Complementary and alternative medicine in undergraduate medical education

Associate deans' perspectives

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omplementary and alternative medicine (CAM) encompasses a range of therapeutic philosophies and procedures not commonly used, accepted, studied, or made available in mainstream medicine. Public demand for CAM, however, has spurred some physicians to refer to CAM practitioners; to provide these services within their clinical practice; and to become educated regarding the safety, efficacy, and assumptions of CAM approaches. Research suggests that knowledge about CAM among medical students,1 practising physicians,^{2,3} and medical educators⁴ is inadequate and that all three groups want more exposure to CAM in undergraduate and continuing education.

In the past 5 years, CAM curriculums have been developed within medical schools in the United States⁵ and the United Kingdom.⁶ While a 1998 survey reported that 81% (13/16) of Canadian medical schools were including CAM in their curriculums,7

evidence suggests that most of these schools are not providing CAM content in a formalized manner, and few have faculty-driven CAM initiatives. In order to develop an educational platform for teaching CAM in Canadian medical schools, more information is needed on what is appropriate CAM content for undergraduate medical students and what are the best teaching methods for CAM material.

Associate deans' perspectives

We conducted interviews with associate deans of undergraduate medical education; 14 of the 17 we talked to shared their opinions regarding the appropriate role of CAM in undergraduate medical education.

Although they seemed to agree on the knowledge, skills, and attitudes that graduating medical students should have regarding CAM, their perspectives varied widely on several other issues. Some indicated that their schools are most definitely looking at increasing CAM content in the curriculum but that they are faced with logistical problems, such as what to teach, who should teach, and where CAM should be added to the curriculum. Other deans did not see the need to include CAM or did not see the need for any curriculum change because they were satisfied with the amount of CAM content.

One dean stated: "I'm really pleased that there is a movement now to help do this, because I have been thinking about this for almost 4 years in our school." But another dean said "[The introduction of CAM into the curriculum] is not a priority for us at this moment. There's no specific demand from students except for pharmacology, but we are open to expand if it's necessary."

While most deans agreed that specific CAM modalities should be addressed in undergraduate medical education, they believed that the emphasis should be on awareness rather than on how to perform or practise these modalities. Also, most thought CAM modality selection should be dictated by what most patients use, whether the CAM profession is regulated, and perhaps most importantly, what can logistically be introduced and integrated into the curriculum.

In reality, an individual school's teaching philosophy will dictate how and to what extent CAM is included in the curriculum. Some deans thought the best approach was to introduce CAM material into existing courses: based on body systems, chiropractic could be discussed in the musculoskeletal system, acupuncture in the nervous system, and yoga and meditation in the mind or in brain and behaviour. Others mentioned having a mixed model that would begin with a stand-alone, lecturestyle introduction to CAM followed by integration of material throughout the curriculum. In some schools, medical students are leading the faculty with regard to organizing opportunities to learn about CAM, through workshops, panel discussions, and forums.

Two main concerns were echoed over the course of the interviews and in the workshop: what is the rationale for including CAM rather than other topics and how can schools introduce CAM into undergraduate medical education without seeming to endorse it? Deans whose schools have introduced CAM attested to the political ramifications of teaching CAM in medical schools.

One thing I had not expected was that the use of a free-standing course tends to give credibility to the area, and an article [about a first-year course] appeared in the local press. The concern was that the article implied that ... the College of Medicine ... approved of the CAM therapies being discussed.

Associate deans' recommendations

Five recommendations to help advance curriculum reform were established: 1) feasible and realistic educational objectives based on knowledge, skills, and attitudes should be further developed; 2) financial, administrative, and other support to implement CAM in undergraduate medical education should be explored; 3) Web-based resources that focus on CAM knowledge, skills, and attitudes should be created; 4) leaders in CAM teaching within each medical school should be identified; and 5) faculty development in CAM should be encouraged and actively supported.

The interviews and workshop appear to have lent credibility to the discussion of CAM in undergraduate medical education. One school has funded an initiative to develop a course on CAM. Other schools have identified faculty members who could be leaders in this field. Collaboration between representatives of English- and French-speaking schools is increasing.

Next steps

Our team is currently planning a workshop with faculty members and students of Canadian medical schools who are strongly interested in a CAM curriculum.* The workshop is intended to build a national vision for CAM in undergraduate medical education, to develop consensus around specific

^{*}This workshop took place in 2003. Workshop reports can be obtained from the corresponding author.

teaching objectives and core content, and to identify strategies for introducing CAM into undergraduate curriculums. This involves adopting an appropriate, realistic, and politically feasible approach that is likely to differ for each school. A great challenge will be to achieve the benefits of a national vision while respecting the need for local autonomy and flexibility.

Given the diversity of opinions about appropriate curriculum content and teaching methods, and the diversity of culture, environment, and language among the different schools, developing a national vision will also require strong commitment from the various partners. Preparation for the workshop has involved ongoing collection and analysis of CAM-related teaching materials currently used by Canadian medical schools, which will assist in developing CAM curriculums.

Because the evolution of CAM within the health care system is likely to continue, reinforcing CAMrelated curriculum content in graduate and postgraduate years should also be considered. Sustained exposure to CAM over an extended period will help ensure that CAM finds a permanent place in the minds of practising physicians and provides the basis for truly integrated health care in the future.

Development of a CAM curriculum is a challenge because there is often limited evidence for the efficacy and safety of CAM, and practising physicians often are unaware of the evidence that exists. In addition, we have few policies guiding physicians' practice of CAM and referral to CAM providers. We believe that these challenges are substantial but not insurmountable, and that they must be addressed to ensure that future physicians are prepared to practise medicine in a health care environment in which CAM therapies are widely used.

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