commentary

Views and Use of Complementary and Alternative Medicine by Mid-Atlantic Permanente Medical Group Health Care Providers

Lydia S Segal, MD, MPH
Department of Integrated Medicine

Abstract

Context: Knowledge of Kaiser Permanente (KP) health care provider views about and use of many forms of complementary and alternative medicine (CAM) therapy may help KP develop appropriate services for patients and continuing medical education (CME) courses for providers.

Objective: To assess provider views and use of CAM therapy in their KP practice.

Design: Retrospective survey.

Main Outcomes Measure: Responses to one questionnaire administered to Mid-Atlantic providers in 2000.

Results: Of those surveyed, 26% responded (N = 141). In the 12 months before the survey, 48% of respondents used some form of CAM to treat patients. Respondents expressed strong interest in KP providing (or increasing) CAM services to patients, mainly for acupuncture, acupressure, and biofeedback. Respondents also expressed greatest interest in CME courses about these three types of CAM.

Conclusions: Providers appear interested in using and learning more about CAM therapy, particularly those forms having the strongest scientific evidence to support them.

Introduction

The increased use of complementary and alternative medicine (CAM) for medical problems[1] means that clinicians may need a better understanding of CAM therapy. The knowledge base of practicing health care providers can be assumed to vary because the field of alternative medicine is so broad, new, and ever-changing and because so many clinicians are referring patients to alternative practitioners.[2] Alternative medicine patient services and continuing medical education (CME) programs for providers need to be tailored to that varied knowledge base.

We did a pilot study to assess our region's providers' opinions about and use of alternative medicine. This study was funded by Kaiser Foundation Health Plan and was approved by both the local Mid-Atlantic Permanente Medical Group (MAPMG) and national Kaiser Permanente (KP) Institutional Review Boards. The pilot study used an abbreviated form of a survey developed by Drs Nancy Gordon and Diane Sobel at KP Northern California.[3]

Defining unconventional therapy, also known as CAM therapy, as that neither widely taught in US medical schools nor generally available in US hospitals was first popularized in a landmark study by Eisenberg at Harvard.[1] His 1993 *New England Journal of Medicine* article showed that, in 1990, Americans made more visits to providers of CAM than to providers of traditional medicine and spent about $13.7 billion (out of pocket) on CAM therapy compared with $12.8 billion (out of pocket) for all hospitalization that year. Although some researchers define CAM therapy more narrowly, many use the broad definition which Eisenberg used and which we too used for this study.

CAM is generally used for chronic medical conditions such as cancer, arthritis, and HIV/AIDS, as well as for many types of chronic pain, including musculoskeletal and headache.[4] Patients with these conditions tend to use medical facilities frequently, thus increasing total utilization of medical services.

Providers' willingness to acknowledge that patients are seeking CAM is often based on their own professional and personal experience with CAM.[5] Gordon et al reported that clinicians are unaware that patients are using CAM, because they do not ask patients about it. Patients report hesitancy to disclose use of CAM to their clinician because they feel the clinician will be critical of their nonmainstream choices.[3]

When alternative modes of care are neutral[6] or potentially beneficial, broadening the scope of that

care benefits the patient and the clinician. However, some alternative forms of therapy can harm patients;[7-9] therefore clinicians need to know when patients are seeking alternative care.

Survey Methods

The questionnaire developed by Drs Gordon and Sobel[3] was adapted and shortened for this study. The questions were in Likert format, each offering a range of one to three or one to five answer choices (eg, "not at all," "somewhat," or "great deal"). Several questions had space for comments.

The survey was sent out to all MAPMG primary care and specialty care physicians, nurse practitioners, and physician assistants whose patients might use CAM (eg, obstetrics/gynecology, orthopedics, or neurology). As an incentive, 20 bookstore gift certificates each worth $50 were awarded from a random drawing of completed and returned questionnaires. Twenty-six percent of the surveys (N = 141) were returned within four weeks after an interoffice mailing; operational issues prohibited a second mailing to increase the return rate. Survey results were tabulated.

Survey Questions

Use of alternative medicine

Providers were asked if in the preceding 12 months in their own practice they had used, had considered using, or had recommended use of any of 12 different modes of CAM therapy for prevention or treatment of any health problem.

Interest in alternative medicine

Providers were asked about their general level of interest in alternative medicine.

Motivation to use alternative medicine

Providers were asked about what motivated them to use CAM therapy. Providers often rely on personal and professional experience combined with updated scientific information to establish their practice styles. The majority of medical school curricula do not include substantial information about CAM,[10] so it is unclear where providers get their motivation and interest to use CAM.

Concerns about alternative medicine

The basis of provider concerns about using each of seven individual types of CAM therapy was asked, and answer choices were the following: "not effective," "harmful," "not covered (by insurance)," "malpractice," or "unknown."

Future opportunities for offering CAM at KP

Providers were asked whether they felt that KP should increase CAM services, either through internal or external offerings. This question sought to reveal if providers were receptive to additional CAM services. A follow-up question asked providers which forms of therapy they would like to see introduced or increased at KP.

Interest in attending CME courses in alternative medicine

Providers were asked what CAM courses they would like to attend for CME credit. This information would help KP target and design CME courses that busy providers would find time to attend.

Table 1. Providers' use of CAM therapy in practice during preceding 12 months

Mode of CAM therapy	Used	Considered using	Recommended
Chiropractic	30	23	32
Acupuncture	15	20	31
Biofeedback	3	26	29
Massage therapy[a]	8	14	40
Meditation	16	14	51
Hypnosis[a]	3	24	11
Counseling	30	6	66
Diet	36	4	56
Herbal[a]	20	13	34
Yoga[a]	6	12	15
Prayer[a]	8	14	31
Homeopathy[a]	6	14	7
Other	1	3	2

[a]Although these therapies were neither offered nor covered by KP, providers reported having used them according to their own definition of "used."

Results

Of those providers responding, 48% had used or had recommended use of some form of CAM therapy in their practice during the preceding 12 months. The most common modes of therapy used were chiropractic, counseling, diet, and herbal. The most frequently recommended modes of therapy were counseling, diet, meditation, and massage therapy. When asked which modes they had considered using but did not actually use or recommend to their patients, providers most frequently listed biofeedback, hypnosis, chiropractic, and acupuncture.

At the time of the survey, the KP system offered chiropractic and acupuncture services on a limited basis. Biofeedback, although part of the base benefit, is used by fewer than .01% of members. Counseling was offered as part of the standard mental health coverage, and diet recommendations were offered by a KP nutrition department. Meditation training was part of a

Table 2. Providers' motivations for using CAM			
Motivator	Not at all	Somewhat	Great Deal
Own experience	79	34	20
Experience of others	46	62	26
Patient not adequately treated	11	65	56
Belief of effectiveness	30	75	39
Fewer side effects	41	70	21
Media influence	50	70	11
Medical journal articles	34	88	11
Keep KP competitive	30	69	33
Other	1	5	15

number of programs and classes available at KP, and the fee (although not directly covered) was about equal to an office visit copayment. Massage therapy, hypnosis, herbs, yoga, prayer, and homeopathy were not offered in the KP system; nor could providers directly refer a patient for therapy outside the system. However, some providers reported having used these modes with patients, perhaps according to their own definition of "used."

Most of the providers who used CAM therapy did so because they doubted that patients were being adequately treated with traditional medicine.

Eighteen percent of respondents stated that they were extremely interested in alternative therapy, and 64% stated that they were moderately or quite a bit interested. Only two respondents stated they were not interested at all.

Most of the providers who used CAM therapy did so because they doubted that patients were being adequately treated with traditional medicine (Table 2). The next strongest motivator was the belief that health problems are more effectively treated by using CAM therapy and traditional medicine together. The belief that CAM therapy had fewer adverse effects than traditional therapy was a common motivator. Motivation to use or to consider using CAM therapy also came from the lay and professional media and from KP and national professional journals.

A provider's own experience was not the motivator for using CAM therapy for 59% of the respondents. The driving forces may instead be a combination of belief in the effectiveness of CAM and knowledge about CAM gained from medical journals, coupled with desire to keep KP competitive.

Table 3 shows that providers' general concerns about using CAM therapy in practice stem from lack of knowledge about CAM therapy, belief that CAM therapy is not effective or can do harm, and lack of insurance coverage for alternative therapy. Fear of malpractice lawsuits does not appear to be a major concern of providers.

Providers' concerns about lack of information focused mainly on chiropractic, acupuncture, biofeedback, and herbal therapy. Lack of insurance benefits was the driving concern about using massage therapy and meditation. Concerns about using diet as CAM therapy focused equally on lack of knowledge about this use of diet and on its perceived ineffectiveness.

Most providers (85%) responded that at least one or more forms of CAM therapy should be increased or incorporated into the organization (Table 4). About 60% of providers believed that use of chiropractic, acupuncture, biofeedback, herbals, meditation, or diet and supplement therapy should be increased or incorporated into the KP system.

Interest was strongest for CME courses about acupuncture, acupressure, or herbal therapy. Providers were least interested in massage, yoga, and homeopathy CME courses.

Discussion

The study had a number of limitations, but most important was the low return rate. Because of the small sample size, we do not know how valid it is to compare our results with those of similar studies.[11] A logical expectation that the providers who were most interested in and amenable to using CAM therapy would take the time to return the questionnaire was supported by the fact that only a few respondents were clearly negative toward CAM therapy. Ardently opposed re-

Table 3. Providers' concerns about using CAM					
Mode of CAM therapy	Unknown	Not effective	Harmful	Not covered by insurance	Malpractice
Chiropractic	29	23	25	16	6
Acupuncture	33	10	1	22	2
Biofeedback	28	6	0	23	1
Massage therapy	23	16	1	27	1
Meditation	15	5	0	24	1
Diet and supplements	18	18	15	9	3
Herbals	30	23	25	8	6

Table 4. Providers' opinions about increasing or incorporating CAM into KP organization

Question	No	Probably not	Not sure	Probably yes	Definitely yes
Should KP offer alternative medicine therapy?	5	6	15	58	57
Should the following CAM therapy be increased or instituted at KP?					
Chiropractic	10	8	23	37	41
Acupuncture	4	3	26	48	40
Biofeedback	1	5	28	43	44
Herbs	12	13	30	33	32
Meditation	6	6	24	39	28
Diet and supplements	8	13	22	39	39
Other	2	0	0	4	8

spondents used the comment space on the survey to express their opinions.

Lack of analysis by provider specialty is another study limitation.[12] Such analysis could have enabled us to design separate CME sessions for each providers' specialty.

The definition of CAM therapy varies, as previously mentioned. Some providers clearly would not consider biofeedback, counseling, or meditation as alternative therapy. In this study, no definition was supplied for "diet." For some providers, diet means nothing more exotic than the healthy heart diet—clearly not an alternative therapy—for others, diet may mean macrobiotics, which some providers feel has a "fringe" quality.

For some providers, their lack of basic CAM therapy knowledge may have affected their viewpoint. For example, if they did not know what homeopathy is, they probably could not express a view about its effects.

On the basis of comments written by the respondents, we sensed a "mainstreaming" of CAM therapy. In general, when a new paradigm is introduced into medicine, clinicians are greatly reluctant to accept the idea without substantial proof of its efficacy. Fifteen years ago, for example, using antibiotics for ulcers would be considered voodoo medicine, yet is standard care today. And for some providers in our survey, acupuncture or meditation were hardly considered alternative at all.

What constitutes efficacy in evidence-based medicine is itself under close scrutiny. For example, the belief that hormone replacement therapy for postmenopausal women prevents some forms of cardiovascular disease was medical dogma until recently. From our study, having scientific evidence about the efficacy of CAM instead of direct experience (personal or professional), appears to allow providers to feel some level of comfort in recommending CAM therapy to patients.

On the basis of a pilot study done (as part of a marketing survey) for the KP Northwest Region's member population, we believe that patient use of, and views about CAM in the Mid-Atlantic States Region are similar among the Northwest region members. Because of the similar demographics of CAM users in the two regions, patient demand for CAM information and referrals is probably similar, and will probably drive providers' interest in offering and learning about CAM. In our study, providers' interest was strongest for CME courses about acupuncture, acupressure, or herbal therapy, probably because patients are using and asking questions about these forms of CAM therapy most often. Tailoring future CAM patient services and provider CME courses may in part be based on patient demands instead of strictly on provider interest. Matching patient and provider interests may be important for future implementation of new services.

In general, when a new paradigm is introduced into medicine, physicians are greatly reluctancant to accept the idea without substantial proof of its efficacy.

CME sessions have been targeted to match providers' interests (acupuncture, biofeedback, chiropractic,

Table 5. Likelihood of providers to attend CME course about modes of CAM therapy

CME subject	Likely to attend
Chiropractic	55
Acupuncture	81
Acupressure	74
Biofeedback	68
Meditation	51
Massage therapy	48
Diet and supplements	62
Herbs	71
Homeopathy	49
Yoga	46
Other	5

and herbal) at KP's local and regional centers.

Addressing which therapy providers believed would be most suitable for KP would help marketing and program development. In other managed care organizations, the driver for new services has been marketing.[13] The services most likely to be expanded include acupuncture, biofeedback, chiropractic, diet and supplements, herbal, and meditation.

This study, although limited by its low return rate (and other problems), confirms that providers in the MAPMG are using or recommending the use of CAM therapy, most commonly acupuncture, biofeedback, chiropractic, counseling, massage therapy, and meditation. The study also suggests that CAM therapy modes with the strongest scientific evidence of safety and efficacy stand the greatest chance of acceptance by providers and, thus, increase in delivery. ❖

Acknowledgements

Bob Dill, MEd, LPC, and Nancy Gordon, PhD, ScD, assisted with application of the project.

The Mid-Atlantic Permanente Medical Group funded the project.

References

1. Eisenberg DM, Kessler RC, Foster C, Norlock FE, Calkins DR, Delbanco TL. Unconventional medicine in the United States. Prevalence, costs and patterns of use. N Engl J Med 1993 Jan 28:328(4):246-52.
2. Astin JA, Marie A, Pelletier KR, Hansen E, Haskell WL. A review of the incorporation of complementary and alternative medicine by mainstream physicians. Arch Intern Med 1998 Nov 23:158(21):2302-10.
3. Gordon NP, Sobel DS, Tarazona EZ. Use of and interest in alternative therapies among adult primary care clinicians and adult members in a large health maintenance organization. West J Med 1998 Sep;169(3):153-61.
4. Gordon JS. Alternative medicine and the family physician. Am Fam Physician 1996 Nov 15;54(7):2205-12.
5. Hughes EF. Alternative medicine in family practice: it's *already* mainstream. Family Practice Recertification 1997 Oct;19(10):24-44.
6. MacPherson H, Thomas K, Walters S, Fitter M. A prospective survey of adverse events and treatment reactions following 34,000 consultations with professional acupuncturists. Acupunct Med 2001 Dec;19(2):93-102.
7. Newton KM, Buist DS, Keenan NL, Anderson LA, LaCroix AZ. Use of alternative therapies for menopause symptoms: results of a population-based survey. Obstet Gynecol 2002 Jul;100(1):18-25.
8. Ernst E. Manipulation of the cervical spine: a systematic review of case reports of serious adverse events, 1995–2001. Med J Aust 2002 April 15;176(8):376-80.
9. Stevinson C, Ernst E. Risks associated with spinal manipulation. Am J Med 2002 May;112(7):566-71.
10. Wetzel MS, Eisenberg DM, Kaptchuk TJ. Courses involving complementary and alternative medicine at US medical schools. JAMA 1998 Sep 2;280(9):784-7.
11. Drivdahl CE, Miser WF. The use of alternative health care by a family practice population. J Am Board Fam Pract 1998 May-Jun;11(3):193-9.
12. Berman BM, Singh BB, Hartnoll SM, Singh BK, Reilly D. Primary care physicians and complementary-alternative medicine: training, attitudes and practice patterns. J Am Board Fam Pract 1998 Jul-Aug;11(4):272-81.
13. Montoya ID. Alternative medicine as a carve-out in managed care. Health Mark Q 1998;16(1):11-24.

Let us hear from you.

We encourage you to write, either to respond to an article published in the *Journal* or to address a clinical issue of importance to you. You may submit letters by mail, fax, or e-mail.

Send your comments to:
The Permanente Journal / Letters to the Editor
500 NE Multnomah St, Suite 100, Portland, Oregon, 97232
Fax: 503-813-2348 • E-mail: permjournal@kpnw.org

Be sure to include your full address, phone and fax numbers, and e-mail address. Submission of a letter constitutes permission for *The Permanente Journal* to publish it in various editions and forms. Letters may be edited for style and length.