Safe Sleep for Babies

Why are Blankets, Pillows and Stuffed Animals, Bad for your Babies?

The Longitudinal Infant Family Environment (LIFE) Study

Why Do Doctors Tell Parents Not to Put Stuffed Animals and Soft Bedding in Their Babies' Cribs?

Keeping loose and soft bedding out of your baby's sleep area is always the safest option. Soft bedding, such as pillows, blankets, toys, or crib bumpers can limit your baby's access to fresh air and unnecessarily increase the risk of suffocation, a leading cause of Sudden Unexpected Infant Death (SUID). SUID refers to the death of an infant less than 1–year old that occurs suddenly and unexpectedly. The American Academy of Pediatrics (AAP) recommends keeping soft and loose bedding out of infants' sleep areas.

SUID accounts for approximately 3,500 deaths in the United States annually. While previous nationwide SUID prevention efforts centered on promoting safe sleep positions (e.g., the Back to Sleep campaign) were successful in decreasing SUID rates in the U.S., the decline has stagnated in recent years. Addressing the risks associated with the use of soft and loose bedding in the infant's sleeping area has been suggested as a potential direction to further decrease SUID rates.

AAP recommendations on creating a safe sleep environment include:

- Place the baby on their back on a firm sleep surface, such as a crib or bassinet, with a tight-fitting sheet.
- Avoid use of soft bedding, including crib bumpers, blankets, pillows, and soft toys. The crib should be bare.
- Share a bedroom with parents, but not the same sleeping surface, preferably, until the baby turns 1 but at least for the first six months. Room—sharing decreases the risk of SUID by as much as 50%.
- Avoid baby's exposure to smoke, alcohol and illicit drugs.



Infant death studies reveals that loose and fluffy bedding is quite dangerous

Over 50% of caregivers reported using soft or loose bedding, such as blankets, pillows, or stuffed toys.⁴ Research has, however, shown that the use of soft or loose bedding increased the risk for SUID.⁵ For example, in a study that analyzed 1,736 cases of accidental suffocation and strangulation in bed (ASSB), 25% of ASSB was due to a pillow, 21% to loose mattresses, and 13% to blankets use.³

Introducing the Longitudinal Infant and Family Environment (L.I.F.E.) Study

The LIFE Study was designed in an effort to decrease SUID in Virginia. The LIFE program include: (a) online psychoeducation focused on infant safe sleep and safe home environment, (b) distribution of Baby Boxes to families, and (c) postpartum home visit by pediatric nurses.

Surveys asking about safe sleep practices and home environment, including knowledge of risk and protective factors for SUID, were distributed to participants in the hospital (baseline) and 7 days after discharge (follow-up). As of March 25, 2019, 750 participants completed baseline survey and 505 completed the 7-day follow-up.

The LIFE Study funded by VDSS

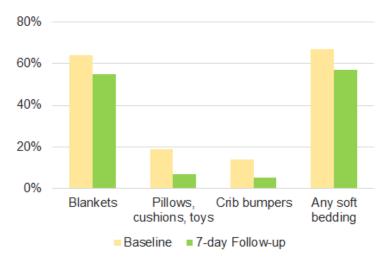
Who are the LIFE study participants?

The mean age of the participants was 28 years (18 – 47 years). The sample consisted predominantly of African American (56%) and Caucasian (30%) participants. The most frequently reported education level was a high school diploma or GED (53%), followed by a bachelor's degree (19%). Approximately half of the participants reported household income lower than \$25,000.

LIFE intervention was effective in removing soft or loose bedding from babies' sleep areas.

Prior to the LIFE intervention, over two-thirds of caregivers (67%) said that they planned to use soft bedding in their infant's sleeping area, including blankets (64%), pillows, cushions, or toys (19%), and crib bumpers (14%). At the 7-day follow-up, the percentages of soft bedding use significantly decreased to 55% for any soft bedding (p \langle .001), 7% for pillows, cushions, or toys (p \langle .001), and 5% for crib bumpers (p = .001; Figure 1).

Figure 1
Comparison of unsafe items use on paired surveys



Based on these findings, the LIFE intervention was effective in addressing accidental suffocation and asphyxiation hazards associated with the use of unsafe items in the infant's sleep area.



Conclusion

Previous interventions and public awareness campaigns have been successful in increasing safe sleep practices and knowledge in caregivers. However, additional efforts need to be made to address the recent stagnation in the decrease of SUID rates. The LIFE Study was launched with the aim to educate caregivers about safe sleep practices and risk factors for SUID, as well as provide them with a baby box to ensure access to safe sleep environments. The preliminary findings suggested that targeting accidental suffocation and asphyxiation risks associated with loose and soft bedding in the infant's sleep area might be an avenue for further decreasing SUID rates.

References

1 Centers for Disease Control and Prevention (January 2018). Safe sleep for babies. Retrieved from https://www.cdc.gov/vitalsigns/pdf/2018-01-vitalsigns.pdf

2 Lambert, A. B. E., Parks, S. E., & Shapiro-Mendoza, C. K. (2018). National and state trends in sudden unexpected infant death: 1990 – 2015. Pediatrics, e20173519. DOI: 10.1542/peds.2017-3519

3 Gaw, C. E., Chounthirath, T., Midgett, J., Quinlan, K., & Smith, G. A. (2017). Types of objects in the sleep environment associated with infant suffocation and strangulation. Academic Pediatrics, 17(8), 893 – 901. DOI: 10.1016/j.acap.2017.07.002

4 Shapiro-Mendoza, C. K., Colson, E. R., Willinger, M., Rybin, D. V., Camperlengo, L., & Corwin, M. J. (2015). Trends in infant bedding use: National Infant Sleep Position Study, 1993 – 2010. Pediatrics, 135(1), 10 – 17. DOI: 10.1542/peds.2014–1793

5 Moon, R. Y., & Hauck, F. R. (2015). Hazardous bedding in infants' sleep environment is still common and a cause for concern. Pediatrics, 135(1), 178 – 179. DOI: 10.1542/peds.2014–3218

6 Moon, R. Y., Hauck, F. R., & Colson, E. R. (2016). Safe infant sleep interventions: What is the evidence for successful behavior change? Current Pediatric Reviews, 12, 67–75. https://dx.doi.org/10.2174%2F1573396311666151026110148

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