Are medical schools keeping up with the times?

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In recent years, medical schools have been criticized for failing to respond to new medical issues, like the opioid crisis and medical marijuana, as well as social developments, like transgender issues and social determinants of health.

Medical educators argue, however, that it's unrealistic to expect the medical education system to "change on a dime," said Dr. Geneviève Moineau, president and CEO of the Association of Faculties of Medicine of Canada (AFMC).

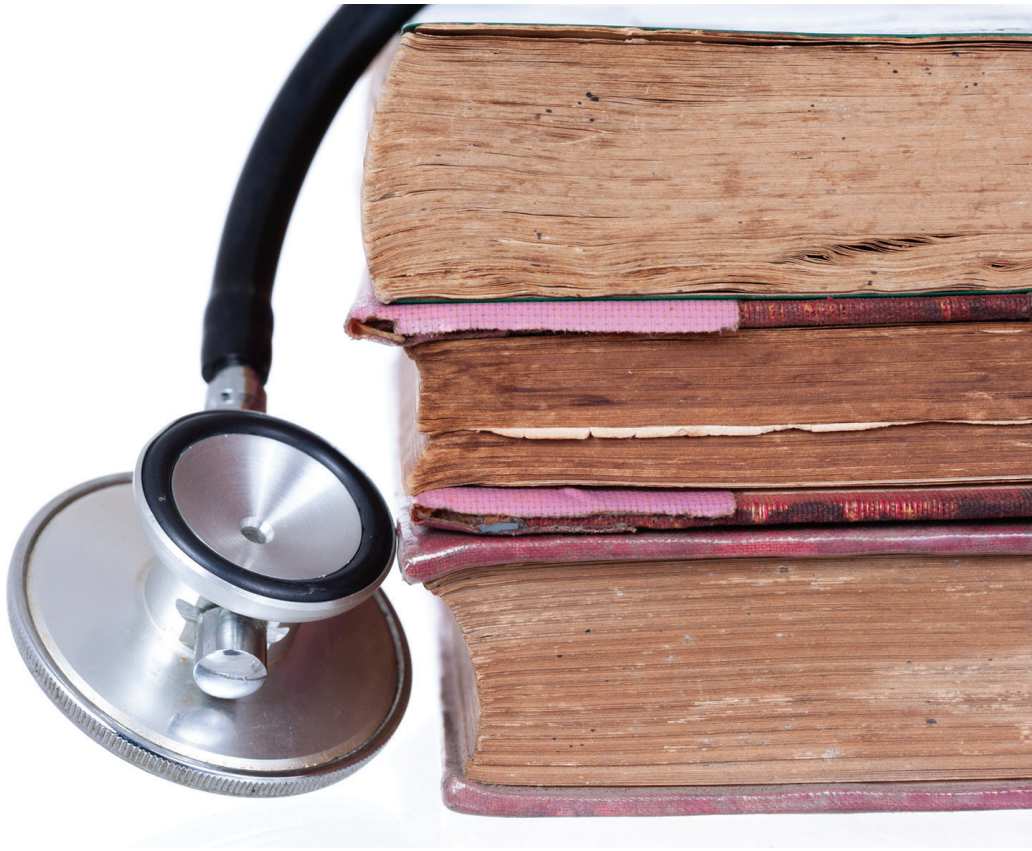
"If you're going to add something new, something has to be taken out," she said. And when educators want to overhaul a course, they must get approval from the faculty, but also from the university senate. "There's a little bit of bureaucracy, as there is for most things."

Also, medical educators want to ensure the evidence supporting a new subject is sound before bringing it into the classroom, according to Dr. Teresa Chan, assistant professor of emergency medicine at McMaster University and communications director of the Canadian Association of Medical Educators. "Some of the newer advances socially or pharmaceutically, they're still new, and we don't always have a lot of new evidence or really great guidelines to translate that."

Chan said that it takes about five years for a new course to become available from the point of conception, and that's not long, considering that knowledge translation of research to physicians in general can take more than three times longer. In many cases, Chan added, it doesn't make sense to teach the latest pharmaceutical developments or street-drug trends to medical students "because they're still busy learning the basics."

Critics say important emerging topics are being missed, however. Pain education has improved in recent years, but is still considered subpar. A recent review of the pain curricula at three Canadian medical schools found it focused too much on opioids and lacked comprehensive discussion of alternatives and the psychosocial aspects of pain management.

Medical marijuana is another blind spot. In a US survey, 85% of residents and fellows reported receiving no education on medical marijuana despite it being



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Should medical school curricula continue to focus on the basics or make space for emerging medical issues?

legal in half the country. Issues relating to health-provider discrimination regarding sexual orientation have also been traced back to a curriculum gap. For example, a 2014 assessment found that emergency medicine residents spent an average of 45 minutes per year on LGBT health instruction.

But those who work in medical education note that curricula are continually updated. In fact, accreditation standards require medical schools to report back on how they're adapting. Dr. Nancy Fowler, executive director of Academic Family Medicine for the College of Family Physicians of Canada, said her organization polled residency programs last year regarding how they were responding to legislation on medical assistance in dying. "We found they had already started the process of introducing educational sessions, hosting faculty development sessions, and pulling together teaching resources around those topics."

Dr. Anthony Sanfilippo, associate dean of undergraduate medical education at Queen's University, pointed out that the third in-class component of clerkship is always left undesignated, to address topics that arose after students started medical school or needed to be expanded. "In the recent past, sexual abuse of patients, domestic violence, Indigenous health — these are all topics that become more relevant," he said.

The medical curriculum at Queen's undergoes a "major overhaul" about every 10 years, and in the meantime, directors are able to make adjustments to courses. "You have a structure, but you can adjust what's in the structure annually," said Sanfilippo.

Some things that could keep medical education more up to date, however, are shared resources and better communication between medical schools, noted Moineau. Last year, AFMC launched a repository of best practices for pain management education based on a review of existing curricula at medical schools and residencies. The association also applied to the federal government to create a national curriculum around opioids.

Educators could also consider whether student-run education initiatives can be incorporated into the curriculum, said Chan. She pointed to an "ECG club" run by students at McMaster to bolster their knowledge in reading electrocardiograms, and social justice initiatives that have popped up at medical schools across the country. "Medical students are pretty smart," she said. "If there's a curriculum gap, they tend to fill it."

According to Fowler, continuing professional development may be better suited than medical curricula to equip doctors to address evolving medical needs. But the problem is that doctors generally have to choose between short, weekend courses or long, intensive training, like year-long traineeships and fellowships. "We really need to develop a middle ground," she said.

Fowler thinks more course offerings of a few weeks to a few months, as well as more mentorship opportunities and online courses, would help physicians stay relevant. One idea is the "horizontal elective," during which a doctor might spend half a day each week with a physician in the region to learn a new skill.

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