Intuition in medical practice: A reflection on Donald Schön’s reflective practitioner

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COMMENTARY

Intuition in medical practice: A reflection on Donald Schon’s reflective practitioner

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Abstract
In a recent commentary, Dr. Abhishek Biswas asks the question whether physicians should rely on their “gut feeling” when making clinical decisions. Biswas describes a situation where his intuition resulted in an immediate course of action that prompted urgent medical attention for a patient who had “routine” pain. Inspired by the author’s account, I would like to further Biswas’ discussion and examine its importance using the educational theories of Donald Schon and his concept of the reflective practitioner. Schon argues that technical knowledge alone is not sufficient to solve the complex problems that professionals face on a daily basis and intuition, developed through a reflective practice, is crucial for any professional’s practice, especially in a time of greater uncertainty in the workplace.

Introduction
In a recent commentary, Dr Abhishek Biswas, describes a professional experience where a “gut feeling” prompted him to reconsider a routine request for pain medication. According to the nurse, the patient’s symptoms appeared unremarkable as his pain was only a 5/10 on the pain scale, but the nurse also mentioned that the patient had a high tolerance for pain and this was the first time he had asked for medication. According to the author, there was something about the situation that was “not quite right” and based on a “gut feeling”, he reassessed the patient’s pain, and found a cause that needed immediate attention. Biswas reflected afterwards on what prompted him to reassess the situation: was it the nurse’s description of the pain, the patient’s urgent need for pain medication, or the patient’s advanced age? Biswas could not pinpoint what it was that alarmed him; it initiated further reflection on the value of intuition in medical practice. He questions whether, “…clinicians [should] rely on gut feelings in [their] clinical practice” (p. 309). As medical professionals, can we or should we even rely on our intuition to make clinical decisions? Inspired by the author’s account, I would like to further Biswas’ discussion and examine its importance using the educational theories of Donald Schon and his concept of the reflective practitioner.

Discussion
Donald Schon was an educational theorist who stated there was a crisis in the professions due to professionals lacking the ability to solve problems that are indeterminate or “not in the book.” He claimed they are only able to solve problems that are straightforward, using technical expertise, or what he referred to as “technical rationality.” He explains this phenomenon in this now famous metaphor:

In the varied topography of professional practice, there is a high, hard ground overlooking a swamp. On the high ground, manageable problems lend themselves to solution through the application of research-based theory and technique. In the swampy lowland, messy, confusing problems defy technical solution… (Schon 1987, p. 3).

In his two books, The Reflective Practitioner (1983) and Educating the Reflective Practitioner (1987), Schon challenges the notion that professional knowledge or technical rationality is the only knowledge that professionals can draw upon to solve problems in professional practice. Schon (1987) believes that under the current epistemology of practice, which is based on technical rationality, “Practitioners are [reduced to] instrumental problem solvers who select technical means best suited to particular purposes” (p. 3). Professionals can solve routine problems by applying scientific theories, but he argues this approach is limited as most professional problems are not routine at all; instead, they are “messy, indeterminate situations” (p. 4).

The Biswas account clearly demonstrates that professional expertise is more than just scientific knowledge or technical rationality. Intuition plays a crucial role in professional decision making as a “gut instinct” allows the practitioner to look beyond the routine and to be open to situations that don’t feel “quite right.” On the surface, technical knowledge, such as evidence based medicine (EBM) and intuition seem to be polar opposites, but according to Biswas, they exist in a “symbiotic
immediately taken to surgery. Schön (1983) would define this his actions: he reassessed the situation, performed a physical and acted on his instinct. His knowledge became embodied in Biswas may not have been able to describe his feeling of actions as it is difficult to put “gut feelings” into exact words. problems of professional practice.

both ways of knowing can be used to solve the indeterminate rigor and relevance debate creates a dilemma for the professional. On the one hand, professions value technical knowledge more as practical knowledge is considered inferior or “a puzzling anomaly” because it is not easily reduced into simple scientific categories (Schön 1983, p. 33). On the other hand, technical rationality, despite the claim of superiority, also has its limits in that it is only beneficial for problems that are well defined. In fact, the broader knowledge that professionals need in order to solve indeterminate problems is overshadowed by technical rationality. In Schön’s own words:

If the model of Technical Rationality is incomplete, in that it fails to account for practical competence in “divergent” situations, so much the worse for the model. Let us search, instead, for an epistemology of practice implicit in the artistic, intuitive processes which some practitioners do bring to situations of uncertainty, instability, uniqueness, and value conflict (Schön 1983, p. 49).

Schön asks that we reconsider the relationship between rigor and relevance and not sideline the artistry of practice in favor of technical rationality. He suggests that we instead find a common ground or a new epistemology of practice where both ways of knowing can be used to solve the indeterminate problems of professional practice.

The “artistry of practice” is better illustrated through our actions as it is difficult to put “gut feelings” into exact words. Biswas may not have been able to describe his feeling of uncertainty, but he did have a sense that something was wrong and acted on his instinct. His knowledge became embodied in his actions: he reassessed the situation, performed a physical exam, ordered an abdominal X-ray, and the patient was immediately taken to surgery. Schön (1983) would define this phenomenon of performing skilled actions but not being able to put the rationale into words as “knowing-in-action” where the practitioner may show skills, make judgments or use scientific theories such as evidence based medicine, but not be able to describe the criteria, rules or procedures for making the decision. Even though the practitioner uses scientific theories, he or she still relies on “tacit recognition, judgments, and skilled performances” (p. 50) to solve professional problems.

How can a new graduate hone intuitive knowledge? Biswas (2015) claims the medical educator’s honest feedback becomes the key to assist the new practitioner develop intuition; the intern or resident may not yet have the necessary clinical experience required to trust that intuition. However, developing a more reflective practice is also an important aspect of professional training as reflection is crucial to learning the “art” of solving problems that are unique or uncertain, but it can also “serve as a corrective to over-learning” (Schön 1983, p. 61). Schön warns there is a danger when professional practice becomes too routine as the practitioner’s knowing-in-practice becomes too “tacit and spontaneous [and] the practitioner may miss important opportunities to think about what he [or she] is doing” (Schön 1983, p. 61). As a result, professional burnout or errors may occur as the practitioners become blind to situations that are not reduced to simple categories that fit their narrow understanding of professional practice. To correct this, Schön recommends a more reflective practice where the professional stops to think about the tacit understandings that have evolved due to repetition, allowing for a new openness to solving situations that are unique or uncertain. According to Schön (1983), professionals reflect on their knowing-in-practice either by reflecting in the midst of the action which he describes as “reflection-in-action” or “reflection-on-action” which is reflection after the action has taken place. In this process, the professional reflects on knowledge used to make a particular judgment, his or her impression of a situation that prompted a way of acting, or on a particular way they framed a problem; through reflection, either in the moment or after the moment, the practitioner develops the “artistry” of practice (Schön 1983).

**Conclusion**

Kinsella (2010) comments on the complex times facing health care professionals as they experience an increasingly difficult case load, patients with complex problems are leaving the hospitals too early, technology is creating new types of ethical problems, health care is being reorganized to accommodate economic interests over patient interests, and professionals face higher levels of dissatisfaction and burn-out. As professionals then, we are practicing in Schön’s “swamplands”, but because we are taught with a focus on technical knowledge, we lack the ability to solve the complex problems that we face every day. Kinsella (2010) refers to this situation as a “theory/practice” gap, where we have the theories and research at our disposal, but we are missing how to utilize this knowledge to solve practice situations. She argues that a new epistemology of practice, based on Schön’s theories of reflection-in-action, may assist health care professionals to navigate uncertain situations.

In conclusion, we may want to reconsider the question of whether we should we rely on gut feelings in our professional practice, and ask different questions such as how we can rely more on our intuition to solve challenging problems, how we can utilize intuition along with our technical knowledge, and how we can foster intuition in our professional education. Schön provided the answer over 30 years ago; through reflection we can incorporate both our technical expertise and intuitive knowledge to become more skillful practitioners in a time of greater uncertainty in the workplace.
Notes on contributor

MR TIM MICKLEBOROUGH, BSp, RPh, MEd, PhD (c), is a pharmacist presently working on his PhD at the Ontario Institute for Studies in Education at the University of Toronto. He is presently researching the challenges internationally educated health professionals encounter when integrating into the professions.

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References

Reflective practice. Thinking about 3 activities on your list. Reflection: A Definition. Reflection: the claims. Reflection: Informal & formal. Models of Reflection (2) Schon’s (1983) Reflection in Action. Models of Reflection (3) Kolb’s (1984) Learning Cycle. Slide Number 9. Reflection in action concerns thinking about something whilst engaged in doing it, having a feeling about something & practicing according to that feeling. This model celebrates the intuitive & artistic approaches that can be brought to uncertain situations. Schon, D. (1983) The Reflective Practitioner. London: Temple Smith. Models of Reflection (3) Kolb’s (1984) Learning Cycle. (Reflective practice student) Reflection is a state of mind, an ongoing constituent of practice, not a technique, or curriculum element. Reflective Practice can enable practitioners to learn from experience about themselves, their work, and the way they relate to home and work, significant others and wider society and culture. What you can change in your context; how to work with what you cannot; how to value the perspective of others, however different they are to you; how others perceive you, and their feelings and thoughts about events why you become stressed, and its impact on life and practice how to counteract seemingly given social, cultural and political structures. Donald A. Schön: The reflective practitioner. In real-world practice, problems do not present themselves to the practitioner as givens. They must be constructed from the materials of problem situations which are puzzling, troubling, and uncertain. The idea of reflection on seeing-as suggests a direction of inquiry into processes which tend otherwise to be mystified and dismissed with the terms intuition or creativity, and it suggests how these processes might be placed within the framework of reflective conversation with the situation which I have proposed as a partial account of the arts of engineering design and scientific investigation.