NURSES’ PERCEPTIONS OF THE USE OF COMPLEMENTARY AND ALTERNATIVE MEDICINE FOR PAIN MANAGEMENT

by

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ABSTRACT

Use of complementary and alternative medical therapies (CAM) by adults for pain management is common practice. More hospitals and clinics are incorporating CAM into treatment plans. Nurses are key team members in planning and implementing care. Perceptions can influence care that is given. It is important to understand nurses’ perceptions CAM use for pain management, their comfort level for recommending and initiating CAM therapies, and educational needs regarding CAM. Some studies have been conducted regarding nurses’ perceptions of CAM, but not particularly CAM used for pain management.

A descriptive qualitative approach was employed using a convenience, cross-sectional sample of 10 nurses who work at a northwest Montana medical center. Data were collected during semi-structured interviews. Imogene King’s Theory of Goal Attainment provided a theoretical framework for the study.

Results indicated nurses were optimistic about CAM and supported incorporating CAM into patients’ pain management treatment plans. Nurses were generally comfortable recommending some kinds of CAM, but some desired the direction of a physician for certain types of CAM. Nurses seemed unsure of their role and responsibility regarding incorporating CAM into treatment plans. Themes that emerged were that nurses thought CAM could be useful for decreasing or even eliminating narcotic use, nurses felt there was a lack of resources and guidance regarding recommending CAM therapies to patients, and although they thought they had a good understanding about CAM, they would like more education about CAM.

There are several implications for future research. Including; replicating the study in other geographic areas, exploring how increased education and available resources impact nurses comfort levels about discussing and incorporating CAM, understanding the relationship between CAM and narcotic use, and more research focusing on physicians’ perceptions of CAM use for pain management.

This research impacts the advanced practice registered nurse (APRN) practice in many ways. The expanded role of the APRN requires a focus on education and advocacy. The APRN could conduct professional educational offerings for medical professionals. Patients and nurses will look to the APRN for guidance. It is important for the APRN to be knowledgeable about CAM use and CAM resources.
CHAPTER 1

INTRODUCTION

Background

The use of complementary and alternative medicine (CAM) for pain management among adults in the United States is becoming more and more popular and is a topic that needs to be better recognized and understood by nurses. Increasingly hospitals and clinics are incorporating CAM options into their treatment modalities. This is due to increased patient demands for individualized care, organizational desires to provide the best care possible, and the need to stay sharp in a competitive marketplace (Ananth, 2012).

Findings released in 2008 by the National Center for Complementary and Alternative Medicine (NCCAM) and National Center for Health Statistics (NHIS) show approximately 38.3% of adults in the United States used some form of CAM. (Neiberg et al, 2011). Therapies included in this study were diverse and ranged from acupuncture, chiropractic, massage, and natural products to Reiki, ayurveda, and qi gong. American adults were found to use CAM most commonly for back, neck, and joint pain (Neiberg et al). Other commonly used CAM therapies include non-vitamin natural products, deep breathing, meditation, chiropractic, massage, and yoga (NCCAM, 2012). These findings are helpful for understanding the prevalence of present CAM use among adults in the United States.
Some research supports the use of CAM for various types of pain. One study conducted by Hui, Boyle, Veyda, and Glazier (2012) found that incorporation of CAM into conventional treatment significantly reduced post-herpes zoster neuralgia pain within three weeks and pain reduction persisted for up to one to two years. Running and Turnbeaugh (2011) found evidence that use of CAM such as massage therapy, acupuncture, and energy therapies in conjunction with western modalities was successful at reducing cancer related pain. Findings from these publications support an integrative approach to pain management.

It is important for nurses to be familiar with CAM therapies to effectively be able to recommend and manage treatment options for patients. Some research has shown that nurses have a lack of knowledge about the use of CAM therapies. One study conducted by Rojas-Cooley and Grant (2009) found that oncology nurses often did not discuss CAM use with their patients because of a lack of knowledge about specific CAM therapies. The investigators discovered that although nurses believed patients have the right to integrate CAM into conventional treatments, they were not comfortable assessing for CAM use, had difficulty finding reputable resources about CAM, and were unsure of the role of CAM in their practice (Rojas-Cooley & Grant).

A study conducted by Hessig, Arcand, and Frost (2004) revealed that a one-day educational offering improved nurses’ knowledge about three specific CAM therapies: relaxation, spirituality, and touch. Nurses in this study felt that CAM integration could improve patients’ quality of life, but did not implement CAM therapies because they were not comfortable with their level of knowledge.
In order to fully integrate CAM therapies into practice, nurses need to be comfortable with their knowledge of these treatments so they can effectively communicate with patients. Communication is crucial for supporting patients. According to Rojas-Cooley and Grant (2009) NCCAM “suggests that nurses be the member of the health care team that initiates conversations about CAM” (p. 217). Rojas-Cooley and Grant found that one main communication barrier that nurses identified was their lack of knowledge about CAM. Oncology nurses were found to have generally positive attitudes toward CAM, but did not discuss the use of CAM with their patients because they were not comfortable with their own knowledge level, assessment skills, or ability to find reputable sources for specific therapies. This perceived lack of knowledge can be a barrier to achieving optimal outcomes for patients. According to Fitch et al. (as cited by Rojas-Cooley & Grant, 2009) “patients were honest about CAM use only if oncology nurses conveyed openness and support” (p.217). It could be difficult for nurses to be open and supportive if their perception is that they lack knowledge about CAM therapies.

Nurses’ perceptions can have an effect on the therapeutic nurse-patient relationship. Some studies have demonstrated how nurses’ perceptions in general can influence pain management decisions in practice. Two separate research studies conducted by Wilson (2007) and McCreadie et al. (2010) demonstrated that nurses’ perceptions of patients’ lifestyles can affect care practices. Wilson’s (2007) study validated that nurses’ perceptions about patients’ behaviors affected decisions they made about treatment of pain. These studies show that regardless of how careful nurses are to
provide unbiased care, perceptual bias exists. By engaging in therapeutic interactions and relationships with all patients, nurses’ can overcome biases that are created by their perceptions. Understanding nurses’ perceptions will enhance their ability to engage in the therapeutic nurse/patient relationship and improve their ability to empower their patients.

Integral to effective communication is the concept that “nurses should understand the philosophical basis for major alternative medical practices before discussing them with patients, families, and health care team members” (Rojas-Cooley & Grant, p. 221). In order to effectively support their patients, nurses need to be knowledgeable about the therapies that are being used. Hessig et al. (2004) found that nurses strongly believed that CAM can improve a patient’s quality of life, but did not implement CAM therapies in nursing practice because of their lack of knowledge. Education can affect nurses’ perceptions of their ability to provide evidence based care and thus their ability to empower their patients.

Patient empowerment is a fundamental concept in nursing care and can be accomplished through trust, communication, education, support, and mutual goal setting. Barrie (2011) found that “empowered patients will often make important and complex decisions about their care and take responsibility for their actions” (p. 38). Nurses and patients can work toward establishing a therapeutic relationship that empowers patients through mutual goal setting (Barrie). Nurses will be more effective in the care they provide and their ability to empower their patients who use CAM when they themselves are knowledgeable and understand their perceptions of the use of CAM therapies.
Patient empowerment through choice in regards to self-managing their pain is also a significant element in chronic pain management. As summarized by Barrie, "as most healthcare professionals provide care to people with chronic pain at some point, it is their responsibility to prepare patients to make informed decisions about their treatment. Empowering patients to self-manage their chronic pain can lead to improved person centered outcomes" (2010, p. 40). Through empowerment, patients will take responsibility for their actions. It is the health professional’s responsibility to prepare them to make such decisions (Barrie). Empowering patients to make health care decisions is one of the basic foundations of nursing practice. If nurses are to empower patients and support their decisions, it is important to recognize perceived biases and gaps in knowledge in order to prepare for this role.

Further investigation of the perceptions nurses have about the use of CAM is necessary to gain a better understanding of how nurses feel and what their practices are regarding CAM. When perceptions are explored and recognized, biases can be identified. The nurse-patient relationship can be optimized when these biases are minimized through education and knowledge and thus will improve efficacy of the therapeutic relationship and promote patient-centered care. By understanding their own perceptual biases and educational needs, nurses can confidently be able to offer support for the incorporation of CAM into patients’ treatment plans when appropriate.

Considering the wide variety of CAM therapies available and the predominance of use, it is important to explore how CAM treatments can be incorporated into practice
when desired or needed by the patient. One pivotal player in helping implement any treatment is the nurse. Nurses inform and educate patients as well as recommend and refer patients for many different types of treatments. So the question arises; what are nurses’ perceptions, feelings, and educational needs in regards to using CAM for pain management?

**Purpose**

The purpose of this study was to explore perceptions that nurses have about incorporation of CAM therapies into pain management treatment plans. This research study sought to identify nurses’ personal biases, feelings, and knowledge gaps, if any exist regarding patients’ use of CAM for pain management. This research attempted to answer the following questions: 1) What are nurses’ perceptions of the use of CAM in pain management? 2) Are nurses comfortable recommending CAM therapies for patients? 3) Would nurses’ like more education regarding CAM therapies? To address the purpose of this study, registered nurses who work at one medical center in a northwestern rural community were interviewed.

**Conceptual/Theoretical Framework**

Imogene King’s Theory of Goal Attainment (King, 1999) was used as a theoretical framework for guiding this research. King (1999) discussed her Theory of Goal Attainment and outlined concepts that serve to explain the nature of human beings and nursing. The concepts include: self, perception, role, communication, interactions, transaction, growth and development, time space, and stress. This particular theory was
appropriate for helping guide this research because the researcher sought to understand nurses’ perceptions regarding the use of CAM in pain management. Nurses’ perceptions are developed by how they feel about their interactions, roles, communication with patients, and growth gained from previous experiences. The key concepts of King’s theory helped the researcher understand and account for the variables that affect nurses’ perceptions and day to day practices. King further explained “the multiple variables that influence perceptions, roles, responsibilities, and decision making in a variety of whole systems such as the healthcare system and the family system require a conceptualization of the whole” (p. 292). The Theory of Goal Attainment helped guide this study to investigate the nature of human interactions nurses experience that affects their perceptions, from a holistic perspective.

King’s theory was appropriate for this study because it helped identify nurse-patient interactions that are characterized by both verbal and nonverbal communication exchanged and interpreted by the nurse, patient and family members (King, 1992). Through this process of transactions values, aspirations, and wants of each person are shared and goal attainment can be accomplished (King). It is important to apply this theory to both research and practice in an attempt to understand the complexity and importance of nurses’ daily interactions with the patients they serve. Nurses enter into relationships with patients to assess, establish goals, create a plan of care, implement said plan of care, and then evaluate the efficacy of that care. These are concepts that are essential to basic nursing practice. It is through those ‘transactions’ that patients gain trust in their nurses and make decisions about their care practices. In order to be
optimally therapeutic, nurses need to understand certain perceptions and biases that they bring to those interactions with patients that may influence decisions the patients make.

**Definition of Concepts**

In order to clarify the key concepts used frequently in this study, the following definitions were used:

1) Complementary and alternative medicine (CAM): “CAM is a group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine” (NCCAM, 2001).

2) Perceptions: “Conscious recognition and interpretation of sensory stimuli that serve as a basis for understanding, learning, and knowing or for motivating a particular action or reaction.” Mosby’s Medical Dictionary, 8th edition (2009).


**Assumptions**

There were two assumptions made by this investigator. The first was that CAM can be incorporated into pain management treatment modalities. The second assumption was that nurses will have had some understanding of and experience with CAM.
CHAPTER 2

LITERATURE REVIEW

The purpose of this chapter is to provide a summary of the research literature relevant to the research questions posed: 1) What are nurses’ perceptions of the use of CAM in pain management? 2) Are nurses comfortable recommending CAM therapies for patients? 3) Would nurses’ like more education regarding CAM therapies? Content is organized according to the following concepts related to the research questions; a) Use of CAM for pain management, b) Nurses’ perceptions of CAM and CAM Education, and c) Nurses’ perceptions of pain management.

Use of CAM for Pain Management

Numerous studies have been conducted in the past decade exploring the efficacy of CAM used for pain management. Research conducted by Hsu, BlueSpruce, Sherman, and Cherkin (2010) sought to provide further insight about a broader range of outcomes that patients experienced who participated in five separate trials about CAM treatments for back pain. Participants reported having more positive feelings, understanding, and awareness about CAM options, which gave them hope and confidence about their ability to manage their pain. This was especially true for participants who received acupuncture. Participants who received yoga, massage, mindful-based stress reduction (MBSR), and t’ai chi frequently reported an increase in their ability to relax. Participants in MBSR also reported feeling generally more positive, being happier, having reduced stress and worry, more control over their emotions, and an overall sense of wellbeing. Mindful-
based stress reduction patients also expressed positive changes in thinking related to their bodies, what causes pain, and how therapy works increasing their ability to cope with pain. Those who participated in yoga reported having better body awareness including posture, movement, breathing, energy manipulation, and connectivity.

Another study conducted in the United Kingdom by Artus, Croft and Lewis (2007) focused on patients with musculoskeletal pain that sought pain management in the primary care setting. More than 80% of respondents reported using at least one type of CAM treatment and two thirds of those currently used CAM treatments. One third of CAM users in the study stated that CAM was recommended by a health professional and the majority of participants used CAM in conjunction with conventional healthcare services. The authors suggested that “patients whom general practitioners saw most frequently for musculoskeletal pain were more likely than not to be using CAM therapies as well” (Artus et al., p. 9).

Patients with post-herpes zoster neuralgia pain were found to have significant improvement within three weeks, lasting for up to nine weeks when a multifaceted CAM therapy approach was used (Hui et al., 2012). Complementary therapies used in this study included: acupuncture, neural therapy, cupping and herbs. Adverse effects were infrequent and mild. Participants in this study were found to have considerable enhancement in quality of life through improvement of physical health, mental health and mood.

One study conducted in Australia sought to determine the prevalence and patterns of CAM use in an osteoporosis clinic (Mak & Faux, 2010). Over 51% of participants
reported having previously used or were currently using CAM therapies to augment treatment. Participants predominantly desired to have a holistic approach to their health care. Similar to studies previously discussed, the most common CAM therapies used were multivitamins, acupuncture, t’ai chi, and yoga (Mak & Faux).

Nurses’ Perceptions of CAM and CAM Education

Hessig, Arcand, & Frost (2004) explored the effects of education on attitude, perceived knowledge, and self-reported application of complementary therapies in a group of oncology nurses. This study sought to understand nurses’ perceptions of the use of CAM, and how education can influence perceptions and knowledge about integration of CAM into nursing practice. The researchers initially assessed attitude toward, knowledge of, and application of complementary therapies in the sample of the nurse population. After an educational offering consisting of an eight hour class addressing 10 specific complementary therapies, the sample of nurses completed a questionnaire at a time frame of three and six months after the educational intervention. This study discovered that although nurses valued complementary therapies, they lacked the knowledge to apply CAM in practice. Education enhanced knowledge and to some degree increased the application of some CAM therapies (Hessig et al.).

In 2009, Rojas-Cooley & Grant addressed a gap in the literature by assessing nurses’ knowledge and attitudes about CAM. Using a descriptive, cross-sectional survey design the authors surveyed oncology nurses involved in direct patient care. Results showed a lack of CAM knowledge that created a barrier to communication with patients (Rojas-Cooley & Grant). "The knowledge deficits limit nurses’ ability to identify and
discuss healing methods of specific therapies, such as herbs or yoga." (p. 221). The study also found that nurses’ attitudes towards CAM were positive overall and they believed patients have the right to choose to have CAM integrated into their conventional care. Findings also supported oncology nurses’ difficulties with “assessing, finding reputable sources, and answering questions involving CAM”. Respondents reported feeling uninformed about their governing board’s position on CAM and were unsure of their role and responsibility for CAM incorporation. These findings reinforce the need for education to help nurses incorporate CAM into practice in the legal and ethical manner (p. 222). Study limitations were identified as; use of a new survey tool, reliance on respondents' self-reported knowledge, and low response rate.

**Nurses’ Perceptions of Pain Management**

There is evidence in the literature that nurses’ perceptions about patients affect their approaches to managing the patient’s pain. A study conducted by Wilson (2007) explored whether a patient's lifestyle affected how nurses assessed and managed pain; in other words how do nurses’ perceptions influence their pain management decisions? Specialist and generalist nurses were given two patient scenarios with similar aged men. One male was professionally employed with a family, and the other was unemployed and admitted to consuming alcohol prior to his accident. This study found a positive correlation between patient's lifestyles and nurses’ pain management behaviors. Generalist nurses were more likely to believe self-reported pain of the employed family man and subsequently under medicated the unemployed patient. Addiction, dependence, and respiratory depression were concerns that nurses expressed influenced their pain
medication administration decisions. Specialist nurses made no distinction between the two patients, suggesting higher level of education and expertise could minimize bias influence. Limitations of this study identified by Wilson (2008) were use of the small, self-selecting, limited sample, and use of hypothetical patient pain scenarios which may have affected inferences and were not absolute indicators of nursing practice. Considering this study was based upon scenarios, possibility of biased responses was another limitation acknowledged by the researcher.

Further support of how nurses’ perceptions affect pain management was provided in a study conducted by McCreaddie et al. (2010). This research investigated how therapeutic effectiveness was compromised in the acute care setting by perceptions nurses had of strategies employed by drug users in regard to pain management. Findings of this study showed that moral relativism proved a struggle for both nurses and drug users in regard to perceptions, judgments, and expectations that both parties held. Both drug users and nurses reported contrasting expectations and perceptions of the therapeutic relationship. Compromised care was evidenced by nurses who reported “a restricted mutuality of caring, potential ethical erosion and perceptions of reduced therapeutic effectiveness” (2010, p. 2734). The authors hoped the identification of key aspects that contribute to problematic interactions with patients found in this study can be addressed further and prevented.

Summary

The evidence in this literature review supports the importance of nurses’ perceptions on the care they deliver. Since nursing has a holistic focus on the delivery of
healthcare, education is paramount to our practice. The literature review also identified that nursing education is especially important in promoting evidence-based practice and quality nursing care. All though there are studies about the use of CAM in pain management, little is known about nurses’ perceptions of the use of CAM in pain management. No research studies were found regarding nurses comfort level for recommending CAM, therefore further research needs to be conducted regarding nurses’ comfort level for recommending CAM therapies.
CHAPTER 3

METHODS

This chapter contains a description of the methods used for this study including:
a) the population studied; b) the design used in the study; c) procedures for data
collection; d) instrumentation; e) discussion of human rights and consent; f) and analysis.
The researcher addressed the following research questions: 1) What are nurses’
perceptions of the use of CAM in pain management? 2) Are nurse’s comfortable
recommending CAM therapies for patients? 3) Would nurses like more education
regarding CAM therapies?

Study Design

A qualitative approach with a descriptive cross-sectional survey design was used
to address the purpose of this study. This design enabled the researcher to employ a
flexible approach for answering the research questions. Qualitative description allows
the researcher to provide a surface overview of a particular event or phenomenon through
a straightforward, comprehensive, and descriptive summary. Qualitative descriptive
design presents an overall view of natural, everyday events (Sandelowski, 2000).

Registered nurses who are employed at a northwestern Montana medical center
were interviewed to identify their perceptions of the use of CAM in pain management.
Demographic and socio-demographic information was collected to describe the cohort.
An interview guide with open-ended questions was used during the semi-structured
interviews.
Population and Sample

The population of interest for this study were male and female registered nurses (RN) working in a northwest Montana medical center. Inclusion criterion required only that the participant be an RN employed at said medical center. A convenience sample of nurses from this hospital was obtained based upon availability and willingness to participate. Effort was made to include nurses from different departments in acute and out-patient settings to involve a variety of perspectives. Altogether 10 participants were included. This sample size is considered adequate for a qualitative study and was chosen due to time and resource limitations of the investigator. Because the study’s focus was on nurses’ perceptions about recommending or initiating CAM, licensed practical nurses (LPN), certified nursing assistants (CNA), and personal care attendants (PCA) were excluded. Planning and initiating a patients’ plan of care including CAM is beyond the scope of practice of LPNs, CNAs, and PCAs.

Initial contact with potential participants was made by the researcher in the participants’ workplace. After the researcher briefly explained the purpose of the research and willingness to participate was determined, contact information was obtained from 12 interested parties. Interviews were set up through text messaging and telephone calls. Two nurses who expressed interest did not return phone or text messages. Ten nurses, in all agreed to participate. Appointments were then made for interviews in the location of the respondent’s choice.
Procedure for Data Collection

Data were collected using a semi-structured interview process to allow for free-flowing, natural conversation. Interviews were conducted during respondents’ free time in a location of their choosing. Settings including a restaurant, four different coffee shops, personal residences, and at the workplace. Approximately one hour of time was allotted for each interview. Rapport was already established through previous workplace familiarity of the respondents with the interviewer. Prior to the interview beginning, the consent form was reviewed and signatures were obtained. Interviews took place over four separate days and the length ranged from 30 to 90 minutes. Brief notes were taken by the interviewer during the interview so the flow of conversation would not be interrupted. Directly after each interview, the researcher reviewed the notes and further supplemented them by adding additional notes to complete the documentation of the responses.

Instrumentation

A review of the literature did not reveal an instrument that would be appropriate for the purposes of this study. Therefore, an interview guide specific to this study was developed by the investigator based on the research questions (Appendix B). Questions were structured to help the research ask open ended questions and provided prompts to keep the flow of conversations going. The interview guide assisted the researcher to conduct the semi-structured interviews and ensure that all of the research questions were covered.
Rights of Human Subjects and Consent Process

Approval from Montana State University Institutional Review Board (IRB) was received in March 2014. Data collection began after IRB approval was received.
Approval from the health care organization in which the participants are employed was also obtained prior to data collection.

Participants’ written consent was obtained by the researcher before the interviews were conducted (See Consent Form in Appendix A). Prior to requesting written consent, potential participants were informed about the purpose of the study, what participation involves, that participation is entirely voluntary, that they can decline to answer any questions they do not wish to answer, and that they can withdraw at any time.
Confidentiality was maintained by having no specific identifiers documented in the notes recorded from the interviews. Respondents were identified by an assigned number according to the order in which they were interviewed. A record of respondent’s names and corresponding code numbers was kept in a locked file for the duration of this study. The record was then appropriately destroyed at the completion of the research. Each participant was also given the researcher’s contact information in the event there were questions or additional comments about the research.

The potential benefit of participating in this study was to contribute to the knowledge base about a little known subject. The information obtained by this study could help practitioners integrate a holistic approach to patient centered care. It could also help identify possible learning needs of nurses and may be beneficial to educators
and managers alike. The risks of participating were minimal and included inconvenience and loss of time.

**Analysis**

Data analysis was initiated during the interview process as the researcher began to identify themes and patterns that emerged during the interview process. After the interview process concluded, interview notes were carefully and sensitively reviewed several times. Interview notes were examined for patterns or repeated words and phrases. The repeated words and phrases were grouped into themes. Once themes were isolated, notes were once again reviewed to ensure similar meaningful phrases were not overlooked. Themes represented similarities in the experiences, thoughts, and perceptions of the participants as described in the interviews. Themes were further organized according to participant demographics and applicable research question.
CHAPTER 4

RESULTS

In this chapter the results of the study are summarized and presented in the following categories; a) description of the sample, b) nurses’ perceptions of the use of CAM for pain management, c) nurses’ comfort for recommending CAM, d) educations about CAM, and e) themes.

Description of the Sample

A total of 10 nurses were interviewed for this study over a period of one week in April, 2014. Participants represented many different departments throughout the medical center including nursing administration, education, infection control, inpatient rehabilitation, intensive care, cardiac/intermediate care, medical, surgical, oncology and hospice. Of the participants, 9 were female and 1 was male.

Nurses who participated in this study possessed a diverse range of experience and years in practice. Overall years of experience ranged from 4 to 35 years with 2 to 15 years in their current specialty. The average number of years of experience of the cohort was 17 years. Four nurses currently had Associate degrees in nursing (ADN), 5 had Bachelor’s degrees in nursing (BSN), and 1 nurse had a Master’s degree in nursing (MSN). One of the AD nurses was currently working on her BSN and the other three ADN nurses all held Bachelor degrees in other areas unrelated to nursing. See Table 1. Specialty certifications were held by 3 ADNs and 5 BSNs, with two BSNs holding two or three certifications. Another BSN was currently working on a specialty certification.
The majority of nurses interviewed held specialty certifications (8 out of 10) and all but 2 of those 8 nurses had certifications that were pertinent to their current area of expertise.

Table 1. Socio-demographics

<table>
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<th>Degree</th>
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Nurses’ Perceptions of the Use of CAM for Pain Management

The first research question in this study was what are nurses’ perceptions of the use of CAM for pain management? Interview questions 2 and 3 addressed this question.

In interview question 2, participants were asked what types of treatment options they considered to be CAM. Nurses reported a wide, diverse variety of treatments and therapies they believed were considered to be CAM therapies. Overall, 37 different types of CAM therapies were identified. Each participant’s number of responses was totaled and ranged from 5 to 16 types of treatments. See Table 2. Overall nurses averaged 12.3 types of CAM that they could name. Responses were grouped according to the NCCAM categories; natural products or mind and body practices. See Table 3.
Table 2. Numbers of CAM Therapies Reported

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Table 3. Types of CAM

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<tr>
<td>Herbs</td>
<td>Acupuncture, message therapy, yoga, qi gong, rolfing, craniosacral therapy, meditation, prayer/spiritual care, visual imagery, relaxation, breathing, hypnosis, ultrasound, acupressure, acupuncture, dry needling, electrical stimulation, reiki, reflexology, chakra therapy, hot/warm water therapy, aroma therapy, smudging, music therapy, art therapy, play therapy, pet therapy, group therapy, diet and exercise, herbal supplements, medical marijuana, naturopathic medicine, chelation, and chiropractic</td>
</tr>
<tr>
<td>Vitamin and Mineral Supplements</td>
<td></td>
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<tr>
<td>Medical Marijuanna</td>
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</table>

In interview question 3, nurses were asked their thoughts and perceptions about the use of CAM for pain management. Nurses were also asked if they thought CAM should be used alone or in conjunction with over-the-counter and prescription medication.

All of the participants stated they believed CAM could be beneficial for pain management. Responses were mostly enthusiastic, with remarks such as “absolutely”, “it could have a huge impact”, and “I’m all for it”. Many nurses related personal stories of experiences they or a loved one had with using CAM for pain management. One nurse used yoga to help relieve back pain; another nurse experimented with dry needling and acupuncture to relieve arthritis pain. Most nurses reported having tried more common therapies like message and relaxation techniques. Several nurses talked about CAM
options that loved ones have tried. One nurse revealed that her spouse used medical marijuana for pain and she believed it was helpful. Two nurses conveyed slight ambivalence toward CAM use. One nurse stated “I’m not sure, but I suppose it couldn’t hurt”. Further into the interview, the same nurse stated “if it works, use it, especially if it can decrease narcotic use”. Six nurses independently acknowledged that patient’s perceptions should direct use of CAM. One nurse stated “what works for one patient doesn’t always work for another, so we need to be open to what the patient thinks will work”. Another nurse stated “if they (patient) believe it is helping, use it”.

Most nurses agreed that CAM could be used alone or in conjunction with traditional, over-the-counter, and/or prescription medications. Nine nurses reported they thought CAM therapies used in conjunction with prescribed pain medication could help decrease or minimize use of narcotics. Eight nurses thought CAM could be used alone to manage pain and four of those nurses further suggested that CAM could/should be used to help patients wean off narcotic medications. One nurse specifically stated “it would be great if CAM therapies could be used to wean patients off of narcotics with a goal of only using alternatives”. Three nurses specified that CAM options should be tried first, before moving to narcotics. Another nurse stated “people who use CAM don’t use as much narcotics or other pain medication”.

Nurses Comfort with Recommending CAM

The second research question in this study investigated whether or not nurses were comfortable recommending CAM for patients? In the fourth interview question nurses were asked about their comfort level with and willingness to recommend CAM,
and level of perceived expertise. Overall, nurses in this study indicated they were comfortable recommending some forms of CAM. Therapies such as massage therapy, yoga, acupressure, aroma therapy, guided imagery, relaxation techniques, and lifestyle changes were among the list of treatments that nurses were generally comfortable discussing and recommending to patients. Several nurses were not comfortable recommending some types of therapies including acupuncture, dry needling, medical marijuana, and herbs. Three nurses stated they were not comfortable initiating CAM therapies without the direction of a physician. One stated “I guess I would recommend CAM if I knew the doctor was on board”. Another nurse said “I would clear it with the doctor first, I wouldn’t want to step on anybody’s toes”. Six nurses stated they would feel comfortable initiating CAM into care plans without direction of a physician. One nurse responded “there might be things I shouldn’t recommend, but I do anyway”. Many nurses expressed concern for patient safety stating “I would want to make sure it (CAM) was safe for the particular patient”, and “it (CAM recommendation) would depend upon the specific patient situation”.

The majority of nurses (8) stated that they would be open to referring patients to a more knowledgeable source of information about CAM, but only four nurses (two BSNs, an MSN, and one AND) were aware of any possible resources. None of the nurses interviewed were aware of any CAM resources that were supported by their organization. Four of the participants expressed concern about lack of CAM resources or knowledge of available resources stating “if I knew which providers the hospital supported, I would
recommend someone” and “I would be more comfortable sharing information with patients if I knew it was from a reliable source and approved by the hospital”.

**Education about CAM**

The third research question in this study was: Would nurses like more education about CAM? The fifth interview question addressed nurses’ past educational experiences about CAM, desire for additional education about CAM, and perceived level of expertise regarding CAM therapies.

Past educational experiences about CAM varied among the group. Most nurses reported more than one way that they have received knowledge or education about CAM. A majority of nurses identified life experience, both professional and personal, as one means they have obtained knowledge about CAM. Five nurses reported receiving formal education about CAM as part of their nursing programs, four participants stated they have attended professional offerings, and five nurses reported being self-taught. See table 4 below.

<table>
<thead>
<tr>
<th>Life Experience</th>
<th>Nursing Programs</th>
<th>Professional Offerings</th>
<th>Self-taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>5</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Note: Participants could provide more than one answer.

Seven nurses stated they would like more education about CAM, but only four of those seven nurses said they would seek out their own educational opportunities about any CAM therapies. Three nurses including one ICU, one ER, and one infection control nurse stated they would not seek out educational offerings because they didn’t feel that it
was pertinent to their current area of practice, but stated they would if their jobs required it.

All 10 participants felt that nurses did need more education about CAM options. They suggested multiple ways that nurses could get more education regarding CAM therapies. Nine nurses thought more CAM education should be incorporated into nursing programs, eight nurses thought more professional continuing education offerings should be available, and half of the respondents thought that nurses should take the initiative to be self-taught about CAM.

Perceived level of expertise about CAM therapies was self-rated as novice by four nurses, average by two nurses, and above average by four nurses. Of the novice self-rated nurses, two were ADNs and two were BSNs. Of the nurses who rated their CAM expertise as novice, one BSN and one ADN respectively had the least amount of years of nursing experience among participants. The two nurses who ranked their expertise as average were a 25 year ADN (who is working on her BSN) and a BSN with 24 year of experience in critical and emergency care, respectively. The nurses who rated themselves above average in CAM expertise were all Bachelor’s or Master’s educated. None of the participants self-reported an expert level of expertise about CAM.

Themes

Three themes were identified in the data. One theme was that nurses think CAM therapies could be useful for decreasing or even eliminating narcotic use. Another theme was nurses felt there was a lack of resources and guidance from the institution where they worked regarding recommending and referring CAM therapies to patients. The third
theme to arise was that although nurses thought they had a good understanding about CAM, they would like more education and reliable resources about CAM therapies.
CHAPTER 5

DISCUSSION

The purpose of this research was to explore perceptions that nurses have about incorporation of CAM therapies into pain management treatment plans. To address this purpose, answers to the following questions were sought: 1) What are nurses’ perceptions of the use of CAM in pain management? 2) Are nurse’s comfortable recommending CAM therapies for patients? 3) Would nurses like more education regarding CAM therapies? In this final chapter a review and discussion of the results of the research is provided. The chapter is organized into the following categories; a) summary and discussion of the results, b) limitations of the study, c) recommendations for future research, and d) implications for practice.

Summary and Discussion of the Results

Participants in this research were enthusiastic and eager to contribute. Regardless of their level of education, experience, and expertise nurses’ responded positively to the questions posed by the researcher. Nurses involved in this study represented an overall diverse and generalized sample of the target population. Years of nursing experience ranged from 4 years to 35 years with an average of 17 years among them. Educational background was equally represented in the sample as evidenced by a fairly even balance between AD nurses and BS nurses, with one MSN nurse involved in the cohort. Nursing specialties were broadly represented in the sample with participants from many different disciplines.
Over all, nurses who took part in this study were supportive of the use of CAM in general, but especially for pain management. They had the attitude of “whatever works, use it”. Nurses commonly believed that CAM should be incorporated into treatment plans and felt including CAM options could help reduce the amount of narcotic pain medication that was used. Some nurses felt that CAM should be used to wean patients off narcotics all together. Several nurses expressed a belief that CAM therapies should be implemented first, before progressing to narcotic pain medicine. Whether CAM is used alone or in conjunction with traditional medicine, nurses felt it was important to include patients and their beliefs in the care planning process.

In general, all nurses felt they were comfortable recommending some type of CAM therapy. More well-known and non-invasive options such as massage therapy, relaxation techniques, and yoga were types of CAM that nurses were largely comfortable discussing with patients. Some nurses were not comfortable recommending more invasive therapies like acupressure or dry needling and were only comfortable acting when a physician directed care. A few less experienced nurses expressed uncertainty about CAM and their scope of practice and weren’t sure what types of CAM therapies needed a doctor’s order. They seemed unsure of their role and did not want to get in trouble for overstepping their scope of practice. Nurses with greater years of experience and education were comfortable recommending more invasive treatments and didn’t feel the need to have a physician directing care. Most nurses expressed concern for making sure CAM options were safe. They also conveyed understanding of individualized patient care and tailoring treatments depending upon diagnosis and individual patients’
situations. While most nurses stated they would refer to someone more knowledgeable about CAM, only a few were aware of any available resources. Many nurses identified a desire for more reliable resources about CAM options and several wanted more direction regarding CAM recommendations and referrals from the facility where they were employed.

Nurses drew their knowledge from both personal and professional experience, some formal education, and a mixture of professional offerings and self-directed learning. Nurses who worked in areas that dealt with chronic pain on a daily basis seemed to have the broadest knowledge about CAM options. Nurses who worked in more emergent or critical areas were not as knowledgeable.

Overall, nurses have a fairly comprehensive understanding about what constitutes CAM therapies. All agreed however, that nurses need more education about CAM as a whole. They thought nursing programs and professional offerings could be ways that nurses received more CAM education. A desire to continue their own education about CAM depended upon the area in which the nurse worked. Nurses who worked in areas where time constraints and priorities made CAM discussions inappropriate did not feel the need to expand on their knowledge of CAM use.

The results of this research revealed three interesting themes regarding nurses and their perceptions of CAM use in pain management. One theme was that nurses think CAM therapies could be useful for decreasing or even eliminating narcotic use. Some nurses believed that CAM therapies should be tried before advancing to narcotic pain medications and many believed that incorporation of CAM into pain treatment plans
could help patients use less narcotic pain medication. Another theme was nurses felt there was a lack of resources and guidance from the institution where they worked regarding recommending and referring CAM therapies to patients. The last theme to arise was that although nurses thought they had a good understanding about CAM use, they would like more education and reliable resources about CAM therapies.

Findings of this study are consistent with previous research conducted by Rojas-Cooley and Grant (2009) and Hessig et al. (2004) that demonstrated nurses’ positivity toward CAM use and belief in patient-centered care. These studies also showed that knowledge level can affect nurses’ ability to communicate with patients about CAM treatments and that nurses desired more knowledge about CAM. Rojas-Cooley and Grant’s research also determined that nurses were challenged to find good resources about CAM and were unsure of their role and responsibilities for incorporating CAM into treatment plans.

**Limitations of the Study**

Several limitations are acknowledged in this study. A small sample drawn from one hospital in one location in the northwest is a limitation. There were many other nursing specialties that were not represented in the sample. These limitations could decrease the generalizability of the study’s findings to the larger population. Another limitation that potentially affected the results was the researcher’s familiarity with the nurses who participated. There was also no differentiation made between acute and chronic pain by the researcher during the interviews. Even though the interview guide states chronic pain, the researcher only asked about pain management in general, and
allowed the participants to freely discuss any pain management. The research question also refers only to “pain” and does not distinguish between acute and chronic. Participants in this study work in an acute care facility and probably encounter both types of pain. Responses could include experiences with both chronic and acute pain. This ambiguity could be a potential limitation of this study.

**Recommendation for Future Research**

The results of this study revealed perceptions of CAM use that nurses’ in a specific area of northwest Montana have. The study should be replicated in other geographical locations to gain a more comprehensive understanding of nurses’ perceptions.

The results of this study indicated that a few nurses felt that a lack of resources and education prevented them from recommending CAM to their patients. More research could be conducted to explore how increasing education and available resources impact nurses comfort levels about discussing CAM with patients and incorporating CAM into plans treatment.

Over all, nurses in this study thought that CAM should be incorporated into patients’ treatment plans. Many of them believed CAM could be useful for decreasing or weaning patients off narcotic pain medications. Little on this subject was uncovered in the literature review. Further exploration about the relationship between CAM therapies and frequency of narcotic pain medication use is necessary to know before this concept can be applied to nursing practice.
This study explored nurses’ perceptions of CAM use and pain management. Several of the nurses who participated expressed a desire to collaborate with a medical provider about recommending use of CAM. There was also some ambiguity in regard to role and accepted practices from a nursing focus. More research focusing on medical providers’ perceptions of CAM use and pain management would be helpful to promote teamwork and an interdisciplinary approach to patient care.

Implications for Clinical Practice

The results of this study showed that nurses felt positively that CAM could be effectively incorporated into pain treatment plans. They also expressed a need for more resources about CAM therapies. Nurses in this study also believed that they needed more education about CAM in order to comfortably recommend and integrate CAM into treatment plans. Professional educational offerings could be provided by advanced practice nurses (APRN) to not only educate medical professionals, but also advocate for incorporation of CAM into pain management treatment plans for patients. Since the role of the APRN is expanded from that of a registered nurse, there is also increased responsibility to provide safe, holistic evidence based care. Nurses and patients will look to the APRN for guidance and expertise. APRNs must evaluate their own educational needs about CAM and strive to fine reputable resources to guide evidence based practice.
REFERENCES CITED


doi:10.1111/j.1365-2702.2010.03284.x


APPENDICES
APPENDIX A

SUBJECT CONSENT FORM
SUBJECT CONSENT FORM
PARTICIPATION IN HUMAN RESEARCH
MONTANA STATE UNIVERSITY

Nurses Perceptions of the Use of CAM for Pain Management

You are being asked to participate in a research study about nurses' perceptions of the use of Complementary and Alternative Medicine (CAM) for pain management. The purpose of the study is to gain an understanding of what nurses' think and feel about the use of CAM for pain management and to identify educational needs. You are being asked to participate because you are a nurse working in a northwest Montana medical center. In order to participate, you must be willing to answer questions about your thoughts, feelings, and education related to the use of CAM for pain management.

If you agree to participate, you will be interviewed once in the location of your choice. The interview should take no longer than one hour to complete but may take longer upon your request. The interview will consist of face-to-face open-ended questions with the researcher taking notes during the interview. After the interview, no additional contact from the researcher will be required. Participation is voluntary and you can choose to not answer any question that you do not want to answer, and you can stop at any time. Declining participation will have no future impact on your career or employment. There will be no benefit to you for participating in the study and the only risk is the use of some of your valuable time. During the interview, you are encouraged to ask questions if you do not understand a question or if additional clarification is needed. You may also ask additional questions regarding the research study.

Your identity will only be known by the researcher and will otherwise be confidential. The information gathered will be used for completion of a Master's Thesis and may be published in a health related publication. No identifying information will be used in either of the above. The interviews will be coded to remove any identifying information.

Should you have questions about this research, you can contact Sunshine Esper at 406-212-9606. If you have additional questions about the rights of human subjects you can contact the Chair of the Institutional Review Board, Mark Quinn at (406)-994-4707 or mquinn@montana.edu

__________________________________________

AUTHORIZATION: I have read the above and understand the discomforts, inconvenience and risk of this study.

I, _____________________________, agree to participate in this research. I understand that I may later refuse to participate, and that I may withdraw from the study at any time. I have received a copy of this consent form for my own records.
Signed: _______________________________  Witness:
(optional)_________________________

Investigator: ___________________________  Date: ________-

__________________________
APPENDIX B

INTERVIEW GUIDE
Interview Guide

What are Nurses’ Perceptions of the Use of Complementary and Alternative Medications in Pain Management

I would like to start by reminding you that participation is voluntary, and you can choose to not answer any question that you do not want to answer, and you can stop at any time.

1) I would like to describe the group of nurses involved in this study. Can you tell me a little about your educational background and nursing specialty? How many years of experience do you have in your current field? How many years of overall nursing experience do you have?

2) In today’s world, we know that there are many different treatment options available to our clients to help them manage their health problems and symptoms including complementary and alternative modalities. What options do you consider to be CAM?

3) What do you think about using CAM for chronic pain management? Should CAM be used alone, or to complement traditional, over-the-counter and prescription medication?
4) Would you feel comfortable recommending CAM to your patients? Why or why not? If no, what, if anything would help you feel more comfortable? Would you be willing to recommend someone who is more knowledgeable about CAM? If yes, what therapies would you be comfortable recommending? Are you comfortable in general, making suggestions for care without a physician initiating the care? What types of care are you comfortable recommending, if any?

5) What do you feel is your level of expertise and knowledge about CAM therapies? What, if any is your educational experience in relation to CAM? Have you, or would you seek out educational offerings about any CAM therapies? If so, which ones? Do you think nurses, in general, should have more knowledge/education about CAM? How should they get that knowledge?

6) What additional thoughts/feelings/perceptions do you have about CAM in general? How about for pain management?