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CAM Curriculum Activities to Enhance Professionalism Training in Medical Schools

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Abstract

Enhancing the professionalism of graduates is a major objective of most health care education institutions today. Educating conventional health care providers about complementary and alternative medicine (CAM) may directly and indirectly improve trainee professionalism by expanding trainees' knowledge and appreciation of diverse health care beliefs and practices, improving physician-patient communication, enhancing self-care, and increasing sense of competence and job satisfaction. A survey based on professional competencies proposed by the Consortium of Academic Health Centers for Integrative Medicine was administered to the grantees of the National Institutes of Health, National Center for Complementary and Alternative Medicine R-25 CAM education project initiative. The survey's aim was to identify project activities that taught professionalism skills. All projects reported curricular features that enhanced trainee professionalism, with substantial percentages of project effort directed toward professionalism-related activities.

Keywords

medical education; professionalism; CAM training; curriculum; self-care

> Let us emancipate the student, and give him time and opportunity for the cultivation of his mind, so that in his pupilage he shall not be a puppet in the hands of others, but rather a self-relying and reflecting being.
>
> —Sir William Osler

Background

Professionalism is at the forefront of dialogue in the medical community, touted as increasingly important in a health care system that has become "more complex and less consumer friendly" (Swick, Szenas, Danoff, & Whitcomb, 1999), threatening the values of those navigating it (American Board of Internal Medicine Foundation, 2002). Professionalism is a comprehensive concept pertaining to knowledge, skills, and attitudes that reflect the values

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and obligations of a group, and it consists of a complex repertoire of thoughts, emotions, and behavioral responses applied to a wide range of situations. Historically, medical educators have trained future physicians in professionalism by relying on implicit methods such as socialization and respected role models (Cruess & Cruess, 2006), yet medicine has had difficulty in resolving the challenge of how to train physicians for an increasingly diverse culture where the values and preferences modeled by medical authority may differ markedly from the patients they serve. Many believe that a new type of professionalism training is required for the development of today's competent, effective health care providers (Braddock, Eckstrom, & Haidet, 2004; Wynd, 2003); rising public expectations and demands for improved patient care and outcomes indicate the need to formally educate future clinicians in this complex concept (Institute of Medicine, 2001; Ludmerer, 1999). Medical educators are encouraged by the American Association of Medical Colleges (AAMC) to cultivate learning environments that promote a culture of professionalism (Inui, 2003), and the Accreditation Council on Graduate Medical Education adopted professionalism as a required competency in 2002.

In response, authorities in the field have attempted to define professionalism in medicine, providing a list of explicit characteristics or behaviors believed demonstrative. For example, the Medical School Objectives Project (MSOP) from the AAMC lists the following characteristics of professionalism: altruism, knowledge, skillfulness, and dutifulness (AAMC, 1998). These characteristics were promulgated to offer medical schools a framework for the creation of their own specific educational objectives and methods. The MSOP states that the goal of all medical education is to prepare practitioners who can "meet their individual and collective responsibilities to society" (AAMC, 1998, p. 3), and Cohen (2004) avers that we must pay mindful attention to these responsibilities. Though ambitious, these statements highlight the notion that physician learners should be trained to be cognizant of a broad range of treatment modalities.

Beginning in 2000, the National Institutes of Health, National Center for Complementary and Alternative Medicine (NCCAM) funded 15 R-25 grants to health professions training organizations under its Complementary and Alternative Medicine (CAM) education project initiative, with the goal of supporting the incorporation of CAM information into health professions curricula. This article explores ways in which the CAM education projects may have contributed, perhaps uniquely, to learner professionalism. In particular, investigators were interested in whether CAM education enhanced patient-centered care, often described as characteristic of truly professional care (Cruess, 2006; Cruess & Cruess, 1997; Fairhurst & May, 2006; Switankowsky, 2004). For example, patient-centered care obligates the practitioner to establish a common ground with his or her patient so that treatment is in accord with the patient's beliefs and preferences (Stewart et al., 2003). Reaching a common ground necessitates a clear understanding of the patient's perspective. CAM education may enhance a physician's insight as trainees learn about alternative systems of care, traditional and indigenous beliefs, and consumers' sometimes unconventional health-related beliefs and practices.

The purpose of the NCCAM education projects, as stated in program announcement PAR-00-027, was to improve knowledge about CAM practices in the allopathic and osteopathic medical communities and to help support the incorporation and integration of CAM information into health professions curricula. Although improved professionalism was not an explicit goal of the initiative, enhanced professionalism was a potential outcome of programs focused on teaching learners about CAM. This study sought to assess the value that the various projects placed on professionalism objectives among their curricular activities and to gauge perceived success in developing professionalism-related competencies.

Methods

A three-page, self-administered survey was developed to identify project activities that taught professionalism skills. The survey also examined activities that taught self-awareness, an acknowledged requisite for professional behavior; those results are reported elsewhere (Elder et al., 2007). The study received University of Kentucky Institutional Review Board approval with exempt status.

In October 2006, surveys were e-mailed to the principal investigators or their designee at 14 of the 15 NCCAM-funded CAM education projects. (A CAM education project focusing on residency training and completed 3 years prior was omitted.) One CAM education project grantee, the American Medical Student Association, forwarded the survey to their six subawardee schools, known collectively as EDCAM projects. In total, 19 projects received the survey. Nonresponders were contacted up to two additional times, receiving an e-mail reminder in 1 week, with a second reminder sent 2 weeks later.

The aims of the study were to investigate training in values and attitudes that might be uniquely obtained through CAM education. In addition, we wanted to differentiate this training from training in CAM knowledge and skills as well as from training in medical knowledge and skills, goals typical of conventional medical school training. Therefore, professionalism was defined as the knowledge, skills, and attitudes that reflect the values and obligations of a group that exist in addition to medical or CAM-related knowledge and skills.

To determine perceived curricular impact on behaviors related to professionalism, survey items were adapted from the Competencies in Integrative Medicine, proposed by the Consortium of Academic Health Centers for Integrative Medicine (CAHCIM; Kligler et al., 2004). Based on professional characteristics described by the AAMC's MSOP and related to the practice of integrative medicine, CAHCIM called for achievement of competencies that reflect an "expanded way of viewing the physician, the patient, and their work together … to reaffirm and reemphasize the humanistic values at the core of medicine" (Kligler et al., 2004, p. 523). CAHCIM expanded the usual knowledge, skills, and attitudes format used in education to include a list of necessary values. Selecting from that list and with modest modifications to make wording consistent among the items, the investigators created a questionnaire to determine perceived curricular impact on professionalism (see Table 1).

Results

All 6 EDCAM pilot projects responded; 10 of the 13 health-professions training schools responded. One nonresponder, a nursing school, replied with a note that they did not perceive the questions as applicable to their project. Descriptive statistics were used to report findings, which are summarized below.

Curricular Efforts Directed Toward Professionalism Versus CAM Knowledge Versus CAM Skills

Project directors were asked to estimate the percentage of curricular effort applied toward (a) professionalism (stated as improving professionalism of trainees), (b) CAM knowledge (stated as increasing knowledge of "whys and hows" of CAM), and (c) CAM skills (stated as increasing skills in CAM modalities and techniques). Estimates of percentage of curricular efforts applied toward professionalism ranged from 5% to 60% (median = 30%). Estimates of curricular efforts applied toward CAM knowledge ranged from 20% to 80% (median = 50%). Estimates of curricular effort applied toward CAM skills ranged from 5% to 60% (median = 10%).

Impact on Professional Competencies

Fifteen project directors rated their project's impact on professional competencies. Table 1 presents modal and mean rating scores on a Likert-type scale, where 1 = *very low* and 5 = *very high*.

Summary of Mind-Body, Self-Care, and Spirituality Activities Reported to Teach Professionalism

Respondents provided feedback about student activities and the perceived link between the activities and the development of professionalism. The programs reported educational activities that ranged from didactics to experiences designed to provide exposure and/or skill development in CAM modalities. Mind-body and self-care techniques included various forms of meditation, Tai Chi, yoga, relaxation and biofeedback, reflection groups, and writing exercises. Mind-body techniques were often seen as an important methodology for training in self-care.

Every project provided some type of forum for focus on spirituality in the context of health and illness. Several offered content about end-of-life issues, palliative care, and spiritual histories.

Discussion

Although there was a wide range in degree of curricular effort related to professionalism, all CAM education projects engaged not only in teaching CAM knowledge but also in directly addressing student professionalism. The projects reported being able to favorably influence the professional behaviors this study had adapted from the CACHIM competencies. Importantly, Item F from Table 1, "recognition that personal, cultural, ethnic, and spiritual beliefs may affect patient treatment decisions," received a modal rating of 4.5. This is particularly promising, because this item most closely matches with the type of self-knowledge (i.e., recognition of personal biases) that is necessary for patient-centered care.

The CAM education projects provided exposure to a wide variety of mind-body techniques. Several saw spirituality experiences as an opportunity to enrich students' understanding of healing. Most projects saw mind-body, self-care, or spirituality experiences as a means to foster self-awareness. Several projects viewed mind-body training, through direct experience with the modality, as an opportunity to expand the learner's view of what constitutes health. The projects also saw mind-body techniques as a means to foster self-care, with the techniques taught in mind-body exercises directly affecting health and well-being. Personal application of mind-body techniques may mitigate the significant stresses of service delivery, with healthier and less stressed providers more likely to deliver professional care (Gordon, 1996; National Center for Complementary and Alternative Medicine, 2005).

With respect to the AAMC's MSOP, although the concepts of skillfulness, knowledge, and altruism are relevant to addressing CAM with patients, we argue that dutifulness seems most relevant to professionalism as examined in this study. Dutifulness pertains to the obligations that practitioners have to their patients and the population at large. These obligations include commitment to the best possible care for the patient through collaboration, cultural sensitivity, and evidence-based practice. In the past, there has been strong opinion that physicians should function using a medico-centric approach of care. Conversely, the patient-centered approach suggests that the patient's perspective is valid, and decision making between provider and patient becomes a shared process. A recent Canadian study of 500 general practitioners, students, and medical school faculty identified sense of duty as an important factor in intention to discuss CAM with patients (Godin, Beaulieu, Touchette, Lambert, & Dodin, 2007). We

recommend that, in the future, educators specifically include changes in perceived duty as an outcome measure in evaluating CAM training.

This study has several important limitations. First, it represents only the reports of the participating CAM education projects and does not describe activities at the many other schools offering CAM-related training. Because data on specific activities are not available, it is difficult to determine what impact program efforts actually had on long- and short-term professionalism outcomes. Also, none of the CAM education projects employed specific measures of professionalism. Program efforts and outcomes cannot be directly compared with other institutions' attempts to teach professionalism. However, this study can serve as a beginning for future work in this area, particularly because it used the CAHIM competencies as descriptors of professional behavior.

Conclusion

The NCCAM-funded educators believed that they were able to influence trainees' professionalism and retrospectively allocated significant proportions of their projects' total efforts toward improving professionalism. They did so through activities emphasizing patient-centered healing, self-care, reduced bias, and deep understanding of CAM. These efforts resulted in perceived changes in philosophy of care, valuing of interdisciplinary care, commitment to personal growth and self-care, recognition that multiple factors influence health, and acknowledgment that personal, cultural, ethnic, and spiritual beliefs may affect patient treatment decisions. It may not be overstating to say that professionalism is fundamental to the CAM curriculum, at least from the perspective of the majority of CAM education project leaders.

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References

American Association of Medical Colleges. Learning objectives for medical student education: Report 1. Washington, DC: Author; 1998.

American Board of Internal Medicine Foundation (ABIM). Project of the ABIM the ACP-ASIM Foundation, the European Federation of Internal Medicine. Medical professionalism in the new millennium: A physician charter. Annals of Internal Medicine 2002;136:243–246. [PubMed: 11827500]

Braddock CH, Eckstrom E, Haidet P. The "new revolution" in medical education. Journal of General Internal Medicine 2004;19:610–611. [PubMed: 15109334]

Cohen J. A word from the president: Ensuring the triumph of professionalism over self-interest. AAMC Reporter. 2004 July;

Cruess RL, Cruess SR. Teaching medicine as a profession in the service of healing. Academic Medicine 1997;72:941–952. [PubMed: 9387815]

Cruess RL, Cruess SR. Teaching professionalism: General principles. Medical Teacher 2006;23:205–208. [PubMed: 16753716]

Cruess SR. Professionalism and medicine's social contract with society. Clinical Orthopaedics and Related Research 2006;449:170–176. [PubMed: 16760821]

Elder WG, Rakel D, Hustedde C, Heitkemper M, Gerik S, Haradzuk N, et al. Using complementary and alternative medicine curricular elements to foster medical student self-awareness. Academic Medicine 2007;82:951–955. [PubMed: 17895654]

Fairhurst K, May C. What general practitioners find satisfying in their work: Implications for health care system reform. Annals of Family Medicine 2006;4:500–505. [PubMed: 17148627]

Godin G, Beaulieu D, Touchette J, Lambert L, Dodin S. Intention to encourage complementary and alternative medicine among general practitioners and medical students. Behavioral Medicine 2007;33:67–77. [PubMed: 17711808]

Gordon, JS. Manifesto for a new medicine: Your guide to healing partnerships and the wise use of alternative therapies. Cambridge, MA: Perseus Books; 1996.

Institute of Medicine, Committee on Quality of Health Care in America. Crossing the quality chasm: A new health system for the 21st century Institute of Medicine. Washington, DC: National Academies Press; 2001.

Inui, TS. A flag in the wind: Educating for professionalism in medicine. Washington, DC: Association of American Medical Colleges; 2003.

Kligler B, Maizes V, Schachter S, Park CM, Gaudet T, Benn R, et al. Core competencies in integrative medicine for medical school curricula: A proposal. Academic Medicine 2004;79:5215–5231.

Ludmerer K. Instilling professionalism in medical education. Journal of the American Medical Association 1999;282:881–882. [PubMed: 10478696]

National Center for Complementary and Alternative Medicine. Backgrounder. 2005. Mind-body medicine: An overview.

Stewart, M.; Brown, JB.; Weston, WW.; McWhinney, IR.; McWilliam, CL.; Freeman, TR. Patient centered medicine: Transforming the clinical method. Oxon, UK: Radcliffe; 2003.

Swick, HM.; Szenas, P.; Danoff, D.; Whitcomb, M. Medical schools recognize importance of professionalism hut educational strategies vary widely. The Association of American Medical Colleges. 1999 Aug 31. Retrieved January 9, 2008, from http://www.aamc.org/newsroom/pressrel/l999/99083l.htm

Switankowsky I. Empathy as a foundation for the biopsychosocial model of medicine. Humane Health Care 2004;4:E5. [PubMed: 15841570]

Wynd CA. Current factors contributing to professionalism in nursing. Journal of Professional Nursing 2003;19:251–256. [PubMed: 14613064]

Table 1

Perceived Impact of CAM Education Projects on Trainee Outcomes Related to Professionalism

Please Rate Your Project's Impact On:	Modal Score	Mean Score
A. Philosophy or perspective on health and illness	4.0	4.00
B. Attitudes valuing interdisciplinary care	4.0	3.73
C. Commitment to personal growth as fundamental to the practice of medicine	4.0	3.67
D. Valuing of self-care for physician well-being	4.0	4.07
E. Recognition that multiple, often unknown factors influence health and healing	4.0	3.73
F. Recognition that personal, cultural, ethnic, and spiritual beliefs may affect patient treatment decisions	4.5[a]	4.4

Note: Rating scale: range from 1 = *very low* to 5 = *very high.*

[a] Mode equals 4.5 because equal numbers of projects rated themselves either 4 or 5 on this item.