

Pharmacist Curriculum on Sudden Infant Death Syndrome (SIDS) Risk Reduction

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Background

Research indicates that pharmacists can benefit from a continuing education program on Sudden Infant Death Syndrome (SIDS) as the role of the pharmacist expands. Alldrege and Koda-Kimble published an opinion piece in the American Journal of Pharmaceutical Education which stated that pharmacist roles of prescribing, educating and monitoring patients leads to job satisfaction.¹ They also recommend that pharmacists take a larger role in patient care. Several studies indicate that patients are willing and open to receiving information from their pharmacists regarding issues related to health promotion.²⁻⁵ This seems to be especially pertinent for mothers of young children according to a study conducted by Hodgson and Wong which found that 61 percent of the mothers they surveyed were visiting the pharmacist at least once a month, 22 percent stated they received advice and of that 87 percent reported the suggestions to be helpful or very helpful.⁶

Methods

The Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) conducted a partners’ meeting in the development of a Continuing Education (CE) module for Pharmacist. Focus groups were conducted with targeted objectives to test the curriculum in Baltimore, MD and Jackson, MS. They included student pharmacists and a representation from diversified practice settings (e.g., hospital, community, corporate, clinical, acute care, rural, urban). In an effort to address health inequities, pharmacists in underserved communities were a demographic data point. Also, one focus group was specifically all African American pharmacists. The focus groups findings substantively supported current research and opinion pieces by noted pharmacists which states that pharmacists roles are expanding and they are an untapped resource for providing health promotion information. It also concluded that pharmacists had a limited perspective regarding SIDS and substantively increased their knowledge through the CE module. A CE program was designed to reach pharmacists through a variety of vehicles such as: live trainings and an on-line CE activity to be delivered to pharmacists. Pharmacist associations and boards were contacted to set up sessions at scheduled meetings.



Pharmacy Partners

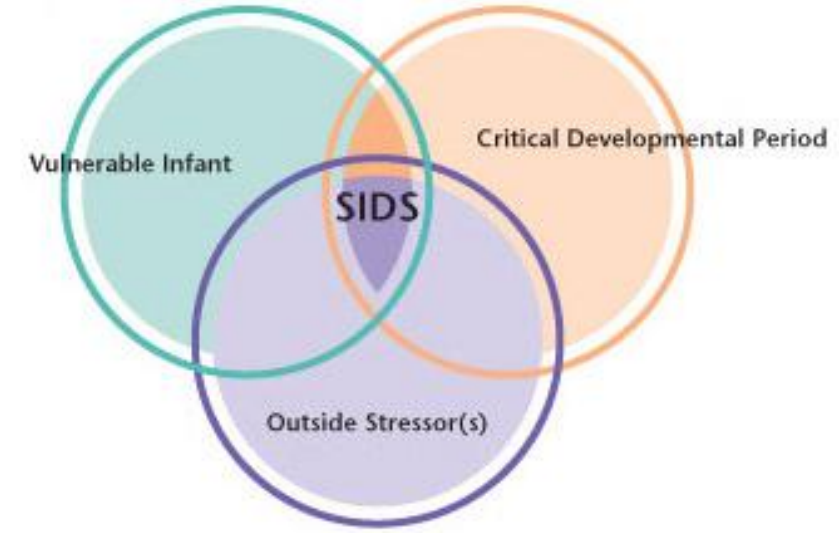
American Association of Colleges of Pharmacy
American College of Clinical Pharmacy
American Society of Health System Pharmacists
National Alliance of State Pharmacy Associations
National Association of Boards of Pharmacy
National Association of Chain Drug Stores
National Community Pharmacists Association
First Candle (SIDS Alliance)



Learning Objectives for the CE are:

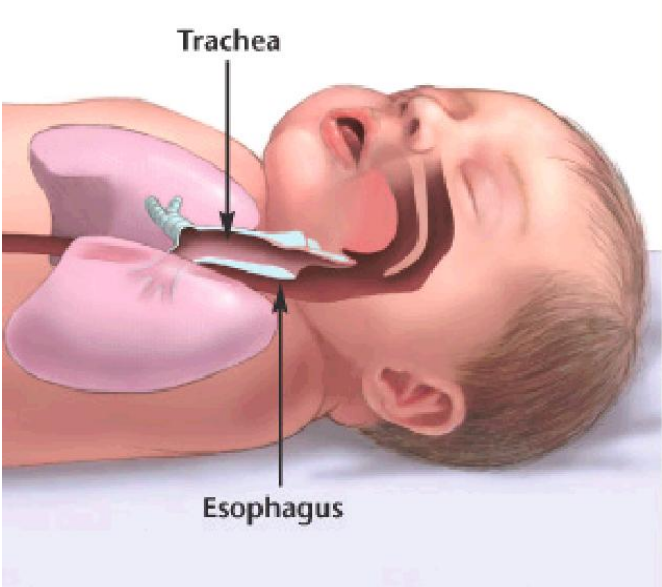
1. Define SIDS.
2. List the critical SIDS risk-reduction messages for expectant and future parents, grandparents, relatives, daycare providers, babysitters, and other caregivers
3. List four barriers to back sleeping.
4. Discuss potential opportunities pharmacists could serve as educators about SIDS.
5. Describe points of contact to effectively communicate SIDS risk-reduction messages to parents/caregivers.

Sample Slides from the CE Module



Triple risk model theory:

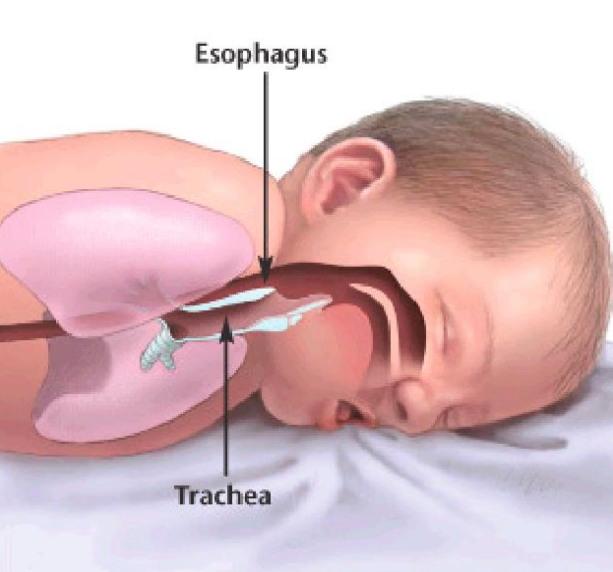
Vulnerable Infant. An underlying defect or brain abnormality makes the baby vulnerable. In the triple-risk model, certain factors, such as defects in the parts of the brain that control respiration or heart rate, or genetic mutations, confer vulnerability. **Critical Developmental Period.** During the infant's first six months of life, rapid growth phases and changes in homeostatic controls occur. These changes may be evident (e.g., sleeping and waking patterns), or they may be subtle (e.g., variations in breathing, heart rate, blood pressure, and body temperature). Some of these changes may temporarily or periodically destabilize the infant's internal systems. **Outside Stressor(s).** Most babies can encounter and survive environmental stressors, such as tobacco smoke, overheating, stomach sleep position, or an upper respiratory infection. However, an already-vulnerable infant may not be able to overcome them. Although these stressors are not believed to single-handedly cause infant death, they may tip the balance against a vulnerable infant's chances of survival.



Many parents fear that infants placed to sleep on their backs are more likely to experience complications from gastroesophageal reflux, including aspiration, than infants placed to sleep on their stomachs. There is no evidence, however, that aspiration is more common among healthy babies sleeping on their backs than among healthy babies sleeping on their stomachs.

When a baby is in the back sleeping position, the trachea lies on top of the esophagus. Anything regurgitated or refluxed from the esophagus must

work against gravity to be aspirated into the trachea.



Conversely, when a baby is in the stomach sleeping position, anything regurgitated or refluxed will pool at the opening of the trachea, making it easier for the baby to aspirate.

Results



Pre and post test consisting of 10 multiple choice questions were utilized. 382 Pharmacists and 320 students have completed the program. Participants averaged 55.8 percent on the pretest and 81-89 percent on the post test with an average increase in assessment scores of 26-34%. There was no statistical difference between the pharmacists and students.

Possible Roles You Could Play as Pharmacists?

1. Asking an expectant mother, father, or a family member about how/where baby will be sleeping.
2. Providing education to women during pregnancy about SIDS.
3. Providing a Safe Sleep brochure with prenatal vitamins, iron, folic acid, infant antibiotics, multivitamins, eye drops, or other prescription or non-prescription purchases.
4. Placing Safe Sleep brochures near infant formula, baby food, diaper products, diapers, thermometers.
5. Sharing Safe Sleep information with your families and community.

Conclusions

1. After completing the CE , pharmacists can increase their capabilities of discussing SIDS, safe sleep environments and protective factors by gaining in-depth knowledge of the most recent scientific and evidence-based information.
2. Pharmacists noted that the information was relevant and applicable to their practice.
3. Pharmacists would like to see information about OTC for infants included in the curriculum regarding current FDA recommendations and teaching points to families and the impact of infections on SIDS deaths.
4. Scheduling sessions continues to be challenging due to limited opportunities at national conferences and member restrictions, and competing topics.

References

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