

ED Staff Members' personal use of complementary therapies and their recommendations to ED patients: A southeastern US regional survey

By: Ann Gill Taylor, Yu-Shen Lin, [Audrey Snyder](#), and Kim Eggleston

Taylor, A.G., Lin, Y., Snyder, A. & Eggleston, K. (1998, December). ED Staff Members' personal use of complementary therapies and their recommendations to ED patients: A southeastern US regional survey. *Journal of Emergency Nursing*, 24(6), 495-499.
DOI: [10.1016/s0099-1767\(98\)70035-2](https://doi.org/10.1016/s0099-1767(98)70035-2)



© 1998 Emergency Nurses Association. Made available courtesy of Elsevier. This manuscript version is made available under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](#).

Abstract:

Background: Use of complementary and alternative therapies has increased in the United States during the past 5 years. Little is known about the use of these therapies in emergency departments. **Methods:** The Center for the Study of Complementary and Alternative Therapies, University of Virginia, surveyed staff in 10 emergency departments in the southeast region of the United States with the purpose of exploring ED practitioners' personal use of complementary therapies and recommendations of these therapies to patients. **Results:** ED staff reported back rub or massage, music, and prayer or spiritual practices as the 3 most frequently used complementary therapies for personal well-being. Back rub or massage and spiritual practices including prayer and group support were most frequently recommended to patients. Clinicians expressed interest in acquiring additional knowledge of complementary therapies and support for integration of these therapies in emergency departments. **Conclusions:** Use of complementary therapies for personal well-being and for patient care by ED staff in the southeast region of the United States is limited. Most ED staff are not familiar with these therapies, but a majority of staff (70%) want to learn more about them. Findings suggest that ED nurses would like additional training in, and better referral patterns to, complementary therapies.

Keywords: complementary therapies | healthcare | emergency department medicine

Article:

Today's health care consumers are looking to complementary and alternative therapies in addition to conventional health care and illness treatments.^{1,2} These therapies encompass a broad spectrum of modalities that do not conform to the beliefs and standards of the dominant group of health care practitioners in the United States and hence are often not taught in US schools of medicine and nursing.³

Growing acceptance of complementary therapies by patients and the integration of these therapies within conventional care presents physicians, nurse practitioners, nurses, and other health care practitioners with new and increasing opportunities, as well as challenges. Survey

data indicate that one third of Americans use complementary and alternative therapies, although most (72%) do not inform their physician that they are using these therapies.¹ A recent Landmark Report on Public Perceptions of Alternative Care² revealed that 42% of Americans have used some type of alternative care in the past year. Studies of general practitioners in the United States, Canada, Great Britain, and Israel reveal a high interest in alternative medicine, with 68% to 76% referring patients to some type of alternative therapy.^{4,5,6,7} Physicians reportedly perceive complementary medicine as moderately effective.⁸

Most studies of complementary and alternative therapies focus on applications within primary care settings. Little attention has been given to the acceptance and use of these therapies in the emergency department. The purpose of this study was to explore ED staff's personal use and perceived effectiveness of complementary therapies and to assess the use of complementary therapies with patients in the ED setting.

Methods

Study design

This descriptive study used survey research methodology. A questionnaire developed by the authors at the Center for the Study of Complementary and Alternative Therapies (CSCAT), University of Virginia School of Nursing, was sent to a convenience sample of ED staff at 10 emergency departments in the southeast region of the United States. The CSCAT is one of 10 national centers funded by the National Institutes of Health to stimulate research in complementary and alternative medicine.

Sample

The study sample consisted of ED clinical staff at 10 emergency departments in the southeast region of the United States. Packets of questionnaires were mailed to nurse managers or nursing specialists who were responsible for the emergency departments and who had agreed to participate in the study. Four hundred eighty surveys were sent to the nurse managers and specialists for distribution to the clinical personnel in their departments.

Survey instrument

The study questionnaire addressed 3 major areas: personal use of complementary and alternative therapies by ED physicians, nurses, and other health care professionals; staff recommendations of complementary and alternative therapies to patients; and general knowledge of these therapies. Within the personal use section of the questionnaire, respondents were asked to indicate whether they had used a complementary therapy to promote their own well-being, the length of use of this therapy, and perceived effectiveness of the therapy. Effectiveness was measured on a 5-point Likert-type scale, ranging from not at all effective (1) to extremely effective (5). Questions addressed the following 24 therapies: relaxation tapes; back rub or massage; guided imagery; prayer or spiritual practice; herbal remedies; mineral or herbal baths; aromatherapy; nutritional supplements; megavitamins; group support; therapeutic touch or energy work; self-help books; hypnosis; magnets; caffeine; cartilage products; music; nature

sounds; acupuncture or acupressure; chiropractic; homeopathy; biofeedback; yoga; meditation; and “other” (space provided for the therapy to be listed by the respondent).

Within the patient recommendation section of the questionnaire, respondents were asked to indicate whether each therapy listed was used within their practice or recommended to patients and to rate the perceived effectiveness of each therapy for patient use. Effectiveness with patients was also rated on a 5-point Likert-type scale, ranging from not at all effective (1) to extremely effective (5).

Within the general knowledge section, ED staff respondents were asked about knowledge of the complementary therapy providers in their localities; interest in additional training in complementary therapies; support for the integration of complementary therapies in the emergency department; and the need for improved referral networks between conventional ED practitioners and local complementary therapy practitioners.

Data analysis

Descriptive statistics including frequencies, percentages, means, and ranges were calculated for outcome variables.

Results

Four hundred eighty questionnaires were mailed to the 10 emergency departments for distribution, and 142 completed questionnaires were returned (30% response rate). Respondents included nurses (78%), physicians (11%), nurse practitioners (3%), and other health care professionals (7%). Ninety-two percent of the respondents were white; 77% were women; and 74% were between the ages of 30 and 50 years (mean age, 38.5 years).

Personal experience with complementary therapies

ED clinicians reported that the 3 most frequently used therapies for the promotion of their own health and well-being were back rub or massage, music, and prayer or spiritual practice (Table 1). Eighty-five percent of the respondents had used back rub or massage, and 52% had used this therapy for at least 6 years, with more than one third reporting more than 10 years of usage (Table 2). Perceived effectiveness was very high, with 76% reporting back rub or massage as very effective (41%) or extremely effective (35%), for an average rating of 4.04 (Table 2).

Table 1. Percentage of responding ED staff (n = 142) using complementary therapies for personal use or recommending use for patients

| Complementary therapy | Personal use | Patient use |
|------------------------------|--------------|-------------|
| Back rub or massage | 85.2 | 59.9 |
| Music | 78.9 | 30.3 |
| Prayer or spiritual practice | 65.5 | 47.9 |
| Caffeine | 56.3 | 10.6 |
| Relaxation tapes | 45.8 | 19.0 |
| Self-help books | 44.4 | 17.6 |
| Nature sounds | 44.4 | 11.3 |

| Complementary therapy | Personal use | Patient use |
|--|--------------|-------------|
| Nutritional supplements | 41.5 | 24.6 |
| Megavitamins | 33.1 | 16.9 |
| Guided imagery | 28.2 | 25.4 |
| Mineral or herbal baths | 28.2 | 6.3 |
| Group support | 26.8 | 43.7 |
| Meditation | 23.9 | 9.2 |
| Aromatherapy | 23.2 | 4.9 |
| Herbal remedies (eg, essiac, flor-essence) | 21.1 | 7.7 |
| Chiropractic | 17.6 | 10.6 |
| Therapeutic touch, energy work | 14.8 | 10.6 |
| Homeopathy | 11.3 | 9.9 |
| Biofeedback | 10.6 | 8.5 |
| Yoga | 10.6 | 2.8 |
| Acupuncture or acupressure | 8.5 | 7.7 |
| Hypnosis | 5.6 | 2.1 |
| Cartilage products | 2.1 | 1.4 |
| Magnets | 0.7 | 0.7 |

Therapies are presented in order of personal use.

Table 2. Most frequent complementary therapies for personal use—length of use and effectiveness (n = 142)

| Complementary therapy | Percentage using therapy | Percentage using >6 y | Mean (SD)* |
|------------------------------|--------------------------|-----------------------|-------------|
| Back rub or massage | 85.2 | 52 | 4.04 (0.99) |
| Music | 78.9 | 87 | 3.92 (0.92) |
| Prayer or spiritual practice | 65.5 | 84 | 3.96 (0.99) |

*Possible range: 1 = Not at all effective to 5 = Extremely effective.

ED staff reported that music was the second most frequently used modality for their personal well-being. Approximately 79% of the respondents had used music as a relaxation technique, and most (87%) had used this therapy for at least 6 years, including 77.3% who had used music therapy for more than 10 years. Almost all users reported that music therapy was effective, with 72% reporting music therapy as very effective (43%) or extremely effective (29%), for a mean rating of 3.92 (Table 2).

Sixty-five percent of the respondents reported using prayer or spiritual practice for their health and well-being. The use of this modality was also long-term, with 84% using this therapy for at least 6 years, including 77.3% who had used it for more than 10 years. The majority of ED staff respondents reported prayer or spiritual practice as very effective (32.2%) or extremely effective (36.8%) in promoting their well-being, with a mean effectiveness rating of 3.96 (Table 2).

Nine of the other therapies were used for personal well-being and health by 25% or more of the respondents, whereas 12 others were used by fewer than 25% of the respondents (Table 1).

Recommendations of complementary therapies to patients

Respondents were also asked about the use of complementary therapies within the ED setting and recommendations of these therapies to their patients. Back rub or massage was not only the

most frequently used complementary therapy for personal well-being, but also the most frequently recommended therapy to patients seen in the emergency department (Table 1). Almost 60% of respondents reported use or recommendation of this therapy in their practice. Respondents were also asked to rate the effectiveness of each therapy in their clinical practice. Most of the practitioners who had recommended back rub or massage to ED patients reported that the therapy was effective; 26.6% rated effectiveness as very high, whereas 19% reported this therapy was extremely effective for an average rating of 3.6.

Forty-seven percent of the ED practitioners recommended use of prayer or spiritual practices to their patients. The majority reported that prayer or spiritual practices were effective, with 46.8% reporting that they were very effective and 17.7% reporting that they were extremely effective, for a mean rating of 3.8. About 9% of those who recommended prayer or spiritual practices failed to rate effectiveness.

Group support was the third highest modality (43%) recommended by the staff to their patients. Practitioners recommending group support judged this modality effective, with 36.6% rating group support very effective and 13.5% rating the therapy extremely effective, yielding a mean rating of 3.5. Sixteen percent failed to rate the effectiveness of this therapy for their patients.

The other complementary therapies, with the exception of music therapy (30.3%), were much less frequently used or recommended in the ED setting (Table 1). Only 2 other complementary therapies (guided imagery and nutritional supplements) were recommended by 25% (or more) of ED staff respondents; the other therapies (18) were recommended by fewer than 20% of respondents, and many (11) were recommended by less than 10% of respondents.

Knowledge of complementary and alternative therapies

Questions also addressed respondents' knowledge of complementary therapy providers and their assessment of the current status of referral networks. Most respondents (76%) judged themselves as having no knowledge of complementary therapy providers in their locality. Sixty-three percent perceived the need for better referral networks between conventional ED practitioners and selected complementary therapy practitioners.

In addition, nearly 70% of the respondents reported that they would like to see more information and training about complementary therapies made available through their departments. Respondents expressed strong support for the integration of selected complementary therapies in the emergency department, with a mean response of 7.5 on a 10-point scale.

Discussion

Findings from this survey indicate that the use of complementary therapies for personal well-being and for patient care by ED staff in the southeast region of the United States is limited. However, the use and recommendation of several mind-body therapies reflect an acceptance of the beneficial effects of these modalities for stressful conditions typically found in the emergency department. Opinions expressed by respondents suggest that additional training in the

area of complementary therapies can lead to increased integration of selected therapies in emergency departments.

Given the stressful work environment of emergency departments, it is not surprising that staff used mind-body therapies most frequently to promote their own well-being. Massage, which is among the best known and most widely used mind-body therapies, has demonstrated beneficial effects.^{9, 10, 11} Tiffany Field and her colleagues at the University of Miami's Touch Research Institute demonstrated that premature babies, when massaged several times a day for 10 minutes, showed a 47% greater weight gain—a finding that perhaps acknowledges the emotional message of massage.¹² The comforting touch involved in massage conveys caring, reduces feelings of isolation, and helps ease tension in tight muscles. ED respondents were primarily nurses who had not only experienced personal success in using massage but also were likely to have received training in this therapy, and thus feel confident in recommending massage to their patients.

ED practitioners also reported frequent use of music to promote their own health and well-being. There is general consensus that music may be the most effective emotional and aesthetic means of communication, and hence this finding is not surprising. All human civilizations have produced and experienced music. Clinical findings and the history of human culture have led us to believe that rhythm may be the most effective element of music.¹³ We know, too, that the cardiovascular system has its own preferential rhythmicity in the high-frequency ranges, whereas respiration prefers the mid-frequency range. Emotional distress and strain such as that experienced in emergency care settings disrupt these rhythms. Research suggests that the effectiveness of music in reducing anxiety and pain is based not only on relaxation/distraction factors but also on the human body's vibratory response to music.¹⁴ ED patients often experience anxiety or pain and consequently a decrease in rhythmic heart rate variability, but only 30% of the staff reported that they recommended music therapy to their patients.

Within the area of complementary therapies, literature supporting linkages between the mind and body is developing rapidly. Hence, in the future ED clinicians and others will undoubtedly give more attention to the role of the mind in health (its thoughts, feelings, beliefs, and meaning). Music may permit a nonverbal access to thoughts and feelings, allow full expression of feelings, and provide opportunities for enhancing conventional therapies.

Spiritual practices, including prayer, are an integral part of Western culture. In a 1993 issue of the *New England Journal of Medicine*, Eisenberg et al.¹ reported that prayer or spiritual practices were also among the most frequently used complementary and alternative therapies. Thus, not surprisingly, ED personnel in this study reported the use of prayer and spiritual practice in their personal lives and recommended such practices to their patients. In so doing, these clinicians acknowledged the long and honored history of the idea that the spirituality can affect the physical body.

Larry Dossey, MD, in his book *Healing Words: The Power of Prayer and the Practice of Medicine*,¹⁵ notes that the integration of prayer and spirituality practices will result in more effective and more humane care—"care that works better and feels better." He predicts that use of prayer will become a standard in scientific medical practice in most communities. Furthermore, this practice will be so pervasive that not recommending prayer as an integral part

of patient care may be considered unacceptable. Findings from the current survey about recommending prayer and spiritual practices to patients in emergency settings support Dossey's predictions of increased integration of this therapy.

The complementary therapy recommended third most frequently to patients seen in the 10 emergency settings was the use of group support. This recommendation acknowledges benefits that selected patients can receive when they meet with others who share the same problem, life situation, or crisis. Group support can alter a patient's course of illness, influence patterns of hospital use, and reduce mortality rates.

Whereas research on the efficacy of selected complementary therapies that have potential use in emergency departments is limited, many opportunities for their use or inclusion as adjunctive treatment may exist, especially in selected situations when patients have a history of drug allergies or fail to respond to conventional treatment. In a randomized controlled trial, Lee et al¹⁶ found that acupuncture was as effective as a conventional analgesic in reducing pain in ED patients with acute renal colic. Not only was the onset of pain relief more rapid with acupuncture treatment, but unlike the conventional analgesic, this therapy produced no side effects.

Recommendations of complementary therapies in emergency care practices were limited in this study. However, respondents revealed that they had little knowledge of complementary therapy providers in their localities and indicated a need for improved referral networks between conventional ED practitioners and selected complementary providers. They expressed a strong interest in gaining additional knowledge and training about complementary therapies and support for increased integration of these therapies in the emergency department.

The opinions expressed by the ED staff suggest that increased knowledge of complementary therapy providers, improved referral networks, and increased training can lead to greater acceptance and use of selected therapies by ED practitioners. Their desire for more information about potential uses of complementary therapies in the emergency setting gives direction for future continuing education programs and also provides strong support for the inclusion of content about complementary therapies within curricula for students of nursing and medicine.

Study conclusions are limited by the use of a convenience sample and response rates that have the potential to bias results. Additional research is needed to confirm the findings on the use of complementary therapies in emergency settings. NIH support for national centers, including the Center for the Study of Complementary and Alternative Therapies, indicates the existence of a continuing need for science-based evidence of the efficacy of complementary therapies. Clinical studies of efficacy within the ED setting can aid in the selection of therapies most appropriate for the patients seen in emergency departments.

Growing interest in complementary medicine by patients and members of the medical profession and an increasing body of scientific research will lead to increased integration of conventional medicine and complementary therapies. Respondents in this survey expressed an openness to this concept of integration, which suggests that integration will occur in the ED setting and in primary care settings.

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;328:246-52.
2. Landmark Healthcare, Inc. Landmark report on public perceptions of alternative care. Sacramento: Landmark Healthcare; 1998.
3. Taylor AG. Nontraditional therapies. In: Fitzpatrick J, editor. *Encyclopedia of nursing research*. New York: Springer Publishing Company; 1998. p. 344-6.
4. Berman BM, Singh BK, Lao L, Singh BB, Ferentz KS, Hartnoll SM. Physicians' attitudes toward complementary or alternative medicine: a regional survey. *J Am Board Fam Pract* 1995;8:361-6.
5. Goldszmidt M, Levit C, Duarte-Franco E, Kaczorowski J. Complementary health care services: a survey of general practitioners' views. *Can Med Assoc J* 1995;153:29-35.
6. Whaton R, Lewith G. Complementary medicine and the general practitioner. *Br Med J* 1986;292:1498-500.
7. Borkan J, Neher JO, Anson O, Smoker B. Referrals for alternative therapies. *J Fam Pract* 1994;39:545-50.
8. Ernst E, Resch KL, White AR. Complementary medicine. What physicians think of it: a meta-analysis. *Arch Intern Med* 1995;155:2405-8.
9. Blankfield RM. Suggestion, relaxation, and hypnosis as adjuncts in the care of surgery patients: a review of the literature. *Am J Clin Hypn* 1991;33:172-86.
10. Johnston M, Vogele C. Benefits of psychological preparation for surgery: a meta-analysis. *Ann Behav Med* 1993;15:245-56.
11. Menard MB. Effect of therapeutic massage on post-surgical outcomes [dissertation]. Charlottesville (VA): University of Virginia; 1995.
12. Field T, Schanberg SM, Scafidi S, Bauer CR, Vega-Lahr N, Garcia R, et al. Tactile/kinesthetic stimulation effects on preterm neonates. *Pediatrics* 1986;77:654-8.
13. Spintge R. Physiology, mathematics, music, and medicine: definitions and concepts for research. In: Pratt RR, Spintge R, editors. *MusicMedicine Volume 2: International Society for Music in Medicine V International MusicMedicine Symposium*; 1994 Mar 17-19; San Antonio. St. Louis: MMB Music; 1996.
14. Wigram T, Dileo C. *Music vibration and health*. Cherry Hill (NJ): Jeffrey Books; 1997.
15. Dossey L. *Healing words: the power of prayer and the practice of medicine*. San Francisco: Harper; 1993.
16. Lee YH, Lee WC, Chen MT, Huang JK, Chung C, Chang LS. Acupuncture in the treatment of renal colic. *J Urol* 1992;147:16-8.