Impaired Caregivers, Bed Sharing Raise Risk of Sudden Unexplained Infant Death in Infants Born with Prenatal Drug Exposure

Study by Nemours Children's Health researcher finds 1 in 4 deaths of prenatally exposed infants involved caregivers who were both impaired and bed sharing at infant's time of death, suggests tailored messages to these caregivers are critical

WILMINGTON, Del. (November 19, 2024) —Babies who are prenatally exposed to illicit drugs or alcohol are known to be at higher risk for sudden unexpected infant death (SUID). A new study by a Nemours Children's Health researcher published in *Pediatrics*, a journal of the American Academy of Pediatrics, showed that caregivers of prenatally exposed infants were twice as likely to be impaired at the time of death.

"As the drug epidemic continues in the United States, about 8% of births are affected by prenatal exposure to illicit drugs," explained lead author Stephanie A. Deutsch, MD, MS, Director of the Nemours CARE (Children at Risk Evaluation) Program at Nemours Children's Health, Delaware Valley. "These infants face challenges from the beginning, including a higher risk of sudden unexplained death."

The term SUID encompasses sudden infant death syndrome (SIDS) and certain other accidental causes of death. Deutsch, Associate Professor of Pediatrics at Sidney Kimmel Medical College of Thomas Jefferson University, said previous research has suggested that the higher rates of SUID in prenatally exposed infants may stem from bed sharing, or from poor decision-making in a caregiver who is under the influence of drugs or alcohol. She and colleagues wanted to further understand the risk factors affecting prenatally exposed infants, hoping to educate caregivers about ways to reduce fatalities.

In this study, Deutsch and colleagues examined de-identified data from the Centers for Disease Control and Prevention's SUID and Sudden Death in the Young case registry. They studied reports on 2,010 infants who had died unexpectedly between 2015 and 2020, categorizing the deaths according to prenatal exposure to drugs or alcohol. Data was based on parental reporting and on maternal and neonatal laboratory test results at time of birth.

The researchers also identified the caregivers at the time of death and characterized the sleep setting, for example, bed vs. crib; alone or with a caregiver.

Key findings:

- Of the 2,010 infants in the study, 14% had been born with prenatal exposure to drugs or alcohol.
- Among babies who were born prenatally exposed, 34% of caregivers were impaired when the infant died, compared with 16% of the caregivers of nonexposed infants. Among the caregivers who were impaired, 75% of them were also bed sharing.
- 52% of sudden unexplained infant deaths took place in adult beds.
- In 53% of the deaths, the baby was sharing the bed with an adult. In 16% of the cases, the baby was sharing with another child.
- 50% of caregivers were asleep, and 19% were impaired at the time of infant death.
- However, among babies who were born prenatally exposed, 71% of caregivers were asleep at the time of death, compared with 46% of the caregivers of babies who were not prenatally exposed.
- Overall, 1 in 4 deaths of prenatally exposed infants involved caregivers who were both impaired and bed sharing.

Deutsch said this study indicates that immediate, targeted efforts to prevent SUID in infants who were prenatally exposed to drugs are needed. Such efforts should not stigmatize the caregivers, she cautioned.

"Pediatricians and primary care providers should deliver clear messages to the parents, family members and other caregivers of babies who were prenatally exposed," she said. "These messages should be culturally relevant, sensitive and easily understandable."

Most urgently, Deutsch said, caregivers should be discouraged from bed-sharing and from using substances while taking care of children. Additionally, babies should have their own space for sleeping, rather than sharing with a sibling or another child.

Expectant mothers with substance use disorders should be informed of drug treatment resources. Deutsch also suggested that if possible, caregivers should ask a nonimpaired person to provide support and assume primary responsibility for infants if they struggle to maintain sobriety.

Additionally, public health nurses, social workers and home visitor programs could help ensure safe sleeping practices and provide helpful resources to vulnerable families.

Finally, Deutsch said health care professionals should help make sure that caregivers have access to safe sleep spaces. Community-based or government crib distribution programs are available for those in need, she added.

Deutsch noted that the study definition of “impairment” may include causes beyond substance-related impairment. However, the disproportionate rates of impairment in caregivers of prenatally exposed infants suggest a unique vulnerability that merits further study.

She also cautioned that families with prenatally exposed infants often face multiple social adversities. Efforts to improve overall health and socioeconomic status for these families may also help reduce the risk of SUID, she said.

About Nemours Children's Health

Nemours Children’s Health is one of the nation’s largest multistate pediatric health systems, which includes two freestanding children's hospitals and a network of more than 70 primary and specialty care practices. Nemours Children's seeks to transform the health of children by adopting a holistic health model that utilizes innovative, safe, and high-quality care, while also addressing children’s needs well beyond medicine. In producing the highly acclaimed, award-winning pediatric medicine podcast Well Beyond Medicine, Nemours underscores that commitment by featuring the people, programs and partnerships addressing whole child health. Nemours Children's also powers the world’s most-visited website for information on the health of children and teens, Nemours KidsHealth.org.

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