

45th Biennial Convention (16-20 November 2019)

Complementary, Alternative, and Integrative Therapies: Implications for School Nurses

Lizbeth P. Sturgeon, PhD, RN, CNE¹

Dawn Garrett-Wright, PhD, PMHNP, CNE¹

Grace Lartey, PhD²

(1)School of Nursing, Western Kentucky University, Bowling Green, KY, USA

(2)Department of Public Health, Western Kentucky University, Bowling Green, KY, USA

Introduction: Complementary, alternative, and integrative therapies (CAI) include practices that are not traditionally associated with conventional medicine. According to data from the most recent National Center for Complementary and Integrative Health (NCCIH) survey conducted in 2012, CAI therapies were used in over 11% of children (NCCIH, 2012). Research indicates that children use CAI to treat respiratory illnesses (Berg, Morphew, Tran, Kilgore, & Galant, 2016) and attention-deficit hyperactivity disorder (Herbert & Esparham, 2017). Other common uses include chiropractic and osteopathic manipulation and natural products like fish oil, melatonin, and probiotics (NCCIH, 2017).

With the expansion of CAI therapy use in children, it is imperative that school nurses are knowledgeable and equipped to assist children in the school setting. However, minimal information on if and how school nurses should administer these therapies is readily available. In addition to the lack of procedural guidance for school nurses, there is also limited data about nurses' perception and knowledge of CAI and this data only includes nurses practicing in areas other than school nursing. In a systematic review that included 15 studies (n=5162) about nurses' knowledge and use of CAI therapies, 77.4% believed they needed more training, 80% expressed deterrents to using CAI in various work settings, and less than 25% reported discussing CAI with their patients (Chang & Chang, 2015). Similarly, in a descriptive study (n=335), researchers found that less than a third of nurses inquired about CAI use in their patients citing that they did not have the knowledge base to do so, lacked time to ask, or felt CAI was not an important part of the treatment plan (Jong, Lundqvist, & Jong, 2015). There are no studies focusing on CAI therapies and school nurses, therefore, the purpose of this study was to assess school nurses' perception and knowledge of CAI and their understanding of the necessity and legality of CAI use in their school districts.

Methods: This nonexperimental, descriptive study was conducted using a researcher-developed instrument. The final survey received approval by the Western Kentucky University Institutional Review Board prior to administration. A comprehensive literature review was performed in order to create the 4-page, 28-question instrument. Fifteen Likert-type scale questions assessed perceptions, training, and comfort in administering CAI therapies to students. Three multiple choice items assessed knowledge of CAI therapies and 10 close-ended questions were included to obtain background and demographic information. A cross-sectional convenience sample of members of state School Nurses Associations in four states completed the survey. The survey was delivered electronically via Qualtrics, an online survey software, or at the State School

Nurses Association Annual conference. A total of 290 school nurses (30.5% response rate) participated in the study. Data were analyzed using IBM SPSS Statistics Version 24. Responses were described using frequencies, means, and standard deviations. Relationships between independent and dependent variables were determined using Chi-square. The significance level was set at $p < .05$.

Results: The majority of participants were female (99.3%), between the ages of 50 and 59 (46.2%), and Caucasian (93.5%). Most school nurses were employed full-time (89.9%) and nearly half of them practiced in suburban schools (45.4%). In addition, the respondents held state (63%), national (11.2%) or state and national (25.9%) certifications. A third of the participating school nurses did not have the school nursing certification.

Three questions were developed to assess the nurse's knowledge of CAI terminology. Most selected the correct definition of alternative medicine but less than 50% understood the meaning of complementary and integrative medicine. The majority of school nurses believed that music therapy (55%), art therapy (55.7%), meditation (54.7%), and yoga (51%) were supported by research and evidence based practice. Few of the participants reported seeing children use these therapies in their practice. Less than 25% of school nurses felt comfortable in administering CAI therapies such as music and art therapy, meditation, prayer and spiritual intervention, yoga, or aromatherapy. Interestingly, 100% of certified school nurses and 63% of non-certified school nurses felt that these therapies have a role in their practice and a majority of participants (82.4%) believed that CAI education is needed for school nurses. Participants thought that students under age 12 (65%) and adolescents (71%) have the right to use these therapies at school. However, only 19% of respondents felt comfortable assessing students and few (12%) believed they were knowledgeable about CAI therapies. Nearly 70% of respondents were unaware of their state board of nursing policy or school district policy on the use of CAI in their scope of practice.

Discussion/Conclusion: School nurses in this study believe that students should be able to use CAI therapies at school however, most were not comfortable with assessing for use and administering these therapies to their student population. Furthermore, a majority did not know if administration was even within their scope of practice. The school nurse may be one of the first professionals that parents and children look to for guidance in administration of CAI therapies therefore it behooves the school nurse to be ready. Position statements for education of pediatric nurses and implementation of CAI therapies have been largely overlooked in the U.S. Over 20 years ago, Cleveland and Biester (1995) called for pediatric nurses to be educated in CAI therapies, conduct research in their practices, and advocate for inclusion of these therapies in health care plans. A decade later, The Society of Pediatric Nurses printed a Position Statement with recommendations for the use of CAI in the care of children (Asher, 2007). This document called once more for education of health care providers, promotion of research, and education of children and their families. Most recently, in an editorial in the Journal of Pediatric Nursing, another plea for more attention by providers was made due to the prevalence of use of CAI therapies in pediatric patients (Betz, 2018). In addition to education in delivering these therapies and conduct of research, policy advocacy is also paramount. Lack of guidelines or position statements should be addressed and be readily available to the school nurse. Position Statements in addition

to the State Board of Nursing Regulations on scope of practice help clarify the role of the school nurse in delivering CAI therapy (North Carolina Board of Nursing, 2016). In addition, policies created by State Boards of Education (Illinois State Board of Education, 2018) help clarify the safe administration of medication. The 2017 National School Nurses Association Position Statement on medication administration recommends that school policies reflect those of local and state governments (National Association of School Nurses [NASN], 2017). Evidence indicates that use of CAI therapies by children is increasing each year but pediatric nurses are slow in reacting to the calls for preparation. It is imperative that school nurses become educated on the safe administration of these therapies and that they advocate the use of CAI therapies for their students. Most importantly, school nurses should have clear policies on the administration of CAI therapies and when lacking, they should be instrumental in petitioning the appropriate agencies for guidance.

Title:

Complementary, Alternative, and Integrative Therapies: Implications for School Nurses

Keywords:

complementary, alternative, and integrative therapies, conventional therapies and school nurses

References:

- Asher, C. (2007). Position statement on complementary and alternative medicine in pediatrics. *Journal of Pediatric Nursing*, 22(2), 159-161. Retrieved from [https://www.pediatricnursing.org/article/S0882-5963\(07\)00122-4/pdf](https://www.pediatricnursing.org/article/S0882-5963(07)00122-4/pdf)
- Berg, J., Morpew, T., Tran, J., Kilgore, D., & Galant, S. (2016) Prevalence of complementary and alternative medicine usage in Vietnamese American asthmatic children. *Clinical Pediatrics*, 55(2), 157-164. doi 10.1177/0009922815599394
- Betz, C. (2018). Complementary and integrative health approaches: Insights and implications for practice and research. *Journal of Pediatric Nursing*, 39, A6-A7. Retrieved from <https://doi.org/10.1016/j.pedn.2018.01.002>
- Chang, H. & Chang H. (2015). A review of nurses' knowledge, attitudes, and the ability to communicate the risks and benefits of complementary and alternative medicine. *Journal of Clinical Nursing*, 24(11-12), 1466-1478. doi: 10.1111/jocn.12790
- Cleveland, M. & Biester (1995). Alternative and complementary therapies: Considerations for nursing practice. *Journal of Pediatric Nursing*, 10(2), 121-123. Retrieved from [https://www.pediatricnursing.org/article/S0882-5963\(05\)80008-9/pdf](https://www.pediatricnursing.org/article/S0882-5963(05)80008-9/pdf)
- Herbert, A. & Esparham, A. (2017). Mind-body therapy for children with attention-deficit/hyperactivity disorder. *Children*, 4(31), 1-13. doi 10.3390/children4050031
- Illinois Department of Human Services and Illinois State Board of Education (2018). *Recommended guidelines for medication administration in schools*. Retrieved November 28th from <https://www.hauserizzo.com/priority-briefings/isbe-releases-medication-administration-guidance/>
- Jong, M., Lundqvist, V. & Jong, M. (2015). A cross-sectional study on Swedish licensed nurses' use, practice, perception and knowledge about complementary and alternative

medicine. *Scandinavian Journal of Caring Science*, 29(4), 642-650. doi: 10.1111/scs.12192

National Center for Complementary and Integrative Health (2017). *Children and the use of complementary health approaches*. Retrieved January 4th, 2018

from <https://nccih.nih.gov/health/children#patterns>

National School Nurses Association. (2017). *Position statement: Medication administration in the school setting*. Retrieved on January 4 2018

from <https://www.nasn.org/PolicyAdvocacy/PositionPapersandReports/NASNPositionStatementsFullView/tabid/462/smId/824/ArticleID/86/Default.aspx>

North Carolina Board of Nursing (2016). *Complementary therapies*. Retrieved November 28th from <https://www.ncbon.com/myfiles/downloads/position-statements-decision-trees/complementary-therapies.pdf>

Abstract Summary:

With more children using complementary, alternative, and integrative therapies (CAI), it is imperative that school nurses are equipped to assist children in the school setting. This study indicated that school nurses felt they were unprepared. Implications for school nursing practice will be discussed.

Content Outline:

1. **Introduction**
2. Background information about the use of CAI therapies in the student population and previous research exploring nurses' understanding and perceptions of the use of CAI therapies.
3. Overview of study methodologies including construction of researcher-developed questionnaire.
4. **Body**
5. Main Point #1: Findings
6. Supporting point #1: Knowledge of CAI Therapies
7. a) *Understanding of terms associated with CAI therapies*
8. b) *Understanding of CAI therapies that are supported by research and evidence-based practice*
9. Supporting point #2: Perceptions Associated with CAI Therapies
10. a) *Inadequate knowledge about CAI therapies*
11. b) *Low level of comfort in assessing students for CAI therapy use*
12. c) *Perceived inability to help with the administration of CAI therapies*
13. Main Point #2: Implications for School Nurses
14. Knowledge of CAI in the Scope of Practice
15. a) *State Board of Nursing Position Statements*
16. b) *State and Local Board of Education Policies and Guidelines*
17. c) *National School Nurse Association Position Statement*
18. Policy Advocacy
19. a) *Heeding the Call – The Society of Pediatric Nurses*
- III. Conclusion**
1. Evidence shows an upward trend in CAI therapy use in students
2. Pediatric nurses are slow to react to calls for preparation

3. School nurses need education and clarity in administering CAI therapies to students in their care

First Primary Presenting Author

Primary Presenting Author

Lizbeth P. Sturgeon, PhD, RN, CNE
Western Kentucky University
School of Nursing
Associate Professor
Bowling Green KY
USA

Author Summary: Dr. Sturgeon is an Associate Professor in the School of Nursing at Western Kentucky University. She received her PhD in Nursing from the University of Kentucky and currently teaches Evidence-Based Practice and Pharmacology. Her research interests include health promotion interventions and infection prevention strategies.

Second Author

Dawn Garrett-Wright, PhD, PMHNP, CNE
Western Kentucky University
School of Nursing
Associate Professor
Bowling Green KY
USA

Author Summary: Dr. Garrett-Wright is an Associate Professor in the WKU School of Nursing. She is Board Certified as a Psychiatric Mental Health Nurse Practitioner and has a PhD in Nursing from Vanderbilt University.

Third Author

Grace Lartey, PhD
Western Kentucky University
Department of Public Health
Associate Professor
Bowling Green KY
USA

Author Summary: Dr. Grace Lartey is an Associate Professor in the Department of Public Health at Western Kentucky University. She received her PhD from the University of Toledo in 2006 with a focus in community health education and a minor in statistics and research design. Her research interests include injury prevention, international health, and child and adolescent health.