



Published in final edited form as:

Clin Pediatr (Phila). 2015 January ; 54(1): 47–53. doi:10.1177/0009922814547565.

Breastfeeding in African Americans May Not Depend on Sleep Arrangement: A Mixed-Methods Study

Ashaini Kadakia, MD¹, Brandi Joyner, MSA¹, Jennifer Tender, MD^{1,2}, Rosalind Oden¹, and Rachel Y. Moon, MD^{1,2}

¹Children's National Health System, Washington, DC, USA

²George Washington University School of Medicine and Health Sciences, Washington, DC, USA

Abstract

Background—Despite high bedsharing rates, breastfeeding rates are low among African Americans.

Objective—Describe the association between breastfeeding and bedsharing; elucidate barriers to breastfeeding in African Americans.

Methods—African American mothers with infants <6 months were recruited for this cross-sectional, mixed-methods study and completed an infant care practices survey. A subgroup participated in focus groups or individual interviews.

Results—A total of 412 completed the survey; 83 participated in a focus group or interview. Lower socioeconomic status mothers were more likely to breastfeed exclusively or at all if they bedshared ($P = .02$ and $P = .01$, respectively). Bedsharing was not associated with breastfeeding among higher socioeconomic status mothers. Breast pain, lack of support, and maternal skepticism about breastfeeding benefits were barriers; the latter was a recurrent theme among nonbreastfeeding mothers.

Conclusions—While bedsharing is associated with breastfeeding in lower socioeconomic groups, it is not in higher socioeconomic African American groups. Skepticism about breastfeeding benefits may contribute to low breastfeeding rates in African Americans.

Keywords

sudden infant death syndrome; socioeconomic status; bedsharing; breastfeeding

© The Author(s) 2014

Reprints and permissions: sagepub.com/journalsPermissions.nav

Corresponding Author: Rachel Y. Moon, Goldberg Center for Community Pediatric Health, Children's National Health System, 111 Michigan Avenue NW, Washington DC 20010, USA. rmoon@cnmc.org

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Introduction

Breastfeeding's numerous benefits, including decreased incidence of infant mortality and sudden infant death syndrome, are well documented.¹⁻⁵ The American Academy of Pediatrics (AAP) recommends exclusive breastfeeding till 6 months.⁶ However, US breastfeeding initiation rates lag behind those in other developed countries^{7,8} and are particularly low for African Americans.⁸ In Washington, DC, the rates of breastfeeding initiation and breastfeeding for 6 months for Caucasians are higher (97% and 79%, respectively) than for African Americans (55% and 27%, respectively).⁹

Bedsharing is a practice in which the infant sleeps in the bed with another person, usually a parent. It has been encouraged by many as a strategy to increase breastfeeding rates.¹⁰ Bedsharing has also been identified as a risk factor for sleep-related infant deaths, including sudden infant death syndrome, accidental suffocation, and ill-defined deaths.¹¹⁻¹⁴ The AAP promotes roomsharing without bedsharing as a strategy to reduce the risk of sleep-related infant death.¹⁵ However, bedsharing rates have increased recently, particularly among African Americans.¹⁶ In 2010, 13.5% of parents in a national survey reported bedsharing, and African Americans were 3.5 times more likely to bedshare than Caucasians.¹⁶ We have previously reported that common reasons for bedsharing among African American families include lack of money or space for a crib, convenience, infant and/or parent comfort (either the infant or parent sleeps better when bedsharing), and the perceived ability to maintain vigilance during sleep. Although parents whom we interviewed felt that bedsharing facilitated feeding, this view was not limited to breastfeeding mothers.¹⁷

Given that African Americans have low breastfeeding rates despite high bedsharing rates, it is possible that other factors may contribute to breastfeeding success. It is important to understand the association of breastfeeding and bedsharing, and the barriers to breastfeeding in this group to develop strategies to overcome these barriers. It is also important to know if practices and barriers differ by socioeconomic status (SES). Therefore, the study objectives were to describe the association between breastfeeding and bedsharing, and to elucidate barriers to breastfeeding in lower and higher SES African Americans.

Methods

This was a cross-sectional study of African American parents with infants 6 months of age recruited from primary care pediatric sites in Washington, DC and Maryland. Parents were eligible if they were 18 years, their parents (ie, infant's grandparents) were US-born, and they self-identified as African American. Exclusion criteria included those who were not the custodial parent of the child (ie, foster care), could not complete an interview in English, the child had a chronic medical condition (eg, recent spinal surgery) that precluded supine sleeping, or the child was born <36 weeks gestation. Lower SES was defined as receiving benefits from Medicaid or the Special Supplemental Nutritional Program for Women, Infants and Children. These criteria, which have been used previously,¹⁷⁻¹⁹ were used as proxies for family income as they are easily verifiable and do not rely on self-report.

After written informed consent was obtained, parents completed a staff-administered survey about knowledge, attitudes, and practices regarding infant care and sleep environment, and demographics. This survey has been validated and used previously.^{17–20} With regard to bedsharing, we asked about both usual practice and what occurred the night before the survey. This is standard procedure in research regarding infant sleep practices. We selected a purposeful sample²¹ of parents, whom we predicted, from their survey responses, would have wide-ranging attitudes and opinions, to participate in focus groups or individual, semistructured in-depth interviews. For instance, we selected parents with different practices regarding feeding and sleep practices. Focus groups were stratified by SES and other demographic variables, as group participant homogeneity increases participant comfort, in turn resulting in an increased willingness to share opinions.²² A trained facilitator led all interviews with the same guide for both formats. This study was approved by the institutional review boards at Children’s National Medical Center, MedStar Research Institute, and Holy Cross Hospital.

Statistical Analysis

Sample size was determined by assuming a 60% rate of breastfeeding in the higher SES group⁹ and a 20% lower rate of breastfeeding in the lower SES group.²³ On the basis of this assumption, an α value of .05 and a β level of 0.10, a sample of size of 129 in each group was required.

Descriptive statistics were calculated. Univariate analysis was conducted to determine the relationship between bedsharing and breastfeeding, and to identify relationships between breastfeeding, bedsharing, and prior discussion with a health care professional. Logistic regression analysis was performed to account for confounders. Analyses were conducted with STATA/SE V.11.²⁴

Qualitative Analysis

We anticipated a minimum of 10 focus groups and 10 individual interviews, assuming that 3 to 4 individual interviews and 3 to 4 focus groups with any one type of participant would be necessary to achieve thematic saturation (the point at which no new themes are emerging) and for analysis across groups for themes and patterns.²² Interviews were recorded and transcribed, and each transcript was checked by 3 authors (RO, BJ, RYM) for accuracy. Disagreements about transcription were discussed and resolved by consensus. This multistep process maximized accuracy of the transcription and decreased bias. Qualitative analysis software²⁵ was used to organize and sort data. Using grounded theory, themes were developed and revised in an iterative manner as patterns became apparent.²⁶ Individual interviews and focus groups were analyzed separately, after which emerging themes were compared. Concurrent triangulation, or use of multiple sources for verification of findings,²⁷ of the focus groups and the individual interviews was used to confirm findings.²⁸

Results

Demographics

A total of 412 parents participated in the survey in 2006–2010; 264 were of lower SES and 148 of higher SES. Mean parental age was 26.8 years (range 18–48 years), and mean infant age was 9 weeks (range, 4–12 weeks). Mean infant age was similar in both SES groups. Higher SES parents were older (29.9 ± 5.1 vs 26.8 ± 6.0 , $P < .01$), more likely to be married (45.9% vs 8.3%, $P < .01$) and to be college educated (47.9% vs 3.8%, $P < .01$). Of the 412 parents, 139 (33.7%) usually bedshared with their infant, and 136 (33.0%) stated that they bedshared the night before the survey. Seventy-three infants (17.7%) were exclusively breastfed, 83 (20.1%) partially breastfed, and 256 (62.1%) exclusively formula-fed. Sleep and feeding arrangements, stratified by SES, are described in Table 1.

We conducted 13 focus groups (47 lower SES and 26 higher SES) and 10 individual interviews (7 lower SES and 3 higher SES) with 83 parents and reached thematic saturation. Focus groups had a mean of 4.9 (range 3–7) participants; all were mothers. Participants in focus groups and individual interviews were statistically similar to the larger group with regard to maternal age, marital status, infant age and gender, Medicaid status, and presence of older children, the other parent, or a senior caregiver in the home. Of the 83 participants, 28 (33.7%) had never breastfed their infant, 24 (28.9%) had initiated breastfeeding but had stopped, 15 (18.1%) were partially breastfeeding, and 16 (19.3%) were exclusively breastfeeding at the time of the initial survey. When asked about the night before the initial survey, 58 (69.9%) did not bedshare with the infant, 13 (15.7%) bedshared for part of the night, and 12 (14.4%) bedshared for the entire night.

Quantitative Analysis

Univariate analysis demonstrated a statistically significant association between current breastfeeding and bedsharing (Table 2). Women were significantly more likely to usually bedshare or to have bedshared the previous night if they were breastfeeding (either exclusively or any), compared with those who were exclusively formula-fed. There was no significant association between having ever breastfed and bedsharing, either usually or last night. Mothers were also significantly more likely to report exclusive or any breastfeeding if they bedshared (usually or last night), as compared with roomsharing without bedsharing. There was no significant relationship between exclusive breastfeeding ($P = .08$) or usual bedsharing ($P = .15$) and having a prior discussion about either of these with a nurse or physician.

Logistic regression analysis was conducted to account for confounding variables, which were determined in univariate analysis to include infant age, maternal age, maternal marital status, and maternal education. Exclusive and any breastfeeding were significantly associated with usual bedsharing and bedsharing previous night, but only in the lower SES group (Table 3). Bedsharing was not associated with ever breastfeeding in either SES group (Table 3).

Qualitative Analysis

Bedsharing was described as a strategy to facilitate feeding; however, this was true for both breastfeeding and formula-feeding mothers. Barriers to breastfeeding that were identified by mothers centered on the themes of physical concerns, lack of support, and skepticism about the benefits of breastfeeding. Themes were consistent across focus groups, and there were no themes that could be attributed to lower or higher SES mothers, nor to mothers who were bedsharing or not bedsharing. However, matrix analysis of themes according to breastfeeding status revealed that skepticism about breastfeeding benefits was a theme only for mothers who were not breastfeeding. Illustrative quotes (Q) are listed in Table 4.

Physical concerns that posed barriers to breastfeeding included pain during breastfeeding (Q1–Q3), perceived change in physical appearance of the breast associated with breastfeeding (Q4), perceived inadequate milk production (Q5), and potential infant exposures (Q6–Q7). Physical pain was a recurrent theme for mothers in all groups, even experienced mothers. Some mothers had learned that proper latch is important for breastfeeding comfort, but this was not common knowledge amongst breastfeeding mothers. Mothers were mindful that everything that they ingested could impact the infant if they were breastfeeding. Mothers who were smokers (Q6) or taking medication (Q7) did not want to breastfeed.

A major theme was the lack of support that breastfeeding mothers receive (Q8–Q13). Mothers felt that breastfeeding after returning to work was too stressful (Q8), and that a societal stigma about breastfeeding (Q9) was voiced by friends and family (Q10). Mothers without support from their mothers and partners found it more challenging to successfully breastfeed (Q11–Q13).

The last major theme was skepticism that breastfeeding improves health or increases intelligence (Q14–Q17). This theme was expressed only by nonbreastfeeding mothers. Skeptical mothers cited themselves, their children, or other people who had been formula-fed and were healthy and smart as proof that formula and breast milk are equivalent (Q15–Q17).

Discussion

We used a mixed-methods approach to try to elucidate the relationship between bedsharing and breastfeeding in African Americans. We found that usual bedsharing and bedsharing last night were associated with an increased likelihood of any or exclusive breastfeeding, but only in lower SES families. There was no association of bedsharing with ever breastfeeding in either group. However, despite higher rates of bedsharing in the lower SES families, breastfeeding rates were lower in this group. Physical concerns about breastfeeding and lack of support were considered barriers by mothers regardless of breastfeeding status; an additional major theme for nonbreastfeeding mothers was skepticism about breastfeeding benefits.

It is interesting that bedsharing was associated with breastfeeding in only the lower SES group. This reinforces that African Americans are not a homogenous group, and counseling

needs to be individually tailored. Safe sleep arrangements did not deter higher SES mothers from breastfeeding, suggesting that decision making regarding sleep and breastfeeding practices may differ by SES in African Americans. It is concerning that bedsharing was associated with breastfeeding in lower SES families. In epidemiologic studies, lower SES families are at higher risk for sleep-related infant death during bedsharing; this may be due to circumstances in which bedsharing occurs that may be unique to low socioeconomic groups.¹¹

Other factors may be more important to breastfeeding success in African Americans than sleep arrangement. Our qualitative findings suggest that parental belief that breastfeeding is more beneficial than formula-feeding may be important to breastfeeding success. Nonbreastfeeding mothers expressed skepticism that breastfeeding would make their children healthier or smarter. While other studies have found that mothers who are aware of the benefits of breastfeeding are more likely to breastfeed^{8,29-32} we found that awareness may only play a partial role in convincing mothers to breastfeed.

Mothers described lack of breastfeeding support in all realms of their lives. Workplace support has been described by others as being important for women to sustain breastfeeding.^{29,31} Women who return to work before their infant is 12 weeks old are less likely to continue breastfeeding.³³ Mothers also described that it was difficult to breastfeed without support from family members and friends. This has been identified by others as a barrier.^{31,32,34} Opposition to breastfeeding by family members and friends may reflect cultural beliefs and attitudes.^{32,35,36} Of critical importance in sustaining breastfeeding is support from the infant's father; the father's opinion is more influential than support from other trusted sources.^{5,8} Encouraging friends and family members, especially fathers, to attend prenatal visits with the mother, and providing information about the benefits and importance of breastfeeding may foster more support.

Mothers need to be committed for breastfeeding to succeed despite barriers.^{29,37-42} Some barriers may be mitigated by improved anticipatory guidance. For instance, discussing breast pain management and how to increase breast milk supply during prenatal and pediatric visits may alleviate concerns. Reviewing which prescription medications are safe to take while breastfeeding may help lessen concerns about potentially toxic exposures. Discussing strategies for continuing breastfeeding after returning to work and informing mothers of their legal right to do so may also help facilitate continued breastfeeding.⁴³

However, commitment to continued breastfeeding despite barriers requires a belief that the benefits of breastfeeding are worth the effort.⁴⁴ Mothers who are concerned about breast pain, smoking, and workplace issues are more likely to formula-feed, even if they are aware that breast milk is better than formula for their infants.⁴⁵ Commitment may be further diminished if mothers are skeptical that breast milk is better than formula. African American mothers are twice as likely to believe in the benefits of formula,⁴⁶ and this comfort level with formula may contribute to this skepticism.

We acknowledge limitations to this study. First of all, the study population was limited to African American mothers in the Washington, DC area, and behaviors were self-reported.

Additionally, qualitative research cannot be used to define prevalence of any viewpoint. Therefore, these results may not be generalizable to other groups or locations. Expanding this study to incorporate other ethnic groups and geographic locations will be important to determine prevalence of these beliefs.

The AAP strongly recommends breastfeeding for its numerous benefits,⁶ and roomsharing without bedsharing as the safest sleep arrangement to reduce the risk of sleep-related death.¹⁵ Our findings suggest that bedsharing is associated with breastfeeding in lower SES groups, but that skepticism that breast milk is better than formula may contribute to low breastfeeding rates in African Americans. Health care providers may need to reinforce information about breastfeeding benefits while providing information about safe sleep arrangements to optimize outcomes for infants.

Acknowledgments

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Although there was no research sponsor for this data analysis, the original study was funded by the National Center for Research Resources (1K24RR023681) and Agency for Healthcare Research and Quality (1R03HS016892). Dr. Moon receives salary support from National Institute on Minority Health and Health Disparities (2P20MD000198) and Maternal and Child Health Bureau, Health Resources and Services Administration (1R40MC21511).

References

1. Chandran L, Gelfer P. Breastfeeding: the essential principles. *Pediatr Rev.* 2006; 27:409–417. [PubMed: 17079506]
2. Anderson JW, Johnstone BM, Remley DT. Breast-feeding and cognitive development: a meta-analysis. *Am J Clin Nutr.* 1999; 70:525–535. [PubMed: 10500022]
3. Belfort MB, Rifas-Shiman SL, Kleinman KP, et al. Infant feeding and childhood cognition at ages 3 and 7 years: effects of breastfeeding duration and exclusivity. *JAMA Pediatr.* 2013; 167:836–844. [PubMed: 23896931]
4. Chen A, Rogan WJ. Breastfeeding and the risk of postneonatal death in the United States. *Pediatrics.* 2004; 113:e435–e439. [PubMed: 15121986]
5. Hauck FR, Thompson J, Tanabe KO, Moon RY, Vennemann MM. Breastfeeding and reduced risk of sudden infant death syndrome: a meta-analysis. *Pediatrics.* 2011; 128:103–110. [PubMed: 21669892]
6. Section on Breastfeeding. Breastfeeding and the use of human milk. *Pediatrics.* 2012; 129:e827–e841. [PubMed: 22371471]
7. Lawrence RM, Lawrence RA. Breastfeeding: more than just good nutrition. *Pediatr Rev.* 2011; 32:267–280. [PubMed: 21724901]
8. Bentley ME, Dee DL, Jensen JL. Breastfeeding among low income, African-American women: power, beliefs and decision making. *J Nutr.* 2003; 133:305S–309S. [PubMed: 12514315]
9. Centers for Disease Control and Prevention. Racial and ethnic differences in breastfeeding initiation and duration, by state—National Immunization Survey, United States, 2004–2008. *MMWR Morb Mortal Wkly Rep.* 2010; 59(11):327–334. [PubMed: 20339344]
10. McKenna JJ, Mosko S, Richard CA. Bedsharing promotes breastfeeding. *Pediatrics.* 1997; 100(2 pt 1):214–219. [PubMed: 9240802]
11. Blair PS, Fleming PJ, Smith IJ, et al. Babies sleeping with parents: case-control study of factors influencing the risk of the sudden infant death syndrome. CESDI SUDI research group. *BMJ.* 1999; 319:1457–1461. [PubMed: 10582925]

12. Carpenter RG, Irgens LM, Blair PS, et al. Sudden unexplained infant death in 20 regions in Europe: case control study. *Lancet*. 2004; 363(9404):185–191. [PubMed: 14738790]
13. Mitchell, EA.; Thompson, JMD. Co-sleeping increases the risk of SIDS, but sleeping in the parents' bedroom lowers. In: Rognum, TO., editor. *Sudden Infant Death Syndrome: New Trends in the Nineties*. Oslo, Norway: Scandinavian University Press; 1995. p. 266-269.
14. Tappin D, Ecob R, Brooke H. Bedsharing, roomsharing, and sudden infant death syndrome in Scotland: a case-control study. *J Pediatr*. 2005; 147:32–37. [PubMed: 16027691]
15. Moon RY. Task Force on Sudden Infant Death Syndrome. SIDS and other sleep-related infant deaths: expansion of recommendations for a safe infant sleeping environment. *Pediatrics*. 2011; 128:e1341–e1367. [PubMed: 22007003]
16. Colson ER, Willinger M, Rybin D, et al. Trends and factors associated with infant bed sharing, 1993–2010: the National Infant Sleep Position study. *JAMA Pediatr*. 2013; 167:1032–1037. [PubMed: 24080961]
17. Joyner BL, Oden RP, Ajao TI, Moon RY. Where should my baby sleep: a qualitative study of African American infant sleep location decisions. *J Natl Med Assoc*. 2010; 102:881–889. [PubMed: 21053702]
18. Moon RY, Oden RP, Joyner BL, Ajao TI. Qualitative analysis of beliefs and perceptions about sudden infant death syndrome (SIDS) in African-American mothers: implications for safe sleep recommendations. *J Pediatr*. 2010; 157:92–97. [PubMed: 20303505]
19. Oden RP, Joyner BL, Ajao TI, Moon RY. Factors influencing African American mothers' decisions about sleep position: a qualitative study. *J Natl Med Assoc*. 2010; 102:870–872. 875–880. [PubMed: 21053701]
20. Ajao TI, Oden RP, Joyner BL, Moon RY. Decisions of black parents about infant bedding and sleep surfaces: a qualitative study. *Pediatrics*. 2011; 128:494–502. [PubMed: 21859921]
21. Mays N, Pope C. Qualitative research in health care. Assessing quality in qualitative research. *BMJ*. 2000; 320(7226):50–52. [PubMed: 10617534]
22. Krueger, RA.; Casey, MA. *Focus Groups: A Practical Guide for Applied Research*. 3rd ed.. Thousand Oaks, CA: Sage; 2000.
23. Centers for Disease Control and Prevention. Progress in increasing breastfeeding and reducing racial/ethnic differences—United States, 2000–2008 births. *MMWR Morb Mortal Wkly Rep*. 2013; 62(5):77–80. [PubMed: 23388550]
24. Stata 11 [computer program]. College Station, TX: StataCorp; 2009.
25. NVivo 10 [computer program]. Melbourne, Australia: QSR International; 2013.
26. Richards, L.; Morse, JM. *Readme First for a User's Guide to Qualitative Methods*. 2nd ed.. Thousand Oaks, CA: Sage; 2007.
27. Denzin, NK.; Lincoln, YS. *Strategies of Qualitative Inquiry*. Thousand Oaks, CA: Sage; 2003.
28. Creswell, JW. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 2nd ed.. Thousand Oaks, CA: Sage; 2003.
29. McCann MF, Baydar N, Williams RL. Breastfeeding attitudes and reported problems in a national sample of WIC participants. *J Hum Lact*. 2007; 23:314–324. [PubMed: 17991796]
30. Cottrell BH, Detman LA. Breastfeeding concerns and experiences of African American mothers. *MCN Am J Matern Child Nurs*. 2013; 38:297–304. [PubMed: 23958620]
31. Street DJ, Lewallen LP. The influence of culture on breast-feeding decisions by African American and white women. *J Perinat Neonatal Nurs*. 2013; 27:43–51. [PubMed: 23360941]
32. Kulka TR, Jensen E, McLaurin S, et al. Community based participatory research of breastfeeding disparities in African American women. *Infant, Child Adolesc Nutr*. 2011; 3:233–239. [PubMed: 23326622]
33. McCarter-Spaulding D, Lucas J, Gore R. Employment and breastfeeding outcomes in a sample of black women in the United States. *J Nat Black Nurses Assoc*. 2011; 22(2):38–45.
34. Persad MD, Mensinger JL. Maternal breastfeeding attitudes: association with breastfeeding intent and sociodemographics among urban primiparas. *J Community Health*. 2008; 33:53–60. [PubMed: 18060485]

35. Phillipp, B.; Jean-Marie, S. African American Women and Breastfeeding. Washington, DC: Joint Center for Political and Economic Studies; 2007.
36. Belanoff CM, McManus BM, Carle AC, McCormick MC, Subramanian SV. Racial/ethnic variation in breastfeeding across the US: a multilevel analysis from the National Survey of Children's Health, 2007. *Matern Child Health J.* 2012; 16(suppl 1):S14–S26. [PubMed: 22466719]
37. Hurley KM, Black MM, Papas MA, Quigg AM. Variation in breastfeeding behaviours, perceptions, and experiences by race/ethnicity among a low-income statewide sample of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participants in the United States. *Matern Child Nutr.* 2008; 4:95–105. [PubMed: 18336643]
38. Guttman N, Zimmerman DR. Low-income mothers' views on breastfeeding. *Soc Sci Med.* 2000; 50:1457–1473. [PubMed: 10741581]
39. Libbus K, Bush TA, Hockman NM. Breastfeeding beliefs of low-income primigravidae. *Int J Nurs Stud.* 1997; 34:144–150. [PubMed: 9134470]
40. Arlotti JP, Cottrell BH, Lee SH, Curtin JJ. Breastfeeding among low-income women with and without peer support. *J Community Health Nurs.* 1998; 15:163–178. [PubMed: 9747023]
41. Johnston ML, Esposito N. Barriers and facilitators for breastfeeding among working women in the United States. *J Obstet Gynecol Neonatal Nurs.* 2007; 36:9–20.
42. Bogen DL, Davies ED, Barnhart WC, Lucero CA, Moss DR. What do mothers think about concurrent breast-feeding and smoking? *Ambul Pediatr.* 2008; 8:200–204. [PubMed: 18501868]
43. US Department of Labor. Break Time for Nursing Mothers, Fair Labor Standards Act section 7. 2010
44. Avery A, Zimmermann K, Underwood PW, Magnus JH. Confident commitment is a key factor for sustained breastfeeding. *Birth.* 2009; 36:141–148. [PubMed: 19489808]
45. Noble L, Hand I, Haynes D, McVeigh T, Kim M, Yoon JJ. Factors influencing initiation of breast-feeding among urban women. *Am J Perinatol.* 2003; 20:477–483. [PubMed: 14703596]
46. Nommsen-Rivers LA, Chantry CJ, Cohen RJ, Dewey KG. Comfort with the idea of formula feeding helps explain ethnic disparity in breast-feeding intentions among expectant first-time mothers. *Breastfeed Med.* 2010; 5:25–33. [PubMed: 20043707]

Table 1

Sleep and Feeding Arrangements, Stratified by Socioeconomic Status (SES).

	Lower SES (n = 264); n (%)	Higher SES (n = 148); n (%)	All (N = 412); n (%)
Breastfeeding			
Exclusive	28 (10.6)	45 (30.4)	73 (17.7)
Partial	44 (16.7)	39 (26.4)	83 (20.1)
None	192 (72.7)	64 (43.2)	256 (62.1)
Usual sleep arrangement			
Bedshare	92 (34.8)	47 (31.8)	139 (33.7)
Roomshare without bedsharing	158 (59.8)	89 (60.1)	247 (66.0)
Separate room	14 (5.3)	12 (8.1)	26 (6.3)
Last night sleep arrangement			
Bedshare	93 (35.2)	43 (29.1)	136 (33.0)
Roomshare without bedsharing	153 (58.0)	88 (59.5)	241 (58.5)
Separate room	18 (6.8)	17 (11.5)	35 (8.5)

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Univariate and Logistic Regression Analysis of Relationship Between Breastfeeding and Bedsharing.^a

Table 2

	Exclusively Breastfeeding			Any (Partial or Exclusive) Breastfeeding			Ever Breastfed (Includes Current Breastfeeding)					
	Yes	No	OR (95% CI)	P-Value	Yes	No	OR (95% CI)	P-Value	Yes	No	OR (95% CI)	P-Value
Usual bedsharing												
Yes	34	105	2.0 (1.2–3.6)	.01	62	77	1.6 (1.0–2.6)	.04	104	35	1.2 (0.7–1.9)	.58
No	39	234			94	179			197	76		
Bedsharing last night												
Yes	34	104	2.1 (1.2–3.7)	.01	62	76	1.7 (1.1–2.8)	.04	103	35	1.2 (0.7–1.9)	.62
No	39	235			94	180			198	76		
Usual roomsharing without bedsharing vs bedsharing												
Bed-share	34	105	1.9 (1.1–3.4)	.02	62	77	1.8 (1.1–2.9)	.01	104	35	1.2 (0.7–1.9)	.57
Room-share	36	211			79	168			177	70		
Roomsharing without bedsharing vs bedsharing last night												
Bed-share	34	102	2.1 (1.2–3.7)	.01	61	75	1.9 (1.2–3.1)	.01	102	34	1.2 (0.7–2.0)	.45
Room-share	35	206			77	164			172	69		

Abbreviations: OR, odds ratio; CI, confidence interval.

^a Logistic regression analysis controlled for infant age, maternal age, maternal marital status, and maternal education.

Table 3

Logistic Regression Analysis of Breastfeeding and Bedsharing, Stratified by Socioeconomic Status (SES).^a

	Low SES						High SES					
	Exclusive Breastfeeding		Any (Partial or Exclusive) Breastfeeding		Ever Breastfed		Exclusive Breastfeeding		Any (Partial or Exclusive) Breastfeeding		Ever Breastfed	
	OR (95% CI)	P-Value	OR (95% CI)	P-Value	OR (95% CI)	P-Value	OR (95% CI)	P-Value	OR (95% CI)	P-Value	OR (95% CI)	P-Value
Usual bedsharing	2.9 (1.3–6.6)	.01	1.9 (1.1–3.4)	.03	1.3 (0.7–2.3)	.41	1.9 (0.8–4.2)	.15	1.4 (0.6–3.0)	.41	0.9 (0.3–2.4)	.99
Bedsharing previous night	2.8 (1.2–6.4)	.01	1.9 (1.1–3.3)	.03	1.4 (0.8–2.4)	.32	2.1 (0.9–4.8)	.07	1.8 (0.8–4.1)	.14	0.7 (0.3–2.1)	.82
Usual roomsharing without bedsharing vs bedsharing	2.9 (1.2–6.6)	.01	2.1 (1.2–3.9)	.01	1.3 (0.7–2.2)	.45	0.6 (0.3–1.3)	.21	0.6 (0.3–1.4)	.27	1.1 (0.4–2.9)	.96
Roomsharing without bedsharing vs bedsharing previous night	2.7 (1.2–6.3)	.02	2.0 (1.1–3.7)	.02	1.4 (0.7–2.5)	.32	0.5 (0.2–1.2)	.14	0.5 (0.2–1.2)	.13	1.1 (0.4–3.4)	.77

Abbreviations: OR, odds ratio; CI, confidence interval.

^a Analysis controlled for infant age, maternal age, maternal marital status, and maternal education.

Table 4**Barriers to Breastfeeding.**

Physical concerns:

Q1. "Even the second time around hurt worse than the first. And I was just, had I not breastfed my first child I don't know if I would've made it to the second time around." (Higher socioeconomic status [SES])

Q2. "I was in so much pain I was almost in tears." (Higher SES)

Q3. "She wasn't latching on right. If you latch on right, it don't hurt. It's only when they don't latch on properly that it hurts." (Lower SES)

Q4. "I don't need no extra sagging [of the breasts] to make it worse than it is." (Lower SES)

Q5. "I wasn't producing the milk." (Higher SES)

Q6. "I don't breastfeed because I'm a smoker ... " (Lower SES)

Q7. "I planned to breastfeed and I take Synthroid ... and that's going to go into the baby and I preferred to go with something that I felt more comfortable with, which was formula." (Higher SES)

Lack of support by employers, family, friends, and society:

Q8. "I went back to work, and then it was just too much. I couldn't handle it." (Higher SES)

Q9. "You can't do it [breastfeeding] in public. They think it's nasty ... " (Lower SES)

Q10. "Two of my girlfriends have just recently had children absolutely refused to breastfeed and they think it's disgusting." (Higher SES)

Q11. "Like I really felt like I didn't have any support in the breastfeeding thing and... I felt like I was not being the right mother to my son ... " (Higher SES)

Q12. "And my infamous mother-in-law has strong feelings about breastfeeding; it's the opposite of what I would have expected. I had challenges with that too, where I didn't want the baby to have formula because I was pumping and then the baby would be sent home with a bottle with formula in it. I'm like, why am I wasting my time pumping at work in the middle of the day when she's giving the baby formula?" (Higher SES)

Q13. "His dad didn't want me to do it. I just think because it was something that I wanted to do I should have been allowed to do it and been at peace with doing it, but with dad being there and they baby's crying and he's not latching on, 'just give him the milk.'" (Higher SES)

Lack of belief that breastfeeding is better than formula:

Q14. "I don't really think it makes a difference [re: intelligence]." (Lower SES)

Q15. "My 2 year old, she is bottle-fed and she is highly smart." (Lower SES)

Q16. "Our kids are healthy, you know, they got the formula or whatever, there's nothing wrong with them, you know there aren't any major issues so ... " (Lower SES)

Q17. "I was formula-fed myself so ... " (Lower SES)
