# Teaching Moment | Occasion d'enseignement

# Clinical uncertainty

# Helping our learners

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hat is the problem?

A resident comes to the preceptor to discuss a case. She is anxious, frustrated, and grasping for help. She has just been with a patient for a halfhour visit and feels she has no idea what the diagnosis is or what she can offer. The patient is also frustrated and increasingly demanding. As the discussion unfolds, it is apparent that the resident has begun to settle on a single working diagnosis, which has eliminated other possibilities too early, wants to order some tests that are likely unnecessary, and is beginning to speak about the patient in a tone that is condescending, alienating, and blaming. It seems likely that this encounter will end with considerable distress for both.

As teachers we come up against this scenario, or some version of it, all too often. It is difficult for the resident, but it is also difficult for most of us, as we have never developed a skill set or language to address this type of situation constructively. Our education is focused primarily on increasing our knowledge base, developing our skills in accessing the evidence, and refining our clinical reasoning, all in service of the false assumption that every clinical problem can be solved. This is not unique to primary care, but primary care is uniquely an environment of low disease probability and the undifferentiated presentation. The family physician is also in the position of remaining part of the patient's clinical course indefinitely, unlike the specialist who might shrug and direct the patient back to the family physician. Clinical uncertainty, as well as physician intolerance of it, has been linked to increased test ordering and overall use of health resources, 1,2 in spite of evidence that shows patients might not want somatic interventions.3 Anxiety with uncertainty has also been linked to lower workrelated satisfaction.4

### Learners' experience of uncertainty

Learners in medicine are in a phase of rapid expansion of their knowledge base, developing sound clinical reasoning skills and understanding how to "be with" patients. But something we do not discuss a great deal is the role of perceived competence. As learners, we tend to avoid situations that will reveal our

uncertainty, or when avoiding it is impossible, we might either disguise it or reposition it as someone else's problem.5 The learner expends a great deal of effort maintaining the "cloak of competence," a survival technique that would fit well into Maslow's hierarchy of needs, as it might be translated for the jungle of medical training. As Fox explained in 1957, our uncertainty might be the result of limitations or ambiguities in the medical knowledge base, or our own incomplete mastery of that knowledge base.6 Much of our anxiety in our early careers stems from not knowing the difference.

## Play of certainty and uncertainty in the clinical encounter

From the moment we begin to engage with a patient's predicament (eg, the nurse's note on the chart says, "Headache") until we consider this encounter complete, we pass through an emotional trajectory described as a clinical tension curve.7 Our tension and anxiety increase over the course of a clinical encounter not only in response to the revelation of data that are difficult to interpret or to synthesize. Other conditions such as the patient's emotions, time pressures, provider fatigue, or cognitive overload aggravate the situation. Ultimately, we hope for a resolution that allows us to leave the encounter with less tension. In the best situation, this resolution might be a confident diagnosis, a management plan, or a reframing of the situation that will maintain engagement with the patient and relieve anxiety. In other words, resolution of an encounter comes by achieving a level of certainty that the provider and patient can hold with confidence.

In the worst situation, we force a resolution by imposing or agreeing to an unnecessary test or prescription, blaming patients for our inability to explain what is going on, or taking shortcuts in clinical reasoning to arrive at an inadequate diagnosis. These responses, sometimes referred to as premature closure, are costly. They are the main cause of medical errors.8 They can leave patients feeling alienated or unheard. Our own anxieties, though briefly relieved, might return to haunt us that evening or when we see those patients' names on our lists another day. Premature closure is a flailing attempt to impose a higher level of certainty on a situation than that situation is ready for.

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## Helping learners get better results

A few simple strategies can improve the outcomes of these encounters for our patients and for our learners. (We believe they also improve satisfaction for the clinical teacher.) We have assembled these strategies from the literature and from our own experience as teachers. The research on effectiveness of teaching these approaches is thus far scant as far as we can determine.

*Tend to emotions.* If we begin by encouraging our learners to have self-awareness of emotional response, and a deeper understanding of the triggers for that response, we set the foundation for better problem solving. By normalizing and probing (eg, "What are you feeling?" "This feeling is common," and "What makes you feel this way?") we begin to shed light on the web of factors that lead up to this unpleasant sensation. We can teach residents to check in with themselves when they notice the temperature rising in the moment of clinical tension. And more important, in doing this, we begin to shift the focus away from blaming patients as bad historians, somatizers, drug seekers, or malingerers to a focus on learners' knowledge base, clinical reasoning, relationships with patients, and other pressures of the day that make these encounters a struggle.

Slow down for clinical reasoning. If diagnoses or treatment plans are not obvious, learners might march through such cases too quickly. They might seek a pattern that fits with something they readily recognize. As the experienced clinician, you might be able to see patterns that they do not, or you might see that it is time to abandon pattern recognition and go back to the hard work of step-by-step hypothesis testing. In other words, the case might benefit from taking more time, reviewing the data in depth, surfacing a few new ideas, and going down a new reasoning path.9 We need to emphasize for our learners the intellectual and relational rewards of seeking what is particular and unique about the individual in front of us, rather than seeking ways to slot him or her into a recognizable category.

Explore certainty within uncertainty. We can have uncertainty without being uncertain. We might not know the exact diagnosis or have a complete explanation for what is going on, but there are still pieces of the problem about which we are certain. We might be certain that patients are safe and that their physical or mental conditions do not put them in danger. We might be certain about some aspects of the pathophysiology (eg, "You clearly have muscle spasm and some inflammation in a joint, I'm just not sure why it's there"). And we might have certainty about what this is not. We need to teach our learners not to be

defeated by what they do not know, but to be skillful in identifying and describing what they do know and what they are confident about.

Join with the patient. Once learners have taken time for the above steps, they are well positioned to move in relation with rather than to control the patient or the encounter. This draws on the familiar territory of patient-centred care, in which we seek to understand the expectations, feelings, and ideas held by patients. Patient-centred care, empathy, and a partnering style have been well scrutinized in research, and have proven to have positive effects on satisfaction and on health outcomes. 10 We can remind learners to disclose their own uncertainty to the patient; to validate the patient's symptoms and the emotional response of both patient and learner; to think out loud with the patient about the analytical process thus far and for the future; and to commit to "stay" with the patient's journey over time as possibilities are explored or strategies to improve the situation are tried. In large part, this joining process involves reframing the problem together with the patient, so that it is less about arriving at a definitive diagnosis or treatment, and more about a partial explanation, a partial plan of action, and a commitment to be in it for the long haul.

Achieve resolution (for today). It will seldom be possible to accomplish all of this in the moment of a single encounter. Thankfully, in family medicine we have many opportunities to return to the drawing board with learners and patients. For any encounter, we can introduce learners to some part of this approach and encourage them to tend to symptom management and function. This will achieve some resolution in clinical tension, and avoid errors, alienation, and unnecessary investigation or treatment.

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#### Competing interests

None declared

#### References

- 1. Van der Weijden T, van Velsen M, Dinant GJ, van Hasselt CM, Grol R. Unexplained complaints in general practice: prevalence, patients' expectations, and professionals' test-ordering behavior. Med Decis Making 2003;23(3):226-31.
- 2. Allison JJ, Kiefe CI, Cook EF, Gerrity MS, Orav EJ, Centor R. The association of physician attitudes about uncertainty and risk taking with resource use in a Medicare HMO. Med Decis Making 1998;18(3):320-9.
- 3. Salmon P, Ring A, Dowrick CF, Humphris GM. What do general practice patients want when they present medically unexplained symptoms, and why do their doctors feel pressurized? J Psychosom Res 2005;59(4):255-60.
- 4. Bovier PA, Perneger TV. Stress from uncertainty from graduation to retirement-a population-based study of Swiss physicians. J Gen Intern Med 2007;22(5):632-8. Epub 2007 Mar 9.
- 5. Lingard L, Garwood K, Szauter K, Stern D. The rhetoric of rationalization: how students grapple with professional dilemmas. Acad Med 2001;76(Suppl 10):S45-7.

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- 6. Fox R. Training for uncertainty. In: Merton RK, Reader G, Kendall PL, editors. The student physician. Cambridge, MA: Harvard University Press; 1957.
- 7. Borrell-Carrió F, Epstein RM. Preventing errors in clinical practice: a call for self-awareness. Ann Fam Med 2004;2(4):310-6.
- 8. Graber ML, Franklin N, Gordon R. Diagnostic error in internal medicine. Arch Intern Med 2005:165(13):1493-9.
- 9. Moulton CE, Regehr G, Mylopoulos M, MacRae HM. Slowing down when you should: a new model of expert judgment. Acad Med 2007;82(Suppl 10):S109-16
- 10. Seaburn DB, Morse D, McDaniel SH, Beckman H, Silberman J, Epstein R. Physician responses to ambiguous symptoms. J Gen Intern Med 2005;20(6):525-30.

#### **TEACHING TIPS**

- Clinical uncertainty is common in the family practice setting, and learning to recognize and manage it is an important skill for learners to develop.
- Failure of learners to recognize and deal with clinical uncertainty can lead to unsatisfactory and even harmful outcomes for both patients and learners.
- Teachers can apply simple strategies to help learners recognize and effectively deal with clinical uncertainty, including tending to emotions, slowing down clinical reasoning, exploring certainty within uncertainty, joining with the patient, and achieving resolution (at least for today).

#### CONSEILS POUR L'ENSEIGNEMENT

- L'incertitude clinique est courante en pratique familiale et il est important que les étudiants développent la capacité de la reconnaître et de la gérer.
- À défaut de reconnaître l'incertitude clinique et d'y faire face, les étudiants peuvent finir par ressentir de l'insatisfaction, ce qui peut entraîner des conséquences nuisibles pour les patients et pour eux-mêmes.
- Les enseignants peuvent utiliser de simples stratégies pour aider les étudiants à reconnaître l'incertitude clinique et à savoir y faire face, notamment en se préoccupant des émotions, en mettant un frein au raisonnement clinique, en explorant la certitude au sein de l'incertitude, en rejoignant le patient et en en arrivant à une entente (au moins pour aujourd'hui).

Teaching Moment is a quarterly series in Canadian Family Physician, coordinated by the Section of Teachers of the College of Family Physicians of Canada. The focus is on practical topics for all teachers in family medicine, with an emphasis on evidence and best practice. Please send any ideas, requests, or submissions to Dr Allyn Walsh, Teaching Moment Coordinator, at walsha@mcmaster.ca.