

Title:

Parental Readiness for Infant Safe-Sleep Interventions

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Session Title:

Infant Safety Interventions

Slot:

O 15: Sunday, 30 July 2017: 1:15 PM-2:00 PM

Scheduled Time:

1:15 PM

Keywords:

Infant Mortality, Parental Readiness and Safe Sleep

References:

Ajzen, I. (2006). The theory of planned behavior. Retrieved from <http://people.umass.edu/ajzen/tpb.diag.html#null-link>

American Academy of Pediatrics. (2016). Reducing sudden infant death with “back to sleep.” Retrieved from <https://www.aap.org/en-us/advocacy-and-policy/aaphealthinitiatives>

Centers for Disease Control and Prevention. (2016). Sudden unexplained infant death and sudden infant death syndrome. Retrieved from <http://www.cdc.gov/sids/data.htm>

Fowler, A. J., Evans, P. W., Etchegaray, J. M., Ottenbacher, A., & Arnold, C. (2013). Safe sleep practices and sudden infant death syndrome risk reduction: NICU and well-baby nursery graduates. *Clinical Pediatrics*, 52(11), 1044—1053.

Gelfer, P., Cameron, R., Masters, K., & Kennedy, K. A. (2013). Integrating “back to sleep” recommendations into neonatal icu practice. *Pediatrics*, 131(4), 1264- 1270.

Knight, J., Webster, V., Kemp, L., & Comino, E. (2013). Sudden infant death syndrome in an urban Aboriginal community. *Journal of Paediatrics and Child Health*, 49(12), 1025-1031.

Abstract Summary:

Readiness to execute infant safe-sleep behaviors during the first year of life impacts infant mortality rates. This study found that beliefs regarding infant safety and improved health for the infant, influence of the mother’s significant other, and ability to limit caregivers in the first year of life supported parental readiness.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to identify factors that support parental readiness for executing safe sleep behaviors.	Theory of Planned Behavior safe sleep survey results indicate behavioral factors that impact safe sleep readiness.

The learner will be able to discuss implications for nursing practice to support readiness for safe sleep behaviors.

Implications for nursing practice when discussing infant safe sleep behaviors with new parents will be presented in the content.

Abstract Text:

Purpose: Infant safe sleep practices and the reduction of Sudden Unexplained Infant Deaths (SUID) is a public health priority in the United States and throughout the world. According to the American Academy of Pediatrics (AAP) (2016), Sudden Infant Death Syndrome (SIDS) is the leading cause of death in children between one month and one year of age, occurs without warning, and is associated with an episode of sleep. The Centers for Disease Control and Prevention (CDC) states approximately 3,500 SUID events occur each year in the United States (2016). The gap in the literature lies in researching parental readiness in executing safe sleep behaviors after discharge from the hospital.

Parents of well newborn and neonatal intensive care (NICU) infants have been studied to identify parental readiness to follow safe sleep guidelines after hospital discharge. Gelfer, Cameron, Masters and Kennedy (2013) studied infants discharged from the NICU to determine if modeling safe sleep practices during the hospital stay would provide a positive influence on parental behaviors regarding safe sleep post discharge. After providing a safe sleep crib card, educational programming for nurses and parents and auditing safe sleep compliance in the NICU setting, parental compliance for safe sleep behaviors post discharge increased by nearly 60% (Gelfer et al.). This study implied parental readiness is influenced by safe sleep observations witnessed in the hospital.

In a longitudinal study conducted by Knight, Webster, Kemp and Comino (2013) 159 mothers were surveyed for readiness to provide safe sleep environments. A higher level of maternal education was associated with identification of two or more SIDS risk reduction strategies in the study (Knight et al., 2013). A review of the literature reveals that parents, specifically ones of certain ethnicities, races, and educational levels, do not provide safe sleep environments during the first year of the infant's life (Knight et al., 2013). A gap in the literature lies in identification of which factors impact parental readiness to execute infant safe sleep behaviors after discharge from the hospital.

This prospective descriptive study identified behavioral perceptions and readiness factors of parents to abide by infant safe sleep practices upon discharge from the hospital in conjunction with implementation of a standardized infant safe sleep education toolkit. The purpose of the study was to identify factors impacting parental readiness to execute infant safe sleep practices related to infant sleep environments in an urban Maternity Center.

Methods: Icek Ajzen's Theory of Planned Behavior (2006) served as the conceptual framework guiding this study. The survey used the Theory of Planned Behavior concepts to survey parental perceptions of executing infant safe sleep guidelines in the first year of the infant's life. Approval for this exempt research study was obtained from the a Midwestern university Institutional Review Board.

The sample included mothers delivering well newborns at an urban Midwestern hospital. Well newborns were defined as stable term (> 37 gestational weeks) or late preterm (34 to 36 gestational weeks) infant admitted to the well newborn unit after delivery and remaining under the care of a well newborn physician until discharge to home from the well newborn unit. Inclusion criteria for the study included the following: mothers must be 18 years of age or older; not incarcerated; gave birth to a well newborn admitted to the Well Newborn Nursery (not admitted to and/or discharged from the Neonatal Intensive Care Unit). Mothers giving birth to an infant receiving care in the Neonatal Intensive Care Unit were also omitted from the study.

After completion of the initial pilot study, the main prospective descriptive study was conducted from January 1st until April 30th, 2016. The study was developed and conducted at a large 700-licensed bed Midwestern hospital on the Mother-Baby unit. The hospital is a Level One Trauma Center and is Magnet designated. The Mother-Baby unit is a 28-bed unit caring for approximately 3,700 infants born annually.

An informational flyer was given to each eligible mother in the Mother-Baby unit describing the study, the topic and investigator's contact information (N= 792). Participants were given the option to opt out of the survey. Surveys were collected by the nursing team upon completion and placed in the locked box on the nursing unit.

The Theory of Planned Behavior (TPB) survey template is a free tool developed by Izek Ajzen and was utilized in the main study to create an infant safe sleep survey. The initial pilot study (n=35) was conducted in August 2015 to determine the constructs for infant safe sleep as related to the theoretical components. Using the results of the pilot study, the initial survey was constructed and tested for reliability. Cronbach's Alpha for the following sections is reported as Section One (Behavioral Beliefs) = 0.708; Section Two (Normative Beliefs) = 0.719; Section Three (Control Beliefs) = 0.751.

The initial draft for the 23-item survey was tested for content and face validity. A panel of five maternal-child medical and nursing experts reviewed the survey for content validity with an 80% return rate that generated feedback regarding the survey content. Additionally, a group of ten patients on the Mother-Baby unit reviewed the survey for face validity. Survey feedback for face validity produced a 100% return rate. The consensus of the patient group was that they understood the theme of the survey to be safe infant sleep and the survey questions described preparing to have safe infant sleep.

The instrument consisted of 23 items designed to analyze Theory of Planned Behavior framework. The main topics addressed in the survey include opinions of infant safe sleep behavioral beliefs, infant safe sleep normative beliefs, and infant safe sleep control beliefs. All items listed in the main survey were generated from the initial pilot study. The participant answered each question using a Likert scale of one to seven.

Demographics of the study sample and correlation of TPB components were calculated from the survey results. Spearman Rho correlation factor was utilized to calculate correlation and level of significance for the data results was reported as $p < 0.01$. The Statistical Package for Social Sciences, version 23, was used to examine statistical findings.

Results: One hundred fifty mothers completed the survey with a completion rate of 18.9%. A relationship between the behavioral beliefs of infant safety and maternal attitude towards infant safety ($r = .406$, $n = 150$, $p < 0.01$) was noted in the survey results. A second association between behavioral beliefs of improved health for infant and maternal attitude towards improved health for the infant ($r = .448$, $n = 150$, $p < 0.01$) was also established in the results. Additional relationships between normative beliefs of the significant other ($r = .461$, $n = 145$, $p < 0.01$) and control beliefs for limiting caregivers ($r = .472$, $n = 146$, $p < 0.01$) were calculated from the data.

The findings from this study revealed significant relationships between behavioral beliefs of the safety of the infant, improved health for the infant and attitudes towards those beliefs. Participants reported positive attitudes towards desiring safety and improved health for the infant. When identifying safe sleep practices as components, Fowler, Evans, Etchegaray, Ottenbacher and Arnold (2013) found parental preference as a barrier to safe sleep with parents reporting they felt safer with the infant in bed with them. The study signifies a need for health professionals to speak to current AAP 2016 recommendations for room sharing instead of bed sharing for the safety of the infant.

Normative beliefs revealed a relationship between safe sleep behaviors and the influence of maternal significant others. The thoughts and influence of a significant other had the most impact of predicting readiness for providing safe sleep behaviors after discharge from the hospital. Control beliefs disclosed

three relationships, however the strongest of the three control behavior constructs was limiting caregivers for the infant. The results found a moderate relationship between limiting caregivers for the infant and being successful in following infant safe sleep behaviors.

When discussing infant safe sleep content with parents, several themes should be included in the delivery for optimal readiness to execute the behaviors. The importance of complying with infant safe sleep behaviors for a positive impact on the infant's health and safety is a motivational factor to enhance readiness for the behaviors. Including the mother's significant other in delivery of the educational component allows for influential people in the mother's life to understand the significance of safe sleep behaviors. Supporting methods to reduce multiple caregivers for the infant in the first year of life or providing means to educate various caregivers regarding infant safe sleep guidelines may support readiness to perform the behaviors.

Conclusion: Factors that affect ability to execute safe sleep behaviors include beliefs of infant safety and improved health. Including key individuals in educational delivery, such as the mother's significant other, can also influence readiness to execute safe sleep behaviors. Healthcare professionals should provide methods to communicate infant safe sleep guidelines to multiple caregivers or ways to reduce the number of caregivers in the first year of life to support readiness for infant safe sleep behaviors.