

A Survey of Hospices' Use of Complementary Therapy

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❖ As people live longer with chronic illnesses, the need for hospice services will increase. Complementary therapies have been shown to increase ease, relieve pain, and improve quality of life—all relevant for people with chronic illness at the end of their lives. The first aim of this study was to identify complementary therapy services available to and provided for clients receiving hospice care in Nevada and Montana. The second aim was to identify differences in those therapies for urban and rural hospice clients. Using a descriptive survey design, data were collected from surveys sent to all hospice administrators in Nevada and Montana (N = 54). A 50% (n = 27) response rate was obtained. Most (70.4%, n = 19) of the participating hospices offered complementary therapy; slightly more than half (52.9%, n = 9) provided the services for less than 25% of their clients. No significant differences were found between rural and urban hospices.

K E Y W O R D S

complementary therapy
hospice
palliative care
rural and urban

Although it is a tribute to America's healthcare system that the life expectancy has risen from 47 to 75 years in the past 100 years, that same system has been slow to adapt to the chronic illness, disability, and pain that Americans are likely to face at the end of their longer lives.¹ Owing in part to advances in healthcare, many diseases that once led to rapid decline and short illness trajectories are now chronic illnesses with longer duration lasting into the last years of life. In both Nevada and Montana, some of the


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Funding was provided by the NIH/NINR (IP20NR07790-01), Center for Research on Chronic Health Conditions, Montana State University, College of Nursing.

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leading causes of death include chronic illnesses such as heart disease, cancer, respiratory disease, and cerebrovascular disease.²

Chronic illness is often accompanied by pain and suffering. This is especially true in the later stages of chronic illness or at the end of life, when pain and suffering can become more pronounced. Hospice services, when available, provide some relief from pain and suffering for people at the end of their lives. The services provided by hospice staff can mean the difference between ease and “dis-ease” at this time of life. Traditional pain relief interventions are available in nearly every instance. For hospice clients, pain relief is consistently described as their highest priority.³

Hospice services, which have been available in the United States since the 1970s, were provided to a record 1.2 million dying Americans in the year 2005. This figure represents an increase of 500,000 since the year 2000.³ Most of the hospice services are used by older adults with the diagnosis of cancer (46%), heart disease (12%), dementia (9.8%), debility (9.2%), and respiratory disease (7.5%).³ The primary service provided by hospice agencies for these clients was pain control (physical, mental, social, and spiritual). According to a recent Department of Health and Human Services document,^{4(p2)} “the goals of hospice care are to provide a good quality of life for the dying patient and to help the patient and his/her family to cope with the approaching death. Control of pain—physical, mental, social and spiritual—is stressed.” A “good death” is thought to be one free of physical pain or other unpleasant symptoms and, as far as possible, discomfort in psychological, emotional, social, and spiritual dimensions.⁵

Healthcare consumers are increasingly requesting symptom management interventions that are considered “complementary” to traditional medical interventions. These therapies are thought to increase ease, relieve pain, and improve quality of life (QOL)—outcomes especially relevant for clients receiving hospice services at the end of their lives. This is especially true for treatments and services to help manage pain and symptoms at the terminal stages of chronic illnesses. The national surveys often cited by Eisenberg et al^{6,7} first shed light on the number of people turning to complementary and alternative therapies. Since that time, others have documented the use of these therapies for a variety of symptoms or reasons. In 2004, Demmer⁸ reported that more than one half of the hospice agencies surveyed across the United States were using some form of complementary therapy for their patients. Demmer⁸ further


stated that “there is encouraging evidence that complementary therapies, used as an adjunct to regular hospice services, have the potential to reduce pain and improve physical and psychological symptoms as well as overall QOL for hospice patients.”^(p511)

If complementary therapies have the potential to assist hospice patients with chronic illness at the end of their lives, the use and usefulness of these therapies should be studied, documented, and implemented in hospice settings. In 2004, the Hospice and Palliative Nurses Association developed a position paper on pain that states, “as one of the most feared symptoms by those at the end of life, it is believed that pain may actually hasten death by increasing physiological stress, decreasing mobility, and contributing to pneumonia and thromboemboli.”^{9(p92)} Unrelieved pain can consume the attention and energy of those who are dying and create an atmosphere of isolation, impotency, and despair in their families and caregivers. Isolation has long been recognized as a stressor for many individuals who live in rural areas.¹⁰⁻¹²

❖ RURAL DWELLERS

Beginning in the late 1980s, seminal research was conducted with rural dwellers in an effort to better understand and describe the unique characteristics and healthcare needs of these individuals. Theoretical developments because of this research describe rural dwellers as independent, engaging in more self-care than their urban counterparts.¹⁰⁻¹³ This early research¹⁰⁻¹³ highlighted the fact that rural dwellers have traditionally been isolated from innovations in many areas, particularly in healthcare. Complementary therapies, although considered innovative in many urban areas, are often extensions of practices handed down from generation to generation and are included in the informal repertoire of self-care and self-health management of older rural dwellers.^{14,15} Also, rural dwellers tend to be out of the mainstream of the healthcare delivery system, with limited access to traditional healthcare, thus increasing the potential for their use of complementary, less formal therapies.^{14,15}

A study of the use of complementary therapies among older rural dwellers in Montana and North Dakota raised a number of questions about the use of complementary therapies by individuals with chronic health problems.¹⁴ Although the use of complementary therapists was less prevalent in the sample than has



been found in national studies, the prevalent use of “self-directed” complementary therapies had potential for significant impact upon the ongoing health of participants. More than two thirds of the participants reported chronic conditions, and more than one third of the respondents used self-directed practices primarily based on information from friends and relatives, not healthcare professionals.

In a subsequent study, a subset of respondents in the previous study who had used complementary care and had chronic illnesses was interviewed to better understand the use of complementary therapies in managing chronic conditions among rural dwellers.¹⁵ Specifically, information was gathered from the patient about reasons for using complementary therapies, the factors influencing the individual’s decision to use these therapies, and whether ready access to such therapists and therapies was a factor in his or her use. Self-directed practices such as use of vitamin, mineral, and herbal supplements, aspirin, and herbal creams were the most common and were often used to compensate for perceived dietary deficiencies. Complementary therapists were used for biofeedback, massage, chiropractic, and podiatry.

The current study builds on these two previous studies and goes further to contribute to our understanding about what therapies are actually provided to individuals with chronic disease residing in Nevada and Montana at the end of their lives. The goal of the study was to begin to describe the use of complementary therapies in managing chronic conditions for individuals at the end of their lives who are receiving hospice care. The specific aims of the study were to (1) identify which complementary therapy services were available and provided to clients receiving care from hospices in Nevada and Montana and (2) identify differences in complementary therapy services available and provided to urban and rural hospice clients.

❖ THE CHANGING DEMOGRAPHIC OF COMPLEMENTARY THERAPIES


Over the years, there has been increased interest in, use of, and legitimization of complementary therapies in the US.^{6,7,16-18} Complementary therapy has been defined as a group of diverse healthcare systems, practices, and products that are not presently considered part of conventional medicine.¹⁹ Examples of complementary therapies include acupuncture, massage, homeopathy,

therapeutic touch, Reiki, art and music therapy, aromatherapy, and hypnotherapy. Complementary therapy has become sufficiently mainstreamed for coverage by several health insurance plans. Within the US, Medicare and Medicaid are beginning to approve reimbursements for using “selected modalities” of complementary therapies.²⁰ Likewise, from an international perspective, Australia has a growing number of private health insurance funds covering therapies such as acupuncture, naturopathy, and homeopathy.²⁰ Therapies that in the past were used as a last resort for chronic illnesses are now used as primary treatments.²¹

In the 1990s, Eisenberg and colleagues^{6,7} conducted two landmark, national studies to assess prevalence, costs, and patterns of use of unconventional medicine in the US. In the first study, telephone interviews were conducted with 1539 randomly selected adults to gather data regarding their medical conditions and details of their use of conventional and complementary medical services. Findings indicated far higher expenditures and frequency of use than previously thought, showing that one in three respondents had used at least one complementary therapy. The purpose of the second Eisenberg et al study⁷ was to examine changes and trends in complementary medicine use and costs during the intervening years since the first study.⁶ Telephone interviews were conducted with 2055 randomly selected adults using comparable questions to those asked in the first study. The researchers found that complementary care use and expenditures had increased substantially from 33.8% in 1990 to 42.1% in 1997. These findings were supported by national surveys of McFarland et al²² in Canada and the US.

The results from the 2002 National Health Interview Survey (NHIS) showed that 62% of adults in the US used some type of complementary and alternative medicine (CAM) during the past 12 months.²³ Data for this study were collected using computer-assisted personal interviews on 31,044 adults older than 18 years. The most popular CAM therapy used was prayer, particularly for health needs. Other complementary therapies included natural products, deep-breathing exercises, prayer group, meditation, chiropractic care, yoga, massage, and diet-based therapies. Reported symptoms treated with CAM included head or chest pain, colds, anxiety, and depression.²³

The review of literature that follows is organized around three areas of research. The first area of research relates to the use of CAM for chronic health conditions,



known to be difficult to treat with monotherapy and present in most hospice patients. The second area of review relates to the use of CAM in the management of pain, and lastly, a review related to CAM for patients at the end of their lives is provided. This three-prong approach to the review of literature provides an introductory view of the utility of CAM.

❖ REVIEW OF LITERATURE

Use of Complementary Therapies for Chronic Health Conditions

The use of complementary therapies for chronically ill individuals has been studied by a number of investigators. A phenomenological study conducted by Lindsey²⁴ noted that the use of complementary therapies by the chronically ill individual could be called a “covert caring for the self.” Four themes emerged from Lindsey’s study: taking control, seeking knowledge, accessing alternative healing modalities, and altered relationships with healthcare professionals.

Vincent²⁵ studied reasons for using complementary medicine in 268 patients from three complementary medicine practices. All conditions for which acupuncture and homeopathy were used tended to be chronic in nature. The authors identified five factors influencing choice: positive valuation of complementary therapy, ineffectiveness of orthodox treatment for their complaint, concern about the adverse effects of orthodox medicine, concern about communication with physicians, and availability of complementary therapies.

Tsay²⁶ studied acupressure and fatigue in patients with end-stage renal disease in a clinical trial and found that patients in the acupressure group had significantly lower scores of fatigue. Saydah and Eberhardt²⁷ conducted a cross-sectional analysis of the 2002 NHIS to determine the use of CAM in adults with chronic diseases. The findings demonstrated a higher use of CAM (50%) among patients with chronic illness over those without. Ai and Bolling²⁸ examined the use of CAM among patients with chronic heart disease and found that 80.9% (n = 182) of their sample used CAM. A wide range of therapies were used, including self-guided exercise and relaxation techniques, lifestyle-diet modifications, spiritual healing, megavitamin therapy, massage, herbs or folk remedies, and imagery. These patients attributed numerous benefits to the use of CAM, including maintaining better health and sleep,

boosting self-esteem, hope, and peaceful mind, and reducing anxiety, stress, and pain.

Use of Complementary Therapies for Pain

Howell²⁹ reported on a grounded theory study of 14 women with chronic pain. The four “healthiest” women with persistent pain used complementary pain management practices, specifically self-care, to successfully manage their pain. In another study of the use of complementary therapies by patients of rheumatologists, Rao and colleagues³⁰ reported that severe pain, a college degree, and osteoarthritis were significantly associated with complementary therapy use. They noted that patients used complementary therapies for symptom relief rather than as a cure. Nearly 50% reported using complementary therapies because prescribed medicines were ineffective.

Kaboli and colleagues³¹ surveyed 480 older adults with arthritis; 28% reported having complementary therapy providers, and 68% used one or more therapies. Use of complementary therapy for arthritis was most common among persons with poorer self-assessed health and higher use of traditional healthcare resources. Cassileth and colleagues³² convened a panel of experts to evaluate the research evidence for complementary therapies in the care of patients with cancer. The panel made recommendations based on the strength of the evidence and risk-to-benefit ratio. They found that mind-body modalities and massage therapy reduced chronic pain and anxiety and mood disturbance and that acupuncture assisted with control of pain and helped reduce levels of medication required to control pain.

Use of Complementary Therapies for Patients at End of Life

Cancer continues to be the primary diagnosis for hospice patients. Researchers in Australia surveyed cancer patients at the end of their lives regarding their use of complementary therapies and found that 48% of them had used some form of complementary therapy.³³ They also found that patients who used complementary care had decreased anxiety and pain, greater satisfaction with conventional medicine, and a greater sense of control over treatment decisions as compared with nonusers of conventional medicine. Similarly, in the study by Demmer,⁸ hospice directors reported that patients who received complementary therapies during their time in

hospice were generally more satisfied with overall hospice services.

In a clinical trial with cancer patients receiving aromatherapy massage, the anecdotal data showed that patients with cancer felt comforted, relaxed, and invigorated after receiving an aromatherapy massage.³⁴ A recent study conducted by Kyle³⁵ suggested that aromatherapy with sandalwood oil effectively decreased anxiety in palliative care patients. In another clinical trial on the effect of massage on pain intensity and QOL of patients with cancer pain, the researchers found that pain intensity, pulse rate, and respiratory rate were significantly reduced immediately after massage.³⁶

Wells and colleagues³⁷ studied the use of CAM therapies in 189 women with non-small-cell lung cancer. The CAM therapies studied included herbs, tea, acupuncture, massage, meditation, and prayer. Of the 189 participants, 84 women (44%) used CAM therapies. Prayer was the most frequently used CAM among participants. Difficulty breathing and pain were the most frequently reported symptoms improved by the use of CAM therapies.

Music therapy was tested in a cancer hospital to determine its effect on patients, 57% of whom had end-stage or advanced cancer.³⁸ Qualitative results revealed that the patients, visitors, and staff members affirmed a sense of "aliveness, resonating with an expanded consciousness."^(p151) In a recent study, Freeman and colleagues³⁹ discovered that patients nearing end of life experienced less agitation and decreased effort with respirations with music thanatology.

Pan and colleagues⁴⁰ conducted an evaluation of 21 studies of the effectiveness of complementary therapies for symptoms common for patients at the end of life. Included in the analysis were 11 randomized control studies, two nonrandomized control trials, and eight case studies. The investigators concluded that acupuncture, transcutaneous electrical nerve stimulation, supportive group therapy, self-hypnosis, and massage therapy might provide pain relief in cancer and/or dying patients. Lafferty and colleagues⁴¹ evaluated CAM treatment at the end of life through the review of clinical trials for massage and meditation. Their findings supported the use of massage and meditation for end-of-life care by demonstrating considerable benefit in decreasing mental distress and pain in these patients. One study by Nelson⁴² explored and described the experiences of 15 hospice residents receiving complementary therapies. The residents displayed a positive response describing a feeling of "physical relaxation" and "enhanced sense of well-being" after complementary therapy.

❖ METHODS

Research Design

A descriptive survey design was used to identify which complementary therapy services were available and provided to clients receiving care from hospices in Nevada and Montana and to identify differences in the services available and provided to urban and rural hospice clients. The study was conducted by two investigators located at two universities. The human subjects institutional review boards at both institutions reviewed and approved the study. Data were collected by mail surveys from hospice administrators in Nevada and Montana.

A survey instrument developed by Demmer⁸ was modified for this research study. The survey questions included forced-choice and short-answer responses about the hospice agency and service area and whether the agency made complementary therapies available for hospice patients. If administrators indicated that the therapies were available, they were asked to respond to a series of questions about the provision of the therapies in their agencies. If administrators indicated that complementary therapies were not available, they were asked to respond to questions about how helpful or important they believed it was to offer these therapies, their plans for offering the therapies in the future, and why they did not offer the therapies. Permission was obtained from Demmer to use and modify the survey instrument. Modifications were made to collect additional relevant information regarding rural and urban location of hospices and their market area, licensure/preparation of staff, as well as qualitative questions related to usual approaches taken to address pain, fatigue, and other symptoms as well as QOL issues such as relaxation and stress reduction. In the work by Demmer,⁸ the survey was tested for content validity. After the revision of the survey for this study, it was reviewed and critiqued for clarity and face validity by a panel of experts in hospice care.

Participants and Recruitment

Participants were recruited from all hospice agencies in Nevada and Montana (N = 54) identified through the US Hospice Directory.⁴³ Potential participants included any person in the position of hospice administrator. To enhance participation, letters were sent to the hospice administrators, informing them about the study and inviting them or someone they designated to participate.

Engagement in the research process was facilitated by demonstrating the value of the individual to the study and acknowledging him or her as an expert in the area of study, as recommended by Dillman.⁴⁴

Data Collection and Analysis

Surveys with cover letters were sent by and returned via regular mail. A second survey with cover letter was sent approximately 1 month later. Because of an initial low response rate, a third survey with cover letter was sent to nonrespondents approximately 1 month later. Data were cleaned, checked, and entered into SPSS version 15 for analysis (SPSS, Chicago, IL). Descriptive statistics were used to summarize the survey questions and identify the complementary therapy services offered and used. To identify differences in services among rural and urban hospices, χ^2 statistics was used. Responses to qualitative questions were analyzed using content analysis methods.

❖ RESULTS

A response rate of 50% (n = 27) was obtained for the survey. Two thirds (66.7%, n = 18) of the hospices were located in rural areas, and 70.4% (n = 19) served rural dwellers. The mean number of patients cared for per year was 157 patients, with a range of 10 to 750 patients, and the length of time that patients received hospice services in most of the programs (63.2%, n = 12) was 1 to 2 months.

Complementary Therapies Available to Hospice Patients

Of the 27 participating hospice agencies, most (70.4%, n = 19) had complementary therapies available for their patients, and more than half (55.6%, n = 10) had 4 or more years of experience offering these therapies. Administrators were asked when during the patient's trajectory of care complementary therapy was most likely to be used, and 89.5% (n = 17) said that it would be used anytime, based on the needs or requests of the patient or family. Most (68.4%, n = 13) indicated that they did not have an assessment process to determine who should receive complementary therapy. Participants indicated which complementary therapies were available in their hospice agencies from a list of therapies provided on the survey. As can be seen in Table 1, a wide variety of therapies was available.

Table 1

Types of Complementary Therapies Available Among Participating Hospice Agencies That Offered Them

Therapies Available	% (Number)
Massage therapy	59.3 (16)
Guided imagery, music therapy	48.1 (13) each
Therapeutic touch	33.3 (9)
Aromatherapy, pet therapy	29.6 (8) each
Reiki, art therapy	18.5 (5) each
Reflexology, hypnotherapy	14.8 (4) each
Acupuncture	11.1 (3)
Yoga therapy, Feldenkrais method	7.4 (2) each
Acupressure, magnet therapy, biofeedback, horticulture, water therapy	3.7 (1) each

Complementary Therapies Used

Despite the array of services available, more than half (52.9%, n = 9) of the administrators of programs that offered complementary therapy said that fewer than 25% of their patients received these services in the past year. Only four said that 50% or more of their patients received complementary care. The most popular complementary therapy was massage, and the second most popular was music therapy. Among the hospices that provided complementary care, 61.1% (n = 11) had one or more salaried personnel who provided complementary therapies, and 88.3% (n = 15) had one or more volunteers who provided the therapies. When asked what type of training these individuals had in the provision of complementary therapies, a wide variety of training was reported, which ranged from self-study to certification programs. Most (88.9%, n = 16) of the administrators of hospice programs that offered complementary therapies estimated that less than 5% of their budget was allocated to complementary therapies.

Symptoms Treated by Complementary Therapies

Administrators were asked about their program's usual approach to care for a wide variety of symptoms. The most common symptoms for which complementary therapies were used included emotional and spiritual pain, with stress reported as the second most common. Other symptoms treated with complementary therapy either alone or in combination with allopathic therapies

included physical pain, fatigue, tension/anxiety, insomnia, nausea, and vomiting.

Effect of Complementary Therapy on Quality of Life

Administrators were asked their opinions about what effect complementary therapies had on patients' QOL. Of the 69.2% of hospices offering complementary therapy, nearly all (89.5%, $n = 17$) reported that QOL was better or much better. The evidence used by the administrators to determine the effect of complementary therapies on QOL consisted of verbal comments or written survey responses from families and nursing assessments of the patients' symptoms.

Obstacles in Delivery of Complementary Therapy

Participants were asked to identify the greatest obstacles encountered in the delivery of complementary therapies within their hospice organizations. The most common obstacles among programs that offered complementary therapy included lack of qualified personnel (44.4%, $n = 14$) and insufficient staff knowledge of how to structure complementary therapy services (22.2%, $n = 6$). Other obstacles included lack of funding, difficulty defining complementary therapy services, and lack of time. Of the eight administrators of programs not offering complementary therapy, 87.5% ($n = 7$) indicated that complementary therapy is helpful or very helpful for hospice patients. All (100%, $n = 8$) said that they were interested or very interested in providing complementary therapy in the near future, although 71.4% ($n = 5$) had no specific plans for implementing complementary therapies. When asked why their program did not offer complementary therapy, the most common response was lack of trained personnel (22.2%, $n = 6$), followed by lack of organizational support and insufficient knowledge about complementary therapy (both at 11.1%, $n = 3$).

Rural Versus Urban

Most (66.7%) of the participating hospices were located in rural areas in Nevada and Montana and/or served rural dwellers. This is consistent with the population distribution of the two states, with relatively few urban areas surrounded by large rural areas. A comparison of rural and urban hospice agencies and the availability of complementary therapies are found in Table 2. Based on

Table 2

Availability of Complementary Therapies in Rural and Urban Hospices^a

	Complementary Therapies Available	Complementary Therapies Not Available	Total
Rural	13	5	18
Urban	5	2	7
Total	18	7	25

^aTwo hospice agencies that reported both rural and urban location were excluded from this analysis.

the results of the χ^2 procedure, there was no significant difference between rural and urban hospices in the availability of complementary therapies ($\chi^2_1 = 0.002$, $P = .97$). In Table 3, a comparison of rural and urban hospice agencies that offered complementary therapy and the percentage of patients who received these therapies are displayed. Again, based on the χ^2 procedure, there was no significant difference between rural and urban hospices in the percentage of patients receiving these therapies ($\chi^2_4 = 7.273$, $P = .12$). Although also not significantly different statistically, hospices located in rural areas had slightly fewer options for complementary therapy available as compared with those in urban areas, and those that they had tended to be more mainstream and less exotic.

❖ LIMITATIONS

Several study limitations deserve mention. Although the response rate (50%) for the mail survey research was respectable and all hospice administrators in the two western states were invited to participate, the total number of participants was small ($n = 27$). The small number of participants may have affected the ability to detect differences in availability and use of complementary therapy among rural and urban hospice programs, if such a difference existed. The extent to which the results can be generalized to other regions of the US is not known. Another notable limitation is that the results of this study represent the perspectives of hospice administrators rather than hospice clients. Although administrators are reliable sources of information about the availability and use of complementary therapies in



Table 3

Rural and Urban Hospices Offering Complementary Therapies According to Percentage of Patients Receiving Complementary Therapies in the Past Year^a

	Patients Receiving Complementary Therapies in Past Year				Total
	< 25%	25%-49%	50%-75%	> 75%	
Rural	n = 5	n = 3	n = 3	n = 0	n = 11
Urban	n = 3	n = 0	n = 0	n = 1	n = 4
Total	n = 8	n = 3	n = 3	n = 1	n = 15 ^b

^aTwo hospice agencies that reported both rural and urban location were excluded from this analysis.

^bThere were three missing values on this survey question.

their organizations as well as the evidence used to determine the effects of complementary therapies on patients, they are not reliable information sources about the actual effectiveness of these therapies on improvement of patients' QOL or relief of symptoms. Gathering comprehensive clinical data to determine actual relief of patients' symptoms or improvement of QOL was beyond the study's aims and resources.

❖ IMPLICATIONS AND DISCUSSION

Offering complementary therapy to hospice patients can be an effective way to reduce pain and discomfort and improve QOL. Healthcare providers, searching for therapies that bring patients relief, may want to conduct assessments specifically to determine who might benefit from complementary therapy and encourage therapies that are known to provide the most comfort.

The results of this study were similar to Demmer's in that a majority of hospice programs had complementary therapies available but relatively few of their patients actually received them. Although this study did not provide a clear reason for this disparity, several possible explanations are suggested by examining the reported barriers to providing complementary therapy. One might wonder if complementary therapy was not provided because rural or urban patients or their families were not interested in or open to these therapies. Not one of the administrators, however, reported that "resistance from

patients or families" or "lack of patient interest" were obstacles to providing complementary therapy. One theme that was evident in the obstacles reported by the administrators of both hospices that did offer complementary therapy and those that did not was lack of knowledge and qualified personnel.

Considering the rural location of many of the hospices, it may be an unrealistic goal to have qualified and licensed complementary therapy practitioners available to provide services to all of their patients. Some complementary therapy techniques, however, with the appropriate knowledge and training, could be integrated into routine care provided by existing nursing staff. Educational interventions for existing hospice staff could be designed, implemented, and evaluated to address the barriers concerning lack of qualified personnel and insufficient knowledge about complementary therapy.

Because massage and music therapies were most commonly used in this and Demmer's study, these options might be a good place to begin. Educational interventions for hospice administrators would also be helpful to provide the knowledge needed to define and structure complementary therapy services and, when possible, to bill for them.

Although healthcare dollars are stretched in today's market, finding cost-effective methods to deliver complementary therapies could have a significant impact on the lives of both rural and urban hospice patients. A small but growing number of studies demonstrate the effectiveness of complementary therapy in relieving symptoms and promoting comfort for hospice patients. To address the obstacles concerning lack of time and funding reported by the administrators in this study, it is imperative that additional rigorous research be conducted to provide stronger evidence of this phenomenon. This might ultimately result in convincing policy makers to invest more time and money to make complementary therapy a care option for all hospice patients who could benefit from it.

References

1. Lynn J, Adamson DM. *Living Well at the End of Life*. Santa Monica, CA: RAND; 2003.
2. National Center for Disease Prevention and Control. Ten leading causes of death. 2005. <http://webappa.cdc.gov/cgi->. Accessed March 3, 2008.
3. National Hospice and Palliative Care Organization. Record number of dying Americans received hospice care last year. <http://www.nhpco.org/files/public/2005-facts-and-figures.pdf>. Accessed February 6, 2007.
4. Haupt B. Characteristics of hospice care discharges and their

- length of service: United States, 2000. National Center for Health Statistic. *Vital Health Stat.* 2003;13(154):1-27.
5. Walters G. Is there such a thing as a good death? *Palliat Med.* 2004;18:404-408.
 6. Eisenberg D, Kessler R, Foster C, Norlock F, Calkins D, Delbanco T. Unconventional medicine in the United States. *N Engl J Med.* 1993;246-252.
 7. Eisenberg D, Davis R, Ettner S, et al. Trends in alternative medicine use in the United States, 1990-1997: results of a follow-up national survey. *JAMA.* 1998;280(18):1569-1575.
 8. Demmer C. A survey of complementary therapy services provided by hospices. *J Palliat Med.* 2004;7(4):510-516.
 9. Hospice and Palliative Nurses Association. Pain [position paper]. *J Hosp Palliat Nurs.* 2004;6(1):62-64.
 10. Weinert C, Long K. Understanding the health care needs of rural families. *J Fam Relat.* 1987;36:450-455.
 11. Weinert C, Long K. Rural families and health care: refining the knowledge base. *J Marriage Fam Rev.* 1990;15(1&2):57-75.
 12. Weinert C, Long K. The theory and research base for rural nursing practice. In: Bushy AB, ed. *Rural Health Nursing.* Newbury Park, CA: Sage; 1991:21-38.
 13. Hassinger E, Godino V. A literature review of health issues of the rural elderly. *J Rural Health.* 1993;9(1):68-75.
 14. Shreffler-Grant J, Weinert C, Nichols E, Ide B. Complementary therapy use among older rural adults. *Public Health Nurs.* 2005; 22(4):323-331.
 15. Nichols E, Sullivan T, Ide B, Shreffler-Grant J, Weinert C. Health care choices: complementary therapy, chronic illness, and older rural dwellers. *J Holist Nurs.* 2005;23(4):381-394.
 16. Astin J. Why patients use alternative medicine: results of a national study. *JAMA.* 1998;279(19):1548-1553.
 17. Weber D. The mainstreaming of alternative medicine. *Healthc Forum J.* 1996;39(6):16-27.
 18. Wolsko P, Ware L, Kutner J, et al. Alternative/ complementary medicine: wider usage than generally appreciated. *J Altern Complement Med.* 2000;6(4):321-326.
 19. National Center for Complementary and Alternative Medicine. What is complementary and alternative medicine? <http://nccam.nih.gov/health/whatiscam/>. Accessed March 23, 2007.
 20. Willison KD, Mitmaker L, Andrews GJ. Integrating complementary and alternative medicine with primary health care through public health to improve chronic disease management. *J Complement Integr Med.* 2005;2(1):1-23.
 21. Paramore L. Use of alternative therapies: estimates from the 1994 Robert Wood Johnson Foundation national access to care survey. *J Pain Symptom Manage.* 1997;13(2):83-89.
 22. McFarland B, Bigelow D, Zani B, Newson J, Kapan M. Complementary and alternative medicine use in Canada and the United States. *Am J Public Health.* 2002;92(10):1616-1618.
 23. Barnes PM, Powell-Griner E, McFann K, Nahin RL. Complementary and alternative medicine use among adults: United States, 2002. *Adv Data.* 2004;343:1-19.
 24. Lindsey E. Experiences of the chronically ill: a covert caring for the self. *J Holist Nurs.* 1997;15(3):247-242.
 25. Vincent C. Why do patients turn to complementary medicine? An empirical study. *Br J Clin Psychol.* 1996;35:37-48.
 26. Tsay SL. Acupressure and fatigue in patients with end-stage renal disease: a randomized controlled trial. *Int J Nurs Stud.* 2004; 41(1):99-106.
 27. Saydah S, Eberhardt MS. Use of complementary and alternative medicine among adults with chronic diseases: United states, 2002. *J Altern Complement Med.* 2006;12(8):805-812.
 28. Ai LA, Bolling SF. The use of complementary and alternative therapies among middle-aged and older cardiac patients. *Am J Med Qual.* 2002;17(21):21-27.
 29. Howell S. Natural/alternative health care practices used by women with chronic pain: findings from a grounded theory research study. *Nurse Pract.* 1994;5(2):90-105.
 30. Rao J, Mihaliak K, Kroenke K, Bradley J, Tierney W, Weinberger M. Use of complementary therapies for arthritis among patients of rheumatologists. *Ann Intern Med.* 1999;131:409-416.
 31. Kaboli P, Doebbeling B, Saag K, Rosenthal G. Use of complementary and alternative medicine by older patients with arthritis: a population-based study. *Arthritis Care Res.* 2001;45: 398-403.
 32. Cassileth BR, Deng GE, Gomez JE, et al. Complementary therapies and integrative oncology in lung cancer: ACCP evidence-based practice clinical practice guidelines (2nd edition). *Chest.* 132(3 suppl):340S-354S.
 33. Wilcock A, Manderson CA, Weller R, et al. Does aromatherapy massage benefit patients with cancer attending a specialist palliative care day centre? *Palliat Med.* 2004;18:287-290.
 34. Correa-Velez I, Clavarino A, Barnett AG, Eastwood H. Use of complementary and alternative medicine and quality of life: changes at the end of life. *Palliat Med.* 2003;17(8):695-703.
 35. Kyle G. Evaluating the effectiveness of aromatherapy in reducing levels of anxiety in palliative care patients: results of a pilot study. *Complement Ther Clin Pract.* 2006;12:148-155.
 36. Wilkie DJ, Kampbell J, Cutshall S, et al. Effects of massage on pain intensity, analgesics and quality of life in patients with cancer pain: a pilot study of a randomized clinical trial conducted within hospice care delivery. *Hosp J.* 2000;5(3):31-53.
 37. Wells M, Sama L, Cooley ME, et al. Complementary and alternative medicine in women with lung cancer. *Cancer Nurs.* 2007;30(1):45-55.
 38. O'Callaghan C, McDermott F. Music therapy's relevance in a cancer hospital researched through a constructivist lens. *J Music Ther.* 2004;41(2):151-185.
 39. Freeman L, Caserta M, Lund D, Rossa S, Dowdy A, Partenheimer A. Music thanatology: prescriptive harp music as palliative care for the dying patient. *Am J Hosp Palliat Med.* 2006;23(2):100-104.
 40. Pan CX, Morrison RS, Ness J, Fugh-Berman A, Leipzig RM. Complementary and alternative medicine in the management of pain, dyspnea, and nausea and vomiting near the end-of-life: a systematic review. *J Pain Symptom Manage.* 2000;20(5):374-387.
 41. Lafferty WE, Downey L, McCarty RL, Standish LJ, Patrick DL. Evaluating CAM treatment at the end of life: a review of clinical trials for massage and meditation. *Complement Ther Med.* 2006; 14:100-112.
 42. Nelson JP. Being in tune with life: complementary therapy use and well being in residential hospice residents. *J Holist Nurs.* 2006; 24(3):152-161.
 43. Health Care Hiring.com. US hospice directories—Montana and Nevada. www.healthcarehiring.com/hospice_montana.php and www.healthcarehiring.com/hospice_nevada.php. Accessed November 4, 2004.
 44. Dillman D. *Mail and Telephone Surveys.* New York, NY: Wiley; 1978.