

Improving SIDS Discharge Education: A Standardized Approach

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Abstract

Sudden Infant Death Syndrome (SIDS) prevention continues to be a focus in healthcare. The consistency and quality of education regarding safe sleep practices provided to parents of newborns at discharge can affect the techniques used at home to prevent death from SIDS. A quality improvement project was conducted at a hospital in the Midwest involving registered nurses on the obstetrics and special care nursery units. The intervention consisted of developing a standardized safe sleep educational pamphlet and a plan for consistent discharge education regarding SIDS prevention. Participants completed a pretest assessing their baseline knowledge of SIDS prevention and safe sleep, utilized the new SIDS prevention pamphlet along with a one-minute video clip to deliver discharge education regarding safe sleep to parents of newborns, and then took the posttest at the completion of the project. Quantitative data was examined from pretest and posttest scores, along with qualitative feedback solicited from parent surveys about the education after discharge. Participation was low and results showed no change in knowledge from the comparison of pre and posttest answers. When asked, parents were able to recall key elements of the education and indicated that they used the information about safe sleep at home.

Keywords: SIDS, discharge education, safe sleep

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Introduction and Problem

Sudden infant death syndrome (SIDS) is the unexpected death of an infant less than one year of age without an identifiable cause. Approximately 3,400 infants die unexpectedly from SIDS each year in the United States (Centers for Disease Control and Prevention, 2021). Even though SIDS-related deaths have decreased by 50% since the early 1990s, SIDS still remains the leading cause of death for infants from the age of 28 days to one year and the third-leading cause of infant mortality overall (Task Force on Sudden Infant Death Syndrome, 2011). Sudden unexplained infant death (SUID) has become a term that is also reported along with SIDS data that further delineates infant deaths into SIDS cases, deaths to unknown cause, and accidental suffocation and strangulation in bed. In 2019 there were 1,250 reported deaths due to SIDS, approximately 1,180 deaths attributed to unknown causes, and 960 deaths from accidental suffocation and strangulation in bed (Centers for Disease Control and Prevention, 2021). Ohio is one of the 28 states with SUID rates above the U.S. average at 110.3 per 100,000 live births (Centers for Disease Control and Prevention, 2021).

A standardized approach to discharge education has numerous benefits including providing consistent evidence-based information, improved efficiency for clinicians, and improved patient satisfaction (Cece et al., 2021). The clinical question that was posed by this Doctor of Nursing Practice (DNP) project is among nurses who work in the obstetrics unit and special care nursery what is the impact of a standardized Safe Sleep (SS) educational pamphlet on nurses' knowledge and skills to perform discharge teaching on the prevention of Sudden Infant Death Syndrome (SIDS) and safe sleeping practices when evaluated within one month of implementation? The independent variable in the study was the standardized SIDS discharge

education pamphlet. The dependent variable was the nurses' knowledge and use of consistent SIDS education to parents of newborns.

Background and Significance

The overall infant mortality rate (IMR) in the United States has declined 15% since 2005, however the rate of decline has not kept up with the pace of the rest of the world (Krishnaswami and Colon-Gonzalez, 2019). The United States has dropped and is ranked lowest among the world's wealthiest countries (Krishnaswami and Colon-Gonzalez, 2019). SIDS prevention and safe sleep education is vitally important to addressing infant mortality. An area of need identified at a local hospital was for more consistent and improved SIDS discharge education for parents of newborns. A key part in addressing the issue of infant mortality and sleep-related deaths is quality education on safe sleep practices and SIDS prevention techniques.

The knowledge base and understanding of SIDS prevention is pivotal for nurses who are caring for infants and their parents. Parents are more likely to model the behavior that they see nurses practice in the hospital (Rhodon, 2017). Nurses in the postpartum unit, neonatal, or special care nursery have a significant impact on SIDS prevention by providing discharge education and demonstrating the effective use of safe sleep techniques (Bartlow, Cartwright, & Shefferly, 2016). A need for more consistent and expanded SIDS prevention education was identified on the obstetrics (OB) unit. Key stakeholders in this project included the clinical nurse educator on the OB and special care nursery units, nurse manager, staff nurses, and parents of infants born at this facility. Collaboration with the clinical nurse educator was essential for coordination with the clinical staff, recruitment, and utilization of resources.

Purpose

The overarching goal of this project was to improve SIDS discharge education and provide caregivers with the knowledge to prevent sleep-related death in infants. The first objective was to have the nurses in the obstetrics unit and special care nursery demonstrate increased knowledge and retention of the SIDS prevention education through improved posttest scores compared to pretest scores prior to use of the intervention. A second objective of the quality improvement project was for the standardized SIDS discharge education materials to be provided consistently to parents of newborns before discharge. The aim of the project was to provide standardized educational materials that allowed for consistent discharge education on the topic of SIDS.

Literature Synthesis

A literature search was utilized primarily using the Cumulative Index to Nursing & Allied Health Literature (CINAHL) plus with full text and ProQuest Nursing & Allied Health databases. Initial search in the ProQuest database for SIDS education yielded 1,059 results. Search within the CINAHL database yielded 17 results when searching for the terms SIDS and nursing knowledge. When this author searched for SIDS and discharge education in the CINAHL database, eight results were displayed.

Nurses' Knowledge of SIDS

Bartlow, Cartwright, & Shefferly (2016) targeted well-baby postpartum units at two hospitals in the Washington D.C. area. Observational data was collected from the researchers monitoring infant positioning and the crib environment for infants in the postpartum nurseries. Barsman, Dowling, Damato, & Czek (2015) examined nurses' knowledge, beliefs, and practices regarding SIDS recommendations in a NICU and step-down transitional care unit (TCU). Most of the nurses surveyed could identify the 2011 American Academy of Pediatrics (AAP)

recommendations for SIDS prevention. Of those nurses, 63% reported educating parents verbally and only 28% gave parents written materials for education (Barsman et al., 2015). A theme that was identified from these studies was the need for improvement with nurses and healthcare providers utilizing SIDS knowledge and modeling safe sleep behaviors in the hospital. Both of these studies qualify as Level II evidence.

SIDS Education Quality Improvement

Parental education is a pivotal part in the prevention of SIDS (Rhodon, 2017). Rhodon (2017) conducted a study aimed at increasing nurses' knowledge and use of the AAP SIDS prevention guidelines and the ability to demonstrate these techniques to parents while infants are hospitalized. Observations were done pre and post intervention with a National Institute of Health (NIH) training tool for SIDS prevention (Rhodon, 2017). Frey, Hamp, & Orlov (2019) performed a quality improvement project that targeted nurses in an urban pediatric medical center to examine compliance with the five core practices of safe sleep which include supine, alone in the crib, flat crib, no other objects in the crib, and appropriate bundling of the infant for pediatric patients currently in the hospital (Frey et al., 2019). These two quality improvement articles are classified as Level VI studies.

An evidence-based safe sleep program implementation in a hospital's NICU was the project of a six-member interdisciplinary team (Zachritz, Fulmer, & Chaney, 2016). The research team developed an initiative that used infant sleep sacks, a clinical practice guideline for safe sleep practices, and standardized discharge education for caregivers in the NICU (Zachritz, et al., 2016). A common theme identified was a need for formal, standardized education among nurses to provide more effective parental education before discharge of infants from the hospital. Random audits revealed data in one of the hospital studies mentioned that demonstrated nursing

staff were only modeling safe sleep practices 20% of the time. Follow-up phone calls after discharge revealed that at least seven out of 14 parents were using unsafe sleep practices at home (Zachritz, et al., 2016). After two infant deaths occurred after discharge from the hospital's NICU, a need for more consistent SIDS prevention education was identified (Zachritz, et al., 2016). This study qualifies as a Level VI.

Understanding discharge information is a pivotal part of improving health outcomes and avoiding unnecessary healthcare utilization and costs (Newnham et al., 2017). Discharge education and summaries are not often complete or helpful, and a lack of standardized process with providing discharge information can have negative effects on patients' health outcomes (Newnham et al., 2017).

SIDS Education for Parents

A descriptive study by Dufer and Godfrey (2017) examined the integration of safe sleep and sudden infant death syndrome (SIDS) education among parents of preterm infants in the Neonatal Intensive Care Unit (NICU). Parents of infants in the NICU were given a pretest to establish baseline knowledge of safe sleep. Parents participated in an educational session, received a handout on safe sleep, and completed a posttest after conclusion of the intervention. The emerging theme from this study showed increased parental knowledge of SIDS prevention after education (Dufer & Godfrey, 2017). This qualified as a Level II study.

Theoretical Framework

Imogene King's Theory of Goal Attainment is the theoretical framework that supported this project's components. A basic assumption of this theory is that a nurse and patient communicate with each other, set a mutual goal, and then implement a plan to attain that goal (Current Nursing, 2012). The development of standardized discharge education for SIDS

prevention and safe sleep techniques aligns with the Theory of Goal Attainment through promotion of goal setting, implementation of a plan, and evaluation. The goal can be established and a plan implemented with nurses providing standardized SIDS discharge education. Evaluation is done with parents to see if the educational goal was met and if the teaching was effective.

Project Design

Recruitment/Sample

The setting for the project are the labor and delivery and special care nursery units of a Midwest regional medical center. A mixed methods research design was utilized with the quantitative portion consisting of knowledge data collected from the nurses in a pretest-posttest format. Qualitative data was elicited from follow-up emails with parents of infants after discharge about the use of the standardized educational discharge tool.

The hospital IRB, as well as the IRB from the researcher's university deemed the project exempt and gave approval with permission to move forward. There were no ethical issues or conflicts of interest with the project. A convenience sample of the nurses on the units of labor and delivery and special care nursery was recruited utilizing multiple methods including email, morning huddle on the unit, and an educational flyer. Flyers that explained the project and the process for participation were emailed and posted in the breakroom and around the units. Incentive was provided for nurses completing all phases of the project, however it was stressed that participation was strictly voluntarily. The nurses that completed the project were entered in a random drawing to win a \$25.00 gift card. The sample of nurses completed the SIDS prevention pretest prior to the intervention to assess baseline knowledge. A total of five nurses from the obstetrics and special care nursery consented and participated in this study.

Tools/Implementation

This author modified the pre and posttests and the educational materials from the hospital certification tool kit developed by the Cribs for Kids program (Cribs for Kids, 2015). (Appendix A and B). The multiple-choice pre and posttests addressed SIDS risk factors, prevention techniques, and other key facts about safe sleep. For example, one question asked "Which factor is thought to protect a baby against SIDS?" and participants were asked to choose from a list of four items. Pre and posttests were distributed in a paper format.

Five questions about the use of the pamphlet for discharge education was the tool used to obtain qualitative feedback from parents. For example, the author asked parents to list ways that they use safe sleep practices with their baby at home. The qualitative questions for parents to answer after discharge were sent in an email that they provided.

In addition, the researcher created an educational pamphlet about SIDS highlighting information about risk factors, ways to protect infants from SIDS, frequently asked questions and other key factors of safe sleep. The nurses included the educational pamphlet and a safe sleep video clip as part of the discharge teaching process with parents. The nurses played the video for the parents on an iPad provided by the nursing unit prior to the infant's discharge. After using the SIDS discharge educational pamphlet and video clip for teaching, the nurses completed the posttest within one month.

The second part of the study was to identify if the parents used the discharge teaching. Parents who consented, were contacted by the author either by email or text message. The parents were not asked to provide names to maintain privacy, and they could select the preferred method of contact.

Data Collection

The pretest survey collected demographics such as age, gender, ethnicity, and years of nursing experience. On the posttest, nurses reported how many times the SIDS discharge pamphlet was used for teaching. Qualitative data was collected using the feedback elicited from the parent follow-up after discharge. Tools used for data collection included the pretest and posttest along with the five qualitative questions that were sent to parents via text message or email. Nurses completed the pretest at the beginning of the project after the clinical nurse educator sent the instructions for participation, along with the pretest through email. Nurses included their employee ID number instead of name to track and compare the pre and posttest while still allowing for confidentiality. After using the standardized plan for discharge education, the nurses received a second email with the posttest for completion.

Data Analysis

The SIDS discharge education project analyzed nurses' knowledge and use of standardized teaching materials with parents of newborns. Answers on the pre and posttests were graded and scores compared to obtain quantitative data. The original plan was to use paired t-tests to identify any change in knowledge among the nurses when comparing the pretest and posttest answers. However, due to an unforeseen low number of participation the data analysis plan changed to a side-by-side comparison of results. Five registered nurses from either the obstetrics or special care nursery department consented to participate and completed the entire project. Nurses provided demographic data including their age, gender, ethnicity, and years of nursing experience on the pretest.

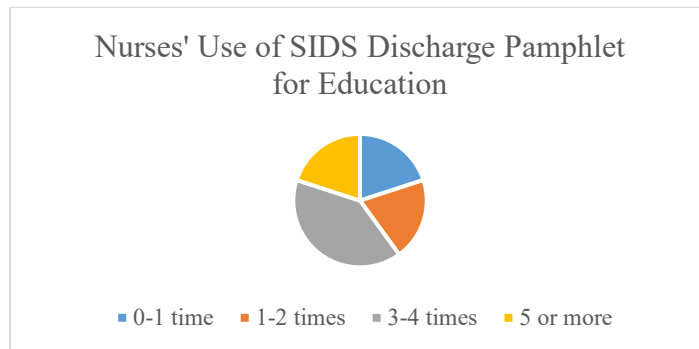
The pretest and posttests consisted of the same fourteen questions, with the exception of a question added on the posttest which asked if the pamphlet was used and if so how many times.

Out of five nurses, one answered the pretest and posttest questions correctly on both attempts.

The remaining four nurses answered one question incorrectly on both the pretest and posttests.

The nurses' reported use of the SIDS discharge education pamphlet is reported in Figure 1 listed below.

Figure 1



Results from the project also included qualitative feedback from parents. The responses were examined for common themes. Four parents responded back after consenting to contact after discharge. The parent feedback, along with the questions asked, is listed in Table 1 below.

Table 1

Parents' Feedback after Discharge

	Did you receive education regarding SIDS prevention at the time of your baby's discharge from the hospital?	Were you given a SIDS prevention pamphlet to take home as a reference?	Did you feel this education about ways to prevent SIDS was helpful? Why or why not?	What are some ways that you are using the teaching provided to you about safety for safe sleep with your baby at home?	Do you have any questions or concerns that were not addressed with the SIDS discharge education?
1	Yes	Yes	"very helpful because it clearly laid out the methods for prevention/safety"	"We always lay baby on his back at the bottom of his crib. He's only ever in a	"more information on what SIDS is and some reasons it

			"...clear, direct, and to the point."	sleeper or a swaddle when he is asleep, even during naps."	generally happens..."
2	Yes	Yes	"Yes it helped us make sure there was nothing in his crib like teddy bears and such."	"We took out all the teddy bears that were in the crib and we make sure we put him on his back."	No
3	Yes	Yes	"Yes it was helpful. I have heard of SIDS but did not know a lot about it."	"Being sure we put baby down for sleep in a safe place on his back with nothing in the crib or pack and play."	No
4	Yes	Yes	"Yes, it was very informative and to the point."	"We put the baby to sleep on her back alone and we don't co-sleep in bed with her."	No

Relationship of Results

The basic assumption of King's Theory of Goal Attainment applies to the development of standardized discharge education for SIDS prevention and safe sleep techniques promoting goal setting, implementation of a plan, and evaluation (Petiprin, 2020). An assumption made by this author is that parents expect to receive consistent and accurate education on caring for their baby and how to prevent injury or illness before being discharged home. Stress and environmental factors for parents, such as having a newborn, may affect goal achievement. The nurses supported the parents during a stressful time to help meet the goal of consistent and accurate discharge teaching through use of the pamphlet and video for SIDS prevention

education. Parent feedback indicated that the standardized SIDS discharge teaching was effective and verbalized that the prevention practices are used at home. While the results were not as plentiful and clinically significant as originally hoped, the results are still supported by the framework.

Aims/Objectives

Aims of the project include increasing knowledge and awareness of SIDS prevention among healthcare providers and parents of infants, increasing standardization of the material being provided to parents, and increasing consistency of SIDS prevention education with every infant discharge from the hospital. The results of the study met most of the aims of the project with the exception of increasing knowledge among nurses when comparing side-by-side results of pretest and posttest scores. The project did provide a standardization and consistency of the education through creation and use of the SIDS discharge teaching pamphlet and the one-minute video for parents to watch.

The objectives were very similar with the aims in the project. The first objective was that nurses in the obstetrics and special care nursery demonstrate increased knowledge and retention of the SIDS prevention education through improved post survey assessments compared to the pre intervention survey. The results from the study did not support this objective. The second objective was that standardized SIDS discharge education materials was developed for nurses and consistently used to deliver education and be provided to parents of newborns before discharge.

Strengths and Limitations

Strengths of the project include providing pivotal and potentially life-saving knowledge to parents and caregivers of newborns. The project provided standardized SIDS education to the

nurses on the obstetrics and special care nursery units. Standardized discharge education gave parents consistent and clear message for safe sleep practices and SIDS prevention. Parents were given a pamphlet to take home that provided both written and visual methods of learning about how to keep their baby safe from sleep-related injury or death. Nursing staff also had the chance to review knowledge of the latest evidence-based practices in SIDS prevention and provide consistent teaching to parents.

Limitations did exist with this project. The largest limitation is the sample size. A very small sample of nurse agreed to participate even though the researcher pursued multiple avenues. The small sample limited the data collection and amount of results to examine for any statistically significant change in knowledge. It is unknown why participation was so limited for this study. Stress from working in pandemic conditions may have contributed to the lower participation.

Recommendations and Implications for Future Practice

Lessons were learned throughout this process that drive recommendations for future quality improvement projects of similar nature. One recommendation is to target the pre and post knowledge increase of parents and caregivers after an educational intervention. The advancement of technology has led to the use of QR codes for multiple uses. The ease of use of QR codes in real time after an intervention or practice change could increase participation numbers. A recommendation going forward is utilization of this technology to streamline the process and make it more user-friendly for nursing and parental participants. The project also could be attempted at additional local hospitals in order to increase the sample size and maximize the impact.

Implications for the future have benefits that reach beyond the immediate. While the sample size and participation was not what was hoped for in this project, parental feedback with follow-up was positive and indicated that education was successful. If one infant life was saved, then the project has had a positive impact. Continuing to provide standardized and consistent SIDS discharge teaching is imperative for future practice in order to ensure the safety and well-being of infants.

Plan for Dissemination

Plan for dissemination includes sharing the project locally and nationally. The author plans to submit for poster or podium presentations at local conferences at the state and possible national level. Due to low numbers of participants, publication in a journal can be difficult. However, sharing the study through educational platforms at conferences allows this important information to be shared with other nursing professionals. The information has been shared with the hospital and with the approval of the marketing department the SIDS pamphlets created could officially be used by the hospital in their discharge educational packet.

Conclusion

Despite the decline of SIDS rates after the implementation of safe sleep recommendations, infant deaths are still occurring. Evidence has supported that educational interventions have increased the awareness of SIDS prevention techniques and safe sleep practices. This quality improvement project established a standardized discharge education process using a SIDS prevention pamphlet and video clip. The goal going forward is that more healthcare providers and facilities can implement consistent SIDS discharge education to help reduce sleep-related injuries and deaths in infants.

References

- Barsman, S., Dowling, D., Damato, E., & Czeck, P. (2015). Neonatal nurses' beliefs, knowledge, and practices in relation to sudden infant death syndrome risk-reduction recommendations. *Advances in Neonatal Care*, 15(3), 209-219.
<http://dx.doi.org/10.1097/ANC.0000000000000160>
- Bartlow, K., Cartwright, S., & Shefferly, E. (2016). Nurses' knowledge and adherence to sudden infant death syndrome prevention guidelines. *Pediatric Nursing*, 2(1), 7-13.
- Cece, K. L., Chargot, J. E., Hashikawa, M., Plegue, M. A., & Gold, K. J. (2021). Use of tablet video for delivery of neonatal discharge instructions to first-time parents. *Family Medicine*, 53(2), 145–147. <https://doi.org/10.22454/FamMed.2021.551065>
- Centers for Disease Control and Prevention. (2021). *Sudden unexpected death and sudden infant death syndrome*. <https://www.cdc.gov/sids/about/index.htm>
- Centers for Disease Control and Prevention. (2021). *Sudden unexpected infant death and sudden infant death syndrome*. <https://www.cdc.gov/sids/data.htm>
- Cribs for Kids. (2015). *Hospital certification toolkit*. <https://cribsforkids.org/hospital-certification-toolkit/>
- Current Nursing. (2012). *Imogene King's theory of goal attainment*.
http://currentnursing.com/nursing_theory/goal_attainment_theory.html
- Dufer, H., & Godfrey, K. (2017). Integration of safe sleep and sudden infant death syndrome (SIDS) education among parents of preterm infants in the Neonatal Intensive Care Unit (NICU). *Journal of Neonatal Nursing*, 23(2), 103-108. doi:10.1016/J.JNN.2016.09.001
- Frey, E., Hamp, N., & Orlov, N. (2020). Modeling safe infant sleep in the hospital. *Journal of Pediatric Nursing*, 50. 20-24. <https://doi.org/10.1016/j.pedn.2019.10.002>
- Krishnaswami, J., & del C. Colon-Gonzalez, M. (2019). Reforming women's health care: A call

to action for lifestyle medicine practitioners to save lives of mothers and infants.

American Journal of Lifestyle Medicine, 13(5), 495–504.

<https://doi.org/10.1177/1559827619838461>

Newnham, H., Barker, A., Ritchie, E., Hitchcock, K., Gibbs, H., & Holton, S. (2017). Discharge communication practices and healthcare provider and patient preferences, satisfaction and comprehension: A systematic review. *International Journal for Quality in Health Care*, 29(6), 752–768. <https://doi.org/10.1093/intqhc/mzx121>

Petiprin, A. (2020). *King's theory of goal attainment*. <https://nursing-theory.org/theories-and-models/king-theory-of-goal-attainment.php>

Rholdon, R. (2017). Outcomes of a quality improvement project: An implementation of inpatient infant safe sleep practices. *Pediatric Nursing*, 43(5), 229-232.

Task Force on Sudden Infant Death Syndrome. (2011). SIDS and other sleep-related infant deaths: Expansion of recommendations for a safe infant sleeping environment. *Pediatrics*, 128(5), e1341-1367. doi: 10.1542/peds.2011-2285

Zachritz, W., Fulmer, M., & Chaney, N. (2016). An evidence-based infant safe sleep program to reduce sudden unexplained infant deaths. *The American Journal of Nursing*, 116(11), 48-55. <https://doi: 10.1097/01.NAJ.0000505590.78202.a2>

Appendix A**SIDS PRE-TEST**

Employee ID _____ **(To track pre and posttest and maintain confidentiality)**
Age _____ **Gender** _____ **Ethnicity** _____
Years of Nursing Experience _____

By providing answers on this knowledge survey I am consenting to participation in the SIDS discharge education project. Participation is strictly voluntary and there will be no penalty for incompleteness. Please provide the demographic data above as you feel comfortable. Information will remain confidential.

1. SIDS is:
 - a. Preventable
 - b. Caused by silent vomiting/choking that impairs breathing
 - c. The leading cause of mortality in infants from 1 month to 1 year of age
 - d. Due to child abuse
2. What cultural group has the highest rate of SIDS Death?
 - a. African Americans & Alaskan Natives
 - b. Caucasians and Hispanics
 - c. Hispanics and Pacific Islanders
 - d. There are no racial disparities in SIDS
3. Which of the following factors is thought to protect against SIDS?
 - a. Breastfeeding and pacifier use
 - b. Home monitors and position devices
 - c. Wearable blankets and classical music
 - d. Tummy time

4. The only way for breastfeeding to be successful is by having the mother and baby sleep together.

a. True

b. False

5. It is safest for a baby to sleep:

a. In a crib or bassinet in the parents' room

b. In bed with the parents

c. In a side car or "co-sleeper"

d. In a crib or bassinet in a separate room

e. Does not matter

6. A new father asks the nurse about allowing his baby to sleep in the bed after a 0200 feeding.

How would you respond to the father based on SIDS recommendations?

a. There is no evidence that shows harmful effects from bed-sharing between an infant and an adult.

b. Sharing a bed is acceptable as long as the parents are cautious and make sure no one rolls over on the baby.

c. Room-sharing is ok but not bed-sharing. The infant should be placed in a crib or bassinet close to the parents' bed but not in the adult bed.

d. It is ok for babies to remain in the adult bed if they fall asleep in their parents' beds after feeding.

7. Which statement is correct according to the AAP regarding sleeping in the supine position and the risk of aspiration?

a. The risk of aspiration is high in infants when sleeping supine.

- b. Sleeping supine does not increase the risk of aspiration in infants.
- c. Infants with GERD should be placed prone for sleeping.
- d. Evidence is inconclusive regarding aspiration and sleep positions

8. Which of the following statements is correct?

- a. It is best to bundle the baby with lots of blankets to keep him/her warm.
- b. Sleeping with the baby is the best way to keep him/her warm.
- c. Keeping the room temperature comfortable for a lightly dressed adult is safest for baby.
- d. It is safest to bundle the baby up to the chin with a thick blanket to stay warm.

9. Which of the following constitutes a safe sleeping environment for an infant?

- a. A firm fitting mattress in a safety approved crib along with a positioner wedge to help with reflux, and no stuffed animals
- b. A firm mattress in a safety approved portable crib with one blanket and a small pillow
- c. A soft sleep surface, such as an adult bed
- e. A firm and flat mattress in a safety approved crib, free of loose bedding, crib bumpers and stuffed toys

10. Tummy time should be provided when the infant is:

- a. Awake and irritable
- b. Drowsy and has a full stomach
- c. Awake and supervised
- d. Anytime

11. Exposure to passive smoke in the house (_____) a baby's SIDS risk:

- a. Triples

- b. Doubles
- c. Does not change

12. When modeling Infant Safe Sleep in the hospital setting, nurses have:

- a. Significantly helped to reduce the SIDS risk
- b. Confused the parents since their culture will ultimately determine sleep practices
- c. Eliminated SIDS from occurring

13. The least effective way for the nurse to communicate the safe sleep message is to:

- a. Verbally discuss and then have parents demonstrate
- b. Model the practice so that parents can see the message in action
- c. Have honest discussions about barriers to practice at home
- d. Provide statistical charts and references for parents to read

14. When nurses are speaking to parents and caregivers about SIDS and other sleep related causes of infant death and how to sleep an infant safely, it is important that their message be:

- a. Very detailed
- b. Include medical terminology
- c. Be clear and culturally appropriate
- d. Include statistics

(Cribs for Kids, 2015).

Appendix B**SIDS POST-TEST**

Employee ID _____ (To track pre and posttest and maintain confidentiality)

Age _____ Gender _____ Ethnicity _____
Years of Nursing Experience _____

By providing answers on this knowledge survey I am consenting to participation in the SIDS discharge education project. Participation is strictly voluntary and there will be no penalty for incompleteness. Please provide the demographic data above as you feel comfortable. Information will remain confidential.

Please circle the best answer after completion of the pretest and reviewing the educational tool.

1. SIDS is:
 - a. Preventable
 - b. Caused by silent vomiting/choking that impairs breathing
 - c. The leading cause of mortality in infants from 1 month to 1 year of age
 - d. Due to child abuse
2. What cultural group has the highest rate of SIDS Death?
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 - b. Caucasians and Hispanics
 - c. Hispanics and Pacific Islanders
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 - a. Breastfeeding and pacifier use
 - b. Home monitors and position devices
 - c. Wearable blankets and classical music

d. Tummy time

4. The only way for breastfeeding to be successful is by having the mother and baby sleep together.

a. True

b. False

5. It is safest for a baby to sleep:

a. In a crib or bassinet in the parents' room

b. In bed with the parents

c. In a side car or "co-sleeper"

d. In a crib or bassinet in a separate room

e. Does not matter

6. A new father asks the nurse about allowing his baby to sleep in the bed after a 0200 feeding.

How would you respond to the father based on SIDS recommendations?

e. There is no evidence that shows harmful effects from bed-sharing between an infant and an adult.

f. Sharing a bed is acceptable as long as the parents are cautious and make sure no one rolls over on the baby.

g. Room-sharing is ok but not bed-sharing. The infant should be placed in a crib or bassinet close to the parents' bed but not in the adult bed.

h. It is ok for babies to remain in the adult bed if they fall asleep in their parents' beds after feeding.

7. Which statement is correct according to the AAP regarding sleeping in the supine position and the risk of aspiration?

- e. The risk of aspiration is high in infants when sleeping supine.
- f. Sleeping supine does not increase the risk of aspiration in infants.
- g. Infants with GERD should be placed prone for sleeping.
- h. Evidence is inconclusive regarding aspiration and sleep positions

8. Which of the following statements is correct?

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- c. A soft sleep surface, such as an adult bed
- e. A firm and flat mattress in a safety approved crib, free of loose bedding, crib bumpers and stuffed toys

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- b. Drowsy and has a full stomach
- c. Awake and supervised
- d. Anytime

11. Exposure to passive smoke in the house (_____) a baby's SIDS risk:

- a. Triples
 - b. Doubles
 - c. Does not change
12. When modeling Infant Safe Sleep in the hospital setting, nurses have:
- a. Significantly helped to reduce the SIDS risk
 - b. Confused the parents since their culture will ultimately determine sleep practices
 - c. Eliminated SIDS from occurring
13. The least effective way for the nurse to communicate the safe sleep message is to:
- a. Verbally discuss and then have parents demonstrate
 - b. Model the practice so that parents can see the message in action
 - c. Have honest discussions about barriers to practice at home
 - d. Provide statistical charts and references for parents to read
14. When nurses are speaking to parents and caregivers about SIDS and other sleep related causes of infant death and how to sleep an infant safely, it is important that their message be:
- a. Very detailed
 - b. Include medical terminology
 - c. Be clear and culturally appropriate
 - d. Include statistics

(Cribs for Kids, 2015).

Please answer these questions regarding use of the SIDS discharge education pamphlet that was created.

***Have you used the SIDS Prevention Education pamphlet for patient discharge education since completion of the pretest and reviewing the pamphlet? _____ (Yes/No)**

***How many times would you say you have used the pamphlet for discharge education?**

0-1_____ **1-2**_____ **3-4**_____ **5 or more**_____

Appendix C**SIDS Discharge Education Project Parent Follow-up Questions**

1. Did you receive education regarding SIDS prevention at the time of your baby's discharge from the hospital?
2. Were you given a SIDS prevention pamphlet to take home as a reference?
3. Did you feel this education about ways to prevent SIDS was helpful? Why or why not?
4. What are some ways that you are using the teaching provided to you about safety for safe sleep with your baby at home?
5. Do you have any questions or concerns that were not addressed with the SIDS discharge education?

Appendix DParent Consent to be Contacted after Discharge

Hello and congratulations on your new baby! ☺

My name is Angela Spallinger, MSN, RN and I am currently conducting a project in order to complete my Doctor of Nursing Practice degree. You should receive a SIDS prevention educational pamphlet as part of your discharge teaching before you go home with your baby. I am looking for feedback to see if you found the educational pamphlet to be helpful.

If you consent to be contacted within one month of going home with your baby to answer 5 short questions which should only take approximately 5 minutes, please provide your cell phone number or email address. All answers and information collected is kept confidential and no names will be used. Please indicate your preference of text, phone call, or email. Thank you so much for your help!

Cell phone number:

Email address:

Preferred type of contact: