

Putting Infants to Sleep on Their Back versus Putting Infants to Sleep on Their Sides, or
Stomach, and Which Position Might Increase the Chance of SIDS in Newborns

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Research Question:

Slide 2: This research question was composed to compare different sleeping positions that may increase the risk of SIDS in infants.

Introduction:

Slide 3: This certain subject interests me because I work at a daycare with an infant setting. We were taught in the daycare to never put the infant to sleep on their stomachs, or prone position. We were always to lay them down lying on their backs, or supine position. Although this was not always the daycare's policy until a few years ago, therefore, past daycare employees may have put infants to sleep in other positions not worrying about sudden infant death syndrome, or SIDS. After completing the OB clinical, I was interested in newborn patient education. Many new mothers are taught, prior to discharge, by the nurses the proper teaching methods on how to position their newborns to decrease the risk of SIDS.

Integrated Literature Review:

Slide 4: The Back to Sleep Campaign promotes the supine position as the best position for infants to sleep in to reduce SIDS. Since the 1994 launch of the public health Back to Sleep campaign, SIDS rates have declined more than 50%, to 0.49 deaths per 1,000 live births (Mennick, 2006). Putting infants to sleep on their sides was acceptable in the previous 2000 SIDS guidelines. The new guidelines recommend only placing infants on their backs because a side-sleeper could roll onto their stomachs increasing risk for SIDS (Hauck, 2006).

Slide 5: According to Efe, Sarvan, and Kukulcu (2007), overheating has been associated with increased risk of SIDS among infants sleeping in the prone position, based on indicators such as increased room temperature, high body temperature, sweating, and excessive clothing or bedding. Therefore, if an infant's face is the main route for heat loss, anytime they are lying on their face, or in the prone position, can result in SIDS. Especially if thick clothing or bedding is used, the infant will overheat even more, increasing an even greater chance of SIDS to occur.

The cause of SIDS may be a brain abnormality that affects breathing and arousal reflexes, which might explain why infants who sleep on their bellies are more likely to die from SIDS. In the prone position, an infant's breathing will decrease making it harder to trigger reflexes like head turning and arousal (Palcrui, 2007).

Slide 6: A research study done in newborn nurseries in 8 hospitals in California tested whether nurses were following SIDS guidelines in their practice and teaching parents about infant positioning regarding SIDS. This study showed that 68.4% of the nurses had placed newborn infants on their sides and that they had taught the mothers to place the infants on either their side or back, with reason that side-placement was better due to fear of aspiration. 90.8% of nurses feared aspiration, even though the American Academy of Pediatrics had ruled side positioning as a risk factor for SIDS and not a risk factor for aspiration. In addition, the mothers reported that they were taught by the nurses to use the side or back positions for their infants (Ihlenfeld, 2005). According to Ihlenfeld (2005), This data indicates that immediate reinforcement of positioning recommendations need to be done with nursing staff to emphasize the safety of supine positioning and the risk that side-lying positions have for SIDS. To further reduce the incidence

of SIDS cases, it is imperative that nurses follow established guidelines regarding newborn and infant positioning.

Slide 7: According to Kinney & Thach (2009), risk-reduction recommendations include putting infants to bed in the supine position. After the recognition that sleeping in the prone position was associated with SIDS, attention turned to factors that might trigger infant death in this position. These factors include asphyxia due to airway compression or rebreathing of exhaled gases in the face-down position, impaired heat loss with subsequent hyperthermia when the face is pressed against bedding, impaired cardiorespiratory regulation related to heat stress, and compromised arousal in response to asphyxia generated in the prone position.

Slide 8: Side-lying used to be considered a safe infant sleeping position like supine is, but with release of the latest recommendations from the American Academy of Pediatrics, “infants should be placed for sleep in a supine position (wholly on the back) for every sleep. Side sleeping is not as safe as supine sleeping and is not advised” (Moos, 2006).

Slide 9: SIDS is the leading cause of death among infants between the ages of 1 month and 1 year. Prone sleeping is a major, preventable risk factor. Since recommendations were made in the United States for infants to be placed supine for sleep the rate of SIDS cut completely in half, decreasing by more than 50% (Ostfeld, 2006).

Clinical Implications:

Slide 10: Many of the articles I found had supportive evidence of supine position being the safest sleeping position for infants in the prevention of SIDS. The negative risks of prone sleeping such as overheating and compromised breathing are some of the reasons why prone position is a major cause for SIDS. With the knowledge we have today about the safety of supine position and

risk of side-lying and prone positions it is crucial that we, as nurses, use this information while in practice and when educating patients about the proper positioning to further prevent SIDS from occurring.

Suggestions for Future Research:

Slide 11: Harris, K., Rutherford, G.W. and B.T. Thach (2007) found that crib and bassinet bumpers are dangerous and only prevent minor injuries.

Slide 12: Although pacifier use is not understood how it could be protective against SIDS yet, it is being researched. Some studies have shown that infants who use a pacifier during sleep have a lower arousal threshold, meaning that they would awaken more easily if experiencing life-threatening obstructive apnea, cardiac arrhythmia, or hypoxia. Other explanations concluded that pacifier use allowed infants to become accustomed to mouth breathing if their nose were to become obstructed, which would encourage a forward tongue position that would decrease the risk of obstruction by the tongue, or discourage the prone sleeping position (Damato, 2007).

Other areas that warrant future research include: Type of surface the infant is sleeping on, pillow/stuffed animal toy use, bumper pad use, parents/siblings sharing the bed with the baby, baby being swaddled at night, excessive cover use, and parental smoking. It would be interesting to follow up on this study and research if the use of pacifiers would help decrease the risk of SIDS.

Slide 13: Future research study populations/designs could include: large case-controlled studies of infants you died before their first year of living, examining obstetric records, interviewing the parents to evaluate their education on infant care, observational studies, and comparing research with sampled control subjects. SIDS is a difficult research topic and many researchers face

significant challenges when designing research study about SIDS (Damato, 2007). Large sample sizes would be required to test the relationship of negative factors and SIDS, and therefore, the best evidence available about SIDS comes from observational studies (Hauck, 2006).