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18 – Teaching and Learning about Uncertainty in Family Medicine

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Uncertainty is a fact of life. We face many kinds of uncertainty in medicine: uncertainty about diagnosis, tests, treatments, and outcomes. There is financial, political, and organizational uncertainty in health services. All this is in addition to uncertainty in our daily lives.

Acceptance of uncertainty can help us develop coping strategies in the low-tech, high-touch world of Family Medicine. We can teach this to our students and trainees and hone this throughout our careers. Does uncertainty make us ask more questions, order more tests, prescribe more treatments, make more referrals, and do more surgery? Does it lead us to take time for personal reflection and discussion with colleagues, patients and their families? It is worth exploring this field and considering new directions for research.

Attitudes to uncertainty have shifted from attempts to master or diminish uncertainty to efforts to cope with it. Many accept and celebrate that things remain uncertain.

Uncertainty can be tolerated (1). By sharing responsibility with the patient we can make it easier on ourselves. Long-term relationships in family medicine and close follow-up allow us to use time as a diagnostic and therapeutic tool. This may reduce anxiety in both doctor and patient from the initial visit.

Uncertainty arises in primary care at the point of first contact with the medical care system (2). Patients appear with undifferentiated symptoms. A patient-centred approach, focusing on understanding the patient's reasons for consulting, may help. The doctor-patient relationship is an important tool for managing uncertainty.

Shared decision-making affects doctors' feelings of uncertainty and their willingness to disclose this to patients (3). Anxiety may be related to gender and be more prevalent among younger doctors. Willingness to learn about shared decision-making increases comfort through sharing uncertainty with patients. Training can help people to cope with the inevitable uncertainty of practice.

Consider a 30 year-old man who comes to the family doctor with low back pain of three days' duration, after heavy lifting at home. The neurological examination is normal. When doctors are asked how certain they are of their diagnosis and that their usual treatment would help the patient in this scenario, figures are high on both counts. When they subsequently learn that this patient had a history of successful treatment with radiotherapy and chemotherapy for Hodgkin's disease ten years earlier, assessments of certainty fall. Context is everything.

Uncertainty also plagues our patients. Patients with chronic obstructive lung disease face ambiguity, defined as a lack of understanding of symptoms, and complexity, defined as lack of understanding of treatment (4). Criticism from family members increases uncertainty while participation in patient support groups helps patients by

decreasing uncertainty. Research into patient self-help groups and their effects on uncertainty and self-efficacy might be useful.

Uncertainty may represent hope to patients. We need to recognize and validate uncertainty in our patients concerning breast self-examination (BSE) (5). BSE increases anxiety without decreasing morbidity or mortality from breast cancer.

Teachers also feel uncertain (6). They may ask: how much do my students know and understand, how effective is my teaching, how can I best use the limited time I have with students and what intellectual and social authority do I have to teach? Too much uncertainty in the classroom can lead to anarchy while too little uncertainty can lead to dogmatism.

Medical students appreciate that we can't know it all, we don't know everything, and we can't even agree on what we think we know. We help our students by listening to their concerns, helping them to ask questions, strengthening their healthy coping mechanisms, providing information they need, and simply by being there for them.

Are evidence-based medicine and computers sufficient to lift the smog of uncertainty (7)? Technology and data are not enough. We work in complex systems on the edge of chaos (8). Strategies for coping with uncertainty may include shared reflection of narratives in Balint groups.

Research may tell us how much uncertainty plays a role in our clinical encounters and describe the ways patients and doctors cope. We should assess the consequences of uncertainty, including costs. We need to understand the meaning of uncertainty in the unique context of family medicine. The results of research in this field will certainly be helpful to us.

Take Home Messages

- Uncertainty is a fact of life in Family Medicine.
- We can tolerate, accept, manage, and even celebrate uncertainty.
- A patient-centred approach and long-term relationships can help us cope with uncertainty.
- Patients may value uncertainty because it gives them hope.
- Research will help us understand how we cope with uncertainty and what this means to medical care.

Original Abstract

<http://www.woncaeurope.org/content/73-teaching-uncertainty>

Conflict of interest:

None reported

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Dedication

It is dedicated to the memory of Dr. Ivar Ostergaard, the original co-author of the workshop on uncertainty presented at the WONCA 2001 conference in Tampere.

References

1. Thomson GH. Tolerating uncertainty in family medicine. *J R Coll Gen Pract.* 1978 Jun;28(191):343-6.
2. Biehn J. Managing uncertainty in family practice. *Can Med Assoc J.* 1982 Apr 15;126(8):915-7.
3. Politi MC, Légaré F. Physicians' reactions to uncertainty in the context of shared decision making. *Patient Educ Couns.* 2010 Aug;80(2):155-7. doi: 10.1016/j.pec.2009.10.030. Epub 2009 Nov 30.
4. Hoth KF, Wamboldt FS, Ford DW, Sandhaus RA, Strange C, Bekelman DB, Holm KE. The Social Environment and Illness

