

Provider Attitudes and Use of Alternative Medicine in a Midwestern Medical Practice in 2001

Brenda Rooney, PhD; Guy Fiocco, MD; Peter Hughes, MA; Susan Halter, MD

ABSTRACT

Objective: To determine the current level of use, referral and desire for service of different complementary and alternative (CAM) therapies among Gundersen Lutheran Medical Center providers.

Methods: A survey was conducted in January of 2001 of all medical and associate staff.

Results: The response rate was 79%; 55% reported using 1 or more of 18 therapies for themselves. Over 25% of providers used nutritional supplements, herbal medicines, or hydrotherapy with a patient. Over half of providers had referred a patient for biofeedback or chiropractic care. Over half of providers would like to offer acupuncture, biofeedback, chiropractic care, hydrotherapy, nutritional supplements, or massage to patients in the future.

Associate staff, female staff, primary care providers, and those who had personally used CAM therapies were more likely to have used, referred, or wish to offer more therapies in the future. There was little support for aromatherapy, magnetic field therapy, naturopathic medicine, or ethnic healing methods.

Conclusions: Use of and desire for complementary therapies at Gundersen Lutheran was higher than expected by the Integrative Medicine Oversight Committee. Health care organizations should consider having a process in place to manage the increasing demands for complementary and alternative therapies.

INTRODUCTION

Alternative, complementary or integrative medicine are terms used interchangeably to refer to a range of therapies considered outside the realm of Western Medicine. A definition for alternative or complementary medicine by the British Medical Association is "those forms of treatment which are not widely used by

orthodox healthcare professions, and the skills of which are not taught as part of the undergraduate curriculum of orthodox and paramedical health care courses."¹ The National Institutes of Health defines complementary medicine in a similar fashion. "Generally it is defined as those treatments and health care practices not taught widely in medical schools, not generally used in hospitals, and not usually reimbursed by medical insurance companies."² Although these therapies are not commonly taught to physicians, increasing demand for these services from patients has resulted in inconsistencies in the availability and quality of these therapies.

Indeed, there is great interest among the public regarding complementary medicine. In a frequently cited article in the *New England Journal of Medicine*, among 1539 adults, 34% of respondents had used at least one "unconventional" therapy in the past year, averaging 19 visits per person.³ Furthermore, Eisenberg and colleagues estimated that in 1990, Americans spent \$13.7 billion, mainly paid out of pocket. In 1998, Eisenberg reported that 42% of people in the United States used CAM therapies, accounting for an estimated \$21 billion in annual expenditures.⁴ A finding of great concern from this study was that 72% reported not informing their medical doctor that they were using unconventional therapies.

But what about clinician interest in complementary and alternative medicine? Physician interest in complementary and alternative medicine is widely documented in many Western countries. A survey in England, reported in 1983, found that 18% of physician trainees reported using at least one alternative medicine method with a patient and an additional 70% wanted to have training in one or more methods.⁵ Another study in England in 1986 found that 38% of practitioners had received some training in complementary medicine and 15% wished to receive training.⁶ Despite little knowledge about the effectiveness of the techniques, 76% of practitioners had referred patients to one of the treatments, and 93% believed

Authors are with Gundersen Lutheran Medical Center, La Crosse, WI. Reprint requests to Brenda Rooney, PhD, 1836 South Ave, La Crosse, WI 54601; 608.782.7300.

Table 1. Personal use of complementary and alternative therapies

Overall	54.5%
By Position	(P=0.001)
Med Staff	47%
Assoc Staff	75%
By Gender	(P=0.001)
Male	45%
Female	74%
By Specialty	(P=0.823)
Primary Care	56%
Specialty Care	54%
By Location	(P=0.201)
La Crosse	52%
Onalaska	70%
Other regional facilities	55%

Table 2. Percent responding yes to using, referring or wishing to offer each of these therapies for patients

<i>Therapy</i>	<i>Used this therapy with a patient?</i>	<i>Referred a patient?</i>	<i>Would like to offer to a patient in the future?</i>
Nutritional Supplements	54%	37%	60%
Herbal Medicines	35%	21%	49%
Hydrotherapy	25%	39%	52%
Massage	24%	46%	62%
Biofeedback	23%	57%	70%
Chiropractic	17%	54%	54%
Meditation/ Guided Imagery	17%	18%	41%
Prayer Therapy	15%	18%	40%
Osteopathy	9%	22%	34%
Hypnotherapy	8%	21%	41%
Yoga	8%	18%	41%
Acupressure	8%	8%	38%
Acupuncture	4%	24%	50%
Naturopathic Medicine	4%	6%	16%
Tai Chi	3%	11%	35%
Aromatherapy	3%	2%	13%
Magnetic Field Therapy	1%	2%	8%
Ethnic Healing	0%	3%	15%

that complementary medicine practitioners needed some form of statutory regulation via a central and independent national organization.

In 1998, Berman and colleagues reported on a survey of attitudes and practice patterns of 783 primary care physicians from the United States.⁷ They found that clinicians most frequently reported training in biofeedback, relaxation, counseling, psychotherapy,

behavioral medicine, and diet and exercise counseling. These therapies were also most likely to be regarded as legitimate. Oriental medicine, Native American medicine and electromagnetic applications were the least accepted and used. Physician attitudes and training were the best predictors of use of therapies with patients. The longer the provider had been in practice, the less likely the provider was to use an alternative therapy.

In 2000, an Integrative Medicine Oversight Committee was created at Gundersen Lutheran. This committee was developed due to the belief that complementary therapies had “crept” into the organization without any formal review, to respond to an ever-increasing desire of clinicians to offer a wider variety of therapies to patients, and because of an apparent patient interest in these therapies. The main purpose of this committee was to create a process for reviewing and approving therapies, and to screen proposals from providers requesting privileges for integrative medicine services. Other purposes of the committee were to inventory therapies currently being offered, educate all staff about various integrative medicine topics, and support integrative medicine research proposals.

This article describes a survey of all Gundersen Lutheran medical and associate staff for the purpose of assessing what percent of health care providers were using complementary therapies, making referrals for therapies, and which therapies they would like to offer to a patient in the future.

METHODS

In January of 2001, 378 surveys were sent to all medical and associate staff of Gundersen Lutheran’s health care system. Associate staff included physician assistants, nurse practitioners or advanced care nurses, and nurse midwives. Any staff member that did not see patients in a clinic office setting, such as radiologists, anesthesiologists, dental specialists, or pathologists, were excluded from the study. The survey was identifiable by ID number only to link to provider-specific demographics (gender, type of staff, department of practice) and to track those who had not completed the survey. Respondents were instructed to send the survey back even if they didn’t wish to complete it, so we could count them as a refusal. A notice was sent out about 2 weeks later to remind clinicians to complete the survey.

Eighteen therapies were asked about: acupressure, acupuncture, aromatherapy, biofeedback, chiropractic, ethnic healing, herbal medicines, hydrotherapy, hypnotherapy, magnetic field therapy, massage,

Table 3. Percent responding yes by staff position (medical staff versus associate staff)

Therapy	Used this therapy with a patient?		Referred a patient?		Would like to offer to a patient in the future?	
	Medical	Associate	Medical	Associate	Medical	Associate
Nutritional Supplements	52	59	33	46*	55	75*
Herbal Medicines	33	41	19	27	44	63*
Hydrotherapy	21	36*	38	42	50	59
Massage	19	36*	42	56*	59	69
Biofeedback	27	15*	63	41*	70	68
Chiropractic	17	19	55	53	54	54
Meditation/Guided Imagery	14	26*	17	22	38	51*
Prayer Therapy	14	20	17	21	38	48
Osteopathy	10	5	22	22	30	44*
Hypnotherapy	10	4	23	16	40	44
Yoga	7	10	13	32*	37	54*
Acupressure	7	10	8	10	32	56*
Acupuncture	4	4	26	19	50	50
Naturopathic Medicine	4	4	4	11*	12	26*
Tai Chi	3	5	10	15	32	43
Aromatherapy	1	10*	2	4	8	26*
Magnetic Field Therapy	1	0	2	2	6	12
Ethnic Healing	0	0	2	6	12	23*

* differences between medical staff and associate are significant at $P < 0.05$

meditation/guided imagery, naturopathic medicines, nutritional supplements, osteopathy, prayer therapy, tai chi, and yoga. For each therapy, clinicians were asked if they had ever used the therapy with a patient, if they had referred a patient for the therapy, and if they would like to offer the therapy to their patients in the future. Clinicians were asked about personal use of any of the therapies listed and to report any known patient complications resulting from the use of an alternative medicine. All information on the survey was scanned, maintained in an Access database, and analyzed using SAS statistical software.⁸ Differences in use of therapies, referral patterns, and desire to offer service to patients were examined by provider characteristics such as gender, length of time in practice, specialty, and personal use of therapies. Differences were significant for p -values < 0.05 .

RESULTS

Of the 378 surveys sent out to providers, 300 (79%) were returned; 7 refused to complete the survey. There were no significant differences in clinician characteristics between those that returned or did not return the survey. Of medical staff, 78% returned the survey, and 84% of associate staff returned it. Seventy-eight percent of males returned the survey compared to 84% of females, and 83% of primary care providers compared to 78% of specialty care providers returned the survey. Eighty percent of main clinic staff returned the survey, compared with

82% of regional clinic staff. Of those surveyed, 75% were medical staff, 70% were male, 29% were primary care providers, and 69% were from the main clinic facility. The average length of time in medical practice was 14.5 years. Fifty-five percent of providers reported using 1 or more of the 18 listed therapies for themselves in the past. Associate staff was more likely to report using CAM therapies than medical staff, and females were more likely than males to report this (Table 1).

The therapies most commonly used with a patient were nutritional supplements, herbal medicines, hydrotherapy, massage, and biofeedback (Table 2). Providers most commonly referred a patient for biofeedback, chiropractic, massage, and nutritional supplements. Therapies that providers most frequently wanted to offer patients were biofeedback, massage, nutritional supplements, hydrotherapy, chiropractic services and acupuncture.

Medical staff was more likely to use biofeedback with a patient, while associate staff used aromatherapy, hydrotherapy, meditation and massage more frequently (Table 3). Medical staff was also more likely to refer a patient for biofeedback. Associate staff was more likely to refer a patient to naturopathic medicines, nutritional supplements, yoga and massage. Associate staff was more likely than medical staff to want to offer most therapies to a patient in the future, although rates were high in both groups. Patterns of use, referral and desire for future use

Table 4. Percent responding yes by specialty (primary care vs. specialty care)

Therapy	Used this therapy with a patient?		Referred a patient?		Would like to offer to a patient in the future?	
	Primary	Specialty	Primary	Specialty	Primary	Specialty
Nutritional Supplements	69	47*	43	34	71	55*
Herbal Medicines	44	31*	29	18*	65	42*
Hydrotherapy	22	26	46	36	56	50
Massage	25	23	63	38*	73	57*
Biofeedback	22	24	65	53	71	69
Chiropractic	24	14*	74	46*	64	50*
Meditation/Guided Imagery	15	18	23	16	46	39
Prayer Therapy	23	12*	23	16	45	38
Osteopathy	19	4*	43	13*	47	28*
Hypnotherapy	8	9	26	19	43	41
Yoga	10	7	20	17	41	42
Acupressure	11	6	12	7	43	37
Acupuncture	7	3	38	18*	66	43*
Naturopathic Medicine	5	3	10	4	16	15
Tai Chi	4	3	13	10	41	32
Aromatherapy	3	3	4	1	13	13
Magnetic Field Therapy	1	1	4	1*	12	6*
Ethnic Healing	0	0	3	3	16	14

* differences between primary care and specialist are significant at $P < 0.05$

between male and female providers were very similar to those of medical staff and associate staff. Females were more likely than males to have used aromatherapy, hydrotherapy, meditation, tai chi and massage with their patients. They were also more likely to have referred a patient for acupressure, yoga, tai chi and massage. Female providers were more likely to want to offer a variety of therapies to patients in the future.

Primary care providers were more likely to use chiropractic services, osteopathy, herbal medicines, nutritional supplements and prayer therapy with their patients compared to specialists (Table 4). Primary care providers were also more likely to have referred a patient to many of the therapies in the past, and to offer the therapies to patients in the future.

Providers who reported personally using a CAM therapy in the past were more likely to use many of the therapies with their patients (13/18 therapies listed), referring a patient to a therapy in the past (15/18 therapies listed), and wishing to offer a therapy in the future (16/18 therapies listed), compared to those that had not personally used a CAM therapy (Table 5).

Finally, 21% of providers reported that 1 or more of their patients had experienced a serious complication as a result of using 1 or more complementary therapies. Of complications cited, 43% were due to use of herbal therapies, specifically interactions with other medications; 38% were due to injuries brought on by chiropractic services.

DISCUSSION

Use of, referral for, and desire to offer complementary and alternative medicines in the future was much higher among our clinicians than the Integrative Medicine Oversight Committee at our institution anticipated. The overwhelming response rate to this survey also suggests a high interest in having their opinions be known.

Like other published research, our study found that providers who personally use complementary therapies were much more likely to use, refer and wish to refer patients to these therapies in the future. In the study conducted by Reilly, 22% of physician trainees had been treated or had treated themselves with an alternative therapy, and this personal experience was predictive of a greater professional use of all therapies by these providers.⁵

A study in England in 1986 found that despite little knowledge about the effectiveness of the techniques, 76% of practitioners had referred patients to one of the treatments.⁶ That study also reported that 93% of practitioners believed that complementary practitioners needed statutory regulation via a central and independent national organization. In a survey of practitioners and medical students in England, Perkin found that medical students were the least informed about alternative therapies, but the most enthusiastic about offering them to patients. Again, of some concern in the Perkin study was a large proportion of doctors admitted making referrals to practitioners for alternative medicine without knowledge

Table 5. Percent responding yes by practitioner personal use of any CAM therapy

Therapy	Used this therapy with a patient?		Referred a patient?		Would like to offer to a patient in the future?	
	Used	No use	Used	No use	Used	No use
Nutritional Supplements	67	37*	44	27*	74	45*
Herbal Medicines	44	23*	26	13*	58	39*
Hydrotherapy	34	14*	46	31*	63	40*
Massage	36	10*	60	28*	76	47*
Biofeedback	27	20	66	48*	77	62*
Chiropractic	23	10*	62	41*	62	45*
Meditation/Guided Imagery	28	3*	26	6*	55	25*
Prayer Therapy	23	7*	25	11*	50	30*
Osteopathy	13	2*	23	18	38	28
Hypnotherapy	12	4*	25	16	52	29*
Yoga	11	2*	28	4*	55	25*
Acupressure	15	0*	13	4*	49	25*
Acupuncture	5	2	26	17	56	40*
Naturopathic Medicine	6	2	10	2*	22	10*
Tai Chi	5	1*	17	2*	47	20*
Aromatherapy	6	0*	5	0*	21	3*
Magnetic Field Therapy	1	1	4	0*	9	4
Ethnic Healing	0	0	5	1*	19	10*

*differences between those with personal use and those with no personal use are significant at P<0.05

of provider's qualifications. This suggests a need for education regarding effective therapies and a method for proper credentialing of such therapies.

A limitation to our study may have been a misunderstanding regarding the question of current use of a therapy with a patient. For example, 4% of clinicians reported current use of acupuncture with a patient. Currently, only 2 Gundersen Lutheran providers have been credentialed to perform acupuncture. The respondents may have misunderstood this question to mean working with a patient who had been referred for treatment for the therapy. Despite this, and the concerns over complications that may have resulted due to complementary medicines, a high percentage of Gundersen Lutheran providers are interested in offering therapies to patients.

The increasing popularity of complementary medicine suggests a need for health care organizations to carefully consider complementary medicine. A process should be developed within organizations to determine what therapies have sufficient evidence of effectiveness and how providers are credentialed in their use. Education of providers and patients about the effectiveness of such therapies should also be ongoing. Education, enhanced communication between providers and patients about appropriate therapies, and documentation of their use would result in a more safe use and acceptability for patients and providers.

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