to our primary health care centre in the first place.

#### **Method:**

Clinical case: Patient, 66 years old with painless jaundice.

Clinical history: Jaundice since six days ago. He associated it with that he was eating mushrooms then, and after that his skin turned yellow. No fever. No toxic syndrome. No vomit.

Pathological history: former smoker 1.5 packets per year since 16 years ago. Hypertension treated with amlodipine 5. Esophagitis treated with pantoprazole 40.

Physical examination: normal abdomen.

Blood test urgent: haemogram normal.

Bilirubin: 8.47 Bilirubin sterified: 6.22 Aspartate transaminase (AST): 172 alanin transaminase (ALT): 443 Fosfatasa alcalina 224, Gammaglutamil transpeptidase (GGT): 1086 pancreatic lipase: 198 pancreatic amylase 58. Hepatitis virus Serologies A, B, C, E: negative. Coagulation: normal.

**Results:** We sent the patient to emergencies. They made abdominal echography: general dilatation of biliary tract, without demonstrating an obstructive cause. TC abdominal: compatible image with a 13mm big pancreas tumour with a dilatation of principal and secondary biliary ductus. Radiologically seemed to be operable. They made an endoscopic retrograde cholangiopancreatography (ERCP), they made a cephalic duodenopancreatectomy and a insertion of a stent in biliary ductus. The evolution was good and the patient stays asymptomatic. We can make a differential diagnose between different causes of jaundice: can be intrahepatic (hepatocellular disease: viral, autoimmune, alcoholic; drugs, pregnancy; sarcoidosis; primary biliar cirrhosis), extrahepatic (gallstones; Citomegalovirus; cholangiocarcinoma, pancreatic carcinoma; pancreatitis; lymphoma)

**Conclusion:** It is really important to consider the symptoms of our patients and to think about the possibility of malignity.

## **PS2.249**

### **Interprofessional collaboration: the approach to effective triage**

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**Introduction:** Can you imagine 800 patients crowding in a 200-seater waiting area in the outpatient queuing as early as 3 in the morning? Scarce resources and manpower make triage a daunting task. Most health care providers today have not been trained to work as part of integrated teams resulting to suboptimal conditions in patient care settings. The individual and collective skills and experience of team members in an interprofessional collaboration has been a key factor in health care services.

**Objective:** This report aimed to present how an effective triage system in the outpatient of Quirino Memorial Medical Center, a tertiary government hospital in Manila, was developed through interprofessional collaboration. A new triage team was organized - two Family Medicine residents as leads, nurse and 2 postgraduate medical interns. Objectives revolved around the establishment of an efficient and systematic process of classifying and prioritizing cases with undifferentiated complaints.

**Method:** Focus group interview of team members on their perceptions and expectations on their duties and responsibilities in the triage were elicited.

**Results:** The team agreed that having a triage system in the overcrowded outpatient is essential to optimize patient care. Each member was clear with their respective tasks. Family medicine residents with their experience on first contact care act as overseer on the overall patients' condition in the area. They validate cases seen by post grad interns. Nurses acts as liaison between patient and health care personnel. While post graduate interns, their tasks include primary survey and risk assessment.

**Conclusion:** Family physicians serve as gatekeepers and first contact of care. It is imperative to develop competent skills both in patient assessment and interprofessional collaborative work to be able to lead an effective team. Role understanding and sharing of responsibilities suggest that open communication, and interdependency would enhance teamwork quality.

## PS2.250

### **Impact of written information given by family doctor on diabetes control - randomized controlled prospective multicentre trial**

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**Background & Aim:** Information to diabetic patients is important to the disease control but its contents, the best way to give it and its impact when given by the family doctor are still unknown. So, this study aims to study the impact in diabetes control of the written information about diabetes, medication and physical activity given to diabetic patients by their family doctor in the primary care consultation.

**Method:** Prospective, randomized, controlled one-year multicentre trial of diabetic patients from 60 Portuguese family doctors (proportionally distributed in every Portuguese region) randomized into 3 different groups of validated leaflet intervention and control. HbA1c (primary endpoint), fasting glucose, BMI, abdominal circumference, BP, smoking status, physical activity and medication adherence were measured in regular primary care diabetes consultations to assess the impact outcomes. Statistical descriptive and inferencial analysis is going to be performed.

**Results:** From the initial 1170 Portuguese diabetic patients recruited from 15 October 2014, only 800 reached the end of the study on 31 December 2015. Data analysis is still ongoing but will be ready in June 2016.

**Conclusions:** We are expecting to find modifications in diabetes control (HbA1c) and some of the metabolic, cardiovascular and treatment variables.

## PS2.251

### **Paleolithic ratio as a novel measure of how Paleolithic a diet is: definitions and calculations from paleolithic and Mediterranean-like diet**

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**Background:** Previous results indicate a need to quantify how paleolithic a diet is. In this paper we conceptualize this notion by defining the novel measure Paleolithic ratio as the ratio of Paleolithic food divided by all food in a diet. Food categories defined as Paleolithic in this respect is fruits, nuts, meat, fish, eggs and vegetables excluding legumes. From reported food intake in a previously reported study with increased glucose tolerance and satiety per calorie and decreased waist circumference after advice to follow a Paleolithic diet as compared to a Mediterranean-like diet we also calculate Paleolithic ratios and study their relationship with outcome measures.

**Methods:** Twenty-nine male ischemic heart-disease patients with impaired glucose tolerance or diabetes type 2, and waist circumference > 94 cm, were randomized to ad libitum consumption of a Paleolithic diet (n=14) based on lean meat, fish, fruit, vegetables, root vegetables, eggs, and nuts, or a Mediterranean-like diet (n=15) based on whole grains, low-fat dairy products, vegetables, fruit, fish, oils and margarines during 12 weeks. Paleolithic ratio for dietary energy, weight and Glycemic Load was calculated as the average ratio of daily intake of Paleolithic food to all food, as recorded in four dayweighed food records.

**Results:** Paleolithic ratio for dietary energy, weight and Glycemic Load centered on 85 % for the group advised to follow a Paleolithic diet and on 40 % for the group advised to follow a Mediterranean-like diet with significant differences between groups for Paleolithic ratio and absolute amounts of non-Paleolithic food. for absolute amounts of Paleolithic food there were significant differences between groups only for weight. Increased Paleolithic ratio and decreased absolute amount of non-Paleolithic food were associated with improved glucose tolerance, decreased waist circumference and decreased leptin. Decreased absolute amount of non-Paleolithic food was also associated with increased satiety per calorie.

**Conclusions:** Increased Paleolithic ratio and decreased absolute amount of non-paleolithic food was associated with favorable changes in glucose tolerance, waist circumference and leptin. Decreased absolute amount of non-paleolithic food was also associated with increased satiety per calorie.

## PS2.252

### **Simultaneous cystometry and urethral pressure reflectometry (UPR) provides information of function and dysfunction of the lower urinary tract**

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**Background and Aim:** Interaction of bladder and urethra is of great importance in understanding the pathophysiology behind different types of incontinence. Simultaneous filling cystometry and urethral measurements has earlier been conducted only by segmental measurement in the urethra. UPR is a new method measuring pressure and cross-sectional area (CA) in the entire length of the urethra at a given time. A thin polyurethane bag is placed in the urethra. A pressure is applied to the bag and the opening of the urethra is measured with reflectometry (sound waves). The method is accurate and reproducible.

The aim was to test the feasibility of simultaneous cystometry and UPR to make it possible to describe the complex interaction of bladder and urethra.

**Method:** This study includes five continent women, ten women with stress urinary incontinence (SUI) and three women with urgency urinary incontinence (UI) and detrusor over-activity. Cystometry and UPR were performed in the supine position. A preselected pressure was applied to the UPR bag that kept the urethra half-open allowing observation of any changes in urethral CA, at any level of the urethra during bladder filling.

**Results:** The continent women revealed a steady urethral CA during bladder filling. Coughs were reflected as positive pressure spikes in 'Vesical Pressure', and as simultaneous compression of the urethra. Immediately after the cough, the urethral CA went back to the pre-cough level. Strong desire to void was not reflected as changes in CA. The SUI women showed the same pattern. In two of the UI women, the CA varied considerably during bladder filling. In the third, the CA only varied considerably during detrusor over activity.

**Conclusions:** Simultaneous cystometry and UPR is feasible to perform and provides detailed information of interaction of bladder and urethra which give a new prospect for understanding function and dysfunction of the lower urinary tract in women.

## PS2.253

### General practitioner run local hospitals in Finland - The basic functions and the role in the hospital system

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**Background & Aim:** In Finland, practically all municipal health centers, that cover the whole country, have GP run hospital units of their own. Hospital units offer treatment for various acute and subacute reasons (e.g. pneumonia) and also treatment after in-patient care in specialized healthcare. However, the role of GP run local hospital units in the rapidly changing Finnish healthcare system is not clear. Research evidence of their tasks and activities beyond routine statistics is practically lacking.

The Aim of this study is to map the essential features of the services of these hospitals in order to contribute to the debate of their fate in the future when Finland is facing a fundamental health care reform from 2019 on.

**Method:** In this observational study the discharge data of the treatment periods lasting less than 31 days from 54 municipal health center hospitals in the catchment area of Kuopio University Hospital will be analyzed by recording copies of routine discharge statistics and asking supplementary structured questions for four months. The hospitals provide the data after the discharge for about 10000 hospitalization episodes. The data is collected using an internet based survey instrument.

The questions explore patient pathways to the hospital, diagnostic and treatment issues and rehabilitation measures.

The data collection has begun in December 2015 and it is proceeding.

**Results:** By now, the data of 227 periods of treatment show that 53% of the patients admitted came directly from home, while 36 % came directly after hospitalization in the specialized health care. The median of the duration of the treatment periods was 4 days. The most common main reason of the care was cardiovascular diseases, in 15 % of the treatment periods. We are hopeful that we can show the first results of the entire data set by the congress.

**Conclusions:** This study is essential in order to these hospitals can be positioned to the health care system but also when planning resources and capacity, improving quality of the care and education of the personnel.

## PS2.254

### Use of antidepressants (ATDP) and benzodiazepines (BZD) in over 75 years and institutionalization

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**Objective:** Know if in patients older than or equal to 75 who take BZDP and / or ATDP there are differences between sex and those who are institutionalized or not. In addition to the proportion of those who are taking these drugs.

**Material and Methods:** Descriptive cross-sectional study carried out random sampling of people aged 75 years or over belonging to five different medical lists of the Basic Health Area (BSA) the data collected were age, sex, if they are institutionalized and the use of ATD and / or BZDP. for analysis measurements and standard deviation is used. To study percentages resorted to the square Chi.

**Results:** Total: 270 patients studied, 158 females and 112 barons; average age 81.10 (81.93 females males 79.94). They are 19 institutionalized in residence (7%) (5.9% females and 1.1% males, there is a significant difference).

Treated with ATDP 59 (21.9%) females 16.7%, males 5.2% (significant difference exists). Institutionalized ((3%) non-institutionalized (18,9) (significant difference exists). Without ATDP treatment 211 (78.1%).

Treatment with BZD 103 (38.1%): 27% females, 11.1% males significant difference. 34.4% non-institutionalized and 3,7% institutionalized, no significant difference. Untreated BZDP 167 (61.9%).

**Discussion:** Patients greater than or equal to 75 years of age our health ZBS are more females than males, which is in line with life expectancy. There is a significant difference in greater institutionalization in females than in males There is more use of ATP in institutionalized and women with significant difference, and the use of BZD in women but not those who are in institutionalized.

## PS2.255

### **Patients attending consultation, do they consult any medical item on the internet?**

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**Objective:** Knowing if patients coming to our clinic consult medical topics on the internet and if there are differences by age and / or sex.

**Material and Methods:** The sample was obtained from patients presenting to four medical consultations of a Urban-Rural Health Center from Monday to Friday. Was studied day of the week, age, gender, morning or afternoon consultation schedule and whether or not consulted on Internet. Student's t test and chi-square is statistically applied.

**Results:** The sample included 617 individuals 404 males 213 females, consulted internet 315 and 302 no consulted internet, 477 came in morning and 140 in the afternoon.

The average (X) age of the sample was 50.3030, with a standard deviation (SD) = 18.2026 and with a confidence interval (CI) =  $\pm 1.4394$  being significant ( $p < 0.05$ ) the difference in the average age between male sex: 52.6056 and female: 49.0891 and age average in those that consulted internet  $x = 43.6667$  and those who did not  $x = 57.2252$ .

Also significant was the age difference from the morning (X = 51.891) or afternoon (X = 44.8927) consultation schedule.

Studied the qualitative variables, it was found a relation between come Friday and consult internet and go in the afternoon on Mondays.

**Conclusions:** The Internet is a tool that is available to all, as we see in our study sample, there are more patients consulting medical items on the net than those that don't do it ; with this study we can open doors for others, as there are age brackets consulting more than others and will be added every day more; and know how it can affect us in our daily practice.

## PS2.256

### Medical referrals to nursing for not delayable attention (NDA)

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**Objective:** Study which the doctors derive to nursing as (NDA) on a Urban-Rural Health Center (HC), and if there is any relation between day of the week, time slots, sex and medical referrals.

**Material and Methods:** Cross-sectional study of NDA on a HC with registration of all the referrals made in ten medical consultations, and the work done by nursing for a week. Grouped by age, sex, day of the week, morning or afternoon and time slots. The relation of these parameters was studied using chi-square tables and tables rx.

**Results:** 123 patients (57 males and 66 females). Age  $\bar{x} = 57.6178$  years  $s = 20.2008$  and Confidence interval  $\pm 3, 5699$ ;  $\bar{x} = 61, 3684$  males,  $\bar{x} = 54.3787$  females, no significant differences were found. Average of activities: 26.6 per day (Table 1); result of motives and tasks (Table 2). It was independent the relation between sex and morning or afternoon schedule. In the study by sections, relation between being a woman and go in the first time slot (8:00 and 9:00), and being a man and go in the 2nd time slot(10:00 and 11:00) was found. Regarding the derivation indications, there was relation between unknown derivation reasons and first schedules either for male or female gender. for nursing tasks and sections, there was relation between injection and 2nd time slot.

**Discussion:** We must improve the quality of physician's referral because there is a high proportion of unknown referral indication in the study. Tasks carried out by nursing more often were injectables and the realization of Combur test.

## PS2.257

### **Pediatric assistance in the emergency department of a semi-urban health centre**

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**Objective:** Study of pediatric patients (under 14) who come to the emergency department of a Urban-Rural Health Center, which has the reference hospital more than 15 km long, with a target population of over 50,000 inhabitants (of which, 8000, are pediatric patients) and without pediatricians on weekends.

**Material and Methods:** The sample was all pediatric population attended during the month of November 2015 applicant urgent attention; was studied by day of week, time of entry, exit, age, sex and average processing time. It was applied to the data, the Student t test, chi-square and one-way ANOVA.

**Results:** Males: 209 females and 204, no significant difference being sex ratios. The average patient / day was 18.8552, with a standard deviation (SD) = 5.7047 and confidence interval (CI) =  $\pm 0.5291$ . The average age was 6.2476, with a(SD)=3.8166 and A (IC)=  $\pm 0.350$ , not being significant age difference by sex (male X 6.6889 and female X = 6.2000). Studied the fate of the patient there was no relation between this and patients /day, day of de week and sex. It was found relation between age and fate, being the oldest of those sent to hospital. No relation between sex and day of the week was found.

If was found relation between Saturday and the time slot from 18.00 h to 20:59h, and Monday and time slot from 8: 00h to 10: 59h; these being the most frequented. The busiest days are Saturday and Sunday. The average processing time was 33.56 minutes with a (SD) = 0.0182, and a (CI)=  $\pm 0.016$

**Conclusions:** The fact that pediatrics consultations are not available on weekends increases the demand for care this days. The average processing time is higher than when the patients are treated at no urgent pediatrics consultations.

## PS2.258

### Screening for COPD from primary care

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**Background & Aim:** To determine the impact of the project to detect COPD in primary care with Vitalograph-COPD6, ('mini-pocket spirometer') validated by screening for COPD. Increasing prevalence of COPD in people assigned to our primary care center. Evaluate the effectiveness of an intervention in the standardized approach of smoking

**Method:** Cross-sectional study in an urban primary care center, 34,475 inhabitants (COPD prevalence 2% in 2014), from February to May 2015. We trained GPs and nursing, in performing the technique and the interpretation of vitalograph-COPD-6. We made a protocol registration software. Screening is done to patients  $\geq 40$  years with cumulative cigarette dose  $> 10$  packs/year. Variables: sex, age, smoker or former-smoker, symptoms, FEV1(COPD6), FEV1/FEV6(COPD6). If FEV1(COPD6)  $< 80\%$  or FEV1/FEV6(COPD6)  $< 0.75$  will be required Chest X-ray and spirometry. Council minimal smoking cessation in patients with active smokers

**Results:** From the sample of 79 patients, we found 27% of vitalograph-COPD-6 altered, and spirometry was performed in all of them. COPD diagnosis is performed in 7.6% of the patients evaluating screening: average age 60 years(47-75), 83% men, 83% smokers, 100% symptomatic cough(83%), dyspnea grade I (50%), mucus(67%). It was a case of diagnosis of lung cancer. of the smokers, 74% received council minimal smoking cessation, and 26% started advanced intervention smoking cessation in nursing consultation; 50% attend follow-up visits for drug control, grip and motivational support.

**Conclusions:** The implementation of a new strategy structured opportunistic screening with the vitalograph-COPD-6 in the primary care consultations allowed us to achieve detect new cases of COPD with and without symptoms and optimize resources for the diagnosis of COPD. It is therefore important awareness among professionals be more active in screening and prevent under-diagnosis. The strategy can encourage the patient to raise awareness of smoking risks to which it is exposed and can motivate encourage the process of change and reflect on their behavior.

## PS2.259

### One day with your doctor: a lifestyle intervention led by general practitioners

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**Background & Aim:** General Practitioners (GPs) typically promote lifestyle changes such as modifications in dietary habits, smoking, alcohol consumption and physical activity. According to the literature, brief interventions carried out by GPs can be effective.

The first pilot project was carried out 19 May 2015 on the World Family Doctor Day in Luxembourg. The aim of this project was to improve the quality of the doctor-patient relationship and GPs function as role models, thereby empowering them to better promote behavioural changes.

**Results:** of 2015: 10 very satisfied participants, 6 male, 4 female. Mean age was 50.5 years and mean BMI 23.31 kg/m<sup>2</sup>, mean frequency in physical activity 4.8 times/week, mean duration 6.5h/week, consuming fruits and vegetables 3.8 times/day.

**Programme:** On 19 May 2016 the Luxembourgish Scientific Society of Family Physicians in cooperation with other public stakeholders (Luxembourgish Health Ministry, the University of Luxembourg, Luxembourg Institute of Health, trainees in Family Medicine, medical students) will run the Intervention "One Day with Your Doctor" on a larger basis. The results will be presented during the WONCA conference in Copenhagen in June 2016.

The programme will include:

- (2) Open Air Cooking session.
- (3) Physical activity such as Nordic walking, running and functional training led by certified physiotherapists and family doctors.
- (4) A reanimation marathon.
- (5) For children a teddy clinic.
- (6) Booths for blood pressure measurements and blood sugar levels.
- (7) Keynote lectures after the cooking session and sports activities.

**Methods:** Participants will be invited directly, mailing and social media channels. Participants will be asked to complete questionnaires during the intervention and online 3 and 6 months after the intervention.

**Conclusions:** Promotion of lifestyle changes could be even more successful, if GPs adopt a healthy lifestyle themselves. By doing so, they could act as role models and encourage behaviour changes in their patients.

Luxembourg offers ideal conditions to investigate the effects of lifestyle interventions in a multicultural environment. It represents a European focus area with more than 50% of its population coming from EU countries other than Luxembourg.

## PS2.260

### How do GPs handle advance directives and health care proxies? A questionnaire survey among German GPs

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**Background:** As a result of a new law in 2009 we observe an increasing patient demand for provisions such as advance directives and/or health care proxies. Beside notaries, general practitioners (GPs) are the preferred contact persons to discuss and compose such documents. There are no data how GPs manage such consultations. This questionnaire survey addresses the frequency of such consultations, their duration, if they are initiated by physicians or patients, if predefined templates are used and how GPs document the results.

**Method:** 959 GPs from university affiliated teaching practices in North Rhine-Westphalia were surveyed with a two-sided questionnaire. The frequency of such consultations was estimated by a five-step scale ("5 times per annum" to ">20 times per annum"). The duration of a counselling was requested in minutes. We asked how often such consultations are initiated by patients or physicians. The data were analyzed using SPSS on Windows.

**Results:** The participation rate was 50.3% (n=482). Consultations were initiated by patients more frequently than by GPs. Less than 5% of GPs never conduct these advices. The GPs' estimates consultations on advance directives take five minutes more on average than those for health care proxies (20.7 versus 15.8). Nearly 80% of GPs use predefined templates and 44% of GPs state that patients "often" or "very often" bring templates in contrast to 14.1% state "very rarely" and "rarely". The majority document by scan, followed by written chart notes and copy. Half of the GPs did not yet write a proxy for themselves.

**Conclusion:** This study provides picture of the ways how German GPs handle consultations for advance directives and health care proxies. Based on this survey further research is needed on how to improve physicians in their counseling on these matters, especially the quality of GPs' advice and the implementation of supportive measures.

## PS2.261

### LDL levels and statin treatment in diabetic patients at one healthcare center

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**Introduction and Objectives:** in 2013, the estimated prevalence of Diabetes in Portugal was 13% (more than one million people affected by the disease). LDL level is a well known and important cardiovascular risk factor in patients with diabetes. The target LDL levels in patients with diabetes vary in literature from less than 100mg per dL to less than 70mg per dL. The aim of this study was to characterize the quality of treatment of dyslipidemia in patient with diabetes to reach the target LDL levels of less than 100 mg per dL.

**Methods:** Data collected from 424 patients with diabetes in a healthcare center. Descriptive analyze concerning age, sex, LDL levels and prescribed statin (grouped by intensity) was made. “Good prescription” was considered when the prescribed statin was powerful enough to reach the target LDL level.

**Results:** 52% of patients were male and mean age was 63 years old. Mean LDL level was 102,3 mg per dL however only 52% of the patients had LDL levels less than the target. “Good prescription” percentage was only 52%. A high percentage of patients without statin treatment was obtained (34% of patients).

**Conclusion:** We conclude that it's highly necessary to alert family doctors to pay more attention to LDL levels of their diabetic patients in order to reduce their cardiovascular risk

## PS2.262

### **System of safety standards in primary care establishment - family medicine teams in canton Sarajevo**

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**Background:** Improving of safety and quality plays a major role in the reform of the health system and health service delivery.

**Aim and Method:** Evaluation of Family Medicine Teams trainings. Within the project "Establishment of a system of safety standards in primary health care" in cooperation with Ministry of Health FBiH, Public Institution Health Centre of Sarajevo Canton and AKAZ was held a training for Family Medicine Teams. Training was conducted from 4 October 2014 to 26 March 2015.

**Results:** 200 Family Medicine Teams attended the workshop (doctors and nurses) from Public Institution Health Centre of Sarajevo Canton. A total of 23 workshops were held, each workshop attended 15-20 participants. Workshops maintained for two days. First day topics were: Safety standards, how to do a self-assessment, facilitation, external evaluation, risk management, and execution indicators. On second day, it was worked on the development of policies and procedures. The training conducted instructors from AKAZ's.

**Conclusion:** Participants have shown interest, actively participated in making of policies and procedures, due to establish a more efficient system of safety and quality in the certification process, in order to make more efficient health care for patients, service users and health professionals in primary health care of Canton Sarajevo.

## PS2.263

### Asymptomatic non-alcoholic fatty liver disease patients in GP practice

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**Background & Aim:** Non-alcoholic fatty liver disease (NAFLD) often is not diagnosed in early stages, because for a long time, it may be asymptomatic. NAFLD is associated with obesity, diabetes and metabolic syndrome. The disease could progress to NAFLD steatohepatitis, liver cirrhosis and hepatocellular carcinoma. The aim of this study is to compare biochemical analysis of clinically asymptomatic patients with and without NAFLD diagnosed in CT.

**Method:** There were 76 clinically asymptomatic patients (aged 30-45) from GP practice in this study. Non-enhanced CT was done to assess the NAFLD. Anthropometric measurement as body mass index (BMI), blood tests- total cholesterol (TC), HDL-cholesterol (HDLC), LDL-cholesterol (LDLC), triglycerides (TG), glucose (Glu) and HOMA-IR were taken from all patients. Every patient had abdominal CT in which we assessed NAFLD according to liver-spleen index.

**Results:** There were 38 patients with NAFLD (NAFLD group) and 38 patients without NAFLD (control group). There were statistically significant higher levels of the BMI ( $p<0,001$ ), TC ( $p=0,028$ ), non-HDLC ( $p=0,001$ ), LDLC ( $p=0,025$ ), Glu ( $p<0,001$ ), HOMA-IR ( $p<0,001$ ), TG ( $p<0,001$ ) and lower level of the HDLC ( $p=0,001$ ) in NAFLD group.

**Conclusions:** Patients even with asymptomatic NAFLD diagnosed in non-enhanced CT had increased TC, non-HDLC, LDLC, decreased HDLC levels increasing cardiovascular risk and elevated Glu, HOMA-IR and TG contributing to the development of the diabetes mellitus type 2. It is necessary to assess and reduce the cardiovascular and diabetes mellitus risk in clinically asymptomatic NAFLD patients.

## PS2.264

### **Vitamin D deficiency and its relationship with thyroid dysfunction**

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**Introduction:** Vitamin D deficiency is a global health problem, its role as an immune modulator has been recently emphasized. The evidence is increasingly pointing towards vitamin D significant role in reducing the incidence of autoimmune diseases. In this study we aimed to examine the relationship between hypothyroidism and vitamin D deficiency.

**Methods:** This research is done in Istanbul Sisli Hamidiye Etfal Training and Research Hospital Family Medicine Polyclinics, among patients aged 65 years, by evaluating retrospectively serum vitamin D, and its relation with TSH levels. The study was conducted between January - December 2015. In SPSS 20.0 program we used frequency, chi-square for analysis.

**Results:** There were 271 patients tested for serum 25(OH)D and TSH levels and 175 (64.6%) patients had low vitamin D levels. Of the study group 202 (74.1%) were women, 69 (25.5%) were men. Vitamin D deficiency were 61.7% in women and 73.9% in men ( $p=0.067$ ) that meant. Among the patients who had Vitamin D deficiency 70.9% was women and 29.1% was men. Patients who had vitamin D treatment ( $n=138$ ) 51.1% ( $p<0.005$ ). 25.4% of the patients who were given vitamin D treatment were also had levothyroxin replacement treatment ( $p<0.005$ ). By other means patients who were given hypothyroidism treatment ( $n=35$ ) 77.8% were also given vitamin D treatment ( $p<0.005$ ). Most patients with D deficiency didn't take medicine about this deficiency. Patients who used treatment because of thyroid dysfunction were also most of them were given vitamin D treatment.

**Conclusion:** Our results indicated that vitamin D deficiency was very common in our population and it is related with hypothyroidism. So all health staff especially who work in primary health care centres should pay attention to screen patients who had serum vitamin D level for also TSH levels and it is also useful for reverse conditions.

## PS2.265

### New knowledge for family doctors

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Advanced therapies have developed in the last decades and there is a great expectation not only for patients but also for general public. In this research we investigated the perceptions of family trainees on health education on advanced therapies.

**Methods:** This study was performed in the district of Jaén, Spain. The sample consisted of 30 family trainees. The average age was 29.2 years. The male/female ratio was 9/21 individuals. A questionnaire was used to evaluate the perceptions with a likert-like 1 to 5 scale to indicate their level of agreement or disagreement for each option. The Kruskal-Wallis and Mann-Whitney tests were used to identify the family medicine resident priorities. Family medicine residents gave highly positive scores to the need for health education in this matter. Providing health education in primary care centres is much better perceived than doing it in primary and middle school ( $p < 0.022$ ). Non-significant differences were observed between other agents such as hospitals, universities and mass media. Statistically significant differences were found between male and female residents. Specifically, scores were higher in males for education in hospitals ( $p < 0.003$ ) and education in mass media ( $p < 0.029$ ).

**Conclusions:** The perception of family medicine residents, with some differences between males and females, is that the primary health care centre is the most appropriate for health education in this matter. Knowing the attitudes and priorities of family medicine residents on this subject can be of interest to plan future education programs not only to promote better informed choices, but also to avoid false therapeutic expectations.

**PS2.266****Pneumococcal vaccination in primary health centers**

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Pneumococcal disease is a prevalent condition that causes a high rate of morbidity and mortality in our environment. The World Health Organization states that it is the vaccine-preventable disease which causes most mortality. In our country, Spain, after reviewing the latest evidence, experts have developed a consensus document with more than 20 signatory societies describing how we should take care of our patients in this area. After reading that document, some general practitioners decided start working in this area, where there is a lack of bibliography. We have proposed a research to study how doctors and patients are doing things in this matter in our district, Jaén (Andalucía, Spain). We sent a written project to the ethics committee that was accepted in December 2015. The objective is to determine the real prevalence of vaccination, and evaluate the efficacy of our medical advice in primary health centers. We have selected more than 700 COPD patients as study population, which is one of the diseases included in the consensus. After studying those patients we will select a random representative sample of COPD patients to whom we explain the recommendations of to the consensus and afterwards we evaluate if their vaccine status changes after our intervention. We will establish conclusions about multiple factors related with COPD such as vaccines, smoking, comorbidity, socioeconomic status and health.

## **PS2.267**

### **Pneumococcal vaccine in COPD patients**

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Pneumococcal disease is a prevalent condition that causes a high rate of morbidity and mortality in our environment. In our country, Spain, experts from over 20 societies have signed a consensus about pneumococcal vaccination. After reviewing our patients in primary health centers from Jaén, Spain, we have noticed that we are not following the scientist community. The mentioned document compares different possibilities of pneumococcal vaccines making a review of the latest researchs. COPD population is one of the addressed groups We have decided to work in this area and study how those COPD patients are treated. We have proposed a cross-sectional descriptive research with more than 800 patients selected as the study population. Our pilot study showed that only a few part of our patients receive the correct vaccination regardless of the vaccine type, for example most of the patients receive an underdose. Moreover we are gathering information about which vaccine is used in each patient (13 serotypes or 23 serotypes). Prevention programs about adequate vaccination states could be carried out with this information.

**PS2.268****Pneumococcal and influenza vaccines connection**

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COPD patients represent one of the most common populations in our daily clinical practice. Due to the lack of research in pneumococcal vaccination in adults we decided to perform further investigations in this topic. The most important societies of family medicine in Spain have recently supported a consensus which resumes the latest researches about vaccination. According to this fact we have proposed a cross-sectional descriptive research with more than 900 COPD patients in Jaén, a region of Andalucía, Spain. Our study consists of a revision of the information we have gathered in these patients with this condition so we can obtain relevant conclusions for the daily practice. We are studying the connection between pneumococcal and influenza vaccination. Through the summary of the prevalence in our pilot study, we can conclude that only a few part of our COPD patients receive the pneumococcal vaccine. Between the 2 vaccines available in our country, the 23-valent is the most used, even though the consensus says 13-valent is more recommendable due it's characteristics. Moreover we suggest that in the first review most of the patients who received pneumococcal vaccine were also been treated against influenza, but not the other way around. These preliminary conclusions will be confirmed with further statistic information.

## PS2.269

### Usual care of panic disorder with or without agoraphobia in general practice

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**Background & Aim:** In Germany the 12-months-prevalence of panic disorder with or without agoraphobia (PD/A) is about 2%, with 82% of patients being exclusively treated by general practitioners (GPs). The quality of usual (i.e. routine) care for patients with PD/A in general practice is widely unexplored. The aim of our study was to describe usual care from a GP's point of view.

**Method:** We designed a questionnaire for the retrospective assessment of diagnostics, interventions and referrals of patients with PD/A in primary care, in consideration of expert interviews and clinical guidelines. In the "PARADISE"-study (Current Controlled Trials: ISRCTN64669297), 38 GPs were trained on clinical guidelines within a 2-hour workshop, provided usual care to 189 patients with PD/A, and answered the questionnaire after an interventional phase of 6 months. Descriptive statistical analysis was performed.

**Results:** The questionnaire response rate was 36/38 (95%). Anxiety-specific diagnostics were characterized by inferior use of validated tools like structured interviews (18%), questionnaires (14%), or specific rating scales (8%). Interventions most often comprised the exploration of psychosocial problems (83%), the recommendation not to avoid anxiety-provoking stimuli (72%), and the prescription of Selective Serotonin Reuptake Inhibitors (61%) or Tricyclic Antidepressants (18%). Most common reasons for referrals to specialists were psychiatric comorbidity (personality disorder 80%, depression 77%, substance use disorder 68%) and treatment-refractory anxiety (77%).

**Conclusions:** GP-delivered usual care for patients with PD/A was mostly well-aligned to current clinical guidelines as it involved a mix of psychosocial and pharmacological interventions. Characteristics of GPs were comparable to representative German samples. However, the generalizability of findings may be limited, given that GPs had been trained on clinical guidelines prior to the delivery of usual care.

## PS2.270

### **Evaluation of labour preference of pregnant women and factors influencing the choice**

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**Introduction:** Vaginal birth is a method of delivery used by human beings for millions of years, and generally, the physiological structure of the female body is suitable for vaginal delivery. Worldwide, cesarean delivery choice has increased because of many reasons; safety, pain control. We know that women are influenced by many factors during decision of the method of birth. In this study we aimed to investigate the causes of increased caesarean rates and to analyze the solutions, again to research pregnant women's attitude towards caesarean section and vaginal delivery and to contribute to develop new health strategies about this.

**Methods:** We applied a questionnaire, consisting of 23 open-ended and multiple-choice questions, to 419 pregnant patients admitted to outpatient obstetric polyclinic. The pregnant with 6-40 gestation age were included to the study. Patients during active labor were out of study. Besides socio-demographic and socio-economic characteristics of the patients, questions include preference of birth type, who determined the type of delivery (patient, doctor), and what affected the choice most.

**Results:** 72% of the pregnant preferred vaginal delivery. Preference of cesarean delivery was high among employed women, and even higher among health professionals. For the both groups first delivery type was most decisive for the second: women who gave birth to the first baby spontaneously preferred vaginal birth, those who underwent cesarean section preferred it again. The second reason that most influenced the cesarean choice was fear of pain. Medical cesarean indication (doctor decision) was only 29%, remains were mostly patients' preference.

**Conclusion:** As family physicians, we are the closest health providers to pregnant women. Acknowledgment we give to our patient may differ their approach to birth. The confidence we give to our patients can soothe their fears and decrease invasive interventions.

## PS2.271

### **Basal carcinoma cell at paediatric age Gorlin-Goltz syndrome: clinical experience**

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**Introduction:** The Gorlin-Goltz syndrome is an autosomal dominant inherited disease, associated with a PTCH gene mutation. Its presentation is polymorphous, being frequent the appearance of the clinical triad based on carcinomas basal cell, odontogenic cysts and skeletal abnormalities.

The estimated prevalence is 1: 150.000 with a ratio male/female 1: 1.

Skin lesions are a very frequent reason for consultation during paediatric age, being valued in most cases in Primary Care. Sometimes, patients would need the intervention of other specialists to deep in the given area.

**Aim:** To share a clinical experience of a syndrome with low appearance frequency. To evaluate the role of the specialist who develops its activity at Primary Care, with patients who requires a multidisciplinary intervention.

**Material and Method:** Clinical case: Two-year-old child arrives to consultation due to injuries at thorax, hands and feet of a month of evolution. Personal history: humeral fracture in 2011 and asthma.

The examination showed palmoplantar pits, thorax injuries difficult to typify macroscopically, hypermobile joints.

**Results:** Karyotype: PTCH1 gene mutation. Skin biopsy solid basal cell carcinoma. Orthopantomography: Anodontia of upper lateral incisors. Complementary tests within normal limits. Current monitority: Maxillofacial, Dermatology and Paediatrics Hospital Service.

**Conclusion:** Clinical and genetic confirmation of Gorlin-Goltz syndrome. The initial assessment in primary care was vital to the diagnosis orientation and early detection of the disease. Once confirmed the diagnosis, the family doctor has not been included in the multidisciplinary monitoring team. As an opportunity to improve, it is necessary to optimize the communication channels with other specialists, so these patients can continue receiving patient focused cares rather than just disease treatment.

## **PS2.272**

### **Adopting hypodermoclysis in primary care: a challenge for you**

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**Background and Aim:** Once a popular technique for fluid administration in pediatric care, hypodermoclysis has since been nearly abandoned due to serious adverse effects stemming from inappropriate fluid tonicity and development of intravenous alternatives. It's been resurfacing in recent times, mainly within context of palliative care: literature today points to the technique as a safe, inexpensive, comfortable and effective measure for hydration and medication in non-urgent settings when the oral route is unavailable. Family doctors routinely care for fragile elderly patients with plenty of comorbidities, who, despite reasonable overall compensation, episodically end up needing hospital care for treatment of dehydration. The hospital admission itself can cause further complications such as disorientation and nosocomial infections. Caregivers can become very competent in managing an hypodermoclysis access set up during the domiciliary visit, achieving expressive results in prevention of dehydration with minimal follow-up needs.

**Methods:** An effective scientific presentation is one that changes behaviors. Minding communicative appeal, this poster aims to keep it simple, thus the unconventional format: the first part will be a brief review of the technique, then a challenge is made to the readers, enticing them consider its adoption in their primary care setting.

**Results:** The expected results of this poster will be raising awareness of attendees toward hypodermoclysis, and if successful, have some adopt it with the benefits discussed below.

**Discussion:** This poster strives to make a brief and clear presentation of hypodermoclysis, while encouraging family doctors to read further on the subject and incorporate its ambulatory use toward the simple aim of preventing dehydration. It should end up preventing hospital visits, thus resulting in comfort for the patients, less spending with hospital admissions and complications, and improvement of accessibility to healthcare by freeing up hospital services.

## PS2.273

### **Quality indicators to measure physiotherapeutic performance for patients with knee osteoarthritis: an observational study**

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**Rationale, Aims and Objectives:** Osteoarthritis (OA) is a common disease that often leads to pain and disability, due to its predilection for low extremity joints. Physical therapy plays an important role in the conservative management of knee OA. Several studies have shown discordance between physiotherapists' practice and guideline recommendations. This study aimed to measure physiotherapists' guideline adherence to optimal knee OA care. Additionally, physiotherapists' determinants at professional and organizational level were explored.

**Method:** An electronic survey was performed among 284 Flemish physiotherapists by convenience sampling. The survey was based on a set of quality indicators for the management of knee OA, developed for the Belgian primary healthcare system. Treatment modalities that do not contribute to high quality care were also examined. Descriptive statistics and quality indicator pass rates were calculated. Data were analyzed with SPSS 23.

**Results:** Compliance to evidence-based quality indicators varied between 27% and 98%. The following quality indicators had pass rates above 80%: education on the importance of exercise, functional and strength training exercise therapy, patient tailored exercise therapy, instruction and evaluation of patients in exercises and referral for sport activities after therapy. for treatment modalities that do not contribute to high quality care, massage (49%) and cold application (24%) were most frequently applied. Female physiotherapists spent more time on giving education on aids and footwear, and teaching self-management strategies. Physiotherapists working in group practices were also more likely to provide advice on footwear and give aerobic exercise training.

**Conclusions:** This study measured a large variation in physiotherapeutic adherence to quality indicators. Improvement is possible by spending more time on advice on weight loss, self-management strategies and periodic evaluation of exercise therapy. Clear insight into barriers for guideline adherence is needed to develop well-targeted quality improvement strategies.

## PS2.274

### Measuring health literacy among very low literate people: a feasibility study with the HLS-EU Questionnaire

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**Background & Aim:** As health care is becoming more patient-centered, patients are increasingly expected to make health care decisions. Therefore, detecting people with limited health literacy (HL) is crucial. Limited HL is associated with lower levels of education. Consequently, instruments, such as the relatively new HLS-EU-Q47 and its shorter version HLS-EU-Q16, should allow inclusion of low literate people. In particular, because researchers' interests in both HLS-EU-Q47 and HLS-EU-Q16 is expanding because of their underlying conceptual framework and their potential use for both screening and more in-depth investigation of HL and the latter because its easiness to administer. Although HLS-EU-Q47 was subjected to a comprehensibility test, HLS-EU-Q16 was not. Therefore, the goal of this study was to examine suitability of HLS-EU-Q16 for use in a population of people with low literacy.

**Method:** Purposive sampling of adults with low (yearly) income (< €16,965.47, for one person) and limited education (maximum high school), with Dutch language proficiency. Excluding criteria were: psychiatric, neurodegenerative diseases or impairments. To determine suitability (length, comprehension and layout) participants were randomly distributed either HLS-EU-Q16 or a simplified version and were interviewed directly afterwards by one researcher. Qualitative and quantitative analyses were performed on respectively interviews and questionnaires.

**Results:** Thirteen participants completed HLS-EU-Q16 (n = 7) or the simplified version (n = 6). Questions about 'disease prevention' (domain) or 'appraisal' of information (competency) are frequently reported to be incomprehensible. Difficulties are attributed to comprehension (vocabulary, sentence structure) and the decision process (abstraction, distinguishing "appraising" from "applying" information, indecisive on the appropriate response). Non-responses were highest and HL was predominantly scored 'inadequate' for HLS-EU-Q16 questionnaire.

**Conclusions:** HLS-EU-Q16 is a suitable instrument to determine HL in people with limited literacy. However, to facilitate the use and interpretation, some questions would benefit from minor adjustments and from the provision of explanatory, contextual information.

## PS2.275

### **Differential diagnosis of ampulous diseases: dermatitis herpetiformis an uncommon autoimmune disease due to gluten intolerance**

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**Background & Aim:** Ampulous diseases (AD) are unfrequent dermatosis, and represent a challenge for differential diagnosis. One of the most common AD is dermatitis herpetiformis (DH), and it is often associated to gluten intolerance. The aim is to describe a clinical case of DH associated to gluten intolerance and the differential diagnosis done.

**Method:** A 22-year-old woman was visited on november 2015, due to the presentation of very pruriginous skin erythematous papular eruption on pubis, forearms, back, left shoulder and buttocks of 1 month lasting. When reviewing the medical history of the patient, she had positive anti-transglutaminase antibodies on 2013, but she continued eating food containing gluten. Moreover, she explained that she increased gluten intake in her diet in the previous two months. Tests done on the current visit were cutaneous culture of back lesion, biopsy of buttock lesions and fibrogastroscopy.

**Results:** Cutaneous culture was positive for *Pseudomonas luteola*. Biopsy showed perivascular superficial dermatitis at the expense of lymphocytes and occasionally eosinophils; discrete hyperplasia of the epidermis with mild exocytosis of lymphocytes and mild hyperkeratosis. Direct immunofluorescence microscopy (DIF) was negative. Fibrogastroscopy reported moderate villous atrophy, crypt hyperplasia and intraepithelial lymphocytosis >40% CD3, Marsh 3b.

**Conclusions:** According to the results and the clinical facts, even when the gold standard test is DIF and in this case is negative, we can conclude that this case is a DH due to the positivity of antibodies anti-transglutaminase, the typical celiac lesions on the fibrogastroscopy and a cutaneous biopsy compatible for DH. When the patient was advised to follow a free-gluten diet, the lesions started to disappear and 2 months later they were practically gone.

## **PS2.276**

### **Home blood pressure monitoring in primary care**

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Hypertension is a common disease in Sweden. The most of the patients are controlled by office blood pressure (BP). Our project group work with home BP monitoring. This method can reduce amount of patient with white-coat hypertension and masked hypertension. Guideline from ESH/ESC (2013) shows that home BP is more closely related to hypertension-induced organ damage than office BP. Recent meta-analyses indicate that the prediction of cardiovascular morbidity and mortality is significantly better with home BP than with office BP.

Our aim is to identify patient with white- coat hypertension and thus reduce medication. Inclusions criteria are patients with high normal BP and hypertension. Exclusions criteria are arrhythmia, malign hypertension, unmotivated patients.

The patients borrow an oscillometric automatic sphygmomanometer and take BP two times/day, on at least 3 days. The results are reported in a standardized logbook. Home BP is the average of these readings, with exclusion of the first monitoring day. We use ESH/ ESC guideline for evaluation of blood pressure. Our project is a pilot study. We are in the planning phase. All of the preparations are ready (project plan, license from director, approval from patients, instructions and logbook for patients). Patient care starts nowadays in January 2016. Local guideline for out- of- office blood pressure has not existed in our region before our study. Our aim is to start with home blood pressure monitoring which is a safer method for blood pressure control than office blood pressure. Blood pressure monitoring is going to be more effective and controlled.

Our target is overmedication. Health education is included in our program. Our expectation is that it can improve patient involvement and health awareness.

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## PS2.277

### Living together the patient's life

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**Background & Aims:** Longitudinality is the main characteristic and tool in General Practice. The aim of this presentation is to share with colleagues GP's experience in living, 20-year long patient's life.

Case Presentation: When I met him for the first time, he was 50-year healthy men, coming for some administrative reasons. A few years later, he came because of insomnia; his daughter-in-law died and his son remained alone with two small children. He and his wife was the main source of support and help to him. It was hard time for patient, sometimes being depressed, developed peptic ulcer and needed support. Some years later, his wife phoned that he was at hospital, having cerebrovascular attack (except overweight, no risk factors).

Recovery was successfully; he lost 15 kilos, and returned to work. Once, he appeared bringing invitation to me for exhibition; he started painting, very much enjoying. The grand-children were already at school-ages, doing well and son was in happy love-relation. Some years later, he was retired, enjoying in paintings and travelling. Physically inactive, he developed some joint's pains, and after one longer journey, deep vein thrombosis.

As other men in his age, he checked-up prostate-specific-antigen (PSA) and it was at the upper-normal limits. Although, PSA was checked once more, he appeared once with unexplained pains and metastatic-prostate cancer was diagnosed. It was again hard time for him and his family, needed support. In the mean-time, he had traffic-accident with serial costal fractures. He recovered successfully, but the cancer was not responding. Nowadays, I am in his home once per week, following him in his palliative phase.

**Conclusion:** This patient is „normal“ to ordinary GPs, but once again, remain us how many enjoynments and sorrow we experienced in living the life together with them.

## PS2.278

### **Does work environment and personal experience of doctors affect the discussions of advanced care planning in Singapore?**

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Singapore is a multi-ethnic, multi-racial society, which is aging rapidly. By 2030, Singapore is projected to become 1 of 34 super-aged countries, with population consisting of more than 20% elderly. With more educated elderly residents, technological advances in healthcare and the growing acceptance of the concept of patient autonomy, advanced care planning (ACP) becomes increasingly important as it allows individuals to have a say in their future healthcare needs through discussions with healthcare professionals and family members. ACP allows individuals to clarify their wishes and concerns, giving them a sense of control over their future care and treatment preferences. This will allow one's decisions regarding medical treatment to be respected in the event that one's decision-making capacity is lost in the future.

ACP discussions should be carried out in comfortable, unhurried settings and offered in primary care setting such as regional medical centers, before individuals become acutely unwell. Having ACP discussions in the community helps individuals make sound decisions in a calm state of mind when they are in a less stressful environment. However, we see a higher proportion of ACP discussions being initiated while individuals were hospitalized due to acute illness or suffering from a catastrophic medical condition.

This study seeks to explore ACP perceptions in doctors working in a tertiary hospital as well as in a regional medical center, aiming to find contributing factors for the different discussion rates of ACP in these 2 institutions.

**Method:** Doctors based in Sengkang Polyclinic as well as Changi General Hospital General Medicine Outpatient clinics will be given a self-administered questionnaire and responses will be analyzed.

**Anticipated Conclusions:** Results of the study will be organized according to following themes:

- 1) Demographics of doctors in the 2 institutions (religion/training/special interests)
- 2) Work environments and support from the respective institutions
- 3) Personal encounters and experience with ACP discussions

## **PS2.279**

### **The experiences and attitudes towards international primary care amongst Family doctors across Europe**

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**Background:** There has been growing interest in collaborating and learning from alternative health systems across and beyond Europe. This has led to innovative practices such as the Hippokrates and Family Medicine 360° exchange programmes. However, not all family doctors have the opportunity to experience these exchanges nor is it clear what the overall experience of family doctors tend to be across Europe in international primary care settings.

**Methods:** We surveyed family doctors and trainees at an annual International Conference on their postgraduate experiences and attitudes towards international primary care in their respective countries.

**Results:** We received forty-two respondents: 32 were family doctor trainees, 8 were family doctors within their first five years of training, one medical student and one family doctor. The majority of those surveyed did not receive teaching on international health at medical school (59.5%) or during their training as a family doctor (56.1%). This is despite the fact that over half (53.7%) of the respondents would like to work overseas in the future. Experiences in international primary care is viewed positively within family medicine with the majority (78.6%) of respondents expressing that they would like more opportunities to incorporate international health into their careers. Suggestions on improving the exposure to international health included more education at undergraduate and postgraduate levels (including making it as a mandatory part of training), more exchange programmes and more exposure to sources of information regarding these issues.

**Conclusions:** This brief scoping survey has found an overall positive attitude towards experiences in international primary care amongst family doctors across Europe. This is despite the fact that there is little exposure to the subject throughout training. Further work needs to be done to increase both exposure and opportunities in international health.

## PS2.280

### When the HbA1c does not tell us the truth...

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**Background:** Type-2 diabetes(DM2) is a chronic disease with high prevalence and high mortality resulting from micro and macrovascular complications caused by hyperglycemic state. The risk of complications in diabetic patients is inversely proportional to glycemic control, as determined by HbA1c levels.

Case Description: 70 years old women, widow, illiterate, reformed at stage 8 of Duvall life cycle. DM2 diagnosed and treated for the past 6 years, involving hypertension, combined dyslipidemia and class-I obesity. She is treated with bisoprolol 2.5mg id, clonazepam 2mg, enalapril-lercanidipin 20/10mg and metformin-glibenclazid 2.5/500mg. At 07/01/2014, she presented the following analytical results HbA1c=4,6% and fasting glycemia=142mg/dl. The hematocrit showed no change and renal function and lipid record were normal. There was no symptomatic hypoglycemia story. in consultation capillary blood glucose value was 213mg/dl. in view of this low HbA1c value, we decided to replace metformin-glibenclazid 2.5/500mg to metformin 500mg, with consultation marking three months later. At 20/04, HbA1c value was 5% and fasting blood glucose value was 235mg/dl. The patient told us that at home blood glucose values were always greater than 200mg/dl. in view of the poor correlation between HbA1c and blood glucose values, it was requested an electrophoresis of hemoglobin. She returns in 26/05 with the following

**Results:** HbA1-57%; HbA2-2.1%; HbF-0.3%; HbS-0%; HbD-36.7%. She maintained high levels of blood sugar, so we decided to increase metformin. We recommended the patient to bring the ambulatory recording of blood glucose levels with more frequent measurements to adjust the medication.

**Discussion:** HbA1c is not always adequate to evaluate the degree of glycemic control in the diabetic patients. Hemoglobin variants can adversely affect the value of HbA1c by high turnover erythrocyte present in these conditions. in these cases, alternative strategies are needed to monitor blood glucose and therapeutic efficacy, as ambulatory recording of blood glucose fasting and/or postprandial.

## **PS2.281**

### **Mal de Meleda - description of a case report**

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**Background and Aim:** Palmoplantar keratodermas (PPKs) consist of a heterogeneous group of disorders characterized by thickening of the palms and soles. The condition may be subdivided into hereditary keratodermas, acquired forms, and conditions in which PPK is an associated feature of a specific dermatosis. Mal de meleda (MdM), a rare autosomal recessive form of PPKs is characterized by erythema and hyperkeratosis of the palms and soles with a sharp demarcation and that progress with age and extend to the dorsal aspects of the hands and feet, accompanied by unguais and digital constrictions changes (Pseudoainhum).

Case description: 23 years old caucasian woman. Only child of a healthy couple in the first degree consanguineous (direct cousins). Without relevant pathological antecedentes. She presents since birth, yellowish transgressive palmoplantar keratoderma, with paraffin aspect, that was aggravated with growth. Currently, the lesions are accompanied by erythema, which extends to the back of the hands and feet, nail dystrophy and pseudoainhum. It also presents excessive sweating and foul odor of the feet and hands. Without comorbidities or other systemic changes. She was followed in dermatology consultation and treated with retinoids without great benefit, so at the moment is only with keratolytic and emollient in continuous use. The patient is unemployed and she attributes this to the disease, for its location with great exposure and negative aspect.

**Discussion:** MdM is a chronic disease with great therapeutic difficulty. It has high morbidity, negative impairment in the patient's quality of life and interpersonal relationships. This case report draws attention to the importance of family assessment, particularly the family genogram, to evaluate the transmission of hereditary diseases, especially in cases of consanguinity. The GP plays a key role in monitoring and support these patients in both prescription comfort therapy, as in addressing its consequences and psychological rebat.

## PS2.282

### **Evaluation of the relationship between health perception and daily living activities among elderly living in residential home**

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**Background & Aim:** The objective of this study is to evaluate the relationship between poor self-rated health and activities of daily living among individuals living in residential home.

**Method:** This cross-sectional study was conducted at Narlidere Residential and Nursing Home during 15 July-2 August 2013. Study population consisted of 484 individuals who are staying in Residential Home. Dependent variable of the study was poor self-rated health. Data were collected using a questionnaire. Activities of daily living were assessed using Basic Activities of Daily Living scale and Lawton and Brody's Instrumental Activities of Daily Living scale. Data were analysed using the SPSS 22.0 pocket programme; a p value lower than 0.05 was considered as statistically significant.

**Results:** Poor self-rated health prevalence was 10.7%. Disabilities among basic ADLs ranged between (7.2%-12.4%); disabilities among instrumental ADLs (IADLs) ranged between 9.0%-31.3%. Multiple logistic regression analysis revealed that transferring (odds ratio, 8.2; 95% confidence interval, 3.8-17.9) and continence (odds ratio, 7.1; 95% confidence interval, 3.2-15.8) were the leading items correlated with poor self-rated health.

**Conclusions:** Each items of activities of daily living were negatively associated with self-rated health. Therefore, interventions improving activities of daily living could help reducing perception of poor self-rated health.

## PS2.283

### Over 100 years in Turkey: evaluation of a centenarian woman living in residential home

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**Background: &Aim:** It was reported that the group especially 85 years old and above needing care increased faster in aging Turkey. In this study, an example of healthy and long aging was evaluated in a 101- year old elderly aging healthily and staying at the residential home.

**Method:** Records of the case of single centenarian woman, exceeding 100 years old and living at Narlidere Residential and Nursing Home and data about patient interviews were evaluated.

**Results:** The old woman having been staying at Residential Home for 12 years was a housewife and literate. She had right nephrectomy, appendectomy and choledochoduodenostomy operations in her history. She had no chronic disease other than hypertension for about 20 years. She used acetylsalicylic acid with anti hypertensive treatment regularly. Blood pressure was followed regularly, tension was regulated. She had never used alcohol and cigarette. BMI of 1.50 m in height elderly was 31.5 (obese). Clear deterioration was not applicable for the self care she was not dependent. Oter than partial support requirement for transportation and money management, ability of performing daily life activities did not reduce. Clear deterioration of cognitive functions was not observed, she could communicate with her friends, share common areas, could go to mess hall without support, she used medicines herself. She did not report extra problem other than arthralgia due to osteoarthritis becoming clear for the last 3 years and dyspeptic complaints. She did not visit the health office at the residential home very frequently in general. She did not apply for healthcare services other than prescription of chronic disease medications and routine controls.

**Conclusions:** The number of elderly having a long life, exceeding 100 years old is increasing in our country like all over the world. Not smoking all her life, being very careful with using medicines mainly analgesic since she has single kidney and preserving cognitive functions are significant characteristics. Moreover, it is known that the woman sex lives longer. Habits of centenarian individuals, modes of living in addition to nutrition, physical, mental and social components for keeping healthy should be considered carefully. Assessments of family physicians being the physicians following the persons for long-term and most closely can be directive in the way to healthy and long life.

## PS2.284

### **The Sustainability Agenda: is anyone listening?**

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**Background and Aim:** Climate change and the potential subsequent health effects are a hot topic of international debate. Some have argued that the medical profession should respond through the provision of lower carbon-intensive healthcare. Family doctors are highly trusted and have the potential to influence clinical systems and patient behaviour. We therefore aim to explore the experience of, and attitudes towards, sustainability among the future generation of family doctors in England, Denmark and New Zealand.

**Methods:** We have designed an online survey influenced by previous attitudinal surveys towards climate change among healthcare professionals and the general public. We have created a Likert scale to determine attitudes and beliefs towards climate change, and multiple choice and free-text entry to capture personal experiences of sustainable healthcare activities. The layout of the questions is randomised where appropriate and aims to minimize any leading or prejudice. We sought advice on the survey design from academics and piloted the survey to a small cohort of GP trainees in Southern England and Copenhagen. The survey will be electronically distributed to 500 trainees in England with estimated numbers of 50 trainees in Denmark and New Zealand.

**Results:** We will present the results of attitudes towards sustainable healthcare and climate change, and compare these internationally. Additionally, we will present the results of the trainees' experiences of sustainable healthcare activities.

**Conclusions:** We aim to draw conclusions about the attitudes of GP trainees towards sustainable healthcare. We also hope to draw conclusions about any international differences of understanding about climate change and sustainable development. We hope the results of this study will influence syllabus design for GP training in the countries studied.

## **PS2.285**

### **Management of anemias in family medicine**

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**Background & Aim:** Anemia is one of the most common disorders in Family Medicine. Patients of all ages may address their physician with complaints of anemia. Apart from the most common causes, globalization and migration of populations due to refugee crisis may reveal causes that are not often encountered in Western Europe.

**Method:** In this symposium we will focus on the management of the patient with anemia from the perspective of underlying mechanisms that have caused these symptoms. Three formal lectures will be presented, focusing on patient's history, clinical findings, diagnostic approaches and treatment modalities.

#### **Presentations:**

1. "Hemoglobinopathies in the era of migrating populations", Maria Tsironi
2. "Infectious diseases induced anemia" Panagiotis Andriopoulos
3. "Anemia, inflammation and chronic disease" Lamprini Tina

**Results:** Aim of the symposium is to raise awareness for causes of anemia that become more and more often in the changing populations of Europe. Diagnostic ability and clinical suspicion are vital in Family medicine and proper management of anemia a crucial part of everyday practice.

## PS2.286

### **Palliative care helps patients with terminal illness live better**

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**Background:** Palliative care is treatment of the discomfort, symptoms and stress of terminal illness. It helps to manage symptoms or side effects of medical treatment. The patient and family members are provided with emotional, social and spiritual support to help them with the dying process. Palliative care intends neither to hasten nor postpone death. It provides relief from pain and other distressing symptoms.

**Aim:** To improve quality of life of patients with terminal illness.

**Methods:** Quantitative data analysis of 75 patients aged 60-75years with life-threatening illness. We extract the most distressing symptoms -pain, shortness of breath, fatigue, constipation, nausea, loss of appetite, problems with sleep. All patients had a three months follow up.

**Results:** Pain was present at all patients, on a various scale. Three complications related symptoms were found at 60% of patients, and 40% of patients had more than three symptoms present. All patients received supportive therapy. Some 72% of patients established a positive impact on the course of illness.

**Conclusions:** Palliative care refers to the supportive care of patients with life treating illness, as well as the supportive care that is available for family members. The goal is to improve the quality of life of the patient with terminal illness.

## PS2.287

### Antithrombotic therapy in atrial fibrillation in the elderly

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**Background:** Atrial fibrillation is the most common cardiac arrhythmia and is characterized by irregular and rapid heart rhythm. The prevalence is higher in man and is increases with age. Affected patients may be at higher risk for death from stroke and other thromboembolic events, heart failure and cardiovascular disease. The treatment of atrial fibrillation in the elderly involves reversing the factors that cause atrial fibrillation, slowing the heart rate with medications and converting atrial fibrillation to a sinus rhythm with medication or electrical cardioversion. Patients with permanent atrial fibrillation may need catheter ablation or implantation of atrial pacemaker.

**Aim:** The adequate management of elderly patients with diagnosed atrial fibrillation.

**Methods:** Quantitative data analysis of 60 patients aged 65-80years with atrial fibrillation. Patients had associated cardiovascular disease, diabetes, hypertension, chronic obstructive pulmonary disease or prior surgery. We extract the most distressing symptoms - palpitations, tachycardia, fatigue, weakness, dizziness, lightheadedness, reduced exercise capacity, dyspnea, angina, syncope. Patients had they risk assessed and treatment was establish based on their personal characteristics and the guideline recommendations. All patients had a six months follow up.

**Results:** Based on the CHADS2 score for atrial fibrillation we evaluate the ischemic stroke risk in this patients: 10% (6 patients) had congestive heart failure, 100% (60) had hypertension, 15% (9) had diabetes, 5% (3) had chronic obstructive pulmonary disease, 16.66% (10) vascular disease, 8.33% (5) had history of cerebral ischemia. Among them, 53.33% (32 patients) had intermediate risc of stroke received aspirin and 46.66% (24 patient) had high risk and receive antithrombotic therapy. After six months, the thromboembolic events were higher in the group of patient receiving aspirin.

**Conclusions:** Antithrombotic therapy reduces risk of stroke and other throboembolic events in patients with atrial fibrillation. Unless the risk of bleeding is exceedingly high, anticoagulation is required for most elderly patients.

## PS2.288

### **Daily clinical practice: cardiovascular risk and statin prescription patterns.**

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**Background:** The latest clinical practice guidelines do not refer to specific levels for defining hypercholesterolemia in primary prevention, since most of the patients with ischemic heart disease had total cholesterol levels between 200 and 250 mg / dl. In patients with hypercholesterolemia, the calculation of cardiovascular risk (CVR) is crucial as atherosclerosis is an inflammatory process with a multifactorial etiology and multiple factors (some of them included in the CVR equation) are involved.

**Aim:** To know the CVR of our patients with dyslipidemia and the adequacy of treatment.

**Method:** This is a descriptive, cross-sectional study. All patients over 60 years with a diagnosis of dyslipidemia in the electronic medical records were included. A population of 16593 people (2523 were over 60 years) are assigned to our primary care center. For data comparison, chi square and Student test were used as necessary.

**Results:** A total of 1084 patient with diagnosis of dyslipidemia were included. Six hundred and four (55.7%) were treated with statins. Of dyslipemic patients who had received statins, the mean of Framingham CVR was 14.2 (SD 8.6) and REGICOR CVR (adaptation of the Framingham tables to the Spanish population) was 6.04 (SD 4.3). A 39.7% of patients with Framingham CVR > 20 (high risk) was untreated and 55.4% of patients with low CVR was treated with statins ( $p = 0.417$ ).

**Conclusions:** A high percentage (55.4%) of our patients with low CVR was being treated with statins despite the potentially serious side effects of these drugs. We must be aware that prescribe a statin to a person at low risk unnecessarily increases the likelihood of adverse effects without providing any preventive effect. All authors declare no competing interests.

## PS2.289

### **Beware the spider! About a case**

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**Background and Purpose:** *Loxosceles Rufenses* is the only species of *loxosceles* found in the Iberian Peninsula. This spider is characterized by being unaggressive, being nocturnal habit and hide in dark places. The aim is to describe the skin loxocelism and its treatment as it can go unnoticed initially and their evolution cause serious skin disorders.

**Method:** We evaluated the evolution of a case of skin loxocelism a young adult that is valued in the emergency and initially goes unnoticed and its evolution during hospitalization.

**Results:** Loxocelism skin is characterized by the appearance of an itchy and painful local lesion progressively with locoregional edema which may progress to an erythematous plaque or adopt features marble plate with red areas alternating with other pale violet, which darkens forming 7 days a scar that leaves a slow healing ulcer.

In severe forms of loxocelism high fever, mialgas with jaundice and hemolytic anemia and hemoglobinuria can lead to acute renal failure, CID and sometimes coma and death. In Spain it has not been described so far no case of visceral loxocelism skin.

**Conclusions:** Despite the absence of a specific treatment for cutaneous loxocelism, it rests with local application of cold, aseptic inoculation point, analgesia as pain, tetanus toxoid if not vaccinated, antihistamines, anti-inflammatories and antibiotics in case of superinfection is recommended. In ulcers greater than 2 cm in diameter corticosteroids and dapsone which limits the extension of the dermatonecrosis added. In cases of very poor local evolution (deep and extensive necrosis) and early surgery is recommended in severe forms it requires hospitalization with regular checks of blood count, coagulation and renal function. In our environment the antiloxoscelic serum is not recommended.

## PS2.290

### Doctor, want Meperidina please

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**Background and Purpose:** Addiction to opioids is defined as a pattern of compulsive behavior that leads the individual who suffers a continuous search of the opioid and its use for other non-analgesic effects. Accordingly, some authors have defined other terms, the "pseudoaddiction" which is observed in patients with cancer or chronic pain, and in his search for opiates is due to a psychological dependence, but with analgesic purposes.

Addressing opioid dependence disorder in our hiperconsultant specifically in a patient with a sore arm and catastrophic present resolution after withdrawal

**Method:** Set the treatment of opioid dependence as a method of detoxification MEPERIDINE dependent patients. Detoxification goals are:

- i. To release the body of the physical dependency associated with chronic consumption of narcotics.
- ii. Reduce or eliminate the pain and discomfort that may occur during withdrawal.
- iii. Provide safe and humane treatment to help the individual overcome the initial hurdle to stop using narcotics
- iv. Provide safe treatment that leads to a broader commitment to make appropriate treatment and these other treatment modalities leads.
- v. Treat any medical problem that can be detected or perform the most appropriate referrals.
- vi. Start the process of educating the patient detoxification is successful when the patient is safe and with minimal discomfort.

### Conclusions:

- The opioid dependence disorder is one of the most difficult to address in our area, because often seen in persons linked to the area onf health.
- While abstinence is the therapeutic goal of any dependence disorder, to achieve this there must be a prior strengthening the doctor-patient relationship and psychological readiness for change that the individual will perform.
- The treatment of opioid dependence involves not only physical detoxification, but also the psychological addiction, whether the therapeutic community or long-term outpatient treatment.

## PS2.291

### **Infectious mononucleosis and corticosteroids. Yes or no?**

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**Background and Purpose:** Infectious mononucleosis (IM) is associated with fatigue, fever, sore throat and swollen lymph nodes. The severity of symptoms can vary. In extreme cases, breathing difficulties because of swelling in the throat and other complications can require hospitalization. Also varies the duration of symptoms; in some cases they can last for months. There are few treatments available. There are no universal criteria for using steroids in this disease.

Although its use is generally reserved for severe complications, there are reports of professionals who use steroids to treat most symptomatic people.

The objective is to determine the efficacy and safety of steroid therapy to control the symptoms of glandular fever in a random sample of patients under 20 years with no other history who are cared for in an emergency.

**Method:** To evaluate the efficacy of oral corticosteroids in the treatment of infectious mononucleosis based on symptomatic improvement (fever, asthenia) and development of glandular inflammation. Patients treated with corticosteroids without diagnosed with infectious mononucleosis with positive heterophile antibody test.

**Results:** There is insufficient evidence to recommend steroid treatment for symptom control in infectious mononucleosis. Furthermore there is little research about the side effects, potential adverse effects and complications, particularly in the long term.

They are not recommended in cases of mild IM. They relieve sore throat and shorten the duration of fever. Increased risk of complications (risk of infections and immunosuppression).It should reserve its use in short cycles (2 weeks) for serious complications of IM, including: myocardial or neurological involvement, airway obstruction, hemolytic anemia, neutropenia and prolonged severe thrombocytopenia.

## PS2.292

### **Management of Atrial fibrillation Including anticoagulation in primary care - study protocol of the cluster randomized controlled trial ALL-IN**

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**Background & Aim:** Atrial fibrillation (AF) is the most common cardiac arrhythmia with an increased risk of stroke and mortality. It often involves frail, elderly patients, requiring adequate care for cardiac and non-cardiac comorbidities, lifestyle and tailored anticoagulation treatment. Given the expected increase in prevalence of AF, transition of care for AF patients from secondary care to primary care is desired. However, data on the safety and (cost)effectiveness are lacking. This study evaluates if integral management of patients with AF by the practice nurse and general practitioner, including care for comorbidities and anticoagulation, is non-inferior to usual care.

**Method.** The ALL-IN study is a cluster randomized trial that will be performed in approximately 60 primary care practices in the region of Zwolle, The Netherlands, with more than 1000 AF patients aged 65 years or over. Patients from primary care practices randomized to the intervention arm will receive integral AF management, consisting of a) visits to the practice nurse three times a year and once yearly to the general practitioner, b) INR measurements performed by the practice nurse, and c) easy access consultation from secondary care through the establishment of an Expert Center for Anticoagulation and an Expert Center Cardiology. Patients from practices randomized to the control arm will receive care as usual by the Dutch Thrombosis Service, cardiologist and/or general practitioner.

**Results:** The study will start in 2016 with a follow-up time of 24 months. Primary endpoint is all-cause mortality. Secondary endpoints are cardiovascular mortality, (non)cardiovascular hospitalization, Major Adverse Cardiac Events (MACE), stroke, major bleeding, quality of life and cost-effectiveness.

**Conclusions.** The ALL-IN trial is the scientific evaluation of a health care innovation that - due to the delegation of tasks to the practice nurse and the establishment of the Expert Centers for Anticoagulation and Cardiology- aims for sustainable and accessible care, close to the AF patient.

## PS2.293

### **Influenza vaccination: causes of negative attitudes of the population of a rural area of Crete**

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Despite efforts made in recent years by the Ministry of Health, the medical associations of the country, the doctors themselves, and the media, to increase influenza vaccination coverage of the population, research data show that the target is not yet reached. The purpose of this study is to investigate the attitudes and behaviors of the population of a rural area of Crete, who are opposed to the appropriate influenza vaccination.

**Material and Methods:** This study was conducted from October 2014 until February 2015. All patients who presented to the Health Center and the regional clinics and were in need for influenza vaccination according to the national guidelines, but refused it, were registered and questioned about their opinion and attitude towards flu vaccination.

**Results:** The main reasons stated that they turn down the administration of influenza vaccine are: lack of information (10.1%), erroneous beliefs (21%), 9% stated that it was not recommended by their personal doctor, while a percentage of 20.6% claimed that they forgot it, and 23.2% mentioned that they do not often get sick and have a good health in general and therefore do not need to be vaccinated. Furthermore, 4.1% feared the process of vaccination and last but not least 12% do not consider it to be useful since they have suffered from flu even when vaccinated in previous years.

**Conclusions:** The results of this study indicate the need for further and more effective interventions to increase vaccination rates. General practitioners, especially in rural and remote areas, should be more pressing and persuasive in matters of vaccination, using all means of education and information for the patients, such as leaflets, speeches, information sessions, in order to make them understand the need for influenza control, and the necessity of the vaccination to prevent the serious complications of the flu in vulnerable population.

## **PS2.294**

### **Views and attitudes of teens in matters of preventive medicine in a rural area of Crete**

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Greece until the 1990's had one of the highest life expectancies in the world. Today, life expectancy at the age of 65 in Greece, is below the EU average. Greeks earn fewer years of life, due to their indifference towards the major health risk factors such as poor diet, smoking, lack of physical exercise and stress. The aim of our study is to record the views of adolescents of a rural area of Crete, concerning the factors that contribute to health protection and the study of their social behavior.

**Method:** 150 teens-75 boys ,75 girls, aged 14-18 years old, responded to an anonymous, structured questionnaire.

**Results:** Regarding the diet, only 26% eat breakfast, 24% never drink milk, while 66% are fed with standard food. 61% consume ready meals more than 4 times a week and 52% consume red and processed meat 4 times/week. Only 16% know about the Mediterranean diet, but do not apply everyday. 95% know that smoking causes lung disease and cancer, but 19% believe that it is a means of social recognition while 6% think that drugs and particularly hashish is a means of communication. Moreover, 73% of teenagers do not exercise regularly. Furthermore, 79% are unaware of the necessary vaccination and 65% do not know the symptoms of major infectious diseases and how they are transmitted, except HIV. 56% had their first sexual experience at the age of 14-15 years and 27% do not use precautionary measures, while 14% are unaware of sexually transmitted diseases other than HIV.

**Conclusions:** The study reveals the need of forming an electronic health record ,which would include health evaluation, labeling of risks and problems and the provision of guidance and advice for carrying out future preventive examination according to age, sex and the findings of the initial audit, leading teens to adopt healthy behaviors.

## PS2.295

### **Headache as a cause for attending the emergency department in a rural area of Crete**

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**Background & Aim:** Headache is one of the common causes among patients who present to the emergency department (ED) of the Hospital and Health Center. It often exists a history of headaches and the repeated visits are due to the failure of the remission of pain by taking common analgesics.

**Method:** We studied the demographic, clinical and laboratory characteristics of 101 patients with headache, examined in the Emergency department in a medical office in a rural area of Crete, during a 6-months period of time (January 2015-June 2015). Diagnostic approach of headache was made according to the classification of the International Headache Society. During the history taking, the age of the patient, the type of the onset of the headache (acute, subacute or chronic), the frequency of headaches, the localization and extension of the pain, the character (throbbing, pressing, stabbing headache), the duration of pain, intensity and any changes to, the time of onset of pain, the factors affecting the intensity of pain, the sought for precursor symptoms, aura and associated symptoms (nausea, vomiting, echofovia, photophobia) and the association of headache with menstruation in women were recorded.

**Results:** 52.4% of the patients examined had previous history of headaches. Specifically, the most common headache appeared were with no specific characters («headache not otherwise specified») (37,3%) followed by migraine (26.2%), tension headache (29; 8%), and cluster headache (4.7%). Significant correlation was found between stress as a cause and precipitating factor for all types of primary headaches. Among the other causes, hypertensive crisis, teeth problems, ear infections, sinusitis, and alcohol intake were the causes of headaches mostly detected.

**Conclusions:** Headache is a common cause of attendance for patients, which deserves particular attention concerning both the rapid and effective treatment and management, since it can affect everyday quality of life.

## PS2.296

### **Sleep disorders among the elderly in a rural area of Crete**

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**Background & Aim:** Studies have shown that people who sleep well have lower incidence of cardiovascular diseases and cancer. The sleep disorders are frequently underdiagnosed, consisting a major cause of concern in the elderly. The purpose of the study is to identify sleep disorders among the elderly in a rural area of Crete and to investigate a possible association with concomitant diseases and medication used. **Method:** the study was conducted with the use of Pittsburgh Sleep Quality Index (PSQI greek version) in 854 people over 65 years old, who visited the clinic of the health center, to prescribe their regular medication, from February 2015 till July 2015. Moreover, information about age, gender, height, weight, medical history, chronic diseases and chronic medication was also recorded.

**Results:** 501 women (58.7%) and 353 men (41.3%) with mean age  $73 \pm 6,7$  years and an average BMI serum  $28,7 \pm 3,5$  were examined. Sleep disturbance was found in 186 individuals (21.7%), 99 females and 87 males. The main concomitant diseases were hypertension in 60.1%, 38.7% dyslipidaimia, coronary artery disease in 29.2%, 17.9% diabetes, COPD 16.8%, depression 15, 6%. The most common medication used was ACE inhibitors(23.4%), diuretics (22.9%), and statins (21.1%). A relationship between sleep disturbances and antidepressant treatment ( $p < 0,03$ ) was revealed, as well as their association with COPD ( $p < 0.04$ ), congestive heart failure and arrhythmias ( $p < 0,05$ ) mainly AF. 21,4% of people with sleep disorders received proper treatment. BMI does not appear to affect the quality of sleep, in contrast to the increasing age and female gender ( $p < 0,05$ ).

**Conclusions:** Morbidity of geriatric population studied did not differ from that in international bibliography, whereas sleep disorders in the elderly in this area show a slight increase, attributed mainly to an increase in depression due to the economic crisis in our country in recent years.

**PS2.297**

**Influenza vaccination campaign for homeless people in the city of Lisbon - an experience report**

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**Background & Aim:** VOXLisboa is a non-profit organization with various healthcare projects. One of these, 'Rua com Saúde' (Street with Health) is aimed at the promotion of health among the homeless population of Lisbon. The volunteer multidisciplinary team includes doctors (family medicine also), nurses, medical emergency technicians, psychologists and students. In December 2015, they participated in a campaign to administer the influenza vaccine to homeless people, drug users, sex professionals and people in a social precarity situation.

**Methods:** There was a joint effort between the regional health administration, VOXLisboa and three other associations in this campaign. All the professionals involved were previously trained to explain the advantages and disadvantages of the vaccine and to dissipate preconceptions about it. They were also trained to administer the vaccine, know its contraindications and treat possible adverse reactions.

**Results:** With this campaign it was possible to vaccinate approximately 400 people. Its actual impact is difficult to measure in short term. However, the homeless population represents a risk group for the development of flu-related complications. This population has a respiratory disease mortality rate seven times higher and high prevalence of chronic pulmonary diseases and tobacco consumption. Moreover, they have several chronic health problems and difficulty to access proper healthcare and disease monitoring, predisposing them to severe complications of influenza.

**Conclusions:** The experience in the field of the volunteers of VOXLisboa was determinant to the success of this campaign. The trusting relationships developed during the volunteer activity between professionals and this population and the importance given to the therapeutic communication made the approach and intervention more effective. This might have increased the number of people vaccinated. An effort was also made in order to fight against the trend of the inverse care law and to promote good health measures.

## PS2.298

### Just a shoulders pain? Think again

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**Method:** Review of 23 articles about Osteopoikilosis. Research conducted by Pubmed, from 2007 to 2015, with the keywords: osteopoikilosis; spotted bone disease; osteoblastic metastasis.

**Background:** Osteopoikilosis is a rare, benign, osteosclerotic dysplasia with autosomal dominant inheritance and is observed equally in both sexes and all ages. Usually is asymptomatic and found incidentally on radiographic examination. In 25% is associated with skin manifestations, rheumatic and skeletal disorders and endocrine dysfunction.

Case report: Female, 20 years old, student. No important personal and family history. The patient referred a slight bilateral shoulder pain, intermittent, with 4 months of evolution. Physical examination showed shoulder pain that worsens with movements of the joints. Shoulders X-ray showed multiple, small, round and ovoid, symmetric, radio-opaque spots in the humerus, with periarticular distribution and predominant meta-epiphyseal location. Laboratory tests unchanged. Radionuclide technetium-99m bone scan excluded metastases. Was hypothesized Osteopoikilosis, that was confirmed with similar lesions at X-ray of the hands, pelvis, knees and femurs.

**Conclusions:** The discovery of bone spots on a radiograph is often disturbing, and benign conditions need to be differentiated from serious disease, mainly osteoblastic metastases. Know Osteopoikilosis may alleviate both, patient and physician anxiety, minimize unnecessary testing, treatments and medical costs. Diagnosis can be done on the basis on the clinical, personal history, physical examination and imaging characteristics and distribution of spots. Osteopoikilosis is usually asymptomatic but joint pain and swelling may be seen in 15-20%. It is relatively easy to make the diagnosis when the characteristically benign-looking spots are found incidentally in an otherwise healthy person or in a patient presenting with a traumatic injury. Difficulty occurs when patients present joint pain, such our case. In these situations, a review of previous imaging, radionuclide technetium-99m bone scan, analysis and or biopsy may be necessary. No specific treatment for Osteopoikilosis is required.

**PS2.299****Cancer risk assessment in primary care - pilot study**

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**Background:** Hungary is amongst countries with the highest cancer morbidity and mortality. Therefore it is important to study lifestyle and family history risk factors for cancer. We studied the feasibility of risk prediction in primary care for the most common cancers in the general population in order to tailor screening and lifestyle recommendations.

**Methods:** A pilot study was conducted in a mid-sized town in Hungary with 15 patient's self-reported questionnaire to the most common risk factors and family history for breast and colon cancer. We used the Referral Screening Tool, the FSH-7, the Ontario Family History Tool, the Manchester Scoring System (based on the USPSTF guideline recommendation) and the Tyrer-Cuzick model for breast cancer risk calculation and the NCI Colorectal Cancer Risk Assessment Tool for colon cancer risk.

**Results:** The most common cancer lifestyle risk factor was obesity (BMI > 25 kg/m<sup>2</sup>), the most commonly used screening tests were Chest X-ray and PSA. Family history (first or second degree relative) was positive in 80%. Self-reported family history for cancer was controversial, incomplete and imprecise.

**Conclusion:** To access family history and lifestyle risk factors for cancer risk assessment and calculations, a trained health care professional is required. Chest X-Ray and PSA tests are the most common screening examinations in spite of USPSTF and national recommendations. Further study needs with larger sample size of patients.

## PS2.300

### **Female sexual dysfunction and hypertension in a primary health care population**

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**Introduction:** Female sexual dysfunction (FSD) represents a complex disease. Hypertension has been identified as a possible risk factor for FSD. In this study we intend to assess the prevalence of FSD in a group of hypertensive women of a Family Health Unit (FHU), and compare with a group of women without hypertension in the same FHU.

**Methods:** We conducted an analytic cross-sectional study based on a random sample of sexually active women of a FHU. We applied The Female Sexual Function Index (FSFI) questionnaire, validated in Portuguese, which evaluates six areas of female sexual function, through anonymous self-completion. Biographical and clinical data were obtained by the family physician, with written informed consent. Statistically significant was admitted for  $p < 0.005$ .

**Results:** We studied 108 women (54 with hypertension and 54 without history of hypertension). The prevalence of FSD in women with hypertension was 66.7% compared to 46.3% among women without hypertension, and there is a statistically significant association between FSD and hypertension in women (OR = 2.32, 95% CI 1.07 5.05;  $p = 0.034$ ).

The average age among hypertensive women was 63.7 years. There is no significant difference in age between the group of hypertensive and normotensive women with FSD.

The comparison of the FSFI evaluation of the different areas of female sexual function between the two groups showed statistical significance for the desired domain, with evidence of more dysfunction in hypertensive women. The number of years of hypertension were significantly associated with FSD ( $p = 0.009$ ).

**Conclusion:** The prevalence of FSD was higher in women with hypertension, with an associated risk 2.32 times higher than women without hypertension. This risk tends to increase with the number of years of hypertension. The physician should be alert to this problem to recognize and appropriately guide these patients.

## PS2.301

### **Predictors of depression and anxiety disorders in infertile patients**

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**Background and Aim:** Infertility is clinically defined as a disease of the reproductive system conditioning the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse. It is highly prevalent worldwide and in Portugal. Often, it implies psychopathological alterations in affected subjects and it can promote the development of psychiatric disorders such as depression and anxiety.

The main goals of the present study were to determine the prevalence and the possible predictors of depressive and anxiety disorders in a sample of infertile subjects from the North of Portugal.

**Method:** To achieve these purposes it was carried out a descriptive analytic cross-sectional study in a sample of infertile subjects from the Medically Assisted Procreation (MAP) Centre of the Centro Hospitalar do Alto Ave - Guimarães in the North of Portugal. Thus, several clinical interviews were conducted in order to collect data and a self-administered questionnaire with Beck Depressive Inventory and Beck Anxiety Inventory to assess the severity of depressive and anxiety disorders, respectively.

**Results:** A sample of 200 infertile subjects was obtained. The prevalence of depressive disorders was 10% and the prevalence of anxiety disorders was 28.5%. The following predictors of depressive disorders were observed: a longer waiting time for MAP treatment, a history of depression, lower educational level, lack of occupational activity and existence of an explanation for the cause of infertility. For anxiety disorders the predictors were: female gender, lower educational level, taking anxiolytics, longer duration of infertility and younger subjects.

**Conclusions:** According to these results, it is recommended that a more intensive support should be given to these subjects through interventions that seek to reduce depressive and anxious symptoms.

## PS2.302

### Think beyond the initial diagnosis

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**Background and Aim:** Deep venous thrombosis (DVT) is a clinical entity associated with a prothrombotic state, abnormal blood flow or endothelial dysfunction. The family physician should be able to recognise signs and symptoms of DVT. Occasionally, DVT can be the first manifestation of another disease.

**Method:** We present the clinical case of CMF, 80 years old, retired, independent for activities of daily living, unitary family, with personal history of arterial hypertension, atrial fibrillation (hypocoagulated with warfarin) and peripheral venous insufficiency. She complained of pain on her right lower member with marked inflammatory signs on her thigh. The dorsalis pedis pulses were present bilaterally. Based on this findings, we assumed the clinical diagnosis of deep venous thrombosis and prescribed analgesia. Afterwards, we verified the international normalized ratio (which was 12). Because the clinical signs were getting worst she was sent to the urgency department five days after. On the ultrasound it was visible an extensive occlusive thrombosis throughout the left internal saphenous, corroborating the previous clinical diagnosis. On follow-up evaluation she presented with weight loss of 17% and marked anorexia. We decided to do imaging study which revealed a large heterogeneous mass in the liver, latter confirmed as a hepatocellular carcinoma. Without curative treatment possible according to oncologist decision, the family doctor started following the patient with home-based palliative care and emotional support.

**Conclusions:** The family doctor should have a comprehensive approach with longitudinal continuity. In the present case, this enabled him to look beyond the initial diagnosis and integrate different manifestations of a single disease. At primary care the physician manages and co-ordinates different levels of care. Faced with an unexpected diagnosis of terminal disease, the physician should be prepared to communicate and explain the prognosis to the patient and family as well as support them during the palliative process.

### PS2.303

#### **Clinical characteristics of acute coronary syndrome patients visiting department of general medicine in a teaching hospital of Japan**

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**Background & Aim:** ACS (acute coronary syndrome) patients presenting with typical chest pain are commonly referred to cardiologists, admitted to coronary care unit (CCU) and receive timely coronary revascularization therapy. However, many ACS patients without chest pain see generalists and tend to be subjected to delay and/or underuse of optimal treatment. The aim of this study is to clarify the clinical characteristics of ACS patients who visit our outpatient clinic of general medicine.

**Method:** Seventy two consecutive patients with ACS in our department (Group A) were reviewed in the period between November 1, 2011 and October 31, 2015. We also examined 525 patients with ACS (Group B) who were directly referred to cardiologists and admitted to CCU. The difference of clinical characteristics between the two groups was analyzed.

**Results:** The group A patients (age:  $65\pm 13$ , M/F:56/16) consisted of 36 ST-segment elevation myocardial infarction (STEMI), 19 non ST-segment elevation myocardial infarction (NSTEMI), 9 recent MI, and 8 unstable angina (UA) patients. The group B patients (age:  $69\pm 13$ , M/F: 395/130) consisted of 263 STEMI, 118 NSTEMI, 46 recent MI, and 98 UA patients. A proportion of ACS patients with no chest pain was higher in the group A than in the group B (42% vs 18%). The chief complaints of ACS patients with no chest pain in the both groups were mainly dyspnea and nausea. A proportion of ACS patients who came on foot was higher in the group A than in the group B (54% vs 30%). in-hospital mortality rate at 30 days after admission was higher in the group B than in the group A (2.5% vs 1.4%).

**Conclusion:** Generalists should always bear in mind a possibility of ACS, especially when patients are presenting with acute onset of nausea and/or dyspnea, regardless of admission route: by walk-in or by ambulance.

## PS2.304

### Successful treatment of supraventricular tachycardia with a new, modified Valsalva manoeuvre

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Case report accepted 24. Febr 2016 (Ugeskr Læger 2016;178:V12150998)

**Background & Aim:** Supraventricular tachycardia (SVT) is a frequent challenge in medical emergency units. Adenosine, the drug of choice, may cause severe chest discomfort. The Danish Society of Cardiology's National Treatment Guidelines for SVT recommend first aid treatment with 'vagus stimulation such as carotid massage and Valsalva manoeuvre'. A disadvantage of the Valsalva manoeuvre is that only 5-20% of the patients convert to sinus rhythm. However, a 'modified Valsalva' as described in a recently published RCT trial (the REVERT study, Lancet aug. 2015) wherein 43% of the patients converted to sinus rhythm compared to 17% in the control group, may open up possibilities of more effective, non-invasive treatment for SVT. The treatment could take place at home or at the office of the general practitioner (GP).

**Method:** We describe a case story of a patient who was successfully treated with the 'modified Valsalva' on first attempt by following the instructions of a short video, co-published with the REVERT study. Furthermore, a 10 ml syringe was used to build up optimal intrathoracic pressure (40 mmHg). The modified component of Valsalva is simple: elevation of the legs after 15 seconds of strain.

**Results:** Our patient had previously received adenosine treatment to convert an episode of SVT. Although effective, she had experienced severe discomfort in the chest. The patient was very relieved that adenosine could be avoided.

**Conclusions:** The principle of never causing harm to patients is enshrined in the Hippocratic oath. This case report illuminates the importance of quick dissemination of superior treatment alternatives. Although more observations are necessary, the ease and safety of the "modified Valsalva" suggest that this procedure could rapidly be incorporated into standard practice, and, not necessary only in a hospital setting, but also at home or in the GP's office.

## PS2.305

### **Prevalence and impact of anxiety disorders in primary care patients presenting with chest pain: an Asian perspective**

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**Background & Aim:** Chest pain and anxiety disorders are commonly encountered by the family physician. Anxiety disorder is a risk factor for coronary artery disease (CAD). On the other hand, patients with anxiety disorders may present with atypical chest pain, presenting a diagnostic dilemma. We aimed to assess the prevalence and impact of anxiety disorders in our Asian primary care cohort presenting with chest pain.

**Method:** Consecutive patients from 9 primary care clinics referred to a tertiary unit for evaluation of chest pain from Jul 2013 to Sep 2015 were prospectively recruited. Anxiety disorders were evaluated by interviewer-administered questionnaires, adapted from the anxiety module of the Patient Health Questionnaire (PHQ), and the Generalized Anxiety Disorder 7-item scale (GAD-7). GAD was defined as a GAD-7 score of 10 and above. Panic disorder was defined according to the diagnostic algorithm for the PHQ module. Significant coronary artery disease was defined as  $\geq 50\%$  stenosis on coronary angiography (computed tomography or actual) or a positive functional test with confirmatory clinical correlation by a cardiologist.

**Results:** A total of 507 (249 male,  $55.9 \pm 11.1$  age, 416 Chinese) patients were included in the analysis. Fifty-seven (11.2%) patients were found to have CAD. The overall prevalence of anxiety disorders was 20.7% (n=105); 19.1% GAD (n=97) and 3.9% panic disorder (n=20). Amongst patients with GAD, 6.2% had CAD compared to 12.5% in those without GAD (p=0.078). In patients with panic disorder, 5% had CAD compared to 11.5% in those without panic disorder (p=0.367). On multivariate analysis, both GAD and panic disorders had no significant correlation with CAD in this cohort of patients presenting with chest pain (p>0.05).

**Conclusion:** In our Asian primary care cohort presenting with chest pain, anxiety disorders (GAD and panic disorder) were prevalent at about 20.7%. However, these anxiety disorders did not predict for CAD.

## PS2.306

### **The effects of continuity on quality of diabetic care at a family practice clinic in Thailand: a retrospective cohort study**

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**Background & Aim:** Continuity of care correlated with better outcomes in caring for patients with chronic diseases but had inconclusive effects on quality of diabetic care. At the Outpatient Clinic, Department of Family Medicine, Faculty of Medicine, Ramathibodi Hospital (OFM), the most emphasized policy is continuity of care between patients and individual physicians. Nevertheless, we have never evaluated the effects of continuity care on quality of diabetic care. Therefore, this study aimed to compare rates of screenings for diabetic complications between patients received and did not receive continuity of care in OFM.

**Method:** Medical records of type 2 diabetic patients followed up at OFM for at least 36 months were retrospectively reviewed. Continuity of care was defined using Usual Provider of Care (UPC) index: high-continuity group (HC) and low-continuity group (LC) referred to  $UPC \geq 0.75$  and  $UPC < 0.75$ , respectively.

**Results:** 658 medical records were reviewed. The proportion of patients who received complication screening services in HC were significantly lower than LC with odds ratios (OR) of 0.66 (95%CI 0.45, 0.97) for screening of diabetic retinopathy, 0.49 (95%CI 0.34, 0.71) for urine microalbumin test. Even though greater proportion of patients in HC received more foot examination than LC (OR=1.07; 95%CI 0.74, 1.15), there was no statistical significance. However, when compared between family physicians with board certifications and doctors from other specialties or without postdoctoral trainings, the family physicians sent their patients for more screenings: urine microalbumin test 2.25 times (95%CI 1.15, 3.29) and foot examination 2.37 times (95%CI 1.52, 3.70).

**Conclusions:** This study found negative association between provider continuity and diabetic complication screening. Therefore, the service system should find other means for improvement and should not rely only on the continuity care of individual providers. Family Medicine Training promoted more diabetic complication screenings in our clinic.

**PS2.307**

**Polypharmacy vs polypragmasy in geriatric population**

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As the number of older people increases, geriatric pharmacotherapy belongs increasingly important role, not only because of the increased use, and thus the frequent interactions and adverse effects, but also because of changes in pharmacokinetic and pharmacodynamic. Family medicine physician plays key role in preventing polypharmacy in the elderly. As we know, with many comorbidities and polytherapy, the old people are part of daily work of Family physician and because of that, we wanted to explore how many medication take the old patients who comes in the Family department of Health Care Mostar. Our goal is to investigate how many people with 65 year and older take more than 4 medicines.

**Methods:** We included all patients over 65 years that occurred in the period from October 01st till December 15th. 2015. Part of the data is taken from medical records and some of the questionnaire developed for research.

**Results:** Four medicine and more take 42.2% of respondents, and even 26.7% of them take 7 medicine, and more. By gender, 58.3% of men and 61% of women take 4 medicines and more. At age 65-75 years was 61% of respondents who have used 4 or more medications, and over 75 years of 75.5%. More than 4 chronic diagnoses had 52.2%.

**Conclusion:** based on the data obtained, we conclude that we as family physicians, must be rational in prescribing. Three quarters of the respondents had more than 4 diagnoses, and almost so many patients drank more than 4 medicines, which could further aggravate the health situation of our oldest patients.

## **PS2.308**

### **How many patients take the medication without a prescription**

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The pharmaceutical industry is very strong and every day they place advertisements for various products that will "improve" our health. Taking OTC medicines is common everywhere in the world, but in BiH may take some medications without recepy that do not belong to the group of OTC.

The aim it was to realize how much of our old patients take medicines without recommendation Family medicine doctor and the most frequent drug groups.

**Methods:** The survey was conducted among patients >65 years that have arisen from October 1st till December 15th.2015. to use adapted questionnaires made out for research.

**Results:** 90 patients, 60% are women. There were 53.33% patients who took drugs without doctor's recommendations, of which 64.8% were women. The most commonly used drugs were analgesics (47.9%) and sedatives 41,6%.

**Conclusion:** the Beers' criteria of both groups the most commonly used drugs among our patients fall into drugs that can not advise older patients. It must be an alarm to have to work more on the education of patients and try to reduce the consumption of these drugs that can be dangerous for older patients.

## PS2.309

### **Streptococcus gallolyticus infection silent debut, severe evolution**

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**Background & Aim:** Streptococcus gallolyticus, member of streptococcus bovis group colonizes digestive tubes of birds, cows and human (2.5-15%). Literature describes the association between bacteraemia with Streptococcus gallolyticus and colon tumours but also extra colonic lesions (endocarditis, osteomyelitis, cholangitis, lung tumours, ovarian tumours) we report the case of 60 years old male, Caucasian patient who was diagnosed with Streptococcus gallolyticus infection with severe evolution by multiple septic lesions.

**Case Presentation:** The patient came to my office for back pain and was diagnosed with vertebral osteomyelitis as the first lesion of Streptococcus gallolyticus infection identified by blood culture. New other lesions were diagnosed on aortic valve (endocarditis), right popliteal artery (thrombosis), right knee (arthritis). Evaluation that was done after 30 and 45 days from the diagnosis showed severe aortic insufficiency so surgical intervention for aortic valvuloplasty was done in a short time. Vertebral and popliteal artery lesions have been improvement in two months of antibiotic treatment. Colonoscopy which was done 6 weeks from the diagnosis showed colonic polyps -the entrance gate of Streptococcus gallolyticus bacteraemia.

**Discussion:** This case represents a diagnosis and treatment problem. Not even the symptoms of the patient, identification the Streptococcus gallolyticus in blood culture and imagistic tests but also the study of literature data contributed to establish the diagnosis .Another question that we try to answer was how did Streptococcus gallolyticus produced bacteraemia.

**Conclusions:** This case proves that Streptococcus gallolyticus infection has a silent period followed by severe evolution by multiple septic lesions in spite of the precocious treatment and warns of the necessity of digestive investigations for these patients.

Key words: Streptococcus gallolyticus, osteomyelitis, endocarditis, thrombosis.

## PS2.310

### **Systematic review evaluating influence and efficiency of Telemedicine on patients' adherence to life-style modifications, disease prevention and management**

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**Background & Aim:** The aim was to evaluate available research information about the influence of telemedicine on patients' adherence with various chronic conditions in prevention, treatment and possible efficiency.

**Methods:** All available research data were gathered in a systematic review from PubMed and Cochrane Databases, publicized in the time period from 2012 to 2015, mostly 2015. Words like 'adherence telemed', 'compliance telemed', 'telemedicine', 'telemedicine treatment', 'telemedicine exercises', 'telemedicine prevention', 'telemedicine effectivity' were entered in the search window of databases, thereafter analyzing „full text” studies and their quality. Research was carried out according to PRISMA guidelines. The data were analyzed by two, independent researchers. No conflicts of interest.

**Results:** 26 studies about adherence complied with the aim. In the research analyses three cohort studies, three meta-analyses, eight systematic reviews and eleven systematic reviews with statistical meta-analyses were analyzed, whereof, 262 randomized controlled trials and 165 non-randomized controlled trials were evaluated [n=59132]. Data about the number of participants were provided only in 13 studies. Most systematic reviews about telemedicine influence on adherence and health show, that these studies are held with various methods, of low quality, with a lot of biased information, sponsored, of low range, incomplete data about study participants, quality, timing and lacked long term observation. Only five studies of 22 showed duration of Tele-therapy/-rehabilitation/-prevention intervening. Still, 18 studies, including 6 systematic reviews with meta-analyses, show a little, short term improvement in patients' adherence. And 22 studies out of 26 show efficacy of telemedicine, improving patients' state of health on some level.

**Conclusions.** Most studies show a little, short term efficacy of Telemedicine on adherence and state of health on some level. However, most systematic reviews show that research of Telemedicine is of a large heterogeneity, of low quality, biased, of low range, quality, timing and lack long term observation.

## PS2.311

### **Point-of-care ultrasound in general practice: a literature review**

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**Background and Aims:** Point-of-Care ultrasound (POC-US) is increasingly used in clinical medicine including in general practice. POC-US may improve the success in ultrasound guided procedures, it may lead to more correct diagnoses, and supplement or replace more advanced imaging. However, ultrasound is a user-dependent examination that requires appropriate training and quality assurance to avoid misinterpretations. Furthermore there is a risk of spurious findings or diagnosis of clinically unimportant conditions. To gain the benefits and avoid unnecessary harm by POC-US, a proper evaluation is needed. We set out to review the literature on this topic.

**Method:** In May 2014 we searched the databases PubMed and Embase using search terms related to ultrasonography and general practice. Additional references were added. In September 2015 an updated search was conducted.

Included were papers describing the training or use of POC-US in a general practice setting and scans performed by general practitioner. The search yielded 4372 hits; 35 papers were included.

The following aspects were evaluated: clinical areas for use, training, frequency of scans, time to scan, quality indicators, the patient perspective, and financial aspects.

**Results:** There was a large variation in the reported training and use of POC-US by general practitioners. Those using POC-US for a broad area of clinical application scanned 2-3 times a day and typically used  $\leq 10$  minutes to perform a scan. POC-US seemed to be in agreement with patient preferences and was probably cost-effective. However, a valid assessment of the quality of the performed scans was not possible and the included studies had a high risk of bias, as there were no randomised studies and the participating scanning general practitioners were not representative.

**Conclusion:** There is a need for further studies on the use of POC-US in general practice in order to secure appropriate implementation and use.