



RESEARCH ARTICLE

ATTITUDES AND KNOWLEDGE OF NURSES' TOWARDS EDUCATION ON COMPLEMENTARY & ALTERNATIVE MEDICINE USING THE STATE OF MISSISSIPPI UNIVERSITIES AS A MODEL

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ABSTRACT

The growing consumer demand for complementary and alternative therapies (CAM) in health care has had an effect on all health professionals. The discipline of nursing is rooted in many holistic processes but the role of providing such services has not been fully defined, including the state of Mississippi. Nurses are the members of the healthcare team who often initiate such a conversation with patients about CAM. For a starting point, we took a look at the state of Mississippi nurses and their feelings on CAM instruction in school curricula or during professional continued education programs. This was a proactive descriptive quantitative study, with a sample size of 116 participants representing 16 higher education institutions. The survey was conducted during the Mississippi Nurses Association's Annual Meetings & Conventions. The findings of this study demonstrated that overall 80% of nurses felt that their higher education institution did not provide adequate education on CAM. Fifty three percent reported actually taking some course that cover a component of CAM, suggesting that 95.6% feeling that the physician should be the one to communicate to patients about CAM use. Our findings highlighted the fact that Mississippi nurses feel unprepared in CAM education when communicating with their patients. Our findings also highlighted the associations between Mississippi nurses "feeling comfortable talking to their patients about CAM" and nurses attending a higher education institution within the state of Mississippi, with a $P=0.857$ (Chi Square). This study shine light on the need of higher education institutions to revisit nursing school's study curricula to fit the continuously changing healthcare system and the popularity of CAM among patients.

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INTRODUCTION

Complementary and alternative medicine (CAM) is defined as a large and diverse set of systems of diagnosis, treatment, and prevention based on philosophies and techniques other than those used in conventional Western medicine. Such interventions may be described as alternative, existing as a body separate from and as a replacement for conventional means of treatment. CAM is characterized by (Cutshall, 2010) its focus on the whole person as a unique individual, (Ikedo, 2007), on the energy of the body and its influence on health and disease, (Rojas-Cooley, 2006) on the healing power of nature and the assembling of the body's own resources to heal itself, and (Rojas-Cooley, 2009) on the treatment of the underlying causes. Many of the techniques used to implement CAM are the subject of debatable conversations and have not been validated by controlled studies (Cutshall, 2010). Several reports often use "alternative" and "complementary" interchangeably, but the two terms refer to completely

different concepts. If a non-mainstream practice is used together with conventional medicine, it's considered "complementary". If a non-mainstream practice is used in place of conventional medicine, it's considered "alternative". However, when conventional and complementary approaches come together in a coordinated way the term "integrative" medicine is used. The use of integrative approaches to health and wellness has increased within care settings across the United States (Ikedo, 2007). Numerous ongoing studies focused on exploring the potential benefits of integrative health in a variety of situations, including pain management, relief of symptoms in cancer patients and survivors, and programs to promote healthy behaviors. Chronic pain is considered a common problem among veterans and active-duty military personnel in the United States. Several agencies are sponsoring research to explore whether integrative approaches can be utilized. For example, many NCCIH-funded studies are testing the effects of adding mindfulness medication, self-hypnosis, or other complementary approaches to pain management programs for veterans. The goal of such program and other programs is to help patients feel and function better and reduce their need for pain medicines that often have serious side

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effects. On the other approach, cancer treatment centers with integrative health care programs may offer services such as acupuncture and meditation to help manage symptoms and side effects for patients who receive conventional cancer treatment (Rojas-Cooley, 2006 and Rojas-Cooley, 2009). Although research on the potential value of these integrative programs are in the early stages, some studies have had promising results.

For example, NICCIH-funded research has suggested that:

- Cancer patients who receive integrative therapies while in the hospital have less pain and anxiety.
- Massage therapy may lead to short-term improvements in pain and mood in patients with advanced cancer.
- Yoga may relieve the persistent fatigue that some women experience after breast cancer treatment.

The adaption of CAM over complementary medicines is still in its infancy and more educational programs need to be implemented. Health care providers such as physicians, nurses, therapists, and others considered key elements in prompting CAM and immunize the suffering of patients. The hypothesis of this investigation stated that implementing educational programs about CAM to healthcare providers such as nurses can reduce or eliminate the suffering from major health conditions. The specific objective of this study was to identify the attitudes of nurses towards education on CAM using Mississippi Universities as a model. This is a descriptive quantitative study, with a sample size of 116 active nurses in the state of Mississippi (MS).

MATERIALS AND METHODS

Population

This study is a proactive survey based quantitative study in which was conducted among active nurses in the state of MS. The survey solicited to acquire information regarding nurses' beliefs, knowledge, and attitudes of education on CAM in major Mississippi universities and colleges. A detailed 31-questions survey was constructed and administered to MS nurses whom attended MS Nurses Association yearly Conventions & Meetings throughout FY 2016& 2017. Application for Internal Review Board (IRB) Approval was granted by the University of Mississippi Medical Center (approved on November 29, 2016.)

Mechanism of Survey Delivery

Three events were utilized to administer the survey. First, with assistance and approval from the Mississippi Nurses Association, a booth was set-up on the first day of association event. Volunteer participants had the opportunity to register for a number of drawings in which survey participants had an opportunity to win a variety of CAM services donated by CAM practitioners within and around the state. Participants were provided with a number ticket upon completing the survey of which was later used to select the prize winner at the end of collection day. The definition of CAM was provided in the survey's introductory letter, which also served as a waiver. Participants were also provided with a district map so that their location of employment can be located based on the MS Nurses Association districts definitions. Surveys were conducted via paper based or lab-top computer. Option two

was also provided in which an invite via email during the conventions of which participants were forward link immediately and allowed to complete the survey at any given time. Last page of completion of survey was then required to be shown at research booth for participants to receive ticket for drawings. Most of survey questions were closed-ended; there were some questions that allowed participants to write an additional comments or information. The second and third events utilized for data collection were the MS Annual Nurses Summit and the Annual Nurses' Practitioners Conference. The MS Annual Nurses Summit was held in Jackson Mississippi at the Jackson Convention Center on February 2017. The Annual Nurses' Practitioners Conference was held in Oxford, MS at the Oxford Conference Center on April 2017. Nurse professionals from around the state attended both events, and it is worth mentioning that the nurses' summit had a larger turnout of nursing student, of who did not meet the criteria to complete the survey (excluded).

RESULTS

There was a total of 116 nurses (met the criteria) that completed the survey, of the 116, 112 (96.55%) were females and only 4 (3.45%) were males. The female to male ration is considered a standard in the nursing profession worldwide. Participants' ages ranged from 21 to over 61, with the higher participants among the age group of 30-39 (32.76%). The second largest age group was between 40-49 (23.28%), followed by age group 50-59 (21.55%), the second lowest group were the 21-29 (12.93%), and the lowest group was between 60 or older (9.48%). See Figure 1. Only 1 participant was of the ethnicity Hispanic or Latino. By races, participants were described as 58 (50%) being Caucasian or white, 55 (47.41%) as Black/African American, and the remaining 3 (2.59%) as Asian.

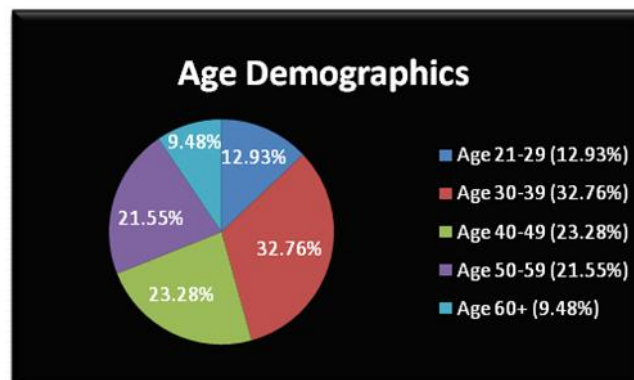


Figure 1. Participants Age Demographics

Among participants, 99 (84.34%) attended a higher education institution in the state of Mississippi, while the other 17 (14.68%) attended institutions outside of the state. Eighty percent of the survey participants reported not feeling adequately educated on CAM within their chosen nursing programs, for both in and out of state educated participants and only 20% reported feeling adequately education on CAM from institutions of choice. Table 1 illustrates the attended. According to the collected surveys, the participants represent 16 universities and colleges and nineteen participants declined to share their institution of higher education. The results revealed that over half (53.04%) of surveyed participants reported taking courses during their education journey with a

CAM education component, and 39.13% have indicated that their curricula lacking courses with a CAM education component. A total of 7.83% stated that they were not sure or not remembering if any course was taken that cover a CAM education component (See Table 1). In exploring the possibilities of ever attending a lecture, workshop or seminar on any form of CAM, a total of 80/116 (68.97%) reported never done so and only 36/116 (31.03%) reported attending a variety of lectures/seminars on CAM (See Table 2).

Table 1. Findings on participants input by age groups on survey question regarding educational courses on CAM during Education Journey at various institutions

Age Groups	CAM education component	Lack of CAM Education Component	Not Sure	Total
21-29	5.17%	6.03%	1.72%	12.92%
30-39	15.52%	13.79%	2.59%	31.9%
40-49	11.21%	9.48%	2.59%	23.28%
50-59	15.52%	6.03%	0.86%	22.41%
60+	5.17%	4.31%	N/A	9.48%
All Ages	53.04%	39.13%	7.83%	99.99%

Table 2. Reported findings on participants input by age groups on "If participants have attended a Lecture or Seminar on any form of CAM?"

Age Groups	Lecture/Seminar on CAM	Lack of Lecture/Seminar on CAM	Total
20-29	2.59%	10.34%	12.93%
30-39	6.05%	26.72%	32.77%
40-49	5.17%	18.10%	23.27%
50-59	12.07%	9.48%	21.55%
60+	6.9%	2.59%	9.49%
All Ages	68.97%	31.03%	100%

Other aspect of the survey was to explore the nurses' potential on conveying the impact of using CAM to patients. Participants were asked about the level of when talking to patients, and a total of 66.37% reported feeling comfortable and 33.63% reported not feeling comfortable talking to patients about it (See Figure 2). In retrospective, a total of 95.61% feeling that it is the job of the physician to talk to the patients about CAM use, and only 4.39% felt that it's not the physician's job (See Figure 3). When asked how important they felt that CAM education among nurses? The majority of participants (97.39%) felt it was important (with choices being very important, important, somewhat important, not important, no interest). Eighty seven percent of surveyed participants supported the ideal of providing additional training to nurses to become CAM educators. Of the participants at large percentage, 72.41% did report future plans of continuing their education.

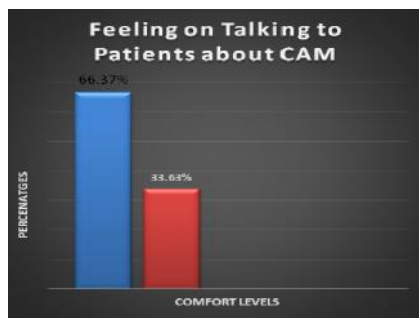


Figure 2. Mississippi Nurses Feelings on "Talking about CAM with Patients" by percentages. N=116

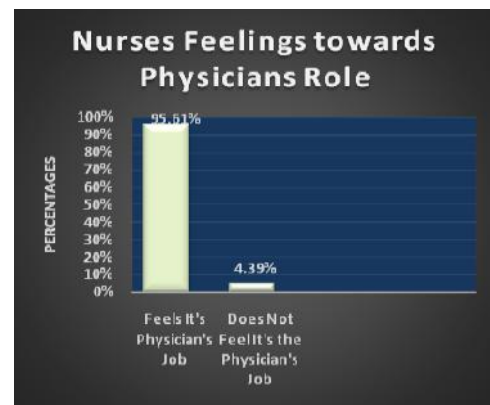


Figure 3. Mississippi Nurses Feelings on "If the Physicians Should Talk to Patients" in percentages (N=116)

A Chi Square test was conducted to identify if associations exist between nurses' feelings of institutions providing adequate education on CAM and nurses feeling comfortable talking to patients about CAM. With a $P=0.007$, there were no associations between nurses feelings of institutions providing adequate education and nurses feeling comfortable talking to patients about CAM. Data analysis (Chi Square) was also conducted to identify if associations exist between nurse attending a higher education institution in the state of Mississippi and nurses feeling comfortable talking to patients about CAM. With a $P=0.875$, there were associations between attending a higher education institution in Mississippi and feeling comfortable talking to patients about CAM.

DISCUSSION

In reviewing the literature, it is quite obvious that consumers are using CAM therapies to help improve health and well-being or to relieve symptoms associated with chronic and terminal illnesses in which conventional therapy failed to do so. Consumers also utilize such therapies because of the high demand on the new holistic healthcare model (Boon, 2006; Brems, 2006; Callahan, 2006; Clark, 2015 and Tracy, 2003). As demands for CAM grows, services being addressed by nurses in the medical community will need to be enforced. In order to address the gap between what CAM consumers are utilizing and what the medical community has to offer, the need to include CAM therapy as part of clinical practice as well as training nursing through curriculum changes and continuing education offerings (Cutshall, 2010). Data obtained from this study highly suggest that integrative medicine curriculum will ultimately be seamlessly incorporated into medical education just to help shape an evolving medical system. The fact that many of the core principles of integrative medicine are really a reaffirmation of fundamental principles that already have widespread support in many institutions providing medical education such as nursing degrees (Tracy, 2003). This can only happen if health care professionals at all levels allow CAM education to take a position in medical education as fast as CAM has taken the conventional medical system by storm. A storm that is recently supported by the National Institute of Health/National Center for Complementary and Alternative Medicine, which is currently offering financial support to a number of higher education nursing schools to develop, implement, and evaluate educational programs on complementary and alternative medical therapies. There will be no doubt that funding such projects will increase nursing knowledge of CAM therapies

and will also provide nurses with expertise to assess the use of CAM therapies safely among diverse populations. Previous studies have also found that significant patients with major complications are continuously and actively seeking communication about CAM in their health care settings. Berman *et al.*, reported that 59% of patients, in one rural practice, believed that their healthcare provider should discuss CAM with them and more than a third would like to be able to discuss their CAM use with their healthcare providers (Berman, 1999). It is likely that patients desire to discuss CAM use with their provider goes way beyond a desire for information to a desire for use (American Botanical Council, 2010). Several studies reported controversial findings that there is a high level of uncertainty about CAM's efficacy and doubts about its potentially adverse interactions when used with conventional medicine among patients (Barnes, 2008). Other researchers suggested that that patients have a desire to discuss such uncertainty with confidence in the information provided by their healthcare providers (Brems, 2006). Globally, significant studies agreed on the notion that not only will CAM education provide such information, but it can put an improved value into the patient-centered services. The results of the study and others provide us with the evidence to support a need of curricula change in various clinical programs to meet the fast changing healthcare system. This study also reveals a nurses population, using Mississippi as a model, feeling unprepared in the area of CAM education and strongly admitting their unpreparedness. It also demonstrates an association between nurses attending Mississippi higher education institutions and nurses not feeling comfortable enough with their training to talk about CAM with patients. Nurses who participated in this survey expressed a significant positive feeling towards learning more about CAM knowledge. They showed an interest in being able to provide more advising to their patients on CAM modalities, with an additional interest in physicians also being able to provide such advisement. The limitations of this specific study include the small sample size in comparison to the large number of nurses practicing in the state, as well as, the low male response rate. Future research should be conducted with a larger sample size from various states in mind & possibly including the views of physicians. Future research should also investigate patient's feelings regarding communication on CAM use to their healthcare providers (nurses or physicians). And since we see a big need of nurses to feel assured of their knowledge on CAM, education addressing these desires would prevent patients from using unsafe or ineffective CAM therapies.

Conclusion

This study suggests that there is a need to revisit nursing school's study curriculum to fit the continuously changing healthcare system and the popularity of CAM among patients. Our findings demonstrate the fact that Mississippi nurses feel unprepared in CAM education when talking to their patients. Findings also highlighted the associations between the feelings of unpreparedness among Mississippi nurses and attending a higher education institution in the state of Mississippi. Such findings could and should pave the way of higher education institutions directions in program curricula planning to better serve a continually evolving healthcare system.

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REFERENCES

- "Complementary and alternative medicine" Def. 2. Mosby's Medical Dictionary, 8th ed. Web. 17 July 2015.
- "Complementary Medicine" Def.2. Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, 7th ed. Web. 17 July 2015.
- Abbott R, Kit Hui K. *et al.*, 2009. Medical student attitude toward complementary, alternative and integrative medicine. *Evidence-Based Complementary and Alternative Medicine*. 2011: 1-14.
- American Botanical Council, 2010. Herbal supplement sales rise in all channels in 2009. *Herbalgram*. 86: 62-65.
- Ask Mayo Expert 2013. Complementary and alternative medicine. Rochester, Minn.: Mayo Foundation for Medical Education and Research.
- Barnes P., Bloom B *et al.*, 2008. Complementary and alternative medicine use among adults and children: United States, 2007. *National Health Statistics Reports*. 12: 1-23.
- Berman B, Bausell R *et al.*, 1999. Compliance with requests for complementary alternative medicine referrals: a survey of primary care physicians' attitudes. *Integrated Medicine*. 2: 11-17.
- Boon H, Verhoef M *et al.*, 2006. Complementary and alternative medicine: a rising healthcare issue. *Healthcare Policy*. 1: 19-30.
- Boullata J. 2005. Natural health product interactions with medication. *Nutrition in Clinical Practice*. 20: 33-51.
- Brems C, Johnson M *et al.* 2006. Patients requests and provider suggestions for alternative treatments as reported by rural and urban care providers. *Complementary Therapies in Medicine*. 14: 10-19.
- Brolinson PG, Price JH. *et al.*, 2001. Nurses' perceptions of complementary therapies among outpatients and physicians at a municipal hospital. *Journal of Alternative and Complementary Med*. 26: 175-189.
- Burke, A., Ginzburg, K. *et al.*, 2005. Exploring the role of complementary and alternative medicine in public health practice and training. *Journal of alternative and Complementary Medicine*. 11: 931-936.
- Callahan L, Wiley-Exley *et al.*, 2009. Use of complementary and alternative medicine among patients with arthritis. *Prev chronic Dis*. 6 (20): A44.
- Cashman L, Burns J *et al.*, 2003. Massachusetts registered dietitians' knowledge, attitudes, opinions, personal use, and recommendations to clients about herbal supplements. *The Journal of Alternative and Complementary Medicine*. 9 (5): 735-746.
- Clark T, Black L. *et al.*, 2015. Trends in the use of complementary health approaches among adults: United states, 2002-2012. *National Health Statistics Reports*. 79: 1-15.
- Cutshall, S., Derscheid, D., *et al.*, 2010. Knowledge, attitudes, and use complementary and alternative therapies among clinical nurse specialists in an academic medical center. *Clinical Nurse Specialist*. 24 (3): 125-131.
- Flannery, M., Love, M. *et al.*, 2006. Communication about complementary and alternative medicine: Perspectives of primary care clinicians. 12: 56-63.
- Furrow, M., Patel, D. *et al.*, 2008. Physician and patient attitudes towards complementary and alternative medicine in obstetrics and gynecology. *BMC complementary Altern Med*. 8: 35-44.

- Halcon, L., Chlan, L. *et al.*, 2003. Complementary therapies and healing practices: faculty/student beliefs and attitudes and the implications for nursing education. *Journal of Professional Nursing*. 19 (6): 387-397.
- Hayes, K.M. and Alexander, I.M. 2000. Alternative therapies and nurse practitioners: Knowledge, professional experience and personal use. *Holistic Nursing Practice*. 14 (3): 49-58.
- Ikedo, F., Gangahar, D., *et al.*, 2007. The effects of prayer, relaxation technique during general anesthesia on recovery outcomes following cardiac surgery. *Complementary in Clinical Practice*. 13: 85-94.
- Levine S. Weber-Levine, *et al.*, 2003. Complementary and alternative medical practices: training, experience, and attitudes of a primary care medical school faculty. *Journal of Alternative and Complementary Medicine*. 16: 318-326.
- Lie D & Boker J (2006). Comparative survey of complementary and alternative medicine (CAM) attitudes, use, and information-seeking behavior among medical student, residents & faculty. *BMC Medical Education*. 6: 58-64.
- McDowell, J. and Burman, M. 2004. Complementary and alternative medicine: a qualitative study of beliefs of a small sample of rocky mountain area nurses. *Medical Nursing*. 13 (6): 383-390.
- Milden, S.R. and Stokols, D. 2004. Physicians' attitudes and practices regarding complementary and alternative medicine. 30: 73-82.
- Nahin, R., Barnes, P. *et al.*, 2009. Costs of complementary and alternative medicine (cam) and frequency of visits to CAM practitioners: United States, 2007. National Health Statistics Reports. 18: 1-18.
- National Center for Complementary and Alternative Medicine 2015. Expanding horizons of health care: strategic plan 2005-2009. <http://nccam.nih.gov/news/camstats/2007/camuse.pdf>. Accessed July 17.
- National Center for Complementary and Integrative Health 2015. "CAM basics." <https://nccih.nih.gov>. National Institute of Health. Web. 17 July.
- Nedrow, A., Istvan, J. *et al.*, 2007. Implications for education in complementary and alternative medicine: a survey of entry attitudes in students at five health professional schools. *Journal of Alternative and Complementary Medicine*. 13 (3): 381-386.
- Rojas-Cooley, M. and Grant, M. 2006. Complementary and alternative medicine: oncology nurses' experiences, educational interests, and resources, *Oncology Nursing Forum*. 33 (3): 581-588.
- Rojas-Cooley, M. and Grant, M. 2009. Complementary and alternative medicine: oncology nurses' knowledge and attitudes. *Oncology Nursing Forum*. 36 (2): 217-224.
- Rush CAM Education Program for Nursing. Retrieved June 16, 2015, from <http://www.rushu.rush.edu/nursing/CAM/>.
- Shelley, B., Sussman, A. *et al.*, 2009. They don't ask me so I don't tell them: Patient-Clinician communication about traditional, complementary, and alternative medicine. *Annals of Family Medicine*. 7 (2): 139-147.
- Tovey, P. and Broom, A. 2005. Oncologists' and specialist cancer nurses' approaches to complementary and alternative medicine and their impact on patient action. *Social Science & Medicine*. 64: 2550-2564.
- Tracy, M., Lindquist, *et al.*, 2003. Nurse attitudes towards the use of complementary and alternative therapies in critical care. *Heart & Lung*. 32 (2): 197-209.
- Tracy, M., Lindquist, R. *et al.*, 2005. Use of complementary and alternative therapies: A national survey of critical care nurses. *American Journal of Critical Care*. 14: 404-415.
- Wahner-Roedler, D., Lee, M. *et al.*, 2014. Physicians' attitudes towards complementary and alternative medicine and their knowledge of specific therapies: 8-year follow-up at an academic medical center. *Complementary Therapies in Clinical Practice*, 20: 54-60.
