Articles

Use of and Interest in Alternative Therapies Among Adult Primary Care Clinicians and Adult Members in a Large Health Maintenance Organization

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During spring 1996, random samples of adult primary care physicians, obstetrics-gynecology physicians and nurse practitioners, and adult members of a large northern California group practice model health maintenance organization (HMO) were surveyed by mail to assess the use of alternative therapies and the extent of interest in having them incorporated into HMO-delivered care. Sixty-one percent (n = 624) of adult primary care physicians, 70% (n = 157) of obstetrics-gynecology clinicians, and 50% (2 surveys, n = 1,507 and n = 17,735) of adult HMO members responded. During the previous 12 months, 25% of adults reported using and nearly 90% of adult primary care physicians and obstetrics-gynecology clinicians reported recommending at least 1 alternative therapy, primarily for pain management. Chiropractic, acupuncture, massage, and behavioral medicine techniques such as meditation and relaxation training were most often cited. Obstetrics-gynecology clinicians used herbal and homeopathic medicines more often than adult primary care physicians, primarily for menopause and premenstrual syndrome. Two thirds of adult primary care physicians and three fourths of obstetrics-gynecology clinicians were at least moderately interested in using alternative therapies with patients, and nearly 70% of young and middle-aged adult and half of senior adult members were interested in having alternative therapies incorporated into their health care. Adult primary care physicians and members were more interested in having the HMO cover manipulative and behavioral medicine therapies than homeopathic or herbal medicines.

(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; 169:153–161)

Alternative, unconventional, or complementary therapies have been defined as medical practices that are not in conformity with the standards of the western medical community (for example, they are not widely taught at medical schools, generally available at hospitals, or subject to reimbursement).[1] Alternative therapies are frequently used by patients with cancer,[2–7] arthritis,[8,9] chronic back pain,[10–12] human immunodeficiency virus infection or the acquired immunodeficiency syndrome,[13] and gastrointestinal problems.[14,15] Population-based surveys conducted in the 1990s suggest that substantial proportions of the populations of the United States and western Europe have been using alternative therapies in addition to conventional western medicine.[12,16–19] Furthermore, surveys in the Netherlands, Belgium, and the United Kingdom have found that more than half the public would like to have coverage for some forms of alternative therapies.[18]

There is also evidence that a substantial number of traditionally trained health care professionals are incorporating alternative therapies into their patient care or are interested in doing so. Recent surveys of general practitioners in western Europe, Israel, and former Commonwealth nations have found that from 25% to more than 80% of general practitioners are using alternative or complementary methods to supplement mainstream medicine, and most feel that these therapies include ideas and methods from which "regular" medicine might benefit.[20–28] Alternative therapies also appear to be gaining acceptance among the health care community in the United States. A 1992 survey of community physicians in Washington State and New Mexico found that more than 60% had referred at least one patient for alternative therapy in the past year, 12% incorporated alternative techniques into their practice, and 42% had used alternative therapies for themselves or family members (or

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ABBREVIATIONS USED IN TEXT
HMO = health maintenance organization
PMS = premenstrual syndrome

both). Primary care physicians were more likely than specialists to make referrals for alternative therapies.[29] A survey of family physicians in the Chesapeake Bay region found that most considered many alternative therapies to be effective and had referred patients to alternative practitioners or used these therapies in their own practice.[30] A survey of family practitioners in Washington State found that nearly 60% had encouraged their patients to seek chiropractic care.[31] An Office of Alternative Medicine has been established at the National Institutes of Health to investigate the effectiveness of various alternative modalities and act as an information clearinghouse, several professional journals devoted to alternative medicine have recently been started, and a growing number of medical schools and centers have developed programs for the study of alternative therapies. Many health insurance companies now routinely cover chiropractic care, some pay for acupuncture, and others are covering naturopathy, reflexology, and other unconventional practices.[32]

In the context of growing interest in alternative therapies among both patients and health care professionals, in 1996 we surveyed adult primary care physicians, obstetrics-gynecology physicians and nurse practitioners, and adult health plan members of the Kaiser Permanente Medical Care Program, Northern California, a large group practice health maintenance organization (HMO), to learn what alternative therapies clinicians were recommending to members for the treatment of health conditions, which therapies members were using, and which alternative therapies both constituencies were interested in having the HMO offer as a covered benefit.

Methods

During the spring of 1996, questionnaires were sent to 1,027 physicians who practiced at least 50% time in a department of adult primary care medicine and a random sample of 225 obstetrics-gynecology physicians and nurse practitioners at the 32 Kaiser Permanente medical facilities in northern California. Obstetrics-gynecology clinicians were included in the study because they frequently provide all primary care for some women and provide care for gynecologic conditions such as premenstrual syndrome (PMS) and menopausal symptoms. Concurrently, a stratified random sample of approximately 3,000 adult health plan members were surveyed. Both surveys had the stated goal of learning about prior use of alternative therapies and the opinions about whether the HMO should incorporate alternative therapies into its health care delivery system to inform decisions about future HMO services. At about the same time, a large-scale general member health survey that collected a wide range of information related to health, health care use, and sociodemographic characteristics and that included 1 multi-item question about alternative therapies was also being conducted with a stratified random sample of adult health plan members (n = 34,000). Data from this larger member survey were used to estimate the proportions of adult members who had used the 20 alternative therapies ever and in the past 12 months.

In all three surveys, as many as three attempts were made to obtain completed questionnaires. Phone follow-up interviews of random samples of nonrespondents to the alternative therapy surveys were used to determine possible response bias. Because adult members were nonproportionally sampled from six age-sex strata and response rates differed significantly across strata, respondents to the member surveys were assigned weights based on their age and sex so that the final sample used for the analyses would better reflect the actual age-sex composition of the adult health plan membership rather than that of the respondent sample.

To estimate the prevalence of alternative therapy use, clinicians and members were asked to indicate which of the following 20 alternative therapies they had used to treat or prevent health problems: chiropractic, osteopathy, acupuncture, acupressure, massage therapy, body work, biofeedback, hypnosis or self-hypnosis, meditation or mindfulness, visualization or guided imagery, relaxation training, homeopathic remedies, herbal remedies, megavitamin therapy, special diet, religious healing or prayer, psychological counseling, yoga, tai chi or *chi gong*, and support groups or 12-Step programs. Brief descriptions of these alternative therapies were provided in the questionnaires. Clinicians were asked whether they had used or recommended the therapies to patients during the past 12 months, and members were asked whether they had ever used the therapies and whether the use was during the past 12 months. Both clinicians and members were asked to list the health conditions for which these therapies had been used.

χ^2 tests were used to assess whether differences in proportions—for example, percentages of adult primary care physicians versus obstetrics-gynecology clinicians or young or middle-aged adults versus adults aged 65 years or older reporting the use of different therapies—were statistically significant. Pearson correlations and multiple linear regression were used to assess significance of differences between groups with regard to continuous variables, such as the level of interest.

Results

Clinician Survey

About 61% (n = 624) of adult medicine primary care physicians and 70.4% (n = 157) of obstetrics-gynecology physicians and nurse practitioners responded to the survey. The characteristics of the respondent sample are shown in Table 1. The results of a survey of a random sample of physician nonrespondents found that respon-

TABLE 1.—*Characteristics of Adult Primary Care and Obstetrics-Gynecology Clinician Respondents*

Characteristic	Adult Primary Care Clinicians (n = 624), %	Obstetrics-Gynecology Clinicians (n = 157), %
Sex		
Male	68.0	42.9
Female	32.0	57.1
Age, yr		
≤44	52.6	48.1
45–65	46.6	49.4
>65	0.8	2.6
Race or ethnicity		
White	68.6	79.0
African American	1.4	1.9
Hispanic or Latino	2.4	5.1
Asian	23.2	12.1
Other	0.8	1.9
Specialty		
Internal medicine	79.6	—
Family practice	14.0	—
General practice	2.8	—
Other adult medicine	3.6	—
Obstetrics-gynecology (physician)	—	75.2
Obstetrics-gynecology (nurse practitioner)	—	24.8

dents and nonrespondents did not differ with regards to sex, age, number of years employed by the HMO, interest in using alternative therapies, and interest in having the HMO cover alternative therapies.

Clinician interest in using alternative therapies. Two thirds of adult primary care physicians and three fourths of obstetrics/gynecology clinicians expressed at least moderate interest in the use of alternative therapies to treat health problems, alone or in combination with more conventional western medicine approaches, and 35% of adult primary care physicians and 45.3% of obstetrics-gynecology clinicians were very interested. Among the obstetrics-gynecology clinicians, nurse practitioners were more likely than physicians to be very interested in alternative therapy use (78.9% versus 35.3%; $P < .001$).

The level of interest was significantly associated with age and sex among both adult primary care physicians and obstetrics-gynecology clinicians, with women and clinicians younger than 55 years significantly more likely to be very interested in alternative therapy use than men and clinicians aged 55 and older. The level of interest was also significantly associated with clinicians' report of how often patients mentioned using or considering alternative therapies ($r = 0.35$, $P < .001$). Results of the multivariate model showed that clinicians' report of how often patients mentioned alternative therapies was a consistently significant independent predictor of clinician interest for both adult primary care physicians and obstetrics-gynecology clinicians ($P < .001$), after controlling for age group (significant predictor for adult primary care physicians) and sex (significant predictor for obstetrics-gynecology clinicians).

Among those who were at least moderately interested, nearly all indicated that this interest was motivated by problems presented by patients who could not adequately be treated with more conventional methods (60% indicated this as motivating interest "a great deal") (Figure 1). The belief that many health problems could be more effectively treated using a holistic approach in lieu of a more conventional western approach was indicated as motivating interest by nearly 85% (with about a third indicating this as motivating interest "a great deal"). A substantial proportion of clinicians also indicated that growing patient requests for these methods and the belief that the HMO must start offering these methods to remain competitive were making them more interested in alternative therapies, but most providers rated these last factors as only somewhat motivating interest.

Use of or recommendation of alternative therapies by physicians. Overall, 93% of both adult primary care physicians and obstetrics-gynecology clinicians had used or recommended to patients at least 1 of the 20 alternative therapies during the previous 12 months, or 89% if we exclude psychological counseling, 12-Step or support groups, religious healing or prayer, and special diet (which was often low fat or low sodium). The percentages of adult primary care physicians and obstetrics-gynecology clinicians who had used or recommended the use of each of the different therapies are shown in Table 2. Among adult primary care physicians, psychological counseling, relaxation techniques, 12-Step or support programs, acupuncture, massage therapy, chiropractic treatment, biofeedback, and acupressure were cited by at least 30%. Less than 10% reported using or recommending herbal or homeopathic medicines or megadoses of vitamins or supplements. Among obstetrics-gynecology clinicians, psychological counseling, relaxation techniques, 12-Step or support programs, meditation or mindfulness, massage therapy, acupuncture, chiropractic, and acupressure were cited by at least 30% of respondents. Obstetrics-gynecology clinicians were significantly more likely than adult primary care physicians to report recommending herbal and homeopathic medicines and megadoses of vitamins or supplements.

Chiropractic, acupuncture, acupressure, and massage therapy were primarily recommended for the management of musculoskeletal and nerve or joint pain, and biofeedback was recommended for the management of headaches. Relaxation techniques and meditation or mindfulness were primarily recommended for stress management and pain control. Hypnosis was mostly recommended for smoking cessation and pain control. Among adult primary care physicians, herbal medicines were most often recommended for treating upper respiratory tract infections, sleep problems, and fatigue, but among obstetrics-gynecology clinicians, they were mostly used for treating symptoms of menopause and PMS.

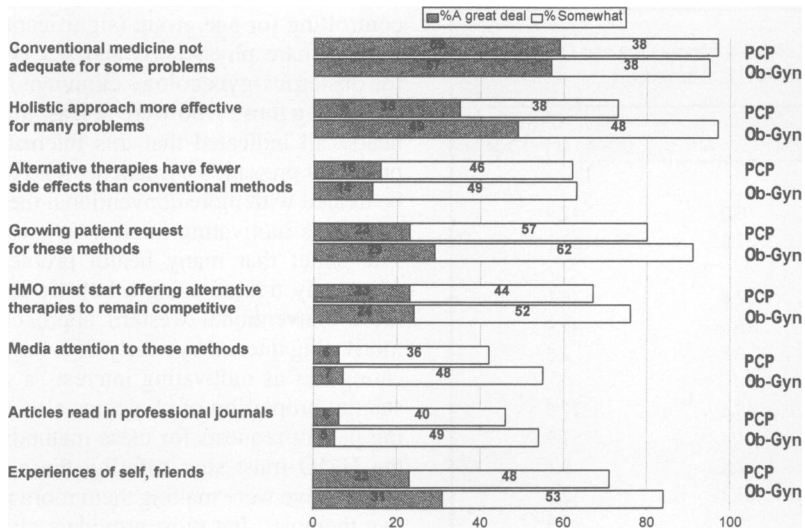

Figure 1.—These factors motivate adult primary care physician (PCP) and obstetrics-gynecology (Ob-Gyn) clinician interest in the use of alternative therapies. HMO = health maintenance organization

TABLE 2.—*Alternative Therapies Currently Being Used or Recommended by Adult Primary Care and Obstetrics-Gynecology Clinicians for Patient Care*

Alternative Therapy	Adult Primary Care Clinicians (n = 624), %	Obstetrics-Gynecology Clinicians (n = 157), %
Manipulation therapies	72.9	68.1
Chiropractic	33.6	37.6
Osteopathy	5.1	5.7
Acupuncture	57.2	42.7
Acupressure	30.9	30.6
Massage therapy	42.5	44.6
Body work	7.5	12.1
Ingested therapies*	29.5	54.1
Herbal or botanical medicine	8.8	29.3
Homeopathic medicine	2.7	9.5
Special diet	18.3	28.0
Megadoses of vitamins, etc	8.3	21.7
Mind-body therapies	74.8	70.7
Meditation, mindfulness	48.9	45.8
Relaxation techniques	67.6	63.7
Guided imagery, visualization	16.7	22.9
Biofeedback	31.9	22.9
Hypnosis, self-hypnosis	11.5	14.0
Movement therapies	27.7	26.1
Yoga	19.5	22.9
Tai chi, chi gong	17.9	10.2
Supportive therapies	84.9	80.2
Religious healing or prayer	13.6	12.7
12-Step program, support group	58.0	48.4
Psychological counseling	78.7	77.1

*Many of the clinicians who indicated using or recommending special diet just described the type as "low fat" or "low sodium." Thus, the prevalence reported for this modality is likely inflated by providers who recommended more conventional diets for heart disease, diabetes mellitus, and hypertension. Excluding special diet, the proportions of clinicians who reported recommending ingested therapies are 16.3% for adult primary care physicians and 42.0% for obstetrics-gynecology clinicians.

Do clinicians want alternative therapies to be covered by the HMO? Asked if they would like to see HMO health care professionals have greater opportunity to use alternative therapies to treat their patients' health problems, 65.6% of adult primary care physicians and 74.3% of obstetrics-gynecology clinicians expressed interest. About 14% of adult primary care physicians and 10% of obstetrics-gynecology clinicians said that they did not want the HMO's health care professionals to have greater access to alternative therapies for patient care, and 15% of adult primary care physicians and 9% of obstetrics-gynecology clinicians were not sure. As might be expected, interest in having expanded opportunities to use alternative therapies within the HMO was positively associated with the level of clinician interest in alternative therapies in general. Among clinicians with a high level of interest, 91.4% said that they probably or definitely wanted to have more opportunity to use these therapies with HMO patients versus 76.7% of those with moderate interest and 30.5% of those with little or no interest. The main concerns expressed about increasing access were that alternative therapies were a fad and that the therapies had not been scientifically shown to be effective.

The proportions of clinicians desiring the health plan to provide coverage for specific alternative therapies are shown in Table 3. Among both adult primary care physicians and obstetrics-gynecology clinicians, the therapies most frequently desired were acupuncture, biofeedback, acupressure, hypnosis or self-hypnosis, chiropractic, yoga, and therapeutic massage. Most adult primary care physicians indicated that they did not want herbal medicines and homeopathic medicines available. A significantly larger proportion of obstetrics-gynecology clinicians than adult primary care physicians were interested in making herbal and homeopathic medicines and massage therapy available.

TABLE 3.—*Alternative Therapies That Adult Primary Care and Obstetrics-Gynecology Clinicians Would Like the HMO to Make Available to Members*

Alternative Therapy	Would Like to Have Therapy Available: Adult Primary Care Clinicians (n = 624), %	Would Like to Have Therapy Available: Obstetrics-Gynecology Clinicians (n = 157), %
Chiropractic	52.1	57.9
Acupuncture	84.0	73.0
Acupressure	62.9	62.9
Massage therapy	43.8	61.0
Herbal, botanical medicine	15.5	44.0
Homeopathic medicine	6.9	24.5
Biofeedback	79.6	75.5
Hypnosis, self-hypnosis	56.9	63.5
Yoga	48.9	52.9

HMO = health maintenance organization

Member Survey

About 50% (n = 1,507) of the randomly stratified sample of members who were sent the alternative therapies questionnaire and 53% (n = 17,735) of those sent the general member health survey questionnaire responded. The characteristics of respondents to the member alternative therapies survey are shown in Table 4. The sample is primarily white, with most having completed at least some college or technical school and about a third having completed at least a four-year college degree. The sociodemographic characteristics of the member health survey respondent sample, which was used to estimate recent and ever use of the different alternative therapies, were virtually identical to those of the other survey sample. The telephone interviews conducted with nonrespondents found that among young and middle-aged adults, nonrespondents were similar to respondents with regard to their desire to have the HMO health care professionals incorporate more alternative treatment methods into patient care and which alternative therapies they wanted to see the HMO offer as a covered benefit. Although nonrespondents aged 65 years and older were less interested in alternative therapies than those who did respond, the survey response rate for that age group was more than 70%. Thus, response bias should not be considered a major concern.

Members' use of alternative therapies. An estimated 31% of adult HMO members had used at least one of these alternative therapies during the previous 12 months or, excluding special diet and the supportive therapies, 25%. Nearly 50% of adults had ever used at least one of these alternative therapies, 43% when special diet and the supportive therapies are excluded. The estimated proportions of adult HMO members who had used the different alternative therapies are shown in Table 5. Overall, the methods most frequently indicated were chiropractic, massage therapy, relaxation techniques, and psychological counseling. Less than 10% of adult members had used herbal or homeopathic medicines. Younger and middle-aged adults were more likely than senior adults to report having used many of these therapies.

TABLE 4.—*Characteristics of Respondents to the Alternative Therapies Member Survey (n = 1,516)*

Characteristic	Before Weighting, %	After Weighting, %*
Age, yr		
20–44	35.5	50.4
45–65	34.8	34.5
>65	29.7	15.1
Sex		
Female	54.9	52.5
Male	45.1	47.5
Race, ethnicity		
White	70.6	68.0
African American	5.7	5.6
Hispanic, Latino	8.6	9.6
Asian	10.6	12.0
Other	4.6	4.8
Education		
<12 yr	7.6	5.9
High school graduate	19.0	16.2
Some college	39.1	41.5
College graduate	34.4	36.4

*Weighted data reflect the actual age-sex distribution of the health maintenance organization's adult membership in the region surveyed. The profile of the 17,735 respondents to the member health survey was almost identical.

Members primarily used the manipulative therapies such as chiropractic and acupuncture for the treatment of musculoskeletal and other pain. In addition, these modalities were being used for allergies (acupuncture and acupressure), smoking cessation (acupuncture), symptoms of PMS (acupuncture, women <44 years), and stress (acupressure and massage). Herbal and homeopathic medicines were primarily being used for upper respiratory tract infections, general health maintenance, pain, allergies, mental health or depression, stress, sleep and fatigue problems, gastrointestinal problems, and among women, managing symptoms of PMS and menopause. Meditation, relaxation techniques, and guided imagery were being used primarily for stress, pain, mental health problems or depression, general health maintenance, and PMS, and hypnosis or self-hypnosis were being used primarily for pain, stress, mental health problems or depression, smoking cessation, weight management, and sleep problems. Biofeedback was used for pain, high blood pressure, and temporomandibular joint pain.

Members' interest in alternative therapies. Members' interest in the use of alternative treatment methods to treat or prevent health conditions varies by age (Figure 2). About two thirds of younger and middle-aged adults indicated that they were at least moderately interested, and more than 40% indicated a lot of interest. Slightly less than half of senior members expressed at least moderate

TABLE 5.—*Estimated Use of Selected Alternative Treatment Methods by Adult HMO Members Ever and in Past 12 Months**

Alternative Method Used	Age 20 to 64 yr			Age ≥65 yr			Age ≥20 yr		
	Female, % (n = 7018)	Male, % (n = 5352)	All, % (n = 12,370)	Female, % (n = 2647)	Male, % (n = 2718)	All, % (n = 5365)	Female, % (n = 9665)	Male, % (n = 8070)	All, % (n = 17,735)
Manipulation therapies									
Chiropractic									
Used in past year	9.6	8.3	9.0	6.7	4.6	5.8	9.1	7.8	8.5
Ever used	24.2	24.2	24.2	18.5	19.8	19.1	23.3	23.6	23.4
Osteopathy									
Used in past year	0.2	0.1	0.2	0.2	0.4	0.3	0.2	0.2	0.2
Ever used	1.0	0.6	0.8	1.7	1.7	1.7	1.1	0.8	1.0
Acupuncture									
Used in past year	2.8	1.5	2.2	1.8	1.0	1.4	2.6	1.4	2.1
Ever used	8.5	5.1	6.8	7.9	5.9	7.0	8.4	5.2	6.9
Acupressure									
Used in past year	2.0	0.9	1.5	0.8	0.4	0.6	1.8	0.9	1.4
Ever used	4.2	2.4	3.3	2.2	1.2	1.7	3.9	2.2	3.1
Massage therapy									
Used in past year	10.2	6.1	8.2	3.5	2.6	3.1	9.2	5.6	7.5
Ever used	17.6	12.5	15.1	7.5	7.0	7.3	16.0	11.7	13.9
Body work									
Used in past year	2.0	1.7	1.8	0.5	0.9	0.7	1.7	1.6	1.6
Ever used	3.5	2.8	3.2	0.9	1.5	1.2	3.1	2.6	2.9
Ingested substances, diet									
Herbal medicine, remedies									
Used in past year	5.2	2.7	4.0	1.2	1.2	1.2	4.6	2.5	3.6
Ever used	10.0	6.3	8.2	3.8	3.1	3.5	9.0	5.8	7.5
Homeopathic medicine									
Used in past year	3.3	2.0	2.7	1.0	0.5	0.8	3.0	1.7	2.4
Ever used	5.6	3.2	4.4	2.0	0.9	1.5	5.0	2.8	4.0
Megadoses of vitamins									
Used in past year	2.5	2.3	2.4	1.7	2.0	1.9	2.4	2.2	2.3
Ever used	3.5	3.2	3.4	2.5	2.7	2.6	3.4	3.1	3.2
Special diet									
Used in past year	1.2	0.8	1.0	0.5	0.5	0.5	1.1	0.8	1.0
Ever used	2.1	1.5	1.8	1.2	0.9	1.1	2.0	1.4	1.7
Mind-body therapies									
Meditation, mindfulness training									
Used in past year	5.8	3.3	4.6	1.9	1.3	1.6	5.2	3.0	4.2
Ever used	9.0	5.3	7.2	3.6	2.2	3.0	8.1	4.8	6.6
Relaxation techniques									
Used in past year	11.4	5.4	8.5	3.6	2.1	2.9	10.2	4.9	7.7
Ever used	16.9	8.7	13.0	6.4	3.1	4.9	15.3	7.9	11.8
Guided imagery, visualization									
Used in past year	4.0	1.3	2.7	1.4	0.8	1.1	3.6	1.2	2.5
Ever used	7.1	2.5	4.9	2.6	1.1	1.9	6.4	2.3	4.5
Biofeedback									
Used in past year	0.4	0.3	0.4	0.3	0.2	0.3	0.4	0.3	0.4
Ever used	2.2	1.0	1.6	0.8	0.6	0.7	2.0	0.9	1.5
Hypnosis, self-hypnosis									
Used in past year	1.8	0.5	1.2	0.6	0.5	0.5	1.6	0.5	1.1
Ever used	4.6	1.8	3.3	2.2	1.2	1.7	4.2	1.7	3.1
Movement therapies									
Yoga									
Used in past year	3.1	1.0	2.1	1.2	0.5	0.9	2.8	0.9	1.9
Ever used	5.9	2.2	4.1	2.9	1.1	2.1	5.5	2.0	3.8

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Tai chi, chi gong									
Used in past year	1.4	1.1	1.3	1.9	0.7	1.3	1.5	1.0	1.3
Ever used	2.8	2.2	2.5	3.7	1.6	2.7	3.0	2.1	2.6
Supportive therapies									
Psychological counseling									
Used in past year	8.0	3.8	6.0	1.7	1.0	1.4	7.0	3.4	5.3
Ever used	15.9	8.1	12.1	4.6	2.5	3.7	14.1	7.3	10.9
Religious healing or prayer									
Used in past year	9.5	4.9	7.3	6.1	3.4	4.8	9.0	4.7	6.9
Ever used	12.9	6.8	10.0	9.2	4.9	7.2	12.2	6.5	9.5
Support group, 12-Step program									
Used in past year	3.2	2.2	2.7	1.2	0.9	1.1	2.9	2.0	2.5
Ever used	6.7	4.4	5.6	2.5	1.8	2.2	6.0	4.0	5.1

HMO = health maintenance organization

*Estimates based on data from 17,735 respondents to a 1996 member health survey, weighted to the age-sex distribution of the adult health plan membership. The ns at the top of each column reflect the actual number of respondents who provided data.

interest, and only about a fourth were very interested. Overall, the survey results suggest that about 60% of the adult membership is at least moderately interested and 40% very interested in the use of alternative therapies.

Fairly high interest in having the HMO's health care professionals incorporate alternative treatment methods to treat health conditions in the future, either alone or combined with more usual treatments, was also indicated (Figure 3). Overall, nearly 70% of adult members would probably or definitely like to see this happen. Again, interest varied with age, with younger and middle-aged adults more likely than seniors to be interested in having alternative therapies incorporated into their HMO-delivered care.

Asked to indicate which alternative therapies they would like to have the health plan provide as a covered benefit, members most frequently expressed the desire for chiropractic, followed by massage therapy, acupuncture, relaxation techniques, and acupressure (Table 6). Among all the possible alternative therapies listed, only homeopathic medicines and biofeedback were not desired by at least 20% of adult members. As might be expected based on the general level of interest in alternative methods, seniors were less likely than younger and middle-aged adults to indicate a desire for the health plan to cover any of the methods. Also, people who had

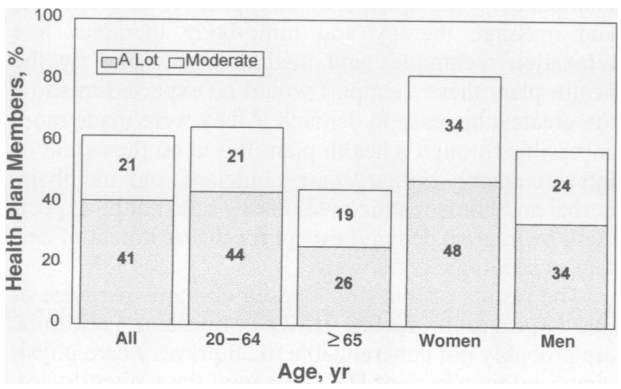

Figure 2.—The level of interest among adult health plan members in using alternative therapies to treat or prevent health problems is shown.

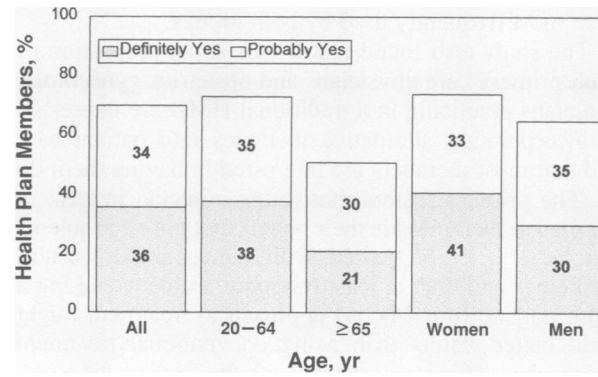

Figure 3.—The proportions of adult health plan members are shown who would like to see health maintenance organization providers use alternative methods to treat health conditions in the future.

TABLE 6.—*Alternative Therapies HMO Members Would Like to Have Covered by the Health Plan*

Alternative Therapy	All, % (n = 1516)	Age, yr		Sex		Used or Considered Use of This Therapy	
		20 to 64, % (n = 1063)	>65, % (n = 453)	Women, % (n = 835)	Men, % (n = 681)	Yes, % n†	No, % n†
Chiropractic	61.1	64.4	42.4	60.5	61.7	83.2	37.8
Acupuncture	41.4	43.8	27.5	40.0	40.0	78.2	28.1
Acupressure	33.6	36.4	17.7	36.7	30.2	76.9	22.5
Massage therapy	50.2	53.3	32.8	54.9	44.9	77.4	34.3
Herbal medicine	30.7	32.8	18.3	34.7	26.2	70.1	19.6
Homeopathic medicine	17.2	18.3	10.9	20.6	13.4	60.8	10.6
Meditation, mindfulness	23.9	26.3	10.3	26.1	21.5	62.0	13.3
Relaxation techniques	36.3	39.1	20.2	40.6	31.5	67.1	25.3
Biofeedback	17.6	18.6	11.7	20.1	14.8	49.1	14.2
Hypnosis, self-hypnosis	22.3	23.9	12.9	24.2	20.1	67.6	14.6
Yoga, tai chi	21.4	22.6	14.5	24.8	17.6	62.5	14.9

HMO = health maintenance organization

*Estimates based on data from 1,516 respondents to the member survey about alternative therapy use, weighted to the age-sex distribution of the adult health plan membership. The ns at the top of each column reflect the actual number of respondents who provided data.

†The ns on which the percentages in the last 2 columns are based are different for each therapy, and can be obtained from the lead author.

used the therapies in the past were significantly more likely than those who had not to want coverage for them in the future.

Discussion

This study found that a substantial proportion of adult members of this northern California HMO, especially young and middle-aged adults, have been using alternative therapies for their health problems, even though they usually have gone outside the health plan to do so. We also found that a substantial proportion of primary care clinicians have already been recommending alternative therapies to patients. Currently, both members and clinicians have been using alternative therapies primarily for the management of pain and problems such as PMS and menopausal symptoms. The manipulative therapies, such as chiropractic, acupuncture, and therapeutic massage, were most frequently used by both groups.

The study also found that a substantial proportion of adult primary care physicians and obstetrics-gynecology clinicians practicing in a traditional HMO are interested in incorporating alternative therapies into patient care and that most members are interested in having them do so. The primary factors motivating clinician interest in alternative therapies are their beliefs that not all problems can be effectively treated with conventional western medicines and that, at least for some problems, taking a more holistic (mind-body) approach to treatment might yield better results than using conventional treatment approaches. This is consistent with the findings of a survey of Swedish general practitioners regarding interest in alternative therapies,[27] as well as studies of why patients seek alternative treatments.[17,26,33] Although most clinicians downplayed factors of patient demand and concern that the HMO might need to offer alternative therapies to stay competitive, there was a significant association between clinicians' reports of the frequency with which patients are mentioning alternative therapy and the level of clinician interest in using these therapies.

The factors most consistently cited by clinicians as affecting whether they recommended different alternative therapies were a lack of familiarity with the methods, concern about whether they were effective, and not wanting to recommend something that their patients would need to pay for themselves. This suggests that if credible evidence were available about the effectiveness and safety of different alternative therapies for treating specific types of health problems, and if these therapies were covered by the health plan, clinicians would likely begin to recommend them more frequently, especially if demand from patients increased. Because both members and clinicians showed the greatest interest in having manipulative therapies like chiropractic, acupuncture, and massage therapy and mind-body therapies like relaxation techniques and meditation covered by the health plan, these therapies would be expected to show the greatest increase in demand if they were made more accessible through a health plan. Based on the extent of interest among primary care clinicians and members, herbal and homeopathic medicines would not be expected to be in great demand except for the treatment of certain gynecologic conditions.

The results of this study, based on the experience of one large group practice HMO in northern California, are probably not generalizable to all primary care physicians and members of HMOs around the United States. For example, the 1994 Robert Wood Johnson Foundation survey found higher usage of alternative therapies in the western United States than in other parts of the

country.[16] The geographic region served by this HMO, however, is not just the San Francisco Bay Area, which is known for leading trends in health care, but also the more conservative Central Valley of California, and the membership is diverse with regard to education, socioeconomic status, and health-related attitudes. In fact, our estimate of the proportion of members who used any of the 20 alternative therapies is comparable to that found in a 1991 national survey.[12] Patients are increasingly presenting providers with symptoms and chronic health problems that are often not totally resolved by conventional western medicines and treatments, such as stress-related disorders, pain, fatigue, PMS, and menopausal symptoms, and some patients are also expressing concern about the iatrogenic effects of the long-term use of pharmaceuticals. As more information about alternative therapies reaches people around the country suffering from these problems through media exposure, Internet searches, and disease-specific networking efforts, interest in alternative therapies among both health care professionals and the public will likely begin to mirror the current experience of this HMO. The results of this study suggest which alternative therapies are likely to be in greatest demand by these dual constituencies and should therefore be a focus for further research regarding the health conditions for which these therapies appear to be effective and ineffective and the possible costs of incorporating them into a traditional health care delivery system.

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