Bed-Sharing with Infants in Oklahoma

Sleep-related injury remains one of the most common causes of infant death in Oklahoma. To reduce sleep-related deaths, including SIDS (Sudden Infant Death Syndrome) and suffocation, asphyxia, and entrapment, the Oklahoma State Department of Health (OSDH) endorses the recently revised 2011 American Academy of Pediatrics (AAP) recommendations for a safe infant sleeping environment.¹

The AAP has recommended that infants sleep on their backs, on a firm sleep surface, away from soft bedding, have no exposure to tobacco smoke, and that parents abstain from alcohol and illicit drugs. Additionally, the AAP has found that breastfeeding, room-sharing without bed-sharing, and routine immunizations are protective against SIDS and other sleep-related deaths.¹ This PRAMS Brief will address infant bed-sharing in Oklahoma.

According to 2009 PRAMS data, 29.0% of Oklahoma infants never shared a bed or other sleep surface with another person whenever they slept or napped (Figure 1). Almost 21% always bed-shared. Twenty-two percent bed-shared 1-2 times per week, 11.3% indicated 3-4 times per week, and 16.6% indicated five or more, but not always.

To determine factors associated with bed-sharing, responses were combined into three groups – never bed-shared, occasionally bed-shared (1-5 or more times per week but not always), and always bed-shared.

Race, Hispanic origin, age, education, and Medicaid/SoonerCare status were all significantly associated with bed-sharing. White mothers were significantly less likely to report always bed-sharing with their infants when compared to African American mothers (17.6% vs. 36.5%, respectively).

Figure 1. Frequency of Bed-Sharing Among Oklahoma Infants, PRAMS 2009

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>29.0%</td>
</tr>
<tr>
<td>1-2 times/week</td>
<td>22.3%</td>
</tr>
<tr>
<td>3-4 times/week</td>
<td>11.3%</td>
</tr>
<tr>
<td>5+ times/week</td>
<td>16.6%</td>
</tr>
<tr>
<td>Always</td>
<td>20.8%</td>
</tr>
</tbody>
</table>

Oklahoma Facts

› One in five (20.8%) Oklahoma infants shared a sleeping surface with someone (bed-shared) every time they slept or napped.
› 29.0% of infants never bed-shared.
› More than one in three African American women (36.5%) reported their infants always bed-shared.
› Hispanic mothers were twice as likely as non-Hispanic mothers to report always bed-sharing (37.1% vs. 18.4%).
› One in four women with Medicaid/SoonerCare indicated infant bed-sharing always.
› Mothers aged 30 years and older were more likely to report never bed-sharing (35.4%) compared to mothers under the age of 20 (16.6%).
› 34.5% of infants born to mothers with more than a high school education never bed-shared.
› Breastfeeding status at 6 weeks of age was not significantly associated with bed-sharing.
Rates of always bed-sharing among Hispanic mothers were twice that of non-Hispanic mothers (37.1% vs. 18.4%, p < 0.001).

As seen in Figure 2, maternal age was associated with the likelihood of bed-sharing. Mothers less than 20 years of age were significantly more likely to always bed-share with their infants, compared to mothers 20-29 and 30 years and older (p < 0.006). Approximately half of women in all three maternal age groups bed-shared occasionally.

Socioeconomic status was another indicator for bed-sharing. Education status among women 18 years and older was significantly associated with bed-sharing. Mothers with less than a high school education were significantly more likely to report always bed-sharing than women with more than a high school education (37.0% vs. 12.8%, p < 0.0001). Conversely, women with more than a high school education were more likely to report never bed-sharing compared to women with less than a high school education (34.5% vs. 20.6%, p <0.0001). Mothers under 18 were excluded from the education analysis.

Mothers with Medicaid/SoonerCare always bed-shared at approximately twice the rates of mothers without Medicaid/SoonerCare (25.6% vs. 13.4%, p <0.0001). Half of the mothers in both groups occasionally bed-shared. Almost one in four with Medicaid/SoonerCare (24.1%) never bed-shared compared to 36.8% of those without Medicaid/SoonerCare.

Mothers with annual incomes less than $10,000 were significantly more likely to report their infants always bed-shared when compared to mothers with annual household incomes of $50,000 or more (27.1% vs. 15.5%, p < 0.010).

Parity, birth weight, gestational age, receipt of prenatal counseling on safe sleep, and breastfeeding status at six weeks of age were not significantly associated with bed-sharing.

References:

“We sleep on our bed and he sleeps on his crib but in the same room”
- PRAMS Mom

Acknowledgements

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PRAMS is a population-based surveillance system about maternal behaviors and experiences before, during, and after pregnancy. Approximately 250 mothers are selected to participate in Oklahoma each month. Mothers are sent as many as three mail questionnaires seeking their participation with follow-up phone interviews for non-respondents. Information included in the birth registry is used to develop analysis weights that adjust for probability of selection and non-response. Prevalence rates were calculated and the potential risk factors were identified using the Cochran-Mantel-Haenszel Chi-Square ($\chi^2$) Test. The sample size for 2009 was 3,008 with a response rate of 69.9%.