

Infant-Parent Bed Sharing in an Inner-City Population

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Background: In the United States, infant-parent bed sharing is a controversial and poorly understood practice. Proponents cite potential advantages such as increases in bonding and facilitation of breastfeeding, whereas opponents cite potential increases in risks of suffocation and sudden infant death syndrome, particularly among mothers who smoke. Few studies have examined normative practices in low-income populations.

Objectives: To describe sleep practices in a cohort of infants born to predominantly low-income, inner-city mothers, to examine stability in sleep practices during the first 7 to 12 months of life, and to identify factors associated with bed sharing.

Design and Setting: Prospective birth cohort study in the District of Columbia, with recruitment taking place between August 1995 and September 1996 and follow-up from November 1995 to September 1997.

Participants: Maternal-infant pairs were systematically selected from 3 hospitals. We interviewed 394 mothers shortly after delivery and at 3 to 7 months post partum. Of these, 369 were interviewed again at 7 to 12 months post partum.

Main Outcome Measure: Usual bed sharing.

Results: At age 3 to 7 months (mean age, 129 days), 201 infants (51%) usually slept alone and 191 (48%) usually slept in a bed with a parent or other adult. Similarly, at age 7 to 12 months (mean age, 262 days), 190 infants (51%) usually slept alone and 175 (47%) usually slept in a bed with a parent or other adult. Of the infants who slept with a parent or other adult at age 3 to 7 months, 75% continued to do so at age 7 to 12 months. Similarly, of infants who usually slept alone at age 3 to 7 months, only 22% were reported to be usual bed sharers at age 7 to 12 months. In multivariate analyses, factors associated with bed sharing at both follow-up interviews included single marital status of the mother (first interview: odds ratio [OR]=1.90; 95% confidence interval [CI], 1.11-3.27; second interview: OR=1.81; 95% CI, 1.02-3.25) and 1 or more moves since the birth of the infant (first interview: OR=1.82; 95% CI, 1.10-3.01; second interview: OR=1.73; 95% CI, 1.05-2.86). Breastfeeding and household crowding were not significantly associated with bed sharing.

Conclusions: Bed sharing was common in this inner-city population, and sleep practices were relatively stable during the first 7 to 12 months of life. These findings underscore the need for additional research clarifying the benefits and risks of bed sharing.

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INFANTS SLEEPING in a bed with their parents, a practice referred to as bed sharing, is controversial and has recently been the topic of impassioned debate.¹⁻¹⁰ Opponents cite increased risks of accidental suffocation, usually caused by entrapment of the infant between the mattress and an adjoining wall, between the mattress and headboard or footboard of the bed, or by a parent, other adult, or child lying on top of the infant.^{11,12} Additionally, several studies have found that bed sharing is associated with an increased risk of sudden infant death syndrome (SIDS), but only among the subset of infants whose mothers smoke.^{9,13-17} Others emphasize the potential advantages of bed sharing including increased parent-infant bonding, facilitation of breastfeed-

ing, and long-term psychological outcomes such as increased self-esteem and discipline.¹⁸⁻²² It has been suggested that bed sharing may even decrease the risk of SIDS by increasing infant arousals, decreasing the time spent in deep sleep, and increasing maternal awareness of the infant.²³⁻²⁷ Although no epidemiologic studies have reported protective effects of bed sharing with respect to SIDS, studies have found a decreased risk of SIDS among infants who sleep in the same room as their parents.^{13,15}

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A recent task force of the American Academy of Pediatrics concluded that the data were insufficient to draw clear conclusions about the safety of bed sharing but did

state that bed sharing may be hazardous in certain conditions.²⁸ In contrast, in 1999, the US Consumer Product Safety Commission advised against the practice of placing infants to sleep in adult beds, either alone or with another person.²⁹ Physicians are often called on to advise parents about bed sharing despite a lack of clear understanding of the prevalence or associated risks.

To understand the relevance of bed sharing at a public health level, it is necessary to determine the prevalence of this behavior in the population. This may be particularly important for low-income families and other populations known to be at increased risk for SIDS. The purpose of our study was to (1) determine the prevalence of bed sharing in a cohort of infants born to predominantly low-income, inner-city mothers; (2) examine stability in sleep practices during the first 7 to 12 months of life; and (3) identify factors associated with bed sharing.

METHODS

The primary focus of this cohort study was to identify determinants, as measured at birth, of immunization and other infant care practices. Detailed study methods have been reported previously.^{30,31} In brief, mothers with singleton births were recruited shortly after delivery from 3 hospitals in the District of Columbia. Two of the hospitals had a high prevalence of low-income patients, and enrollment at the third site was limited to patients cared for by staff physicians to capture a sample of low-income, inner-city patients. Infants were excluded if they had birth weights less than 1800 g, had major congenital malformations, or were not placed in the mother's care after discharge from the hospital. Mothers who were incarcerated at the time of the baseline interview were also excluded. Mothers were enrolled between August 1995 and September 1996 and were interviewed 3 times: shortly after delivery, at 3 to 7 months post partum, and at 7 to 12 months post partum. Mothers approached for enrollment were given a layette set. Additionally, those who completed follow-up interviews were given \$25 for each interview. Most follow-up interviews (91%) were face-to-face. The study was approved by the institutional review boards of all participating study sites and collaborating institutions. Informed consent was obtained from study participants at the time of enrollment.

SLEEP PRACTICES

At both follow-up interviews, mothers were asked about their infants' usual sleep practices and those on the night prior to the interview. For example, mothers were asked, "Where does [baby's name] usually sleep?" and "Where did [baby's name] sleep last night?" Response choices read to mothers included the following: alone, in a bed with a parent, in a bed with another child, in a bed with another adult, and other [specify]. Respondents were also asked about the room in which the infant slept. For these questions, interviewers were instructed to circle all that applied. Additionally, mothers were shown a card and asked to circle the type of place where the infant slept. Choices listed on the card included the following: crib, bassinet, cradle, carry cot or travel bed, adult bed or mattress, sofa, playpen, car seat or infant seat, cot, drawer, box, and floor.

In bivariate and multivariate analyses, infants were considered to be bed sharers if they usually slept with a parent or another adult. More than 1 response (eg, usually slept alone and usually slept in a bed with a parent) was given by 32 mothers (8%) at infant age 3 to 7 months and 20 mothers (5%) at 7 to 12 months. At each interview, if at least 1 of the responses

included usually sleeping with a parent or other adult, the infant was considered to be a usual bed sharer.

INDEPENDENT VARIABLES

Information was obtained from abstraction of hospital records and from maternal interviews, as previously described.³⁰ Information about potentially sensitive topics (eg, maternal depression or persons in the home with drug or alcohol problems) was obtained through self-administered questionnaires. Variables that might change with time, such as maternal employment, marital status, and breastfeeding practices, were measured at all 3 interviews. Exceptions included life stressors, which were measured only at the second follow-up interview, and infant sleep position, which was measured only at the first follow-up interview.

Several measures were designed to collect information about constructs related to immunization (eg, perceived benefits of immunization) and thus were not relevant to this analysis. However, 2 measures were thought to be potentially meaningful with respect to bed sharing: an 18-item scale adapted from the scale of Beautrais et al³² that measured stressful life events, and a 6-item scale adapted from that of Kandel and Davies³³ that measured maternal depression. For these 2 variables, if more than one third of the responses in a given scale were missing or answered "don't know," the observation was eliminated. This resulted in the elimination of 5 observations from the first follow-up interview and 3 from the second. For both scales, the distribution of scores was divided into tertiles with about a third of respondents in each group; these scales were then treated as ordinal variables.

ANALYSES

Because we were interested in factors associated with bed sharing rather than predictors of bed sharing, concurrent associations were examined whenever possible. In unadjusted analyses, associations between independent and outcome variables were assessed using the χ^2 test or Fisher exact test for categorical variables, the Cochran-Armitage trend test for ordinal variables,³⁴ and the *t* test for continuous variables. Factors significantly associated with the outcome at $P \leq .10$ in bivariate analyses were introduced into multivariate logistic regression models with usual bed sharing as the outcome. A stepwise selection algorithm, with $P = .10$ specified as the exit value, was used to select variables that made an independent contribution to the model. Statistical tests were interpreted in a 2-tailed fashion to estimate *P* values.

RESULTS

STUDY POPULATION

Of the 518 eligible mothers, 452 (87%) agreed to participate and were interviewed at baseline. Of the 452 mothers interviewed at baseline, 395 completed the first follow-up interview; of these, 370 completed the second follow-up interview. The mean ages of the infants at the time of the first and second follow-up interviews were 129 days (median age, 120 days; range, 90-228 days) and 262 days (median age, 251 days; range, 213-381 days), respectively. Two mothers reported that they did not live with their infants (1 who completed only the baseline and first follow-up interviews and 1 who completed all 3 interviews) and thus were excluded from the analyses.

Mothers enrolled in the study were predominantly African American/non-Hispanic (82%) and unmarried (73%), and 68% reported household incomes lower than the federal poverty level³⁵ (**Table 1**). Maternal-infant pairs en-

Table 1. Sociodemographic Characteristics of Mothers and Infants Enrolled in the Study*

Characteristic	No. (%)
Maternal race	
African American, non-Hispanic	370 (82)
Hispanic	73 (16)
Other	9 (2)
Marital status†	
Married	122 (27)
Single	329 (73)
Household income‡	
Lower than poverty line	289 (68)
Higher than poverty line	135 (32)
Maternal education, y	
<12	192 (42)
≥12	260 (58)
Maternal age, y	
<20	97 (22)
≥20	354 (78)
Maternal employment	
Working	171 (38)
Not working/student	277 (62)
Infant sex	
M	237 (52)
F	215 (48)
Birth weight, g	
1800-2499	46 (10)
≥2500	404 (90)
Delivery mode	
Cesarean	98 (22)
Vaginal	349 (78)

*Includes data obtained from the 452 mothers who were interviewed at baseline. Numbers do not total 452 because of missing values.

†Respondents living with a partner are included in the married category.

‡Poverty was based on family income and size as outlined in the 1996 Health and Human Services poverty guidelines.

rolled in the study were comparable with eligible pairs not enrolled in the study in terms of maternal race, age, marital status, type of insurance, employment status, type of delivery, and infant birth weight, gestational age, and sex. Similarly, mothers lost to follow-up were not significantly different from those who completed follow-up interviews with respect to any of these characteristics.

SLEEP PRACTICES

At age 3 to 7 months, 90% of the infants usually slept in the mother's room, and 89% had slept in the mother's room on the night prior to the interview (**Table 2**). Almost half of the infants (49%) had slept on an adult bed or mattress on the night prior to the interview, and 43% were reported to usually sleep on an adult bed or mattress. Similarly, almost half of the infants usually slept with another person: 157 (40%) with a parent, 2 (0.5%) with another adult, 29 (7%) with a parent part of the night, 1 (0.3%) with another child, and 3 (0.7%) with other combinations of persons. Similar proportions were reported at age 7 to 12 months.

Sleep practices were relatively stable between the 2 follow-up interviews (**Table 3**). Of the 369 infants with data from both interviews, 178 usually shared a bed with a parent or other adult at age 3 to 7 months. Of these, 133 (75%) continued to do so at age 7 to 12 months. Similarly, 90% of the infants who usually slept in the moth-

Table 2. Sleep Practices at Ages 3 to 7 Months and 7 to 12 Months*

	Age 3-7 mo (n = 394)	Age 7-12 mo (n = 369)
Room in which infant sleeps		
Usually		
Mother's room	355 (90)	318 (86)
Own room	14 (4)	27 (7)
Room with other children	13 (3)	14 (4)
Other	7 (2)	6 (2)
Combination	4 (1)	3 (1)
Missing/don't know	1 (<1)	1 (<1)
Last night		
Mother's room	349 (89)	316 (86)
Own room	17 (4)	22 (6)
Room with other children	13 (3)	13 (4)
Other	8 (2)	14 (4)
Combination	3 (<1)	1 (<1)
Missing/don't know	4 (1)	3 (<1)
Type of bed infant sleeps in		
Usually		
Adult bed/mattress	171 (43)	177 (48)
Crib	170 (43)	176 (48)
Bassinet	35 (9)	4 (1)
Cradle	2 (<1)	1 (<1)
Carry cot/travel bed	2 (<1)	1 (<1)
Playpen	7 (2)	8 (2)
Floor	1 (<1)	0
Missing/don't know	6 (2)	2 (<1)
Last night		
Adult bed/mattress	194 (49)	189 (51)
Crib	151 (38)	160 (43)
Bassinet	32 (8)	2 (<1)
Cradle	0	1 (<1)
Carry cot/travel bed	1 (<1)	1 (<1)
Playpen	7 (2)	7 (2)
Floor	1 (<1)	0
Sofa	0	1 (<1)
Car or infant seat	0	1 (<1)
Missing/don't know	8 (2)	7 (2)
Person infant sleeps with		
Usually		
Alone	201 (51)	190 (51)
Parent	157 (40)	152 (41)
Other adult	2 (<1)	4 (1)
Child	1 (<1)	3 (<1)
Alone/parent	29 (7)	17 (5)
Parent/other adult	2 (<1)	0
Alone/parent/child	1 (<1)	0
Alone/child	0	1 (<1)
Parent/child	0	1 (<1)
Alone/other adult	0	1 (<1)
Missing/don't know	1 (1)	0
Last night		
Alone	187 (47)	182 (49)
Parent	185 (47)	165 (44)
Other adult	4 (1)	7 (2)
Child	2 (<1)	6 (2)
Alone/parent	10 (3)	2 (<1)
Alone/other adult	0	1 (<1)
Parent/child	0	1 (<1)
Missing/don't know	6 (2)	5 (1)

*Data are presented as number (percentage).

er's room at age 3 to 7 months continued to do so at age 7 to 12 months, and of the 159 infants who slept in an adult bed at age 3 to 7 months, 75% continued this prac-

Table 3. Persistence of Infant Sleep Practices

Sleep Practices at Ages 3-7 mo	No. of Participants	Continuing Behavior at Ages 7-12 mo, No. (%)
Usual bed sharing*		
Yes	178	133 (75)
No	191	149 (78)
Room in which infant usually sleeps		
Mother's room	332	300 (90)
Other	36	18 (50)
Type of bed in which infant usually sleeps		
Adult bed	159	120 (75)
Crib	161	120 (75)
Bassinet	32	3 (9)
Playpen	6	0 (0)
Other	4	0 (0)

*Defined as usually sleeping in a bed with a parent or other adult. Among the 369 infants with data from both interviews, more than 1 usual sleep condition was reported for 31 infants at ages 3 to 7 months and 20 infants at ages 7 to 12 months. At each interview, if 1 of the conditions included usually sleeping with a parent or adult, the infant was considered to be a usual bed sharer.

tice at age 7 to 12 months. Only the 38 infants who usually slept in a bassinet or playpen at age 3 to 7 months were likely to change sleep environments between the 2 interviews, with 40% moving to adult beds and 45% to cribs by the time of the 7- to 12-month interview.

In unadjusted analyses, maternal factors associated with bed sharing (at $P < .05$) at both follow-up interviews included age younger than 20 years, African American race, single marital status, birth in the United States, and having moved between birth of the infant and the time of the interview (**Table 4**). Factors associated with the 3- to 7-month outcome but not with the 7- to 12-month outcome included maternal depression, initiation of prenatal care after 4 months of gestation, and a maternal education level of less than 12 years. Factors associated only with the 7- to 12-month outcome included poverty, maternal unemployment, and stressful life experiences. Breastfeeding and number of persons per room, a measure of household crowding, were not significantly associated with bed sharing at either of the follow-up interviews.

Although the data suggest that bed sharing at age 3 to 7 months might be more common among infants of mothers who smoked or used drugs or alcohol during preg-

Table 4. Unadjusted Associations Between Maternal and Infant Characteristics and Bed Sharing

Characteristic*	Usual Bed Sharing at Ages 3-7 mo (n = 393)		Usual Bed Sharing at Ages 7-12 mo (n = 369)	
	No. (%)	P Value	No. (%)	P Value
Sociodemographic				
Maternal race/ethnicity†				
African American, non-Hispanic	318 (53)	<.001	296 (53)	<.001
Hispanic	68 (28)		66 (26)	
Other	7 (29)		7 (29)	
Maternal age, y†				
<20	84 (61)	.01	82 (63)	.001
≥20	309 (45)		287 (43)	
Marital status‡				
Single	289 (54)	<.001	272 (54)	<.001
Married	100 (30)		96 (28)	
Household income‡				
Lower than poverty line	289 (48)	.90	288 (51)	.03
Higher than poverty line	74 (47)		64 (36)	
Maternal education level, y†				
<12	170 (55)	.02	162 (52)	.09
≥12	223 (44)		207 (43)	
Maternal employment‡				
Employed	84 (43)	.28	106 (38)	.01
Not employed	305 (50)		257 (52)	
Mother born in United States†				
Yes	309 (54)	<.001	289 (53)	<.001
No	84 (30)		80 (26)	
Infant				
Birth order§				
First born	133 (50)	.46	128 (56)	.06
Second born	87 (41)		83 (42)	
Third born	69 (49)		63 (43)	
Later born	103 (53)		94 (44)	
Birth weight, g§				
1800-2499	40 (53)	.59	40 (58)	.17
≥2500	352 (48)		328 (46)	
Sex§				
M	203 (51)	.28	192 (48)	.69
F	190 (46)		177 (46)	

(continued)

nancy, these associations failed to reach statistical significance (Table 4). For example, 56% of infants of mothers who smoked shared a bed with an adult vs 47% of infants of nonsmokers ($P = .15$). Similarly, 63% of the 56 infants of maternal drug users shared a bed with an adult vs 50% of infants of mothers who had no documentation of drug use ($P = .10$). Of the 41 infants of mothers who reportedly used alcohol during pregnancy, 61% shared a bed with a parent or adult vs only 48% of the 305 infants of mothers with no reported alcohol use ($P = .12$).

In adjusted analyses, infants were more likely to bed share at ages 3 to 7 months and 7 to 12 months if their mothers were single or if the family had moved at least once since the birth of the infant (Table 5). Additional

factors independently associated with the 3- to 7-month outcome but not with the 7- to 12-month outcome included African American race and a maternal education level of less than 12 years. Conversely, factors independently associated with bed sharing at age 7 to 12 months but not at age 3 to 7 months included maternal age younger than 20 years and maternal birth in the United States.

COMMENT

In this predominantly low-income population, bed sharing was normative behavior during the first year of life, with almost half of all mothers reporting that their infants usually shared a bed with a parent or other adult.

Table 4. Unadjusted Associations Between Maternal and Infant Characteristics and Bed Sharing (cont)

Characteristic*	Usual Bed Sharing at Ages 3-7 mo (n = 393)		Usual Bed Sharing at Ages 7-12 mo (n = 369)	
	No. (%)	P Value	No. (%)	P Value
Maternal health behaviors				
Maternal smoking during pregnancy§				
Yes	87 (56)	.15	82 (49)	.86
No	274 (47)		258 (48)	
Maternal drug use during pregnancy§				
Yes	56 (63)	.10	54 (56)	.54
No	234 (50)		222 (51)	
Maternal alcohol use during pregnancy§				
Yes	41 (61)	.12	37 (51)	.74
No	305 (48)		289 (48)	
Initiation of prenatal care†				
<4 mo gestation	255 (45)	.04	243 (44)	.11
≥4 mo gestation	138 (56)		126 (53)	
Maternal depression‡				
Low	106 (37)	.006	106 (50)	.96
Medium	140 (51)		138 (43)	
High	142 (55)		122 (50)	
Stressful life experiences				
Low	... #	...	122 (41)	.009
Medium	...		118 (43)	
High	...		129 (57)	
Infant care				
Ever breastfed‡				
Yes	201 (45)	.13	179 (44)	.20
No	191 (52)		189 (51)	
Current feeding method‡				
Bottle	345 (48)	.95	348 (47)	.26
Breast/both	47 (49)		20 (60)	
Usual infant sleep position¶				
Prone	172 (49)	.74
Nonprone	220 (48)		...	
Household factors				
Smokers in home‡				
Yes	180 (53)	.06	170 (51)	.24
No	201 (44)		189 (44)	
Person in home with a drug problem‡				
Yes	14 (71)	.08	7 (86)	.04
No	373 (47)		361 (47)	
Person in home with an alcohol problem‡				
Yes	18 (56)	.54	15 (53)	.62
No	371 (48)		352 (47)	
Live in same place as when infant was born‡				
Yes	293 (45)	.03	257 (43)	.01
No	100 (58)		112 (57)	

*Other variables examined that were not associated with bed sharing include birth hospital, type of delivery, length of hospital stay, wantedness of the pregnancy, situational optimism, coresidence with the grandmother, household violence, and the presence of supportive friends or relatives. Number of rooms per person in the household, a measure of household crowding, was also not associated with bed sharing.

†Information obtained from the baseline interview.

‡Information obtained at both follow-up interviews. Proportions shown are from the interview that was concurrent with the outcome variable.

§Information obtained from the baseline medical record abstraction.

¶This measure was included only at the second follow-up interview.

||Infant sleep position was ascertained only at the first follow-up interview.

#Ellipses indicate not applicable.

Table 5. Adjusted Odds Ratios for Factors Associated With Usual Bed Sharing at Ages 3 to 7 Months and 7 to 12 Months

Age of Infant, Characteristic	Unadjusted Odds Ratio	Adjusted Odds Ratio*	95% Confidence Interval
3-7 mo†			
African American, non-Hispanic	2.95	2.61	1.39-4.92
Single, not living with partner	2.77	1.90	1.11-3.27
Maternal education level <12 y	1.61	1.80	1.15-2.82
Moved since birth of infant	1.66	1.82	1.10-3.01
Maternal depression‡	1.43	1.27	0.96-1.68
7-12 mo§			
Single, not living with partner	3.00	1.81	1.02-3.25
Moved since birth of infant	1.75	1.73	1.05-2.86
Mother born in United States	3.20	2.91	1.54-5.49
Maternal age <20 y	2.31	2.04	1.15-3.62

*Results of stepwise logistic regression that considered all variables significant at $P < .10$ in unadjusted analyses. Exit $P = .10$.

†Data were missing on at least 1 independent variable for 18 respondents. For adjusted model, $n = 375$.

‡Odds ratio per tertile increase on depression scale.

§Data were missing on at least 1 independent variable for 25 respondents. For adjusted model, $n = 344$.

At both follow-up interviews, most infants (85%-90%) were reported to usually sleep in the same room as their mother. Furthermore, sleep practices were relatively stable between the 2 follow-up interviews, suggesting that in our population, these practices become established early in infancy. Additional studies in other populations are needed to confirm this finding.

RELATIONSHIP TO PREVIOUS STUDIES

Our findings of an overall 48% prevalence of usual bed sharing at age 3 to 7 months, and a 53% prevalence among African Americans, are higher than national prevalence estimates. According to figures from the National Infant Sleep Position (NISP) study,³⁶ in 1993-2000, 7% of white infants, 12% of Hispanic infants, 21% of Asian/"other" infants, and 28% of black infants usually slept in an adult bed. About 95% of those who slept in an adult bed shared the bed with a parent or other adult. However, consistent with our findings, other studies of urban populations have estimated the prevalence of bed sharing among African American infants to be about 50%.^{37,38} For example, Flick et al³⁸ gathered information about bed sharing through questionnaires sent to 218 impoverished African American mothers at approximately 8 weeks post partum. Of these mothers, 49% reported that their infant had shared a sleep surface with another person on the night prior to completion of the questionnaire.

Associations between demographic factors and bed sharing were also largely consistent with other studies. In our study, non-Hispanic African American infants were more likely to bed share at age 3 to 7 months than other infants (primarily white infants of Hispanic ethnicity). This effect was independent of income, a finding consistent with results from the NISP study and suggestive of potential cultural differences in sleep practices.³⁶ In our study, other variables associated with bed sharing at 3 to 7 months postpartum included single marital status of the mother, a maternal education level of less than 12 years, and in-

creased mobility. Although marital status and mobility were not included in the NISP study, a previous study of children aged 6 to 48 months conducted in Cleveland, Ohio, in the 1980s suggested that bed sharing was more common in single-parent households, both for white and African American families.³⁹ This same study identified a positive association between increased mobility and bed sharing; however, this association was seen only among white families. In a separate study, McCoy et al⁴⁰ reported a lower prevalence of bed sharing among white infants and a higher prevalence among infants of mothers who were single, young, or had annual household incomes lower than \$16 000.

Facilitation of breastfeeding is commonly cited as a reason for bed sharing. As in other studies of low-income populations, we found no association between bed sharing and either the initiation of breastfeeding (as ascertained by asking mothers if their infants had ever breastfed) or concurrent breastfeeding.^{38,39} Interestingly, several studies in different populations have identified positive associations between bed sharing and the initiation, duration, or promotion of breastfeeding.^{22,40,41} In a nationwide study in New Zealand, 80% of mothers who shared a bed with their infants reported breastfeeding as the reason for bed sharing.⁴² In contrast, in our study less than 15% of bed sharers were still breastfeeding at the first follow-up interview; thus, only a small fraction of bed sharing can potentially be attributed to breastfeeding. These inconsistencies suggest that the reasons for bed sharing vary depending on cultural, economic, and other factors specific to the population.

LIMITATIONS

Strengths of this study include the prospective design, enrollment, and follow-up of a high-risk population as well as the collection of data on smoking, breastfeeding, and potential confounders. However, several limitations should be noted. First, we did not ask mothers to quantify the proportion of the night that the infant shared a bed but rather allowed them to circle all applicable responses (eg, slept alone and with a parent). Even though mothers were permitted to choose more than 1 response, more than 90% chose a single response for each of the questions about bed sharing; therefore, most were able to identify the primary sleep conditions for their infants. Second, because we lacked details about why infants shared a bed, it is not possible to determine if bed sharing was by choice or necessity (ie, no available alternative sleep environment, such as a crib). Third, our study reflects bed-sharing practices between 1995 and 1997. Results from the NISP study found that the prevalence of bed sharing increased from 1995 through 2000 and that sociodemographic characteristics associated with bed sharing were relatively stable across time.³⁶ Thus, the high prevalence of bed sharing reported in our article may actually underestimate the current prevalence of bed sharing, although reported associations are likely to be applicable. In our study, information about maternal drug use during pregnancy, a variable obtained from hospital record abstractions, was missing for 26% of respondents. This was primarily owing to documentation procedures at 1 of the 3 study hospitals. There is no reason to suspect that

What This Study Adds

Infant-parent bed sharing is a controversial and poorly understood practice in the United States. Little is known about the prevalence of bed sharing, particularly among high-risk populations. One cross-sectional study found that 49% of 8-week-old African American infants were bed sharers. In this longitudinal study, we found that bed sharing was normative behavior, with almost 50% of 3- to 7-month-old, predominantly low-income, inner-city infants routinely sharing a bed with a parent or other adult. Furthermore, sleep practices were relatively stable between the first and second follow-up interviews (at 3 to 7 and 7 to 12 months of life, respectively), suggesting that sleep practices become established early in infancy.

the relationship between drug use and bed sharing was different among the subset of mothers without information about drug use; however, our power to detect a statistically significant association between maternal drug use and bed sharing was reduced. Finally, mothers in our study were selected to represent District of Columbia residents of lower socioeconomic status, but our sampling scheme was not population based. Although our findings are consistent with studies conducted in other urban settings, they may not be generalizable to all inner-city populations.

CONCLUSIONS

Bed sharing was normative behavior in this predominantly low-income population. The high rate of this practice underscores the need for enhanced research efforts to clarify the benefits and risks of bed sharing in the general population.

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