Complementary and Alternative Therapies:

A Review of the Literature

Christina Hebert

Our Lady of the Lake College

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According to the National Center for Complementary and Alternative Medicine (CAM) is a collective term used to describe, “a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine” (Rojas-Cooley & Grant, 2006, p. 581). Conventional medicine, on the other hand, is defined as, “medicine as practiced by holders of MD [medical doctor] or DO [doctor of osteopathy] degrees and by their allied health professionals, such as physical therapies, psychologists, and registered nurses” (Rojas-Cooley & Grant, 2006, p. 581). CAM is a very broad term that encompasses a variety of therapies including, but not limited to, “chemically well defined molecules, substances from plant or animal origin or therapies such as spiritual healing or psychosocial interventions” (S. Buchan, Shakeel, Trinidade, D. Buchan & Ah-See, 2012, p. 672). In the US, there has been a steady trend in recent years toward “natural” therapies, with an estimated quarter of the population utilizing some form of CAM (O'Regan, Wills, & O'Leary, 2010, p. 35). Yet, despite this trend toward CAM therapies, there appears to be a disconnect between complementary and alternative therapies and conventional medicine in terms of how CAM therapies are addressed by nurses in education, research, awareness, and acceptance of such therapies into practice.

The article, “Complementary therapies: a challenge for nursing practice” focused specifically on complementary therapies as opposed to alternative therapies, and identified several challenges that complementary therapies pose for nursing practice. Although this article was not like any of the other articles that included a study with findings, it provided excellent insight into what complementary therapies encompass and the nurses’ responsibilities in becoming proficient in understanding and educating patients on them. On page 36, the article identified some of the most commonly used complementary therapies used in the clinical setting in the United States today. Some of the most common therapies include: “massage, aromatherapy and reflexology, and many of the methods used in complementary therapies are practiced in holistic nursing care, for example therapeutic touch, guided breathing, massage and relaxation.” One of the reasons why complementary therapies have become so widespread in the US is due to an ageing population with chronic rather than acute illnesses. Many aging Americans are turning to complementary therapies in hopes that their quality of life will be enhanced (O'Regan et al., 2010, p. 36). However, there is still a lack of sufficient evidence-based practice available for nurses to access when looking to discuss complementary therapies with their patients. The article points out one of the most important arguments toward the importance of increasing nursing knowledge and implementation of complementary therapies that was seen in the overall review of literature, and that was that holism is at the root of most complementary therapies. The concept of holism has been at the heart of nursing care since the beginning of nursing as a profession, and many of Florence Nightingale’s treatments would arguably be considered to be variations of complementary therapies today (O'Regan et al., 2010, p. 37). Therefore, nurses need to be at the forefront of, “providing direction to the practice of complementary therapies by incorporating traditional practices, such as assessment, reflection and holism, in the performance of these techniques” (O'Regan et al., 2010, p.37). The authors provide the reader with a good understanding of complementary therapies, but they give the reader an inaccurate sense of the term “alternative” therapies, as they point out that, “the status of complementary therapies has shifted to such an extent that therapies referred to previously as ‘fringe’, ‘alternative’ or ‘irrational’ are increasingly offered as integrated healthcare therapies” (O'Regan et al., 2010, p.35). While complementary therapies are becoming more well-known and are slowly being more integrated into conventional medical practice, alternative therapies are identified as “alternative” for a reason: they are specifically defined as an alternative choice to conventional medicine rather than simply a “compliment” to it (Rojas-Cooley & Grant, 2006, p. 581).

The descriptive and quantitative article, “The use of complementary and alternative medicine by nurses” studied 531 nurses’ knowledge, use, and attitude of CAM efficacy at the Aberdeen Royal infirmary in Aberdeen, Scotland. The study utilized a cross-sectional questionnaire (Buchan, S. et al., 2012, p. 673). Nurses who qualified for the study were those who worked on “main inpatient wards and in the main operating theatres in a tertiary referral centre” (Buchan, S. et al., 2012, p. 673). Those nurses were given an anonymous questionnaire to fill out, and the findings showed that women more than men were likely to use CAM; 80% of the responders admitted to using some form of CAM in their lifetime; 50% of the respondents admitted that CAM methods were very effective, with 81.5% saying they would personally spend money on CAM therapies; and almost 75% of the respondents said they would recommend CAM therapies to others, although 93% of the total number surveyed admitted no CAM training. Of the 621 nurses who were asked to participate, 531 nurses completed the surveys, showing an 86% response rate. It is important to note that the survey asked nurses to specify whether they had spent any money on the CAM therapies they claimed to utilize. The results found that the nurses that had not spent any money on CAM were not sold on its’ efficacy, while the nurses that spent money weekly on CAM therapies believed them to be either effective or extremely effective. While the article points out the statistical significance of that fact, I believe that fact to demonstrate a considerable bias in regards to CAM therapies among nurses who spent money on it versus nurses who did not. One might argue that nurses who spent money on CAM therapies had a need to prove its’ validity in order to continue to “buy into” the concept of CAM therapies in general. Further study is therefore warranted (Buchan, S. et al., 2012, p. 674). Finally, one of the primary aims of the study was to determine whether, “the preregistration nursing course would benefit from having CAM education integrated into the curriculum” (Buchan, S. et al., 2012, p.675). The study showed that almost 75% of the respondents desired that CAM therapies be integrated into formal nursing curriculum, which is not surprising in light of many of the concerns nurses voiced on the survey which included: lack of knowledge of CAM and its potential side effects; and lack of informed and potentially harmful advice given to patients, due to lack of knowledge of potential drug-interactions combined with patients’ current medication regimen (Buchan, S. et al., 2012, p. 675). Proper nursing education about CAM, then, is both desired and needed to, “safely and effectively complement conventional medicine” (Buchan, S. et al., 2012, p. 675).

The descriptive article, “Complementary and Alternative Medicine: Oncology Nurses’ Experiences, Educational Interests, and Resources” sought to study and, “describe oncology nurses’ experiences with patients communicating interest in or use of complementary and alternative medicine (CAM) therapies along with oncology nurses’ CAM resources and educational interests,” and utilized a national mailed survey to collect the data received from a randomized sample of 764 Oncology Nursing Society, or ONS, RN members directly involved in patient care (Rojas-Cooley & Grant, 2006, p. 581). Of the 1,910 anonymous members that were mailed surveys, only 764 responded, yielding a 40% response rate (Rojas-Cooley & Grant, 2006, p. 582). The reason this study was initially performed is because when the authors performed a search of nursing and complementary therapies in their current available literature, there yielded no results of studies that had been performed to assess, “the level of education or training required by nurses” even though policy requires education in CAM therapies among healthcare providers (Rojas-Cooley & Grant, 2006, p.582). Essentially, the desired outcome of this study was to, “establish a foundation to identify CAM learning and interest needs of oncology nurses involved in direct patient care,” as well as to, “describe oncology nurses’ CAM communication experiences, educational interests, and resources used in professional practice.” (Rojas-Cooley & Grant, 2006, p. 582) For this study, the Nurse Complementary and Alternative Medicine Knowledge and Attitude Survey was created by the authors and then validated by a team of qualified experts to, “identify oncology nurses’ knowledge, attitudes, resources, communication experiences, and educational interest in CAM therapies,” and was then mailed to the respondents (Rojas-Cooley & Grant, 2006, p. 583). The findings showed that in communicating with their patients, many oncology nurses felt uncomfortable discussing CAM therapies and desired, “to learn more about CAM therapies so that they could communicate confidently and accurately with their patients about them;” many oncology nurses cited prayer as the most common CAM therapy utilized by their patients, which may only indicate that, “patients are uncomfortable asking about or disclosing the use of potentially controversial treatments and, therefore, only seek or disclose information about modalities that they believe are acceptable to nurses;” and the most common source that oncology nurses used to find CAM therapy information was through patients, professional journals and books, rather than, “scientifically sound sources such as scientific literature and other qualified healthcare professionals” (Rojas-Cooley & Grant, 2006, p. 585). It was clear from this study that there is either a very limited availability of scientifically-proven resources related to CAM therapies, or the availability resources are not easily accessed. The article identified two limitations to the study, and those were the use of a newly developed survey, a low response rate, and dependence of data on self-reported answers (Rojas-Cooley & Grant, 2006, p. 586).

The descriptive and quantitative cross-sectional article, “Complementary and Alternative Medicine: Oncology Nurses’ Knowledge and Attitudes” sought to, “explore oncology nurses’ CAM knowledge and attitudes in the treatment of patients with cancer” by sending out an anonymous survey to a randomized sample of 5% of the total Oncology Nursing Society (ONS) membership (Rojas-Cooley & Grant, 2009, p.218). The survey had a 24% response rate from primarily, “baccalaureate-prepared Caucasian women,” with a total of 850 of the returned surveys eligible to be coded and conducive to the descriptive analyses (Rojas-Cooley & Grant, 2009, pg. 219-220). The study was conducted using the Nurse Complementary and Alternative Medicine Knowledge and Attitude, or NrCAMK&A, survey tool that was created by M. Teresa Rojas-Cooley as a “nurse-specific tool for assessing knowledge, attitudes, experiences, resources, and educational interests regarding CAM therapies” (Rojas-Cooley & Grant, 2009, p. 218). The validity of the questionnaire was determined by a panel of experts, including nurse researchers, community-based hospital nurses, a psychologist, nurse research scientists, and a CAM adult nurse practitioner (Rojas-Cooley & Grant, 2009, p. 219). The study assessed respondents’ knowledge of complementary and alternative medicine, utilizing an assessment tool that used, “four subscales that corresponded to sections of the NrCAMK&A survey;” and attitudes toward complementary and alternative medicine, focusing on three subscales that included beliefs, practice, and role (Rojas-Cooley & Grant, 2009, p. 220). The article explained that one of the reasons the study was conducted was to determine, “nurses’ fluency with CAM terms,” and the study showed that, “communication with patients is inhibited by a lack of proficiency in CAM vocabulary” (Rojas-Cooley & Grant, 2009, p. 220). Another important aspect of conducting the survey was to determine the amount of knowledge nurses have in regards to different alternative medical practices and biologically based therapies, and the study showed that many nurses were specifically unfamiliar with naturopathic, homeopathic and ayurvedic medicine, as well as different healing methods such as yoga and herbs. In order for nurses to discuss complementary and alternative medicine with patients, “nurses should understand the philosophical basis for major alternative medical practices,” and nurses should also become familiar with the NCCAM domains, which, “can help patients safely choose a CAM therapy that corresponds with their healing beliefs. Nurses can use that knowledge to search the literature for CAM modalities with the most data supporting their use” (Rojas-Cooley & Grant, 2009, p. 221). Finally, the five belief-related questions provided great insight into the attitudes of nurses and the desire to have CAM education: under CAM education, the high scores showed a desire to have CAM incorporated into practice, and in order for that to happen, “education must be provided;” under accountability and nursing practice, the lower score seemed to indicate a lack of understanding of how CAM could be integrated into their practice, and many nurses believed, “that patients are more accountable for CAM disclosure than nurses are for CAM assessment; however patients will not inform healthcare teams about CAM use unless asked directly;” under the practice-related belief questions the low scores seemed to indicate that, “oncology nurses have difficulty in assessment, finding reputable resources, and answering questions involving CAM;” and the category that had the lowest score was the role-related attitude questions, under which most respondents said that they, “were not informed on their state board CAM position or the ONS position statement, demonstrating a clear need for CAM role clarification in oncology nursing” (Rojas-Cooley & Grant, 2009, pg. 221-222). The article identified its limitations as having, “a new survey tool, reliance on respondents’ self-reported knowledge, and a low response rate,” and also identified the purpose of assessing nurses’ attitudes and beliefs about CAM as providing, “the foundation for a CAM education curriculum and certification program” (Rojas-Cooley & Grant, 2009, p. 222).

The quantitative article, “Relaxation and Visual Imagery Techniques: Do They Work? Can They Really Help Burn Patients?” aimed to determine whether relaxation and visual imagery techniques help to reduce post-burn hypermetabolism, the extreme increase in caloric needs by post-burn victims. In the past, “relaxation and visual imagery techniques have been employed following cardiac surgery; with pregnant women and patients with HIV; to reduce postsurgical pain; and to assist with the side effects of chemotherapy” (Klein & Hoffman, 2010, p. 170). The study was conducted at a regional, accredited burn treatment center, in response to a question posed by the psychiatric liaison clinical nurse specialist and the clinical nutritionist at the center asking whether simply resting was adequate to reduce post-burn hypermetabolism, or whether a more specific relaxation and visual regimen was more beneficial (Klein & Hoffman, 2010, p. 170). The above-mentioned experts suggested that, “the introduction of [relaxation and/or visual imagery techniques] could provide patients with a noninvasive, nonpharmacologic strategy to employ at any time during their hospitalization to help lower their post-burn hypermetabolic response” (Klein & Hoffman, 2010, p. 170). To be qualified for the study, patients were required to be, “English-speaking patients who were age 18 or older, had burn injuries greater than 10% total body surface area, and were neither intubated nor pregnant” (Klein & Hoffman, 2010, p. 171). Fourteen patients were randomly selected to participate in the study, with eight patients assigned to the control group and six patients assigned to the treatment group. In order to determine the treatment’s effectiveness, “the study measurement began at least 1 hour after patients ate, had a dressing change, or participated in physical or occupational therapy,” and all patients included in the study were connected to the Hewlett-Packard Component Monitoring System in order to provide the researchers with baseline vital signs of blood pressure, pulse and respirations (Klein & Hoffman, 2010, p. 171). In addition, the researchers utilized the MedGraphic CCM/D Metabolic Cart, “an open-circuit system, using breath-by-breath technique to measure gas exchange” in order to accurately measure patients’ resting energy expenditure, or REE, as a way of determining the effect of resting for 20 minutes at a time versus guided relaxation and visual imagery techniques (Klein & Hoffman, 2010, p. 171). The patients who were taught guided relaxation and visual imagery techniques were encouraged to continue practicing the techniques throughout the day, and the findings revealed that, “although the mean post-test REE from the control group was reduced by 117 calories, the mean post-burn REE from the treatment group was reduced by 456 calories...once patients in the treatment group were taught a relaxation and visual imagery technique, they were able to lower their REE” (Klein & Hoffman, 2010, p. 173). Although the findings showed that relaxation and visual imagery techniques do work to reduce post-burn hypermetabolism, the article admits the study’s limitations as containing data from only one burn-unit, and containing a very small sample size (Klein & Hoffman, 2010, p. 174). In order to determine whether the guided techniques are definitively more useful than simple resting, a larger sample size from multiple burn-units needs to be utilized. However, this study does offer, “a foundation for further research into the use of relaxation and visual imagery techniques with burn patients” (Klein & Hoffman, 2010, p. 174).

The objectives of the qualitative article, “Use of complementary and alternative medicine by patients with arthritis,” a descriptive cross-sectional study at the inpatient and outpatient physiotherapy and immunology clinics of Ataturk University Hospital in Turkey, were to “determine the prevalence of complementary and alternative medicine use in patients with arthritis, the types of complementary and alternative medicine used, pertinent socio-demographic actors associated with complementary and alternative medicine use and its perceived efficacy” (Unsal & Gozum, 2010, p. 1129). The study was conducted with the following parameters: “subjects included in the study were 18 years or older and able to speak, understand and communicate verbally in Turkish; patients had been diagnosed with arthritis at least six months prior to conducting the study; [and] after written informed consent was obtained, each patient was interviewed for 15-20 minutes by the researchers...” (Unsal & Gozum, 2010, p. 1131). Included in study were 250 patients with arthritis that completed the survey (Unsal & Gozum, 2010, p. 1131). The survey used to conduct the study was developed by an unspecified team of researchers, and was validated by an unspecified group of four research experts. The survey that was used to interview the patients was a semi-structured questionnaire used for data collection. The patients included in the study were split into two groups: those who utilized CAM therapies and those who did not (Unsal & Gozum, 2010, p. 1131). Patients who utilized CAM therapies were found, “most likely to be women and to have lower levels of formal education” (Unsal & Gozum, 2010, p. 1136). The study found that many patients with arthritis use a variety of CAM therapies for joint disorders both in conjunction with and separately from conventional medicine, including many herbal products such as stinging nettle and herbal teas, thermal spring, balneotherapy, massage therapy or spa therapy. In order to highlight the dangers of using some herbs in conjunction with conventional medicine, the article used an herb called gingko as example, demonstrating that, “certain herbs might be dangerous when combined with allopathic treatment that patients are already using” (Unsal & Gozum, 2010, p. 1136). Gingko, when combined with aspirin or ibuprofen, may cause excessive bleeding (Unsal & Gozum, 2010, p. 1130). Additionally, “many health care providers in the study hospital do not ask about the use of herbal products and, therefore, do not acknowledge or know about their use in their patient populations. As a result, it is possible for providers to make erroneous decisions in prescribing allopathic medications” (Unsal & Gozum, 2010, p. 1136). One of the most important implications for healthcare professionals drawn from this article is the importance of developing scientific-based research regarding some of the more common CAM therapies, in order to provide healthcare providers with a reputable source from which to make informed decisions and advice regarding CAM therapies for their patients (Unsal & Gozum, 2010, p. 1136). The article mentioned two limitations: first, the study only surveyed patients who were at Ataturk University Hospital; and second, “the definition of arthritis is broad and there is no way to definitively distinguish different types of arthritis included in the interview question” (Unsal & Gozum, 2010, p. 1136). An additional limitation to the study that I found is that although it is important to learn from what other countries are doing in the field of medicine, Turkish culture and American culture are very different. A similar study should be conducted within the United States in order to determine whether patients with arthritis in America are as likely to utilize CAM therapies, and if so, which ones.

The qualitative article, “Navigating a safe path together: A theory of midwives’ responses to the use of complementary and alternative medicine,” a grounded theory methodology design, studied the responses of midwives toward pregnant women that considered complementary and alternative medicine during their pregnancies and childbirth. Data was collected from 25 midwives from one private and three public hospitals in Australia using semi-structured interviews and non-participant observations (Hall, Griffiths & McKenna, 2012, p. 802). Data was collected over 18 months, and during that time the method of sampling changed from purposive sampling, which targeted specific midwives thought to be appropriate for the original study, to theoretical sampling, which focused on, “exploring relevant incidents and events, rather than on specific populations” (Hall et al., 2012, p. 802). Important to note is that in the beginning of the study, open-ended questions were used to draw out a variety of answers from the midwives, but over time, more closed-ended questions were employed to collect specific answers from questions that had arisen from previous interviews (Hall et al., 2012, p. 802). All of the answers were tape-recorded and then transcribed. The study found that in dealing with the concept of CAM therapies with pregnant patients, there was a three-step process than many midwives utilize when considering CAM therapies in a hospital setting. The three steps were, “individualizing pregnancy care, encountering diverse perspectives and minimizing the risks of childbearing,” and there were four categories that were common to all midwives in employing strategies to accomplish the three steps mentioned above: “communication about CAM, determining the role of CAM, influencing CAM use and managing the conflicts” (Hall et al., 2012, p. 803). Essentially, through feedback from the midwives, it was found that although CAM therapies are becoming more prominent in healthcare and are increasing in popularity among women who desire a more natural approach to child-birthing, there was still a large disconnect between what is considered a “holistic approach” to childbearing and “standard midwifery” (Hall et al., 2012, p. 804). The article pointed out that the disconnect largely stems from a lack of CAM education, therefore warranting, “the need for improved education and greater professional guidance to equip midwives to respond with understanding and confidence to the increasing prevalence of CAM in the maternity setting” (Hall et al., 2012, p. 807). Finally, the article admits several limitations as having a small self-selected sample study that only addressed midwives within only three hospitals in only one Australian city, Melbourne (Hall et al., 2012, p. 807).

This article, “Putting Evidence Into Practice: Evidence-Based Interventions for Cancer and Cancer Treatment-Related Cognitive Impairment” part of Oncology Nursing Society’s “Putting Evidence Into Practice” initiative, focused on comprehensively reviewing the current literature available, “to identify effective interventions for the prevention, treatment, and management of cognitive impairment for cancer survivors” (Von Ah, Jansen, Allen, Schiavone & Wulff, 2011, p. 608). Cognitive impairment is a common yet distressing symptom related to certain types of cancer including breast cancer, testicular cancer, brain tumors, and lung cancer; and cancer treatments including surgery, chemotherapy, radiation therapy and hormonal therapy (Von Ah et al., 2011, p. 607). As cognitive impairment is hard to measure, and varying definitions exist, this article defined the term as, “a decline in function in one or more of these cognitive processes...forgetfulness, memory lapses, difficulty with problem solving, inability to focus and concentrate, and mental slowness” (Von Ah et al., 2011, p. 608). Specifically, the goal of this comprehensive study of literature was two-fold: “to provide current evidence regarding the prevention, treatment, and management of cancer and cancer treatment-related cognitive impairment for cancer survivors; and discuss the process and development of the Evidence-Based Interventions for Cancer and Cancer Treatment-Related Cognitive Impairment PEP content from ONS” (Von Ah et al., 2011, p. 608). The participants in the review of literature were oncology nurses chosen from a competitive process for their expertise in identifying cognitive impairment in cancer patients, and the literature was described and divided into pharmacological—psychostimulant medications and erythropoietin-stimulating agents—and nonpharmacological—CAM therapies and cognitive training programs— interventions (Von Ah et al., 2011, p. 609). Of the 29 studies that were deemed appropriate for inclusion in the review, the findings overall showed that more research is needed in order to establish more of a refined evidence-based database of treatments available to cancer patients with cognitive impairments (Von Ah et al., 2011, p. 612). The findings also showed that, “large randomized, controlled trials are needed to test novel treatments, including but not limited to pharmacologic interventions, psychological counseling, dietary interventions, restorative environmental interventions, cognitive programs, or cognitive-behavioral interventions” (Von Ah et al., 2011, p. 613). The article concludes that the team’s work will act as a foundation for nurses to be able to understand the science behind certain interventions for cognitive impairment among cancer patients, and promises that the team will continue to work on the current scientific research available to oncology nurses by updating the summary of current literature every six months (Von Ah et al., 2011, p. 613). Although the article did not specify limitations in the study, I found that one of the limitations was that the article did not describe the application process of the selected oncology team members. The article mentions that the process was competitive, but did not say how (Von Ah et al., 2011, p. 608).

The article, “Employee Use and Perceived Benefit of a Complementary and Alternative Medicine Wellness Clinic at a Major Military hospital: Evaluation of a Pilot Program,” a descriptive and quantitative self-report survey, examined the “feasibility and impact of a hospital-based wellness clinic using CAM modalities among civilian, contract, and Department of Defense employees” (Duncan, Liechty, Miller, Chinoy & Ricciardi, 2011, p. 813). This article set out to study the effects of CAM therapies on hospital nurses, physicians, clinicians, support staff, and administrators, and the findings showed that the implementation of CAM therapies inadvertently yielded positive dietary and health modifications by participants. The study was conducted because the authors hypothesized that “a workplace wellness clinic based on complementary and alternative medicine (CAM) principles would have the potential to positively impact individual stress responses and would be well-utilized by clinicians and other hospital employees.” (Duncan et al., 2011, p. 810) In order to complete this study, the Restore and Renew Wellness Clinic (R&RWC) was created as a pilot. The two principles of Chinese Medicine formed the clinic’s foundation: first, “all living things are animated by qi or energy” and second, “qi moves in a dynamic and fluid interplay of opposites described as yin...and yang” (Duncan et al., 2011, p. 810). Therefore, the clinic offered ear acupuncture, clinical acupuncture, and zero balancing. The authors used the concepts of qi and yin and yang to explain the purpose of the study as well as the findings of the study, and reasoned that, “the ANS of military health care workers, repeatedly exposed to the disorganized qi of patients who are physically or mentally traumatized by their war experience, are influenced by that exposure. Their post-traumatic stress disorder-like symptoms may be secondary to the traumatic stress symptoms of their patients” (Duncan et al., 2011, p. 810). Participants of the R&RWC were asked to complete a 1-page survey at the completion of their visits in order to evaluate their experiences. The survey asked the participants to describe, “the number and types of services received; the overall experience and impact; reported changes in stress and compassion fatigue; changes in health habits; factors important to their decision to participate, likelihood of participants recommending the clinic to others or returning themselves; and suggestions for improvement” (Duncan et al., 2011, p. 810). Participants were invited to return to the clinic whenever they had free time to do so, and an interesting finding showed that, “those who visited the wellness clinic nine or more times, 75% strongly agreed that they experienced more compassion with patients as a result of clinic participation” (Duncan et al., 2011, p. 813). In addition to positive inter-personal changes due to wellness clinic visits, the findings also showed that, “about one fifth of the surveys reported a broad range of health habit changes, which were grouped into healthy life-style categories such as diet/nutrition, sleep, and exercise...in many cases, the comments seem to reflect a calm, balanced nervous system in participants returning to units and co-workers” (Duncan et al., 2011, p. 813). This was a very interesting article because it did not focus on patient perceptions of CAM therapies, but on healthcare professional first-hand experiences with CAM therapies. The findings can help healthcare professionals recommend certain CAM therapies to patients because they have directly experienced the positive effects in their own lives, and can point to the study’s findings that conclusively showed a positive overall outcome for healthcare professionals that frequented the clinic. The article identified the limitations of the study as being that despite the study’s overall positive participant outcomes, “no causal inferences can be made on the degree of effect the intervention had on improving wellness of participants or delivery of care,” anonymous surveys, and, “self-selection bias among repeat visit surveys” due to the fact that the participants who frequented the clinic were more likely to demonstrate higher satisfaction with the services than those who did not return (Duncan et al., 2011, p. 814). An additional gap I found was that although the data collected gave percentage points to reflect positive or negative outcomes, nowhere does the article tell how many participants were involved in the study. Therefore, it is impossible to determine whether the sample size was adequate to determine efficacy of the findings.

The article, “The consequences of integrating complementary and alternative medicine: An analysis of impacts on practice,” highlighted the consequences of integrating complementary and alternative medicine within Australia. The opening paragraph of the article showed how complementary and alternative medicine is beginning to mesh with conventional medicine, or biomedicine, in a way that a new “hybrid” term called, “integrative health care” is now commonly used to describe the fusion. The article pointed out that, “CAM researchers attempt to develop working models to better integrate CAM with biomedicine as well as argue for the need of the randomized control trial to demonstrate the efficacy of the various treatments” (Possamai-Inesedy & Cochrane, 2013, p. 66). The article goes on to propose that, “increased health care costs, the indemnity crisis, practitioner shortages as well as the rise of the patient/consumer and increased intrusion of corporatization has led to increased loss of autonomy, power and a clear move away from the ‘golden age of doctoring’” (Possamai-Inesedy & Cochrane, 2013, p. 66). The authors admit that while Australian CAM and conventional medicine integration is occurring, the integration is occurring far more rapidly in the US (Possamai-Inesedy & Cochrane, 2013, p. 67). The article mostly points out the changing tide of healthcare from one that is doctor-controlled to one that is patient-mediated, and explains the change by saying that, “we have begun to question the experts. This process can go some way in explaining consumer demand in CAM—even in the face of a lack of evidence of efficacy” (Possamai-Inesedy & Cochrane, 2013, p. 68). The article makes it clear that CAM therapies are in increasing demand, yet little scientific-evidence has been collected to prove its efficacy and validity. Therefore, further research is crucial both for the safety of patients who utilize or are thinking of utilizing CAM therapies, as well as for the healthcare professionals who desire to provide their patients with accurate and scientifically-proven results for CAM therapies. One interesting take-away from this article is that the US has clearly accomplished much in regards to CAM therapy legitimization over the years through the funding of research, as a result of “a push toward measuring the efficacy of the treatments” (Possamai-Inesedy & Cochrane, 2013, p. 71).

**Relationship of Topic to Community Health Nursing and Health Policy**

One of the most important aspects of nursing, community health nursing or otherwise, is patient advocacy. CAM therapies, as seen throughout the above literature reviews, are rising in popularity. Yet despite the increase in patient use of CAM therapies, it seems nurses are largely unaware of the common therapies available, as there is both a lack of overall education involving those therapies and their drug-interactions and a lack of reputable resources available for nurses to keep abreast of therapies that are utilized by patients worldwide. Patients are at risk for having serious drug-interactions with certain CAM therapies, so in order for nurses to be an advocate for their patients, nursing CAM education needs to be developed and incorporated into core curricula. In order for that to happen, CAM education must become a priority through health policy changes.

**Synthesis of Topic**

The research has shown that despite the many people that are utilizing CAM therapies, studies show a disconnect in the way CAM is largely approached by healthcare professionals, as many patients omit aspects of CAM therapies they may be using because they may have not specifically been asked about them in their medical/health histories by their healthcare providers. The danger in having such disconnect is that many CAM therapies are known to have severe drug-interactions when used in conjunction with conventional medicine.

Studies have found that certain areas of nursing, specifically oncology, are familiar with certain CAM therapies due to their patients’ continuous and high pain levels that are often unable to be alleviated purely using conventional medicine. CAM provides a way for patients to experience some relief from their pain. Unfortunately, many other areas of nursing do not have a working knowledge of CAM, and feel uncomfortable discussing CAM with their patients due to lack of education. Many nurses do, however, have a desire to become knowledgeable about such things. Therefore, further CAM education is warranted and desired by most of the nurses identified in the above studies. In addition to nursing CAM education, and perhaps before CAM education can be implemented, there is a need for additional scientific research to be conducted in order to provide nurses with reputable sources that they may access in order to educate themselves and their patients in regards to CAM therapies. Many nurses do not feel comfortable discussing CAM therapies with their patients because there is not sufficient data to prove its’ validity, and there is not sufficient data to identify any possible side-effects or drug-interactions the therapies may have. Therefore, in educating nurses regarding specific CAM therapies, there also needs to include education regarding the location of reputable sources in which nurses may search for information on CAM therapies for their patients.

**Conclusion**

Nurses are at a unique advantage, as healthcare professionals who promote a holistic approach to healthcare, to have discussions with their patients about CAM in a way that may serve to bridge the gap between conventional medicine and CAM therapies. In order for informed discussions to occur, however, more scientifically-sound research needs to be performed and made available for nurses to use; and CAM education needs to be integrated into nursing core curricula so that nurses are aware of the possible drug-interactions some CAM therapies have with conventional medicine, and so that nurses have a working knowledge of the most common CAM therapies that are utilized by patients.

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