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## A Survey of Hospices Use of Complementary Therapy

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### Abstract

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.

### Keywords

complementary therapy; hospice; palliative care; rural and urban

### Introduction

While it is a tribute to America's health care system that the life expectancy has risen from 47 years 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). Due in part to advances in health care, 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 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. Pain relief, for hospice clients, is consistently described as their highest priority (3).

Hospice services, available in the United States since the 1970's, were provided to a record 1.2 million dying Americans in the year 2005. This represents an increase of 500,000 since the year 2000 (3). The majority of 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) “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” (pg. 2). 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).

Health care 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; 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. Eisenberg's (6,7) often cited national surveys 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, Demmer (8) reported that over one half of the hospice agencies surveyed across the United States were using some form of complementary therapy for their patients. Demmer further stated “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 quality of life for hospice patients” (8).

If complementary therapies have the potential to assist hospice patients with chronic illness at the end of their lives, their use and usefulness should be studied, documented, and implemented in hospice settings. In 2004, the Hospice and Palliative Nurses Association (9) 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” (pg. 92). 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 (10,11,12).

## Rural Dwellers

Beginning in the late 1980's seminal research was conducted with rural dwellers in an effort to better understand and describe the unique characteristics and health care needs of these individuals. Theoretical developments as a result of this research describe rural dwellers as independent, engaging in more self-care than their urban counterparts (10,11,12,13). This early research (10,11,12,13) highlights the fact that rural dwellers have traditionally been isolated from innovations in many areas, particularly in health care. Complementary therapies, while 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 health care delivery system with limited access to traditional health care, 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). While 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. Over two thirds of the participants reported chronic conditions and over one third of the respondents used self-directed practices primarily based on information from friends and relatives, not health care professionals.

In a subsequent study, a subset of respondents in the previous study who had used complementary care and had chronic illnesses were 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 their use. Self-directed practices such as vitamin, mineral, and herbal supplements, aspirin, and herbal creams were most commonly used 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: a) to identify what complementary therapy services were available and provided to clients receiving care from hospices in Nevada and Montana, and b) to 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 United States (6,7,16,17,18). Complementary therapy has been defined as a group of diverse health care 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 (20). Within the US, Medicare and Medicaid are beginning to approve reimbursements for using “selected modalities” of complementary therapies (21). Likewise from an international perspective, Australia has a growing number of private health insurance funds covering therapies such as acupuncture, naturopathy, and homeopathy (21). Therapies that, in the past, were used as a last resort for chronic illnesses are now used as primary treatments (22).

In the 90's, Eisenberg and colleagues (6,7) conducted two landmark, national studies to assess prevalence, costs, and patterns of use of unconventional medicine in the U.S. In the first study, telephone interviews were conducted with 1,539 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 utilized at least one complementary therapy

The purpose of the second Eisenberg study 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 2,055 randomly selected adults using comparable questions to those asked in the first study. It was 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 McFarland's national surveys in Canada and the U.S. (23).

The results from the 2002 National Health Interview Survey (NHIS) showed that sixty-two percent of adults in the U.S. used some type of complementary and alternative medicine (CAM) during the past 12 months (24). Data for this study were collected using computer-assisted personal interviews (CAPI) on 31,044 adults over 18 years of age. 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 pain, head or chest colds, anxiety, and depression (24).

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 mono-therapy and present in most all hospice patients. The second area of review relates to the use of CAM in the management of pain, and lastly a review is provided related to CAM for patients at the end of their lives. 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 Lindsey (25), noted that the use of complementary therapies by the chronically ill could be called a “covert caring for the self.” Four themes emerged from Lindsay's study: taking control, seeking knowledge, accessing alternative healing modalities, and altered relationships with health care professionals.

Vincent (26) 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 doctors, and availability of complementary therapies.

Tsay (27) 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 Eberhardt (28) conducted a cross-sectional analysis of the 2002 National Health Interview Survey (NHIS) to determine the use of complementary and alternative medicine (CAM) in adults with chronic diseases. The findings demonstrated a higher use of CAM (50%) among those with chronic illness over those without. Ai and Bolling (29) 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

Howell (30) 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 colleagues (31) 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 colleagues (32) surveyed 480 older adults with arthritis; 28% reported using complementary therapy providers and 68% used one or more therapies. Use of complementary therapy for arthritis was most common among those with poorer self-assessed health and higher use of traditional health care resources.

Cassileth and colleagues (33) 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 as well as 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 number one diagnosis for hospice patients. Researchers in Australia surveyed cancer patients at the end of their life regarding their use of complementary therapies and found that 48% of them had used some form of complementary therapy over the course of their illness (34). They also found that those 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 Demmer's study (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 (35). A recent study conducted by Kyle (36), suggested that aromatherapy with Sandalwood oil effectively decreased anxiety in palliative care patients. In another clinical trial of massage on pain intensity and quality of life for patients with cancer pain, the researchers found that pain intensity, pulse rate, and respiratory rate were significantly reduced immediately after massage (37).

Wells and colleagues (38) 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 frequent reported symptoms improved by the use of CAM therapies.

Music therapy was tested in a cancer hospital to determine its affect on patients, 57% of whom had end stage or advanced cancer (39). Qualitative results revealed that the patients, visitors, and staff members affirmed a sense of "aliveness, resonating with an expanded consciousness". In a recent study, Freeman and colleagues (40) discovered that patients nearing end-of-life, experienced less agitation and decreased effort with respirations with music thanatology.

Pan and colleagues (41) 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, 2 non-randomized control trials, and 8 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 colleagues (42) 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 Nelson (43) 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.

## Method

### Research Design

A descriptive survey design was used to identify what 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 Demmer (8) 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 or not the agency had 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 quality of life issues such as relaxation and stress reduction. In Demmer's work (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.

### Subjects and Recruitment

Participants were recruited from all hospice agencies in Nevada and Montana (N=54) that were identified through the U.S. Hospice Directory (44). 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/her as an expert in the area of study as recommended by Dillman (45).

### 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 one month later. Due to an initial low response rate, a third survey with cover letter was sent to non-respondents approximately one month later. Data were cleaned, checked, and entered into SPSS Version 15 for analysis. Descriptive statistics were

used to summarize the survey questions and identify the complementary therapy services offered and utilized. Chi Square statistics was used to identify differences in services among rural and urban hospices. Responses to qualitative questions were analyzed using content analysis methods.

## Results

A (N=27) response rate was obtained on 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 and the length of time that patients received hospice services in most of the programs (63.2%, n=12) was 1-2 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 four or more years 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.

### 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 less 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 that 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 (QOL)

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), 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 8 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 Vs. 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 on Table 2. Based on results of the chi square procedure, there was not a significant difference between rural and urban hospices in terms of the availability of complementary therapies ( $\chi^2 = 0.002$ ,  $df=1$ ,  $p=.97$ ). On 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 chi square procedure, there was not a significant difference between rural and urban hospices in terms of the percentage of patients receiving these therapies ( $\chi^2 = 7.273$ ,  $df=4$ ,  $p=.12$ ). Although also not significantly different statistically, hospices located in rural areas had slightly fewer options for complementary therapy available as compared to urban 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 mail survey research was respectable and all hospice administrators in 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 U.S. is not known. Another notable limitation is that the results of this study represent the perspectives of hospice administrators rather than hospice clients. While administrators are reliable sources of information about the availability and use of complementary therapies in 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' quality of life or relief of symptoms. Gathering comprehensive clinical data to determine actual relief of patients' symptoms or improvement of quality of life 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 quality of life. Health care 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 both the administrators of 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. Since massage and music therapies were the 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.

While health care 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. There are now a small but growing number of studies demonstrating the effectiveness of complementary therapy in relieving symptoms and promoting comfort for hospice patients. In order 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.

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## Biographies

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*Wendy Andrews, MSN, RN, FNP*, recently received her FNP/MSN at the Orvis School of Nursing, University of Nevada, Reno under the supervision of Dr. Alice Running. She received her BSN in 2002 at the University of Nevada, Reno and has been working as a Neurology and General Surgical RN for the past 5 years and will now begin working as a Nurse Practitioner in Internal Medicine.

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**Table 1**

Types of Complementary Therapies (CT) Available Among Participating Hospice Agencies that Offered CT

Therapies Available	Percent (n)
Massage Therapy	59.3% (n=16)
Guided Imagery, Music Therapy	48.1% (n=13) each
Therapeutic Touch	33.3% (n=9)
Aromatherapy, Pet Therapy	29.6% (n=8) each
Reiki, Art Therapy	18.5% (n=5) each
Reflexology, Hypnotherapy	14.8% (n=4) each
Acupuncture	11.1% (n=3)
Yoga Therapy, Feldenkrais Method	7.4% (n=2) each
Acupressure, Magnet Therapy, Biofeedback, Horticulture, Water Therapy	3.7% (n=1) each

**Table 2**  
Availability of Complementary Therapies (CT) in Rural and Urban Hospices \*

	CT Available	CT Not Available	Total
Rural	n=13	n=5	n=18
Urban	n=5	n=2	n=7
Total	n=18	n=7	N=25

\* Two hospice agencies that reported both rural and urban location were excluded from this analysis

**Table 3** Percent of Patients Receiving Complementary Therapies (CT) in Past Year among Rural and Urban Hospices Offering CT\*

	Percent of patients receiving CT 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 <sup>**</sup>

\* Two hospice agencies that reported both rural and urban location were excluded from this analysis.

\*\* There were 3 missing values on this survey question.