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5 – Telemedicine: the Next Evolution for Family Medicine

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Information (IT) has changed habits for most people since the convergence of mobile phones and the internet. More and more it is possible to do almost any interactive activity through this platform, including webconference. It is not different in Latin America, where the growth of mobile acquisition and use by the population is increasing every year, making these devices almost universal (1).

Similar to what happens to banking and commerce, it is expected that health will be also included in the services to be offered by IT apps and some complementary devices. In this sense, Telemedicine is a field with increasing perspective, becoming even more specialized for home use aiming patient-to-doctor relationship improvement.

It has been already noticed by the Medical Council in São Paulo (Conselho Regional de Medicina do Estado de São Paulo – CREMESP), Brazil, that digital systems are being applied to family medicine, i.e., it is now possible to make an appointment with a physician by the mobile phone, and to be attended at home (2).

This return to the "old days" doctor's visiting at the patient's house has many advantages to both doctors and patients, namely: ready access to a consultation with almost no waiting queue, different from the public health or insurance health systems; easiness and comfort for the patient, mainly old individuals and persons with reduced mobility or handicapped; reduced costs for doctors once they don't need to keep offices and staff to run them, including taxes; improvement of patient-doctor relationship, creating a better and closer interaction with the patients' families and environment.

Medical Councils are already promoting discussions to understand the new way of delivering medical services using current IT resources and future developments in the area. An ever present preoccupation is about keeping the ethical principles that rule the medical profession and to avoid any harm to the population. One may argue if there is anything new on ethical grounds when we change technology because the principles of physicians' behaviour still apply.

What must be discussed is how to prepare doctors for this new environment in order to take the best of current technology in favour of patients (3). Medical education is not changing accordingly with the new scenarios already in course. The old fashioned set of disciplines and the pedagogical strategy for the teaching-learning process have to be reviewed in order to get into the contemporary society. Patients are changing faster than doctors. There is an urgent need to reform the medical curriculum and make it appropriate for the current and future developments (4).

Telemedicine offers a large variety of diagnostic and treating tools for the family physician, giving more resolution power to Family Medicine. But it requires that doctors be trained to use properly these new and powerful tools. Telemedicine is beyond making appointments for doctor home visiting or talking by webconference. Telemedicine applied to Family Medicine is about keeping track of patient evolution using objective measurement tools of health status on a everyday basis.

Many portable devices are already available for application in the field, being quite useful during consultation at patient's home and monitoring events of interest for patient's follow up.

Portable equipment like ultrasound, electrocardiogram, dermatoscopes, otoscopes, ophtalmoscopes, oximeters and blood analysers linked to mobile phones or tablets, running electronic medical record software, represent a wide range of possible diagnostic tools which give on site support for family physicians, increasing their ability to propose specific treatment right on home consultation (5).

Besides doctors training on these new technologies, it is important to highlight the need to validate this approach through clinical studies in order to establish the predictive value of them. A lot of research is needed in this area.

It is also worth mentioning that costs are decreasing regarding digital portable equipment and it is expected that they will be affordable in the near future either for doctors and patients or for insurance and public health systems. Again, it is important to run cost-benefit analysis to estimate properly the actual gain derived from the application of these new devices and protocols in Family Medicine.

Telemedicine brings also another possibility for the environment of Family Medicine: the family physician-specialist relationship. Using IT, family doctors may consult easily with specialists and discuss their patients' cases or having feedback from consultations made by the specialist. This is also a benefit for the patient in a way doctors will have the needed information from colleagues quickly, saving time between consultations.

In a similar manner, Telemedicine allows family physicians to monitor patients at distance, making it possible to reduce the number of office or home consultations, either by webconference contact or through parameters like blood exams made at home (glucose is a current example). Treatment adherence can be also followed quite well using telemedical resources, enhancing the outcome for patients and giving a good parameter for changes needed on prescription by the doctors.

There are many opportunities to develop tools to help Family Medicine doctors deliver a better care for their patients. It is a whole new area for research and it includes behaviour change approached as well, so important to promote health education. It is also an interesting resource for patients under rehabilitation and those with chronic diseases, for whom constant and regular attention is so fundamental to achieve improvement from interventions proposed, assuring the correct implementation of treatment.

Although the digital technology is ready to be applied, it is very important to realize that devices and gadgets are not good enough by their own. A vigorous effort has to be made in terms of conception, research and validation for clinical application of telemedical potentialities. All that is not incompatible with the main principles that must guide any health professional work in terms of patient relationship: empathy, compassion, privacy, confidentiality, autonomy, beneficence, non-maleficence and justice.

Family Medicine in cooperation with Telemedicine will make ideas become real and produce useful instruments of assistance, using the best promises of digital and information technology for the comfort and improvement of our patients, in a cost-effective and humanized way.

Take Home Message

- Patients are ready to use their mobile devices for health purposes and they like it
- Doctors, even young ones, need to be trained in mobile technologies and portable devices either for diagnosis or treatment
- Clinical studies must be carried out to validate and estimate the cost-efficiency of each new telemedical application
- Family Medicine is a natural partner for Telemedicine in years to come, serving the best interest of patients

Original Abstract

<http://www.woncaeurope.org/content/ab257-%C2%A0-%C2%A0-%C2%A0-%C2%A0-telemedicine-family-physicians-useful-tool-future>

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