

Infant Bedsharing among Low-Income Mothers in New York City: Prevalence, Correlates, and Added Risks

**Terry J. Rosenberg, PhD, Lindsay Senter, MPH,
Marjorie McMeniman, PhD, Lorraine Boyd, MD, MPH,
Mary Ann Chiasson, DrPH**

APHA Annual Meeting, November 5, 2007

Rationale for Concern

Bedsharing can be hazardous to an infant due to the potential risks of wedging, overlay, suffocation, and infant mortality.

Added risk factors for adverse outcomes of bedsharing include mother's overweight / obesity, smoking, and drinking.

Definitions

- **Bedsharing** – an adult or older child sharing a sleep space with an infant
- **Overweight** – BMI from 25 to 29*
- **Obese** – BMI of 30 or more*
- **Substance use** – self-reported tobacco or alcohol use in the past six months

* BMIs were computed from self-reported height and weight.

Overview

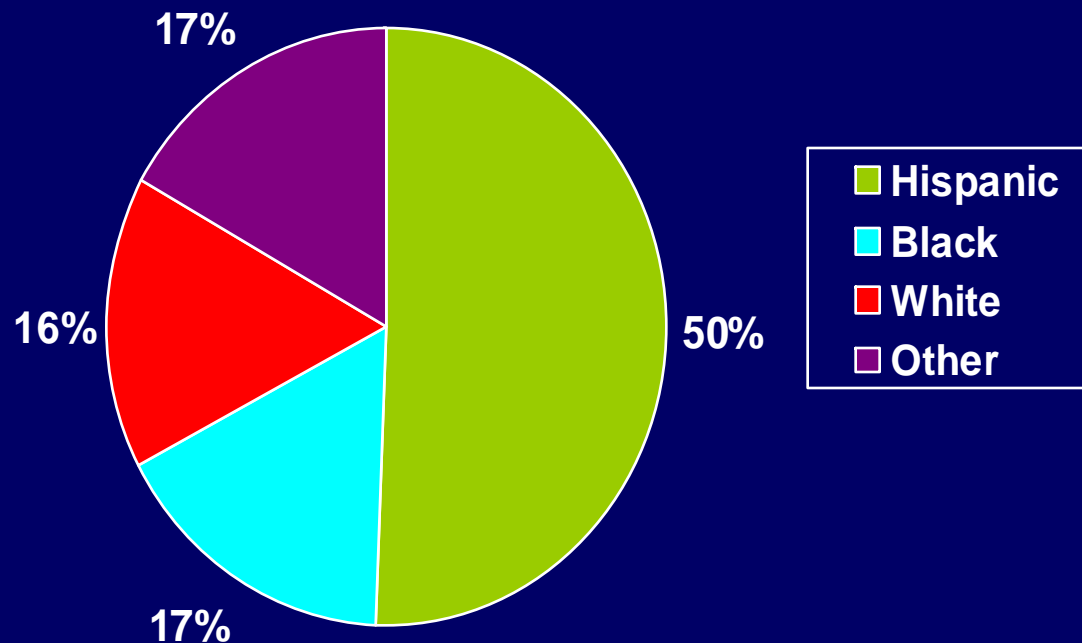
- **Data** – 178 English or Spanish-speaking mothers with singleton infants 1-year-old or younger recruited from 2 WIC sites in NYC
- **Goal** – To characterize the prevalence of bedsharing and its correlates; to measure additional risk factors for adverse outcomes
- **Methods** – Chi-square; logistic regressions to predict bedsharing
- **Note** – Both nighttime and daytime bedsharing were examined for the period when the infant was less than 3 months old

Overview of Analyses

Key variables

- Demographics
- Information about best infant sleeping location and position
- Sources of information about best infant sleeping location and position
- Bedsharing practices – when and where
- Other risks – mother's overweight/obesity, smoking, drinking

Distribution of Respondents by Race/Ethnicity* (N=178)



*Foreign-born women were 67% of the total, from 27 different named countries. Mexico, the Dominican Republic, and Ecuador were the top three foreign birthplaces.

Other Demographic and Health Factors (N=178)

Mother's age (mean)	26.6 years
Infant's age (mean)	3.7 months
Less than high school	33%
Not married	54%
Cesarean delivery*	27%
Ever breastfed*	73%
Regular source of pediatric care*	98%

* These all refer to the current pregnancy and the youngest infant. 7

Infant Sleeping Information and Practices (N=178)

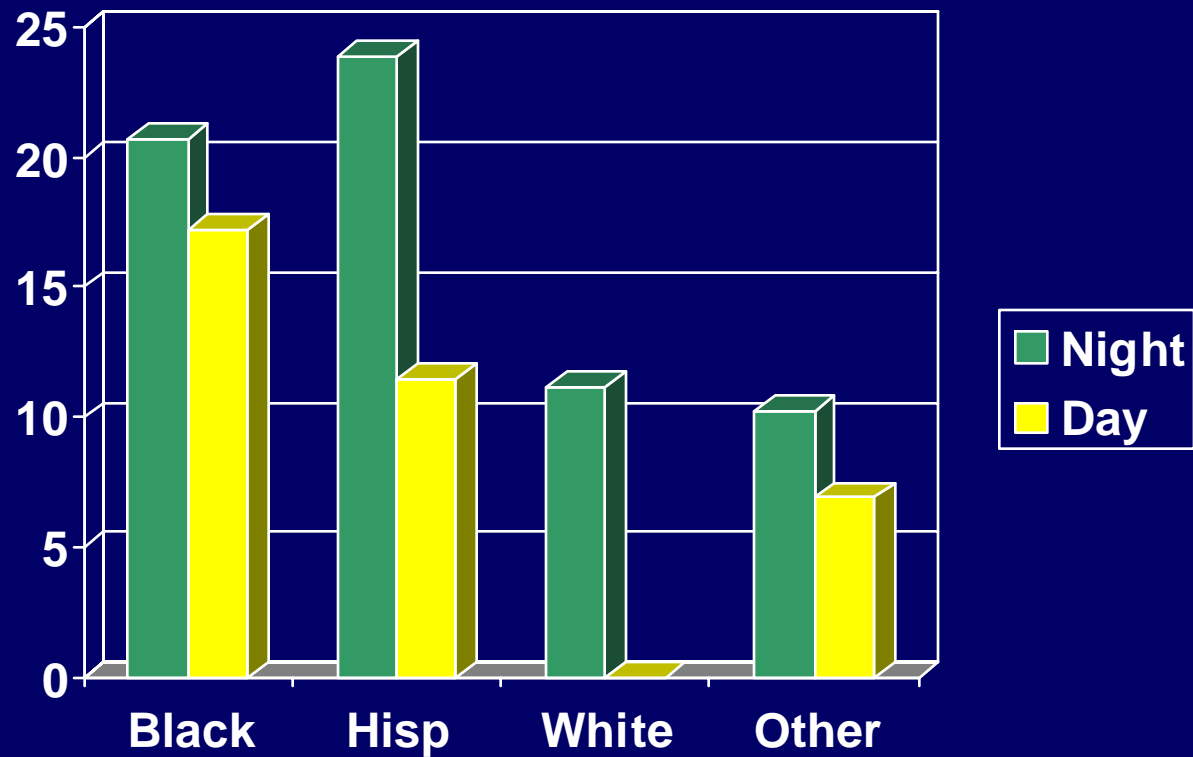
Ever received information	72%
From doctor or nurse	55%
From grandmother	44%
Crib, bass., etc. = best place	89%
In mother's bed = best place	7%
Nighttime bedsharing*	19%
Daytime bedsharing*	10%
Any bedsharing*	24%

•Of the nighttime bedsharers, 24% also shared a bed during the day compared to 6% of those who did not share a bed at night. 8

Factors Related to Doctor/Nurse as Source of Information (N=178)

Race/Ethnicity (p=.03)	
Black	72.4%
White, Hisp., Other	52.1%
Birthplace (p=.001)	
US-born	74.1%
Foreign-born	45.8%
Education (p=.03)	
GE high school	60.5%
LT high school	44.1%

Bedsharing by Race/Ethnicity (N=178)*



*Chi-squares are not significant.

Bedsharing by Cesarean Delivery (N=178)

Nighttime (p=.10)	
Cesarean	26.5%
No Cesarean	16.3%
Daytime (p=.02)	
Cesarean	18.4%
No Cesarean	6.2%

NOTE: In the bivariate analyses for nighttime and daytime bedsharing there were no other variables which reached statistical significance.

Logistic Regression Analysis for Nighttime Bedsharing (No or Yes) (N=152)*

Variable	Adjusted Odds Ratio	95% Conf. Interval
Age - LT 27	1.7	0.7 - 4.2
Brthpl - US	0.8	0.3 - 2.4
R/Eth - Black	1.4	0.4 - 5.2
Lang - Span	1.8	0.6 - 5.4

* All variables were dichotomous.

Logistic Regression Analysis for Nighttime Bedsharing (cont.)*

Variable	Adjusted Odds Ratio	95% Conf. Interval
Educ - LT HS	0.9	0.3 – 2.7
Marital - Not married	1.3	0.5 – 3.2
Cesarean - Yes	2.2	0.9 – 5.3
Breastfed - Yes	1.7	0.6 – 4.6

* All variables were dichotomous.

Significant Predictors from Logistic Regression Analysis for Daytime Bedsharing (N=152)*

Variable	Adjusted Odds Ratio	95% Conf. Interval
R/Eth - Black	5.2	1.1 – 25.8
Cesarean - Yes	3.6	1.2 – 10.7

*The same predictors were used in this regression that were used in the nighttime bedsharing analysis.

Prevalence of Factors that are Associated with Increased Risk of Adverse Outcomes while Bedsharing (N=43 Bedsharers)



NOTE: Among nighttime bedsharing mothers 40.9% had one or more of these risk factors. Among daytime bedsharing mothers 31.3% had one or more of these risk factors.

Conclusions

- **Grandmothers are a very important source of information about the best infant sleeping practices.**
- **While few women report that sleeping with an adult or another child is the best place for an infant to sleep, almost three times this figure bedshare at night (19%).**
- **Women who have a Cesarean delivery are more likely to bedshare.**
- **There is a subgroup of bedsharing women who also have other behavioral risks.**
- **The small sample size for this study limited the finding of statistically significant subgroup differences.**

Recommendations

- **Healthcare providers should be encouraged to talk with women of reproductive age about the best infant sleeping practices.**
- **An educational program about the best infant sleeping practices should go beyond traditional healthcare settings.**
- **Subgroups of women with behavioral risks---obesity, smoking, and drinking---require special attention in an educational program about the best infant sleeping practices.**