

How Should Complementary Practitioners and Physicians Communicate? A Cross-Sectional Study from Israel

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Objectives: The extensive use of complementary and alternative medicine for patients can complicate dialogue between physicians and complementary and alternative medicine practitioners, but not much data have been collected on the expectations and attitudes of physicians and complementary and alternative medicine practitioners concerning their communication and collaboration. In this study, we compared the results of a cross-sectional survey of both groups to elucidate the attitudes and expectations regarding communication and collaboration.

Methods: Questionnaires were mailed electronically or through the mail to 2532 primary care physicians and 450 complementary and alternative medicine practitioners employed by Clalit Health Services, the largest health maintenance organization in Israel.

Results: Questionnaires were returned by 333 physicians (response rate of 13%) and 241 practitioners (response rate of 54%). According to our results, the majority of both groups expressed an interest in clinical practice collaboration (69% and 77% of physicians and practitioners, respectively; $P = .043$); preferred using a medical letter to communicate with each other; and expected to consult with each other about mutual patients to formulate treatment plans. However, the practitioners were more interested than the physicians in collaborative scientific research (15% vs 42%, respectively; $P < .0001$) and collaborative medical education (2% vs 27%, respectively; $P < .0001$). The physicians also supported a physician-guided model of teamwork in clinical practice, whereas the practitioners supported a more collaborative model.

Conclusions: Educational programs for primary care physicians and complementary and alternative medicine practitioners should focus on aspects of communication between the groups and practical methods for writing referral or medical letters. (J Am Board Fam Med 2007;20:565–571.)

Complementary and alternative medicine (CAM) encompasses various therapeutic methods and techniques, some of which have their origins in traditional and philosophical systems of medicine.

Some scholars have named any merging of CAM with conventional biomedicine “integrative medicine,” whereas others perceive CAM as “a higher-order system, or systems, of care that emphasizes wellness and healing of the entire person as primary goals, drawing on both conventional and CAM approaches in the context of a supportive and effective physician–patient relationship.”¹

The increasingly widespread use of CAM is throwing into greater relief problems with communication among CAM practitioners, physicians, and their patients.^{2,3} Advocates of integrative medicine have acquired evidence to support the benefits of collaboration between mainstream medicine and CAM in clinical practice, scientific research, and medical education.^{4,5} Several studies have shown a gap in communication between physicians and patients that was associated with low disclosure rates

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of patient use of CAM treatments and the reluctance of physicians to make referrals for CAM treatments.^{6,7} Two studies that have yielded such evidence examined physicians' and acupuncturists' reports and found CAM referral rates to be lower than 30% in the United States.^{8,9} In another US study, 82% of 517 primary care physicians reported they had strong referral relationships with other primary care physicians but lacked direct, formalized referral relationships with chiropractors.¹⁰ A survey of 2875 members and fellows of the United Kingdom's Royal College of Physicians found that 41% referred patients to CAM.¹¹ However, the fact that 32% of the respondents practiced CAM themselves and that the United Kingdom's National Health Service (NHS) includes several CAM modalities may explain why the United Kingdom's CAM referral rate is higher than that of the United States.

Research-based integrative medicine was a key component of the United States's National Center of Complementary and Alternative Medicine's 2001 to 2005 strategic plan.¹² In addition, an increasing number of collaborative studies are being designed and published by physicians and non-physician CAM researchers who are often affiliated with CAM research centers within medical facilities.¹³ Some progress is being made on several fronts. For example, in the United Kingdom, the Prince of Wales advocated the integration of various CAM modalities into the NHS.¹⁴ The recent Smallwood report, which examined the role of CAM in the NHS, recommended that a full-assessment of CAM therapies and their potential role within the NHS be performed and suggested the provision of health care on an integrated basis.¹⁵ Collaborations between physicians and non-physician medical educators are also increasing, as evidenced by the fact that courses on CAM-related topics were offered during the 2002 to 2003 academic year at some of the 98 medical schools in the United States.¹⁶

The more widespread emergence of integrative medicine initiatives in medical practice, research, and education raises a number of important questions regarding the communication between physicians and CAM practitioners: Do physicians and CAM practitioners share a common interest in clinical, scientific, or educational collaboration? Are they willing to communicate with each other about the patients they have in common? What are

their expectations regarding this communication and possible collaborative teamwork? How do they envision CAM being integrated in medical practices, such as primary care clinics? To answer these questions, we compared the results of a cross-sectional survey of both groups.

Research Methods

Study Sites and Participants

We performed a 2-arm study of primary care physicians and CAM practitioners employed by Clalit Health Services (CHS), the largest of 4 health maintenance organizations in Israel. CHS serves 3,800,000 clients, which constitutes approximately 60% of the Israeli population.¹⁷ All 4 of Israel's health maintenance organizations offer CAM treatments under medical surveillance through administratively separate agencies, which were created because of economic considerations. In 2005, the 4 health maintenance organizations' CAM agencies conducted 45% of the 1.4 million CAM treatments performed in Israel.¹⁸

Of the 4 CAM agencies, the one operated by CHS is the largest. It offers patient-paid, reduced-price CAM services at 40 clinics throughout Israel. Although the CAM agencies' services are generally not covered by the state medical insurance, CHS partially reimburses patients for the costs of CAM treatments, but only if patients have supplementary medical insurance. Most of the clinics offer a variety of CAM treatments, including herbal and nutritional supplements; systematic systems of complementary medicine (eg, traditional Chinese medicine and homeopathy); and manual healing. Although some of its clinics are located in conventional primary and secondary care clinics, they operate independently, with their own administrative and clinical structures. In most cases, patients visit the CAM agencies without referral letters from their physicians. In general, no mechanism exists for the health maintenance organizations' CAM practitioners and conventional physicians to communicate or establish referral patterns and other professional peer relationships.

Study Design

The study was constructed based on research experience and discussions with physicians, CAM students and practitioners, and patients in both conventional and CAM clinics in Israel and Texas. The

study consisted of 4 stages: (1) questionnaire construction, (2) primary questionnaire refinement, (3) secondary questionnaire refinement, and (4) survey administration.

The questionnaire was constructed based on a comprehensive literature review and discussions at meetings of the Complementary and Traditional Medicine Unit's administrative staff.

To make the questionnaire as comprehensible as possible we conducted 2 focus group discussions: one with 14 physicians (consisting of residents and specialists practicing family medicine in urban and rural primary care clinics) and one with 15 CAM practitioners practicing a wide range of CAM modalities, including naturopathy, herbal medicine, acupuncture, and manual therapies. In the first of 2 discussion components, the participants were asked to suggest the main areas of interaction between physicians and CAM practitioners and to formulate potential questions and answers for the questionnaire. In the second component, the participants were asked to react to previously formulated topics and questions.

The secondary refinement of the questionnaire was based on the focus groups' appraisals. Because it was more likely to be understood, the authors used a broad definition of CAM: "therapies often named alternative, complementary, natural, folk/traditional medicine, which are not usually offered as part of the medical treatment in the clinic." Added to this definition was a list of CAM modalities, which included herbal medicine; Chinese medicine (including acupuncture); homeopathy; folk and traditional medicine; diet/nutritional therapy (including nutritional supplements); chiropractic; movement/manual healing therapies (eg, massage, reflexology, yoga, Alexander and Feldenkreis techniques); mind-body techniques (eg, meditation, guided imagery, relaxation); energy and healing therapies; and naturopathy.

Survey administration consisted of mailing or e-mailing questionnaires to the 2532 primary care physicians and 450 CAM practitioners employed by CHS. Survey data were entered into a computer database for further analysis.

Data Analysis

Data were evaluated using the SPSS software program (version 12; SPSS Inc., Chicago, IL). Pearson's χ^2 test and Fisher's exact test were used to detect differences in the prevalence of categorical

variables and demographic, collaborative, and integrative variables between the physicians and practitioners. In addition, a Student's *t* test was performed to determine whether any significant differences existed between the continuous variables between the 2 groups. *P* values $<.05$ were deemed significant.

Results

Questionnaires were returned by 333 physicians and 241 CAM practitioners; response rates were 13% and 54%, respectively. The respondents' characteristics are shown in Table 1.

After comparing both groups' attitudes toward collaborative teamwork in the areas of clinical practice, research, and education, we found that the CAM practitioners were significantly more supportive of collaborations between conventional and CAM health care providers than were the physicians in all 3 areas (Table 2).

Both groups had similar attitudes toward the potential integration of CAM into a primary care clinic and designated family physicians as the primary referral source in a hypothetical integrative medicine clinic. Nevertheless, the CAM practitioners were more supportive than the physicians of the family physician having a major role in CAM referrals (82% vs 63%, respectively; $P < .0001$). In both groups, more respondents indicated that CAM practitioners, not other health care providers, should offer CAM treatments in a hypothetical integrative medicine primary care setting (Table 3).

Table 4 shows notable differences in the attitudes of physicians and CAM practitioners toward 4 theoretical models of collaboration as described in the questionnaire. For example, physicians were significantly more supportive of teamwork that would be directed and coordinated by a physician than were the CAM practitioners (43% vs 19%, respectively; $P = .0001$). In contrast, the CAM practitioners mostly supported codirected teamwork than were physicians (21% vs 37%, respectively; $P = .0001$). However, as a secondary option, both groups supported a model in which the director of the treatment team was determined based on the distinctive characteristics of the patient's disease and condition.

According to our analyses, more than 60% of the respondents in both groups (219 of 332 physicians and 150 of 233 CAM practitioners) indicated

Table 1. Characteristics of Primary Care Physicians and Complementary and Alternative Medicine Practitioners

Characteristic	Primary Care Physicians (n = 333)	CAM Practitioners (n = 241)
Sex* (n [%])		
Male	187 (58)	95 (41)
Female	134 (42)	137 (59)
Age (mean ± SD [median])	47.7 ± 7.2 (48)	40.2 ± 9.4 (38)
Medical specialty† (n [%])		
Specialists	265 (80)‡	
Family medicine	105 (32)	
Internal medicine	47 (14)	
Pediatrics	9 (3)	
CAM modality (n [%])†		
Movement/manual healing		124 (51)§
Traditional Chinese medicine		88 (37)
Naturopathy		29 (12)
Homeopathy		10 (4)
Herbal medicine		9 (4)
Chiropractic		8 (3)
Healing		4 (2)
Meditation		3 (1)

Data analysis were performed by *t* test. CAM, complementary and alternative medicine; SD, standard deviation.

*Three hundred twenty-one of 333 primary care physicians and 232 of 241 CAM practitioners reported this data.

†Respondents reporting any kind of medical or CAM specialty, which include one or more of the fields specified here.

‡Eighty-eight physicians (27.3%) reported having studied CAM, with experience ranging from basic introductory courses to full programs. Twenty-four physicians (7.7%) reported practicing CAM. Fifty-two percent reported having used CAM treatments over the past year.

§Thirty-one (13%) of the CAM practitioners were physicians.

that a referral or medical letter would be the best way for physicians and CAM practitioners to communicate about mutual patients. Although both groups preferred using a referral letter over other means of communication (such as telephone calls, e-mails, and direct meetings), more CAM practitioners than physicians supported these alternate methods. We used a 7-point scale to assess physicians' and practitioners' readiness to communicate with each other ("the other practitioner") when giving treatment to the same patient. We found that the CAM practitioners' self-ratings of readiness to communicate with "the other practitioner" were higher than the self-ratings of the physicians for this question (median, 5 out of 7 vs 4 out of 7 points, respectively; mean ± SD, 4.55 ± 1.62 vs 4.21 ± 1.86, respectively; *P* = .025). Nevertheless, CAM practitioners reported they were less likely than the physicians to ask their patients about communicating with "the other practitioner" in reality (median, 2 out of 7 vs 3 out of 7, respectively; mean ± SD, 2.30 ± 1.55 vs 3.18 ± 1.74, respec-

tively; *P* < .0001). Both groups estimated that their patients were interested in their health care providers engaging in dialogue (median, 4 out of 7 (for both groups); mean ± SD, 4.10 ± 1.48 vs 4.38 ± 1.56, respectively; *P* = .07). In addition, both groups indicated they would be more ready to write a letter to "the other practitioner" if they had first received a referral letter than if they had not. In addition, physicians and CAM practitioners shared similar expectations regarding "the other practitioner" when administering treatment to the same patient: the principal expectation was that the other practitioner be willing to participate in consultations and construct a treatment plan together.

Discussion

In this study we surveyed the attitudes of primary care physicians and CAM practitioners toward the potential integration of CAM in a primary care setting. We based the perception of CAM integration into a primary care setting on the characteris-

Table 2. Areas in Which Respondents Were Interested in Collaborative Teamwork Between Conventional and Complementary and Alternative Medicines

Area	Participants* (n [%])		P
	Primary Care Physicians (n = 328)	CAM Practitioners (n = 226)	
Clinical practice	226 (69)	174 (77)	.0430
Scientific research	50 (15)	95 (42)	<.0001
Medical education	8 (2)	61 (27)	<.0001

Data analysis was performed by Pearson's χ^2 test. CAM, complementary and alternative medicine.

*Three hundred twenty-eight of 333 primary care physicians and 226 of 241 CAM practitioners responded this question. Respondents were able to choose several options, thus the sum of percents exceeds 100%.

tics that are common to both primary care and CAM, such as being patient-centered, being rooted in a holistic biopsychosocial agenda, and being characterized by a collaborative and integrative approach. We showed that both physicians and CAM providers envisioned the family physician as having an important role in CAM referrals if such treatment is made available in the clinic.

This study shows that primary care physicians and CAM practitioners share a positive view of communication between the "other practitioner" and themselves concerning mutual patients. Respondents in both groups highly supported the use of referral or medical letters and specifically stated that receiving a medical or referral letter from a patient's "other practitioner" would increase their readiness to respond in kind.

Sherman et al⁹ found similar results from a study of acupuncturists, who discussed approximately 50% of their physician-referred patients with the

physicians, whereas they involved the patients' physician with only 12% of their other patients. Our report suggests that a referral letter from a physician to a CAM practitioner does more than communicate clinical information but that it may also affect the formation of a collaboration between physicians and CAM practitioners.

In our study, both groups reported a low rate of inter-profession communication in current daily practice, although they indicated that their patients might support it. More studies are needed to verify whether patients *do* support communication between their physicians and CAM practitioners. Such studies should also look at patient expectations regarding such dialogue as it relates to all 3 parties involved in treatment.¹⁹

Our study further showed that both groups expect collaboration, not communication only, regarding mutual patients. An example of multidisciplinary collaboration is the approach characterized

Table 3. Respondents' Attitudes to the Question, If Complementary and Alternative Medicine Was Provided in a Primary Care Clinic, Who Should Offer Complementary and Alternative Medicine Treatment?

CAM Provider	Participants* (n [%])		P
	Primary Care Physicians (n = 327; 327 responses)	CAM Practitioners (n = 234; 264 responses)	
CAM practitioner non-MD	135 (40.9)	199 (75.4)	<.0001
CAM practitioner MD	119 (36.1)	31 (11.7)	<.0001
Family physician in the clinic	48 (14.5)	9 (3.4)	<.0001
Nurse	6 (1.8)	5 (2.1)	NS
Pharmacist	4 (1.2)	4 (1.9)	NS
Other	15 (4.5)	16 (6.1)	NS

Data analysis was performed by Pearson's χ^2 test. NS, not significant; CAM, complementary and alternative medicine.

*Three hundred twenty-seven of 333 primary care physicians and 234 of 241 CAM practitioners responded this question. Respondents were asked to focus on merely one option but were able to choose several options. Thus, number of responses is higher than the number of respondents. The data in the table refer to number of responses.

Table 4. Respondents' Attitudes to the Question, How Do You Perceive Conjoint Physician– Complementary and Alternative Medicine Practitioner Teamwork?

Team Director	Participants* (n [%])		P
	Primary Care Physicians (n = 283; responses = 298)	CAM Practitioners (n = 198; responses = 227)	
Physician†	127 (42.6)	43 (18.9)	.0007
CAM practitioner‡	8 (2.7)	12 (5.3)	NS
Codirected‡§	62 (20.8)	83 (36.6)	.0001
Directed by either physician or CAM practitioner§	86 (28.9)	60 (26.4)	NS

Data analysis was performed by Pearson's χ^2 test. NS, not significant; CAM, complementary and alternative medicine.

*Two hundred eighty-three of 333 primary care physicians and 198 of 241 CAM practitioners responded this question. Respondents were asked to focus on merely one option but were able to choose several options. Thus, number of responses is higher than the number of respondents. The data in the table refer to number of responses.

†The head of the team is a physician (or CAM practitioner) that directs and coordinates the treatment.

‡The physician and CAM practitioner have equal standing, with neither of them heading the team.

§The head of the team is determined by the unique characteristics of the patient and his/her illness.

by the 5 NHS general practices in the United Kingdom, which integrate anthroposophic and conventional medicine.²⁰ However, based on our results that indicated physicians favored a physician-directed model whereas practitioners favored a codirected model, we believe that physicians and CAM practitioners perceive collaboration differently. This discrepancy is not remarkable because teams composed of professionals from different fields may experience conflicts relating to status, power, and different understandings of the concepts and nomenclature used in different modalities.²¹ Caspi et al²² proposed the Tower of Babel metaphor as a way of characterizing the “language” gap between conventional medicine and CAM schools of thought. This communication gap may also be overcome through the implementation of educational initiatives for both physicians and CAM practitioners. We suggest that such efforts focus not only on improving knowledge and attitudes but also on obtaining the skills necessary to write a medical letter as a channel for mutual communication.

Our study had significant limitations that may have influenced our findings. For example, the physician group may have been affected by a selection bias resulting from the low response rate and high prevalence of personal CAM use among the responding physicians over the previous year. Low interest in or opposition to CAM may have been the reason for other physicians' not responding. The low response rate may also have been a result of the physicians' unfamiliarity with a new Web-based questionnaire collection system. Physicians'

familiarity with CAM in this study (27%) is comparable with the findings in another study in Israel (25% of 165 physicians),²³ so the low response rate is not necessarily a source of bias. In any case, the results of the present study may reflect the attitudes of a physician subpopulation that favors CAM more than does their group as a whole.

Therefore, we recommend interpreting the study results with caution; our study participants may be more receptive to and experienced in integrative medicine than their colleagues. Moreover, our study results may reflect the attitudes of a minority of physicians (13% response rate) who have more interest in issues relating to communication with CAM providers.

It may be instructive to investigate whether the physicians who did not respond to the questionnaire are less familiar with CAM providers or less convinced than CAM practitioners of the importance inter-professional collaboration. Studies in larger populations of physicians and CAM practitioners, including physicians unfamiliar with CAM, may clarify the importance of the communication between the 2 groups and the influence of this collaboration on physician–patient communication.

In summary, this study suggests that primary care physicians and CAM practitioners are willing to collaborate and communicate with each other, especially concerning a mutual patient. Writing a referral or medical letter is their preferred way to communicate. Educational programs for physicians and CAM practitioners should focus on aspects of communication and practical methods in writing a referral or medical letter in the scope of CAM.

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