EBP Project: Safe Sleep Practices to Prevent Infant Deaths

Camryn Brown, BSN, Alexa Gray, BSN, and Brianne Middleton, BSN

Problem

Sudden Infant Death Syndrome (SIDS) accounts for 42% of infant deaths (Templet et al., 2023). As the primary educators at discharge, nurses are tasked with teaching parents about safe sleep practices and SIDS prevention. Unfortunately, a gap persists between what is learned before leaving the hospital setting and infant sleep practices at home. The American Academy of Pediatrics has ongoing infant sleep recommendations; however, SIDS rates have not dropped in recent years despite these recommendations (Ward et al., 2021). As healthcare professionals, it is important that we work to protect one of our most vulnerable populations and research how to reduce SIDS.

Literature Review

Two reviewed studies Lemoine et al. (2020) and Ward et al. (2021) conducted pre- and post-tests of participants' knowledge before and following interventions. Lemoine et al. (2020) gave pre-tests on infant safe sleep before train-the-trainer simulations and again post-simulation. Ward et al. (2021) gave pre-tests to expectant mothers and then provided cribs and education in a group setting with a post-test following. Participant inclusion for these studies consisted of nurses on post-partum, mother-baby, nursery, pediatric units, and new mothers. Items included in discussions of proper safe sleep education included back sleep positioning, room sharing without bed sharing, removal of extra objects on approved flat sleep surfaces, avoiding overheating, avoiding smoke, alcohol and drug exposure, and breastfeeding (Lemoine et al., 2020; Ward et al., 2021).

Commonly discussed risks like sleep positions other than back sleep, bedding and unnecessary crib items are included in discussions before mothers are discharged (Raines, 2018). The most beneficial education tested so far has been "trainthe-trainer" simulations (Lemoine et al., 2020). Results from these studies showed an increase in compliance in safe sleep environments and the ABCs (Alone, on their Back, in a Crib) of safe sleep (Leong et al., 2019). The results also show an increase in knowledge between the baseline test and post-intervention tests, as well as retained knowledge 3 months later (Ward et al., 2021).

Recommendation

Providing additional education for nurses can bridge the gap between safe sleep practice and their relation to SIDS. This could help improve the teaching provided by nurses to parents about important sleep recommendations. These include the back sleep position; firm sleep surface; room-sharing without bed-sharing; avoiding soft bedding and overheating; avoiding smoke, alcohol, or illicit drug exposure; breastfeeding; routine immunizations; and offering a pacifier (Ward et al., 2021). Providing a checklist of education to nurses would ensure all parents receive the same information before discharge, providing equity of care. A one-year follow-up at the patients' home would help maintain safe sleep practices. This intervention opens an opportunity to make important changes in the infant's sleep environment and evaluate the effectiveness of teaching in the hospital.

Further Study

Qualitative studies of train-the-trainer programs can further highlight the practices of training-based education. Comparing these programs can also determine the effectiveness of knowledge obtained. A study on the outcomes of home visits could also show the effectiveness of discharge education and how helpful follow-up care can be in decreasing the rate of infant deaths.

References

Lemoine, J., Rholdon, R., Templet, T., & Stueben, F. (2020). Effects of implementing a simulation-learning based training using a train-the-trainer model on the acquisition and retention of knowledge about infant safe sleep practices among licensed nurses. Journal of Pediatric Nursing, 55, 224–231. doi: 10.1016/j.pedn.2020.08.014

Leong, T., Billaud, M., Agarwal, M., Miller, T., McFadden, T., Johnson, J., & Lazarus, S. G (2019). As easy as ABC: evaluation of safe sleep initiative on safe sleep compliance in a freestanding pediatric hospital. Injury epidemiology, 6(Suppl 1), 26. https://doi.org/10.1186/s40621-019-0205-z

Raines, D. (2018). Factors that influence parents' adherence to safe sleep guidelines. Journal of Obstetric, Gynecologic, and Neonatal Nursing, Volume 47, Issue 3, 2018, 316-323, ISSN 0884-2175, https://doi.org/10.1016/j. jogn.2018.01.010

Templet, T., Rholdon, R. Jr., Lemoine, J. (2023). Infant Sleep Practices: Using Simulation to Enhance Role Modeling Behaviors. Pediatric Nursing. https://www. thefreelibrary.com/Infant+Safe+Sleep+Practices%3a+Us ing+Simulation+to+Enhance+Role...-a0748188953

Ward, T. C. S.., Miller, T. J., & Naim, I. (2021). Evaluation of a multisite safe infant sleep education and crib distribution program. International Journal of Environmental Research and Public Health, 18(13), 6956. https://doi. org/10.3390/ijerph18136956



Brief biography for authors/contributors: Alexa Gray, Brianne Middleton, Camryn Brown graduated on May 9, 2024, with Bachelor of Science in Nursing degrees from the Fran and Earl Ziegler College of Nursing at the University of Oklahoma Health Science Center. They presented their evidence-based practice poster at the Partners in Quality conference on March 8, 2023, in Oklahoma City. They would like to thank Professor Cindy Rieger for her wonderful guidance and help throughout their research. They will be starting their nursing careers in High-Risk Obstetrics Care, Mother-baby, and Surgical ICU. They chose to research the effects of additional education on safe infant sleep practices because they have seen the effects of unsafe sleep in their educational journey. Cindy Rieger, APRN, PHCNS-BC is a Clinical Assistant Professor at the Fran and Earl Ziegler College of Nursing at the University of Oklahoma Health Science Center.