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An approach to educating family practice residents and family physicians about complementary and alternative medicine

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KEYWORDS

Complementary medicine;
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Summary Complementary and alternative medicine (CAM) in the context of medical education is a controversial topic among the medical community. With the increased popularity of complementary and alternative medicine, medical educators are faced with the need of educating physicians so they would become competent to communicate with patients about CAM. As academic medicine shows more interest in CAM, it is critical to develop initiatives to overcome physicians' attitudinal barriers toward CAM and develop an instruction strategy that can address these needs.

An approach to educate family practice residents and family physicians about CAM is described in this article. This patient-centered teaching approach hinges on the belief that CAM and family medicine are closely related. It espouses utilizing critical thinking and basing decisions on evidence-based material.

The course covered four main topics in CAM: herbal medicine, traditional Chinese medicine (TCM), homeopathy and complementary nutrition. The course had limited objectives of exposing physicians to the common methods in CAM and providing sufficient information, so physicians could provide their patients with an informed, safe and balanced advice. The instructions emphasized the importance of improving physician–patient relationship and enriching the participant both professionally and personally. Results of our study revealed that after the course physicians' referral to CAM became more selective, at the same time, their personal use of CAM also increased. This reflects the increased value of CAM in the physicians' own healthcare, as well as their improved knowledge of appropriate referral patterns. Most importantly, the course increased the physicians' awareness of the psychosocial aspect of clinical problems encountered in family practice and, through the close observation of CAM in practice, gave them an additional viewpoint to better understand the patient–doctor relationship.

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Background

Complementary and alternative medicine (CAM) is becoming increasingly popular in the Western world. Surveys in the past suggest that over 40% of the US population is using at least one CAM modality or product.¹ In a recent survey, subsequent analyses showed that 76% of respondents had used at least one CAM therapy in their lifetime. This trend suggests a continuing demand for CAM therapies which will likely affect healthcare delivery in the foreseeable future.² With this increased popularity of CAM, physicians are confronted with increased demand from patients to give advice or relate to these modes of therapy. Medical educators are faced with the need to fill necessary gaps in information, so physicians can give a reliable and safe advice to their patients.^{3–11}

Recently, two sets of articles on CAM and medical education discussed the need for educational reform in teaching CAM.^{12–17} It was concluded that CAM education should be an integral part of medical education. Most authors agreed that physicians need to learn more about these therapies, and discussed the reasons why some patients embrace them. A survey among medical schools in the US revealed that in 1997–1998, 64% of US medical schools were offering CAM instruction, 31% of courses were offered by departments of family practice. There was a tremendous heterogeneity and diversity in content, format, and requirements among the different courses.⁶ This unstructured CAM instruction raised concern with some authors, who felt that there should be a structured approach to instruction that emphasizes skepticism and critical thinking.^{13–15}

In the US, the Society of Teachers of Family Medicine Group on Alternative Medicine developed a consensus on recommended attitudes, knowledge and skills in CAM for incorporation into family practice residency training curriculum. It was mentioned that a number of family practice residency programs were trying to implement those suggested guidelines, but it remains unclear what teaching strategy would be the most effective in integrating CAM therapies into training programs.¹⁸

Since 1996, the authors noted a need and interest in CAM, among family physicians and family practice residents in the Department of Family Medicine at Rappaport Faculty of Medicine Technion-Israel Institute of Technology in Haifa Israel. This need was acknowledged during multiple discussions and personal conversations between authors and department members. The authors accessed multiple information sources related to CAM, such as websites, books and journal articles.

The information obtained from those sources was reviewed critically. Discussions with CAM providers and patients were also reviewed. Based on this knowledge, the authors tried to address the issues related to CAM by developing an educational forum.

The aim of this forum was:

1. To provide a basic understanding on the need to give a proper advice to patients on the use of CAM.
2. To provide some knowledge on the most common CAM methods with critical review on their efficacy and safety.
3. To discuss how to integrate some of these regimens into the conventional care.

The instructions gradually expanded from a few lectures to a systematic introductory course on CAM. The decision to teach an introductory course in CAM to family physicians was based on the authors' belief that the concepts of family medicine and CAM are closely related. The two are anchored in philosophy of empirical medicine, which appraise the unique characteristics of the patients' symptoms and place great emphasis on the physician–patient interaction in the healing process.

In recent years, there has been a struggle to integrate humanistic notions with an evidence-based approach to therapy. In this paper, the authors present their experience of introducing this program to physicians and residents in an academic setting.

Course description

The course that evolved was a systematic course on CAM and addressed the specific needs of family physicians and family practice residents. The course objectives were developed by the authors, after literature reviews and the discussions with department members, CAM practitioners and patients.

There were four main course objectives:

1. To introduce residents and physicians to CAM methods with emphasis on the evidence supporting these methods.
2. To provide a sufficient background on CAM, so that course participants may discuss and give an informed advice on CAM to their patients.
3. To be able to discuss how CAM can be integrated into the physician patient therapeutic encounter.
4. To improve the patient–physician relationship by increasing physicians' knowledge of CAM.

The course was given on an elective basis and consisted of 16 sessions of 90 min each. The course was team-taught by the authors: a family physician and a family practice resident. The authors have both clinical experience in various CAM modalities as well as in clinical research in the arenas of herbal medicine and homeopathy. Course participants were both family physicians and family practice residents at different stages of their residency program.

The authors hypothesized that introducing CAM to conventionally trained physicians without prior exposure to this topic would require a different approach. The course utilized an organized, rationalistic, logical conventional approach complemented by an experiential, associative, empiric approach. The formal lectures were combined with videos related to the various topics that were discussed, and illustrated slides emphasizing specific issues. Workshops that involved touch, smell and taste to enrich the educational experience, and workshops that sharpened the observational skills, utilized painting and guided imagery and other techniques, were conducted. The instruction was combined with an active discussion with course participants concentrating on issues relevant to family practice and doctor–patient relationship.

The course was divided into six subunits (Fig. 1) covering main topics and issues related to CAM. The authors envisioned a progression of study in an imaginary circle, beginning with a general introduction to CAM that included usage patterns of CAM, reasons for this popular trend and comparison of the therapeutic encounter in conventional medicine versus CAM.

This was followed by addressing herbal medicine as a new and separate subunit of instruction. Herbal medicine is a topic that is relatively well accepted by conventionally trained physicians. It is a topic that can easily be organized in a format similar to conventional pharmacology, such as efficacy, safety, dosage, toxicity, drug interactions and standardizations. The teaching extended the conventional perception of herbs as merely “drug-like” substances by viewing the plant as a whole. It was explained how an herbal preparation could be more meaningful than the sum of its separate “active” ingredients. This notion was brought into the context of patients’ expectations of herbal healing properties and its relevance to patient–doctor dialogue. From these relatively familiar grounds, the authors moved to topics that are more provocative, such as Traditional Chinese Medicine (TCM) and homeopathy. Both represent philosophical medical

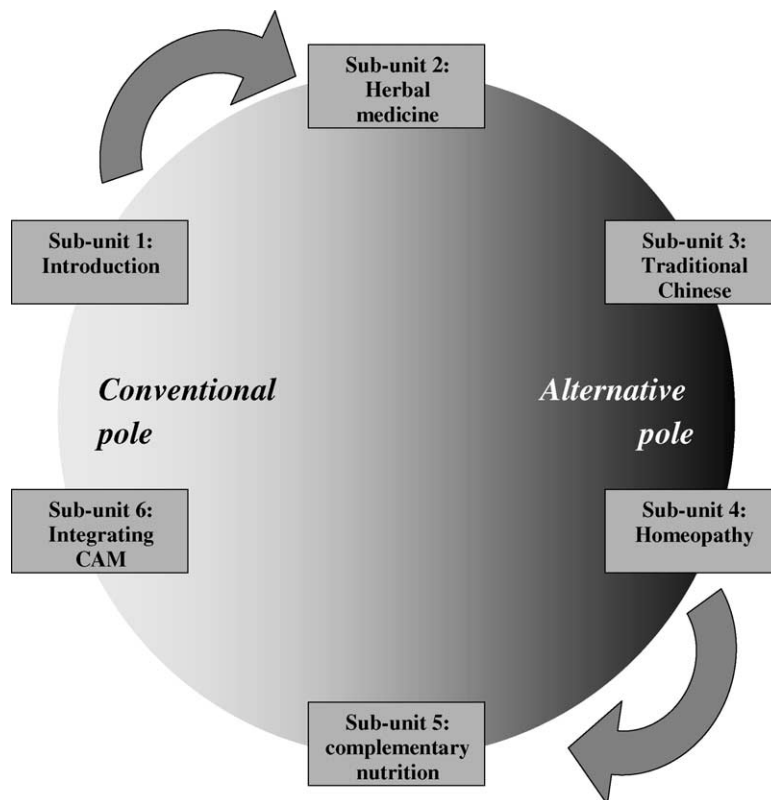


Figure 1. Course progression.

systems, one embedded in Oriental viewpoint and the other in European empirical outlook. TCM was introduced first, since most physicians could relate to acupuncture as a technique that is commonly employed in pain clinics. This was followed by homeopathy, a topic that is hard to grasp by many conventionally trained physicians. The discussion covered mainly the philosophy and research related to this therapeutic method.

Instruction was complemented by distribution of samples of homeopathic remedies in a small first aid kit and instructions for safe use. The instruction progressed back to a topic that physicians could easily relate to complementary nutrition. This topic dealt with different diets—both conventional and alternative—vitamins, and specific food with medicinal value. Such information is supported by scientific research and can easily be integrated into daily clinical work. As mentioned in the herbal medicine unit, students were invited to view food as more than a sum of “active ingredients” and to look at it in the context of medical treatment and healing.

Four major topics were covered:

1. Philosophy: The history and cultural background of each method, its philosophy, its impact on the patient–doctor relationship, and how it enriches the conventional therapeutic encounter.
2. Research: Review of the current research related to each method, discussion on efficacy and safety of each method as well as indications and contraindications of each method.
3. The clinical encounter: Discussing how a therapeutic encounter is shaped by each method, discussing possible tools to evaluate practitioners’ educational background, experience and how each method is practiced.
4. Practical tips: Discussing useful tips from each therapeutic modality that can be integrated into the family physicians’ daily practice. Each of the tips mentioned was backed by clinical research.

Finally, issues related to patient–doctor relationship and their connection to CAM were highlighted. These included discussing an appropriate response to patients’ requests regarding CAM use, demonstrating the importance of providing patients an informed and educated advice about CAM, and, clarifying issues related to the safe integration of CAM into the family practice setting.

Course evaluation

Course participants attitudes toward CAM were assessed by a before–after design utilizing a

self-administered questionnaire that took less than 10 min to complete. The questionnaire consisted of multiple choice questions with additional open space for unstructured written comments (Appendix A). Questions were chosen after reviewing the literature concerning medical students’ and physicians’ attitudes toward CAM use and issues related to academic CAM teaching.^{3–6,9,13–15,18} Question selection was also based on our experience of giving isolated lectures related to CAM in our department as well as giving priority to questions that could be closely related to our physician population. The questionnaire was given in similar formats at the beginning and at the completion of the course. The questions covered topics that could detect attitudes of physicians toward CAM, such as referral patterns to CAM and personal and family use of CAM. This questionnaire was given along with a feedback questionnaire. The feedback questionnaire is given at the completion of each course being administered by the Department of Family Medicine at our institution in Haifa, Israel. This feedback questionnaire is administered and processed by the department faculty (excluding course directors) to evaluate quality and satisfaction. It is a general questionnaire that evaluates the quality of the teaching, educational effectiveness, course format and course relevance to the clinical work of a family physician. Later the results of this questionnaire are shared with course directors, and provide feedback for improvement of future courses.

Results

Twenty-five physicians participated in this course during the academic year of 1999–2000. Course participants included 13 (52%) family practice residents and 12 (48%) family physicians. Eighteen physicians completed the pre-course assessment (8 residents and 10 family physicians) and 19 physicians completed the post-course evaluation (9 residents and 10 family physicians). Results of both evaluation tools, the authors’ pre–post course questionnaire and the department post-course evaluation are summarized in Tables 1 and 2.

Reasons for choosing the course

Seventy-six percent of course participants stated that they chose to participate in the course for personal enrichment. Other important reasons that were mentioned were the need to obtain additional treatment options, information regarding how and when to refer to CAM as well as when to avoid that

Table 1 Results of questionnaires evaluating attitude change.

	Evaluation of attitudes before course (N = 18) (%)	Evaluation of attitudes after the course (N = 19) (%)
Evidence is an important factor in referring patients to CAM Clinical	27.5	53
Participants personal use of CAM for themselves or their families	44	63.6
Non-selective referral to CAM	22	10.6
Referral of only selected patients to CAM	60.5	68.9

referral (72%). Some of the participants mentioned the desire to enrich the therapeutic encounter with their patients (68%).

Attitude change due to course participation

Table 1 reviews the attitudes of the participants toward CAM in the beginning and at the end of the course. In reviewing the results in this table one can notice an attitude change toward referral patterns to CAM at the beginning and at the end of the course. In the beginning of the course most participants did not relate to the medical evidence supporting CAM as a possible therapeutic option. Only 26% mentioned that this issue is an important factor in referring patients to CAM. At the end of the course 53% mentioned that this factor is an important one. The course made a personal change in physicians' attitude toward their own use of CAM as well as for their families. Prior to starting the

course, 44% of participants mentioned that they used CAM for themselves and for their families in the past. After the course, 63% mentioned using CAM for themselves or their families. On the other hand, the referral pattern to CAM became more selective after the course. At the beginning of the course 24% mentioned referral to CAM to a large number of patients; after the course only 11% made that kind of referral. While referral to a selected group of patients was 60%, before the course, this selective referral increased to 69% after the course.

Relatedness of course content to family medicine

At the end of the course 77% of participants felt that CAM is relevant to their work as family physicians. Seventy-two percent mentioned that the course increased their awareness to the psychosocial aspect of clinical problems encountered in fam-

Table 2 Family medicine department post-course evaluation results.

Course objectives were clear	To a large extent (%)	To a medium extent (%)	To a small extent (%)	Not at all (%)
1. Course objectives were clearly presented	88.9	11.1		
2. The lessons were clear and organized	89.5	10.5		
3. Participants had an ample opportunity to express themselves	73.7	10.5	15.8	
4. The topic is relevant to my work as a family physician	55.6	22.2	22.2	
5. Course administration by more than one instructor helped to clarify the messages	68.4	15.8	10.5	5.3
6. The course increased my awareness to biopsychosocial issues	44.4	27.8	27.8	
7. The course gave me another perspective to understand patient–doctor relationship	50	33	16.7	
8. The course enriched my personal perspective as a physician–healer	52.6	26.3	15.8	5.3
9. The course enriched my professional perspective as a physician	26.3	36.8	26.3	10.5
10. Do you feel that this course made a change in your attitude toward CAM	Yes, 72	No, 28		
11. My general estimate of the course quality	High, 89.5	Medium, 10.5	Low, 0	

ily practice. Eighty-three percent of the participants mentioned that the course gave them an additional viewpoint to the understanding of the patient–doctor relationship through the observation of “other treatment methods.” An interesting fact mentioned in the departments’ post-course evaluation results was that 79% of participants stated that the course enriched their personal perspective as physician–healer (Table 2).

In general, the course received high evaluation by 89% of the participants.

Discussion

Medical education as it relates to complementary and alternative medicine is a complicated topic and a cause for controversy among the medical community. As a result, there is no logical and agreed approach to deal with this issue. It is clear that the increased popularity of CAM among the general public underscores a need to educate physicians on these treatment methods, so physicians can provide patients with relevant information and maintain the function of a reliable informed health adviser.

As academic medicine shows more interest in CAM, it is critical to develop initiatives to overcome attitudinal barriers of physicians toward CAM and develop an instruction strategy that alleviates these barriers.

Family medicine and CAM are both focused on a patient-centered approach, an approach that emphasizes communication and partnership with patients with a focus on health promotion and healthy lifestyles. In addition, family medicine and CAM recognize as important the connection of mind and body, and both value a holistic approach to patient care. Maybe these similarities in approach could explain the fact that the large bulk of CAM instruction modalities originate from family practice departments.^{5,6,11,15,18} The important question is what needs to be discussed in CAM instruction that’s specific to family physicians. The Society of Teachers of Family Medicine Group on Alternative Medicine developed a consensus of recommended attitudes, knowledge and skills in CAM for incorporation into family practice residency training curriculum.¹⁸ Among the suggested guidelines is the need to understand and respect cultural influences on health beliefs and health choices, basic theory or philosophy of treatment, indications and potential adverse effects as well as efficacy and cost effectiveness of each treatment modality. The authors felt that in addition to the above suggested guidelines, the instruction approach needs to em-

phasize and take advantage of the similarities of family medicine and CAM. At the same time the instruction can use CAM to enhance issues relating to family medicine.

The authors are aware that this study has several limitations. This is a small study with limited number of participants and the fact that they chose the course as an elective, may have led to a selection bias. The course assessment was based on pre- and post-course questionnaires, but there were no previous studies for comparison, or prior validation of the assessment instrument. There is a need to do a follow-up study to assess if those changes are long-lasting. The authors were not able to objectively assess behavioral changes or changes in communication skills among the course participants, or whether their patients’ satisfaction improved as a result of the course, which is the ultimate desired outcome. On the other hand, this article brings an approach to teach CAM to family practice residents and family physicians who are interested in expanding knowledge on this popular topic. The initial goals of the instruction were to provide a basic understanding on CAM use so participants can give an informed advice to their patients. That goal was achieved as noted from both evaluation tools. An added benefit to this teaching approach was the fact that participants mentioned that the course increased their awareness to biopsychosocial issues, gave them an additional viewpoint to the understanding of the patient–doctor relationship through the close observation of CAM. An interesting point that emerged from this course assessment, was that 79% of participants mentioned that the course broadened their own personal view of the physician – healer perspective. Physicians’ and residents’ participation and feedback, have indicated that the course was a valuable learning experience that changed their attitudes toward CAM in favor of a more balanced and informed approach. After the course, physicians became more selective in their referral to CAM, and at the same time they increased their personal use of CAM, reflecting the increased value of CAM in their own healthcare. In addition, some course participants mentioned in personal communication after the course, that it gave them, a sense of professional and personal satisfaction as being caring healthcare providers. The authors felt that that was an extremely valuable point in view of the many studies which emphasize primary care physicians’ burnout and personal dissatisfaction.^{19–22} These findings emphasize that learning is not just about facts embedded in the exterior world but could touch the innerself and more meaningful aspect of the learner (student). As evident by this study, participants not only relate to

CAM but also eventually relate to their own place as therapists and healers in the primary care setting.

We hope that this course and similar courses, would bring some food for thought about the place we are at in our encounter with our patients, and improve patient–doctor relationship.

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Appendix A. Sample of questions in the pre–post questionnaire

Did you ever use CAM in the past, to treat yourself and/or your close relatives?

- No
- Yes

If yes, which CAM modalities did you use?

What do you or your close family need in order to integrate CAM into your health care?

- EBM, I need a good supporting research article
- The practitioner must be an M.D.
- Personal relationship with CAM therapist
- Therapist is licensed in this field or has certification from a national professional organization.
- Therapist or remedy are easily accessible
- When I know that conventional medicine doesn't have anything else to offer
- Other (Specify)_____

Do you recommend CAM use to your patients?

- No
 - Yes, if the patient requests
 - Yes, but to a small extent
 - Yes, I consider CAM to a significant number of patients
 - Other (Specify)_____
 - If yes, which CAM modalities did you use?
- _____

If you do recommend CAM use what are your reasons to integrate/ refer patients to CAM ?

- EBM, there is a good supporting research article
- The practitioner is an M.D.
- Personal relationship with CAM therapist
- I go along with patients' request
- Therapist or remedy are easily accessible
- When I know that conventional medicine doesn't have anything else to offer
- When I am frustrated with the patient
- Other (Specify)_____

What do you need in order to integrate/ refer patients to CAM ?

- EBM, I need a good supporting research article
- The practitioner must be an M.D.
- Personal relationship with CAM therapist
- Therapist is licensed in this field or has certification from a national professional organization.
- Therapist or remedy are easily accessible
- When I know that conventional medicine doesn't have anything else to offer
- Other (Specify)_____

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