

The Nurse's Role in the Prevention of Sudden Infant Death Syndrome

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According to the Centers for Disease Control, in 2022 there were roughly 3,700 unexpected infant deaths in the United States. Of those 3,700 infant deaths, 1,529 of them were confirmed to be attributed to sudden infant death syndrome. Sudden infant death syndrome is the sudden onset of a fatal episode of an infant from birth to 12 months of age. This death of an infant is not proven through autopsy to be caused by a specific illness or disease but rather by unexplained means and happens to devastate many families every year. Although there is not one specific cause of death in sudden infant death syndrome (SIDS), there are many risk factors that can contribute to the incidence of SIDS in the United States. As a nurse, it is extremely important to know these risk factors to be able to articulate to patients and caregivers how to prevent this tragedy from occurring. When discussing the prevention of sudden infant death syndrome (SIDS), it is the nurse's role to educate caregivers on prevention measures, implement evidence-based practice including safe sleeping habits and AAP recommendations, as well as recognizing risk factors to reduce incidence of sudden infant death syndrome in patients.

When considering the prevention of sudden infant death syndrome, it is the nurse's primary role to educate patients and families on ways to prevent this tragedy from occurring from safe sleep recommendations to prevention in utero. As promoted by the World Health Organization (WHO), co-sleeping on a bed, sofa or chair with an infant significantly increases the risk of sudden infant death syndrome for that infant. Whether intentional or not, co-sleeping is extremely dangerous for an infant under the age of 12 months and the risk of SIDS occurring is greatly increased when the parents have recently consumed tobacco, alcohol or other substances (Jullien, 2021, p. 2). It is the nurse's role to express the importance of safe sleep practices to guardians and family members to reduce the incidence of sudden infant death syndrome in patients. Expressing to families and caregivers that when they are tired, it is crucial

to switch off holding the infant or to place the infant in a secure area for sleep such as a crib or a bassinet. This will greatly decrease the risk of sudden infant death syndrome from occurring. Other crucial education that the nurse is responsible for relaying to their patients include the risk factors that can transpire in utero. Many individuals are unaware of just how dangerous maternal smoking can be to a fetus, "... infants exposed to smoking in utero have been show to display significant arousal abnormalities, taking longer times to wake when exposed to exogenous stressors, such as hypoxia, thus increasing vulnerability to SIDS" (Bednarczuk, Milner & Greenough, 2020, p. 2). As previously stated, maternal smoking is detrimental to infants' health for many reasons, but one adverse effect includes the increase in the risk of sudden infant death syndrome. Among many other things, smoking in utero will hinder the infant's ability of arousal. For instance, when an infant is experiencing hypoxia, if they are unable to arise and correct this, the infant's life can be in danger. As a nurse, it is best practice to educate patients whenever the opportunity presents itself. With the care of infants, it is even more crucial to educate caregivers on tactics to reduce incidence of tragedies such as sudden infant death syndrome to likely safe a life: "The rates of incidence of SIDS are directly related to parents' and/or caregivers' prior knowledge—the greater the knowledge of strategies to prevent sudden death of infants, the less likely that such deaths will occur" (Rodrigues et al., 2024, p. 2). As previously stated, education is crucial in the care of any patient population but even more so when considering children under the age of 12 months old. As a nurse, increasing the caregiver's knowledge can only improve the care of the infant and will likely save their life especially when considering tragic and unpredictable occurrences that are seen with sudden infant death syndrome.

As essential as education is in the prevention of sudden infant death syndrome, it is just as important as the role of the nurse to implement evidence-based practice and safe sleep

guidelines. According to the American Academy of Pediatrics (AAP), their most recent recommendations include sleeping in the supine position, room sharing and supervised awake tummy time as strategies to reduce the incidence of SIDS in America. Not recommended are co-sleeping, head coverings that will overheat the infant and loose bedding or soft objects in the infant's sleeping area. Instead, consider offering a pacifier when sleeping but do not force it on the infant and ensure that the infant's place of sleep includes a firm surface with tight fitting, breathable linen (Jullien, 2021). Co-sleeping is sleeping on the same surface as the infant including a mattress, chair or couch. This greatly increases the risk for sudden infant death syndrome but room sharing is a current evidence-based recommendation that allows the caregiver to hear the infant and quickly tend to them as necessary. The safe sleep campaign and AAP making recommendations using evidence-based practice has greatly impacted the role of the nurse because there are now clear guidelines that allow nurses to pass on information confidently to patients knowing that it will save many lives. According to Goldwater (2023), laying the infant to sleep in a supine position is considered the best evidence-based practice for several reasons. One of which includes, "sleeping prone caused pooling of secretions and increased numbers of toxigenic bacteria in the nasopharynx and malony et al. showed prone sleeping increased the local temperature into ranges known to induce bacterial toxin production" (p. 1273). With this being said, it is the nurse's role to ensure that an infant is positioned supine to sleep. Not only is this position optimal from a respiratory standpoint, but sleeping in a supine position can prevent the pooling of secretions and harboring bacteria that can be seen in an infant that sleeps in the prone position. Ultimately, it is the nurse's role to implement and practice safe sleep guidelines and AAP recommendations in their everyday practice to prevent the occurrence of sudden infant death syndrome among the infant population.

Along with education and implementation of evidence-based practice to prevent sudden infant death syndrome in patients, it is the nurse's role to recognize risk factors that an infant may have for experiencing this tragedy. As well as adherence to safe sleeping guidelines and appropriate thermoregulation, there are other measures that need to be taken to reduce risk factors in infants including infection prevention: "SIDS has been linked to additional factors including bacteriological findings of *Staphylococcus aureus* infections and staphylococcal endotoxins, and smoking" (Vincent et al., 2023, p. 2). It is the nurse's responsibility to maintain and practice infection prevention measures to decrease an infant's risk of SIDS, including proper handwashing techniques, standard precautions and sanitizing equipment as necessary. Despite the many precautions that can be easily practiced reducing the risk of sudden infant death syndrome in patients, there are some risk factors that are unavoidable. The risk for the occurrence of sudden infant death syndrome is highest when the infant is between two and four months old. It is said that "90% of SIDS cases occur before the infant reaches six months" (Fraile-Martinez et al., 2024, p. 851). With the infant's risk peaking between two and four months of age, it is crucial as the nurse, to articulate this fact to the family members and guardians of the infants being seen. Making families and caregivers aware of this increased risk will allow the caregivers to better care for their infants and take extra precautions during this time. Another non-modifiable risk factor that is present in our infant population is race and ethnicity. With risks varying across all races and ethnicities, studies have shown that, non-Hispanic Black individuals are at twice the risk of sudden infant death syndrome than non-Hispanic white persons (Boyer et al., 2022, p. 1). Although race and ethnicity are risk factors that cannot be prevented or modified, this is important for the nurse to recognize and make the family aware of this increased risk. Sharing this knowledge and recognizing this risk factor will allow

for the infant to be monitored more closely and hopefully prevent the occurrence of sudden infant death syndrome. As the nurse, it is crucial that they can recognize risk factors, whether modifiable or not, to better care for the infant and hopefully prevent SIDS from occurring in these patients.

Sudden infant death syndrome truly is a tragedy that devastates many families in the United States every year. Sudden infant death syndrome (SIDS) is a sudden onset of a fatal episode in a child under the age of 12 months. This sudden death is not related to nor caused by any specific disease or illness as evidenced by investigation and autopsy. Although the direct cause has not yet been identified, there are several known risk factors that are found among infants that have suffered. Some of these risk factors include sleeping in the prone position, sleeping in a soft area with loose bedding and soft objects. Other risks include co-sleeping or sleeping with head coverings or linen that would cause the infant to overheat as well as maternal smoking and staphylococcal aureus infections. Some of the non-modifiable risk factors that have been identified include infants between the age of two and four months as well as non-Hispanic black individuals. As previously stated, even though not all of these risks are able to be modified or corrected, it is extremely important that the family of these patients are educated on the increased risk and ways to better care for these infants to prevent the incidence of SIDS. This education may have the greatest impact on families that are new to guardianship, currently in low economic status or families that have limited access to knowledge or supplies to care for a new infant. Regardless of the family's background, it is essential that the nurse relay important information on the topic of SIDS to decrease the overall incidence across the nation. Once again, when discussing the prevention of sudden infant death syndrome (SIDS), it is the nurse's role to educate caregivers on prevention measures, implement evidence-based practice including safe

sleeping habits and AAP recommendations, as well as recognizing risk factors to reduce incidence of sudden infant death syndrome in patients.

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