# HHS Public Access

Author manuscript

*J Community Health*. Author manuscript; available in PMC 2015 April 02.

Published in final edited form as:

*J Community Health*. 2015 February ; 40(1): 12–19. doi:10.1007/s10900-014-9886-y.

# Knowledge and Beliefs of African-American and American Indian Parents and Supporters About Infant Safe Sleep

**Sandra Herman**,
Tomorrow's Child, Lansing, MI, USA

**Mary Adkins**, and
Tomorrow's Child, Lansing, MI, USA

**Rachel Y. Moon**
Division of General Pediatrics and Community Health, Goldberg Center for Community Pediatric Health, Children's National Health System, 111 Michigan Avenue NW, Washington, DC 20010, USA. Department of Pediatrics, George Washington University School of Medicine and Health Sciences, Washington, DC, USA

Rachel Y. Moon: rmoon@cnmc.org

## Abstract

To investigate, by using qualitative methods, beliefs among African-American and American Indian families about infant safe sleep practices, barriers to acceptance of prevention recommendations, and more effective messaging strategies. Seventy-three mothers and supporters participated in focus groups. Participants discussed infant sleep practices and effectiveness of safe sleep messages. Data were coded, and themes were developed and revised in an iterative manner as patterns became more apparent. Themes included reasons for and influences on sleep decisions, and concerns about safe sleep recommendations. Parental sleep decisions seemed to be driven by perceptions of what would make their infant most comfortable and safe, and what would be most convenient. Parents were aware of safe sleep recommendations but unaware of the rationale. Because they generally did not believe that their infants were at risk for a sleep-related death, day-to-day decisions seemed to focus on what was most effective in getting their infant to sleep. There appeared to be no distinctions in opinions among African-American and American Indian families. African-American and American Indian families seemed to have similar concerns about infant comfort and safety, and their perceptions about what would be most effective in achieving these goals appeared to be important influences on their sleep practices. Adherence with safe sleep recommendations may be enhanced if health care providers and educational materials discussed rationale underlying recommendations and addressed common parental concerns. It may be beneficial to target educational interventions towards fathers, as they may be untapped sources in implementing safe sleep practices.

© Springer Science+Business Media New York 2014

Correspondence to: Rachel Y. Moon, rmoon@cnmc.org.

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

**Keywords**

Racial disparity; Safe sleep; Infant mortality; Sudden infant death syndrome

## Introduction

There continue to be disparities in infant mortality in the U.S. The infant mortality rates for African-Americans and American Indians are 12.4/1,000 live births and 9.1/1,000 live births, respectively, compared to 5.3/1,000 live births for whites [8, 14]. In Michigan, these disparities are even wider; the African-American and American Indian infant mortality rates in 2009 were 15.5/1,000 live births and 9.0/1,000 live births, respectively, compared to 5.4/1,000 live births in whites [2]. It should be noted that, while the mortality data reflect the National Center for Health Statistics' standard case identification for race/ethnicity, racial miscoding in American Indian mortality data has historically been a concern [3, 6] and thus, the mortality rates may be an underestimate.

Most postneonatal (31–364 days) deaths occur while the infant is asleep or in a sleep environment; these deaths are referred to as sleep-related infant deaths and are comprised of sudden infant death syndrome (SIDS), accidental deaths, such as accidental suffocation, overlay, and asphyxia, and ill-defined deaths [9]. In recent years, while the rate of SIDS has declined, there have been steep increases in the rates of accidental sleep-related deaths [13] and ill-defined deaths [7]. The AAP Task Force on SIDS has recently updated its recommendations to prevent all sleep-related infant deaths [9]; these recommendations include placing the infant supine (on the back) for sleep, having the infant sleep in the same room as the parent but on a separate surface (e.g., crib, bassinet, playpen), and removing all soft bedding and bumper pads from the infant's sleep area.

Furthermore, there continue to be disparities in safe sleep practices. A compelling body of evidence indicates that African-American mothers know about, but do not accept, the safe sleep recommendations [10]. However, there is little or no current peer-reviewed research on the knowledge, attitudes, behaviors, and beliefs of American Indian mothers related to infant safe sleep practices, and whether they are different from those of African-American mothers.

We therefore conducted a series of focus groups with largely African-American and American Indian mothers and their supporters in Michigan to obtain insight and input about beliefs about infant safe sleep practices, barriers to acceptance of prevention recommendations, and strategies to deliver compelling safe sleep messages to families.

## Methods

### Participants

We conducted focus groups in three major urban areas and two tribal communities in Michigan. Participants were recruited by community programs that provide services to mothers and their infants. Participants were eligible if they were mothers of children<2 years of age or the supporters (partners, grandmothers, etc.) of mothers of children <2 years of

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

age. Although the target population was African-American and American Indian mothers and their supporters, participants were not excluded because of race/ethnicity.

### Data Collection

After written informed consent was obtained, qualified and interested participants completed a brief survey with questions about demographics before the focus group. Focus groups lasted 60–90 min. All focus groups were audiotaped. All focus groups were conducted by trained, racially congruent facilitators, while 1–2 staff members operated the recording equipment. Focus group participants were asked about infant safe sleep practices, including how participants placed their babies for sleep, what they had heard about keeping their babies safe during sleep, which safe sleep messages made sense and did not make sense, and which safe sleep messages would work best with parents. Broad, open-ended questions were followed by more specific, probing questions to elucidate responses. Participants were provided with refreshments, child care, and transportation, and were given a $25 gift card at the end of the focus group. The institutional review board of Michigan Department of Community Health determined that this study did not fit criteria for studies requiring formal IRB review and approval and considered this study exempt.

### Analysis

Focus group recordings were transcribed by a professional transcription company. After initial transcription, the transcript was checked by the authors for accuracy. Qualitative analysis software (NVivo 7, QSR International Pty Ltd, Melbourne, Australia) was used to organize, sort, and code the data (quotes). Using grounded theory methodology, themes were developed and revised in an iterative manner as patterns became apparent [12]. Themes were developed within the context of policy issues on safe sleep education and practices and improving methods for future dissemination of the safe sleep message. Initial coding analysis was conducted by one of the authors (S.H.) and then discussed with other authors (M.A, R.M.) to reach consensus on the major themes. Concurrent triangulation, or use of multiple sources for verification of findings [5], was conducted by comparing our findings with findings in national studies on acceptance of safe sleep practices by African-American mothers.

## Results

### Participants

In 2012, we conducted 9 focus groups with 73 participants and reached thematic saturation. Focus group attendance averaged 8.1 (range, 6–11) participants. There were 5 focus groups for mothers, 3 for supporters (one of these were exclusively male), and 1 for both mothers and supporters. Three of the focus groups (Communities 3, 4) were American Indian, and the others were African-American. Participant demographic characteristics are described in Table 1. At least half of the mothers and supporters (66.7 and 50 %, respectively) were African-American, while approximately one-third (29.6 and 30.8 %) were American Indian. Mean age for the participants was 24.9 years for the mothers and 30.7 years for the supporters, and mean age for the children was 5.6 months for both groups. Half of the supporters were male. The majority of the mothers (87 %) and supporters (84.6 %) had

Author Manuscript



completed high school. Almost 40 % (39.6 %) of mothers and 84 % of supporters worked at least part time.

## Themes

Three themes emerged in the discussions: (1) reasons for decisions about infant sleep practices; (2) concerns about the safe sleep recommendations; and (3) influence on infant sleep decisions. The themes and sub-themes, along with the focus groups in which they were identified, are summarized in Table 2. Themes were consistent across focus groups. There were no themes that could be attributed only to American Indian mothers or to African American mothers. Some themes were not raised in some focus group discussions; however, absence of a theme does not necessarily imply that it is not a concern. Illustrative quotes (Q) are included in Tables 3, 4 and 5, with a brief description of the speaker in parentheses.

**Reasons for Sleep Decisions (Table 3)—**In all of the focus groups, parents described making decisions about sleep locations and positions based on their perceptions of their infants' physical and emotional comfort and perceptions of what was safe, effective, and convenient in meeting the needs of their infants while also meeting their own need for rest.

**Perceptions of the Infant's Physical and Emotional Comfort—**Parents made decisions about sleep location and position based on their perceptions of the infants' physical and emotional comfort. Some parents bedshared with their infant (Q1), placed their infants on the side (Q2) or stomach (Q3) for sleep, or used blankets (Q4), because they perceived their infants to be more comfortable that way or because they would be more comfortable that way. Parents expressed the opinion that health professionals and educational materials did not address the differences among infants in terms of sleep behavior and environmental comfort (Q5).

**Perceptions of What is Safe, Effective and Convenient—**Groups in all communities had discussions about infant safety. A recurrent theme was that infants were safer in bed with their mothers (Q6), and mothers believed they would sense problems with their infants if the babies were close (i.e., in bed with them)(Q7). There appeared to be a strong belief that a mother instinctively knows where her baby is in the bed during sleep and will awake before the infant is injured (Q8). Parents whose infants were not in the bed with them expressed concern that they could not adequately monitor the infant (Q9). Other mothers were concerned about the dangers of cribs (Q10). In general, if the mother had prior experience in which they did not adhere to sleep recommendations and there was not a bad outcome, she inferred that this practice was safe for her children (Q11).

However, there were also concerns about accidental suffocation. Mothers acknowledged that they slept with their infants, even though they knew that suffocation was a risk, when they were tired (Q12). One mother described how she was not always aware of where she and her infant were in relation to each other in the bed (Q13). Another mother described her concern that she would fall asleep while breastfeeding, and her infant would suffocate (Q14). One father described a near –suffocation experience with a previous infant (Q15).

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

Parents suggested that their decisions about how and where the infant slept were often driven, not by the recommendations or by safety concerns, but by the parent's need for sleep and, therefore, the parent's need for the infant to go to sleep (Q16). Some participants expressed the desire for safe sleep guidelines to include alternative strategies to keep the infant safe while promoting sleep (Q17–Q19).

Even when the immediate danger of bedsharing was not clear to parents, participants in all but one community expressed concerns that bedsharing with the infant would become a habit that would be difficult to change when the child was older (Q20). For some parents, this concern resulted in use of the crib or bassinet instead of bedsharing (Q21–Q22).

### Concerns About Safe Sleep Recommendations (Table 4)

**Rationale Behind Recommendations:** Parents were aware of the safe sleep recommendations and wanted to assure that their infants were safe (Q1). However, the rationale behind the recommendations and why following the recommendations was safer were unclear (Q3). Furthermore, there was often confusion about the recommendations, because of changes in the message over the past 30 years (Q2) and because those who were perceived to be knowledgeable sources (such as nurses) did not always follow the safe sleep guidelines (Q4, Q5).

**Choking:** Choking was a major concern for mothers and their supporters in 2 communities, a lesser concern in 2 communities, and did not come up in the discussions in 3 communities. Choking and gastroesophageal reflux were among the primary reasons mothers chose to place their infants on their stomach or sides (Q6). A recurrent theme was that the side position was the best alternative, as the infant was not prone, they would not choke, and any vomitus would drain easily (Q7).

### Influences on Sleep Decisions (Table 5)

**Education:** Safe sleep education influenced mothers' decisions about where and how their babies slept. A number of participants cited safe sleep materials or talks from hospitals, Healthy Start, and other home visiting programs, as being influential (Q1). Other mothers expressed a desire to be provided with additional information explaining how to implement safe sleep guidelines (Q2).

**Disbelief:** Participants acknowledged that, in general, they did not believe that a sleep-related death could happen to their infants (Q3). Indeed, there was a perception that SIDS was a "syndrome" or "disease;" since their infants were healthy, participants did not believe that they were at risk. Many of the participants had personal experience with sleep-related infant deaths in their family or among their friends (Q4). Although this scared some, it was not a deterrent to unsafe sleep practices (Q5–Q6).

**Fathers, Family and Friends:** Family and friends, particularly those with experience with infants, were described as influential sources for young mothers (Q7–Q8). Furthermore, fathers seemed to be very influential in decisions about sleep location, particularly when it came to not bedsharing (Q9–Q10).

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript



## Discussion

Parental decisions about infant sleep location and position seemed to be driven by perceptions of what would make their infant most comfortable (i.e., longer sleep duration) and safe, and what would be most convenient for the parents. Parents were aware of the safe sleep recommendations, but seemed to be unaware of the rationale. Because they generally did not believe that their infants were at risk for a sleep-related death, their day-to-day decisions seemed to focus on what was most effective in getting their infant to sleep, so that they could sleep. There appeared to be no distinctions in opinions among African-American and American Indian parents and their supporters.

Parental perceptions of their infants' physical and emotional comfort often seemed to result in decisions to place their infants prone or on the side, to sleep with their infants in their bed (i.e., bedshare), and to use blankets and other soft bedding. These practices are not recommended because of the increased risk for SIDS and accidental suffocation and strangulation in bed [9]. However, many parent decisions appeared to be responses to the exigency of the moment rather than to thoughtful consideration as to the dangerous consequences of some of their decisions. While some mothers understood that these behaviors could result in harm to their child, others did not believe that this could happen to them. Intertwined with this was the idea that maternal vigilance would protect an infant during sleep. Mothers felt that bedsharing was the most effective way to be vigilant during sleep. These findings are similar to those in other qualitative studies with African-American mothers [1, 4, 11] that have found that comfort and the belief in the importance of vigilance were important determinants of parental behavior.

The idea that "it can't happen to me" was a recurrent theme. This idea was reinforced for many by parents' past experience. If they had not followed medical recommendations in the past without a negative consequence, many parents took that to mean that what they were doing was safe, as long as they were vigilant. Even if a parent knew someone who had a personal experience with a sleep-related infant death, this was generally not a deterrent to unsafe sleep practices. Other studies have found that parents often believe that sleep-related deaths only occur when parents are not vigilant [10].

While the immediate dangers of bedsharing did not appear to be compelling to some parents, participants in all but one community expressed concerns that bedsharing with the infant could potentially create a habit that would be difficult to change when the child was older. For some parents, this was a motivating factor in the decision to not bedshare. Indeed, discussing long-term issues with bedsharing may be a more effective strategy to discourage the practice than discussing infant sleep safety.

Parents welcomed education about safe sleep from health care professionals and, for some, the education influenced their decisions about how and where their infants slept. Some parents cited home visiting programs, such as Healthy Start, as being a primary source of education about infant safety. However, parents also expressed frustration that health care providers did not explain the rationale behind safe sleep messages and did not address individual concerns, such as choking and how to assure that the infant was both comfortable

Author Manuscript



and safe. Parents also expressed confusion when health care providers did not follow the recommendations in the hospital. Other studies have also reported that parents are interested in how and why certain behaviors increase safety [11], and that biological plausibility impacts on parental willingness to adhere to recommendations [10]. Parents are less likely to believe that following a recommendation is important if they do not perceive that the health care provider thinks that it is important, or if the recommendation does not make sense.

Mothers reported that family members and friends were important influences on their beliefs about how and where an infant should sleep. In particular, fathers were potentially powerful influences. Comments by fathers in the focus groups suggested that they were open to learning about safe sleep, and that they were often the ones who would implement safe sleep practices in the home. While we did not reach thematic saturation with the fathers, future studies should investigate the influence of fathers in decision-making and perhaps target educational interventions towards fathers.

We acknowledge limitations to this study. First of all, the study population was limited to African-American and American Indian mothers and supporters in Michigan. Additionally, qualitative research cannot be used to define the prevalence of any opinion. Therefore, these results may not be generalizable to other populations or locations. It will be important to expand this research to other ethnic groups and geographic locations to determine how prevalent these beliefs are.

African-American and American Indian mothers and their supporters seemed to have similar concerns about infant comfort and safety, and their perceptions about what would be most effective in achieving these goals appeared to be important influences on their sleep practices. Adherence with safe sleep recommendations may be enhanced if health care providers and educational materials discussed the rationale for safe sleep recommendations and addressed common parental concerns. It may also be beneficial to target educational interventions towards fathers, as they may be untapped sources in implementing safe sleep practices.

## Acknowledgments

Funding for this project was provided by the W. K. Kellogg Foundation. Authors also received support from the National Institutes of Health (P20MD000198). We would like to thank the Inter-tribal Council of Michigan Healthy Start Project; Calhoun County Public Health Department (Battle Creek, MI); Strong Beginnings, Spectrum Health (Grand Rapids, MI); and Sew up the Safety Net for Women and Children, Henry Ford Health (Detroit, MI) for their collaboration in identifying and recruiting participants and providing culturally competent facilitators for the focus groups.

## References

1. Ajao TI, Oden RP, Joyner BL, Moon RY. Decisions of black parents about infant bedding and sleep surfaces: a qualitative study. Pediatrics. 2011; 128(3):494–502. [PubMed: 21859921]
2. Beebe, M. Summary of 2010 infant death statistics. Lansing, MI: Vital Records and Health Data Development Section, Michigan Department of Community Health; 2012.
3. Johnson JC, Soliman AS, Tadgerson D, Copeland GE, Seefeld DA, Pingatore NL, et al. Tribal linkage and race data quality for American Indians in a state cancer registry. [Research Support, N.I.H., Extramural Research Support, Non-U.S. Gov't]. American Journal of Preventive Medicine. 2009; 36(6):549–554.10.1016/j.amepre.2009.01.035 [PubMed: 19356888]

Author Manuscript Author Manuscript Author Manuscript Author Manuscript


4. Joyner BL, Oden R, Ajao TI, Moon R. Where should my baby sleep? A qualitative study of African-American infant sleep location decisions. Journal of the National Medical Association. 2010; 102(10):881–889. [PubMed: 21053702]
5. Krueger, RA.; Casey, MA. Focus groups: A practical guide for applied research. 3. Thousand Oaks, CA: Sage; 2000.
6. Leavitt, MO. US Department of Health and Human Services, Indian Health Service. Regional differences in Indian health, 2002–2003. Washington, DC: Government Printing Office; 2008.
7. Malloy MH, MacDorman M. Changes in the classification of sudden unexpected infant deaths: United States, 1992–2001. Pediatrics. 2005; 115(5):1247–1253. [PubMed: 15867031]
8. Mathews TJ, MacDorman MF. Infant mortality statistics from the 2009 period linked birth/infant death data set. National Vital Statistics Reports. 2013; 61(8):1–69. [PubMed: 24979974]
9. Moon RY. American Academy of Pediatrics, 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; 129(5):e1341–e1367. [PubMed: 22007003]
10. Moon RY, Oden RP, Joyner BL, Ajao TI. Qualitative analysis of beliefs and perceptions about sudden infant death syndrome (SIDS) among African-American mothers: Implications for safe sleep recommendations. The Journal of Pediatrics. 2010; 157(1):92–97. e92.10.1016/j.jpeds. 2010.01.027 [PubMed: 20303505]
11. Oden R, Joyner BL, Ajao TI, Moon R. Factors influencing African-American mothers' decisions about sleep position: A qualitative study. Journal of the National Medical Association. 2010; 102(10):870–880. [PubMed: 21053701]
12. Richards, L.; Morse, JM. Readme first for a user's guide to qualitative methods. 2. Thousand Oaks, CA: Sage; 2007.
13. Shapiro-Mendoza CK, Kimball M, Tomashek KM, Anderson RN, Blanding S. US infant mortality trends attributable to accidental suffocation and strangulation in bed from 1984 through 2004: Are rates increasing? Pediatrics. 2009; 123(2):533–539.10.1542/peds.2007-3746 [PubMed: 19171619]
14. Wong CA, Gachupin FC, Holman RC, Macdorman MF, Cheek JE, Holve S, et al. American Indian and Alaska Native Infant and Pediatric Mortality, United States, 1999–2009. American Journal of Public Health. 201410.2105/AJPH.2013.301598

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

## Table 1

Participant demographics

| | **Mothers (n = 54)** | **Supporters (n = 26)** |
|---|---|---|
| Participant age, years—mean (range) | 24.9 (16–39) | 30.7 (17–56) |
| Youngest child age, months—mean (range) | 5.6 (0–24) | 5.6 (0–13) |
| *Race/ethnicity—n* (%) | | |
| American Indian/Alaskan Native | 16 (29.6) | 8 (30.8) |
| Black or African-American | 36 (66.7) | 13 (50) |
| Other (Hispanic or Caucasian) | 2 (3.7) | 5 (19.2) |
| *Participant gender—n* (%) | | |
| Female | 54 (100) | 13 (50) |
| Male | 0 (0) | 13 (50) |
| *Child gender—n* (%) | | |
| Female | 26 (48.1) | 10 (41.7) |
| Male | 27 (50) | 13 (54.2) |
| Twins male and female | 1 (1.9) | 1 (4.2) |
| *Participant educational status—n* (%) | | |
| Less than high school graduate | 7 (13) | 4 (15.4) |
| High school graduate/GED | 18 (33.3) | 5 (19.2) |
| Some college, trade school or certificate program | 26 (48.1) | 13 (50) |
| College graduate | 3 (5.6) | 4 (15.4) |
| *Participant employment status—n* (%)* | | |
| Work full time | 9 (17) | 14 (56) |
| Work part time | 12 (22.6) | 7 (28) |
| Attend school | 14 (26.4) | 7 (28) |
| Do not work outside of home | 8 (15.1) | 0 (0) |
| Looking for work | 26 (49.1) | 6 (24) |
| *Living arrangement—n* (%) | | |
| Live alone with children | 19 (35.2) | 5 (20.8) |
| Live with spouse/partner | 18 (33.3) | 14 (58.3) |
| Live with own parents | 11 (20.4) | 4 (16.7) |
| Live with other family member | 3 (5.6) | 1 (4.2) |
| Other | 3 (5.5) | 0 (0) |

*Because participants could provide multiple responses, responses do not total 100 %

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

**Table 2**

Themes by focus group

| | Focus group | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Community 1: African-American mothers (n = 6) and Supporters (n = 3)** | **Community 2: African-American mothers (n = 10)** | **Community 2: African-American supporters (n = 6)** | **Community 2: African-American male supporters (n = 7)** | **Community 3: American Indian mothers (n = 7)** | **Community 4: American Indian mothers (n = 11)** | **Community 4: American Indian supporters (n = 11)** | **Community 5: African-American mothers (n = 11)** | **Community 6: African-American mothers (n = 11)** |
| Reasons for sleep decisions | | | | | | | | | |
| Perceptions of the infant's physical and emotional comfort | X | X | X | X | X | X | X | X | X |
| Perceptions of what is safe, effective and convenient | X | X | X | X | X | X | X | X | X |
| Concerns about safe sleep recommendations | | | | | | | | | |
| Rationale behind recommendations | X | X | X | X | X | X | X | X | X |
| Choking | X | X | X | X | | | | X | X |
| Influences on safe sleep decisions | | | | | | | | | |
| Education | X | X | X | X | X | X | X | X | X |
| Disbelief | | X | | X | X | X | | X | X |
| Fathers, family and friends | X | X | X | X | X | X | X | X | |

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

**Table 3**

Quotes about parental reasons for sleep decisions

Q1. I want her to sleep exactly how she is [in the crib] but she just seems uncomfortable or whatever like she want to be close to something, so I want to get her to that. [African-American Mother]

Q2. She is a side sleeper. She rolls on her back sometimes, but she's more comfortable on her side. [African-American Mother]

Q3. But I feel if she's comfortable, then okay, have them sleep on their stomach. We can—we sleep on our stomach, we never have a problem. [African-American Mother]

Q4. Because you're making sure the baby's comfortable, maybe, or you think they're comfortable. It seems like the baby wants a blanket too. I can't sleep without a blanket, even if it's hot. [American Indian Supporter]

Q5. I think it's important… that they're telling us how the baby should sleep, but I still think babies, they are different. They're going to do their own thing. If they—if he likes to sleep on his side and don't like his back, then every time he sleeps then he roll on his side. I can't change the way he sleeps. I mean, I could, but if he feel comfortable on his side, then I let sleep on his side. [African-American Supporter]

Q6. I just feel safer with my baby next to me or by her dad. [American Indian Mother]

Q7. When we first brought her home from the hospital I was too scared to fall asleep the first couple of days she was home. So I was kind of awake for two or 3 days straight holding her at night and then when her father would get up in the morning he would take baby and then I would sleep for a little while. We had a Boppy Pillow and we put blankets in it so that it was like at an angle and she would sleep in the middle of it. And I just felt like she was safer there because I could roll over and put my hand on her belly and feel her breathing. [American Indian Mother]

Q8. But a lot of people… who say they can't feel their baby or something, that's just crazy to me because my instincts as a mother… When he move in his sleep, I'm jumping up, so I just don't understand it, how you can't. [African-American Mother]

Q9. I think my biggest worry is him sleeping in the crib… It's not far away, but still at the same time, he's not right here. So I'm constantly getting out of my sleep trying to look at him, trying to make sure he's okay. [African-American Mother]

Q10. It was, one time on the news, they said a baby was in a crib sleeping, somehow the arm got locked up in one of the things, and the arm had come off and stuff like that, like broke the arm and stuff. [African-American Mother]

Q11. I slept with all my babies and they're all alive. [American Indian Mother]

Q12. And going and getting him in the middle of the night, it's just I'm just too lazy and tired… It's just much easier for me to try to get some sleep and bring him into bed with us. [American Indian Mother]

Q13, I also know, when you're a mom and you get like, really, really tired, I have done it where I have laid the baby in the bed and been this way, facing her. But when you're tired, and you get to moving in your sleep, I've woke up and been facing that way. So yeah, I understand what you guys are saying [about always being aware where your baby is], but when you're tired, and you're just dead beat tired, you get to moving in your sleep, and you don't know always which way you're moving, because I've done it plenty of times, and the baby has kind of been, like, facing me, and it's like, "Okay, but I was laying this way." So it can happen. [African-American Mother]

Q14. But in the middle of the night, I'll pick him up when he needs to eat, and I'm tired, and I'll just feed him the breast, and hope he don't suffocate, really, I'm so tired. [African-American Mother]

Q15. I don't like him to sleep with me. You know, you might roll over on him or anything. You know, I had a bad experience with my 7-year old because I actually did roll over on her, you know. And it's just not a good idea. [African-American Male supporter]

Q16. We're all busy, we're all working… When you get home…, you're exhausted. You're like, I'm not going to fight with this baby to put them in a safe place that I know is safe. What else can I do? How else can I, instead of just a flat cold hard mattress, what are some other alternatives for safe sleep? [American Indian Mother]

Q17. I think you should give a tip on how there can be a safe way the baby can sleep in the bed instead of just saying, no, you can't do it. [African-American Mother]

Q18. Especially if you are having that many problems putting your [baby to bed], trying to follow safe sleep steps and you're having problems. I think if there was something that … had a list of safe alternatives, … instead of waking up every 15 min to adjust your baby, you'd actually read it to see if something can accommodate you. [American Indian Mother]

Q19. They, they [brochure authors] can't possibly have children, because getting a baby… to do exactly what you want it to do in its sleep, you'd have to be, like, a night owl, to sit up and watch the baby. Oop, you're not on your back any more, flip you back over… [African-American Mother]

Q20. I definitely fear that I won't be able to get her out of my bed. My son had that issue and still, from time-to-time, I wake up at 3:00 in the morning and he's in my bed. It becomes an attachment issue, kind of like what she was saying. They kind of feel like your bed is their bed as well, you know, and I just don't want him to be four, five and six still in my bed. [African-American Mother]

Q21. I am putting them on their backs in their cribs a lot more. Because I'd rather have them sleeping in their cribs than with me because I have an almost 3-year-old and she sleeps with me all the time. And I want my own bed; I want my bed back. [American Indian Mother]

Q22. Well, it took me a long time to convince her to start letting the baby sleep in the bassinet…. Like I said, I had a 1-year old so we just got done going through this and she sees how much, how hard it is to get my daughter to sleep in her own bed. So now, it's easier for her to, you know what I mean, just let that go. Like I ain't trying to deal with fighting with no more kids, so she just …went ahead and put her in the bassinet, so it was easy. [African-American Male supporter]

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

**Table 4**

Quotes about parental concerns about safe sleep recommendations

| |
|---|
| Q1. The reason why I'm here is to learn more information about the sleeping of babies infants making sure my baby sleeps right at night. I've been watching the news and hearing about people babies dying, sleeping with their babies and stuff. [African-American Male supporter] |
| Q2. When I was a baby my mother told me, both with me and my sister that she laid us on our bellies because at least when I was a baby that's what you were supposed to do. You were supposed to lay your baby on the belly because that's the safest and I've noticed that like over the years they, they changed it. It's oh now it's on the back and then oh it's on the belly, oh no now it's on the back and so I guess I'm wondering which one really is supposed to be the one that is the safest. Or is there not one that is more safe than the other? [African-American Supporter] |
| Q3. Sudden Infant Death Syndrome we don't know what causes it. So it could be a possibility that noise could play a part in it. Yes because if they get too scared I mean or too stimulated that would raise his blood pressure. [African-American Supporter] |
| Q4. Okay when I was in the hospital with him they were sticking him on his belly but they were like "Only we can do it because he's monitored but when you get home you can't do it. [American Indian Mother] |
| Q5. But the hospital they started doing it on his stomach but then they said they should sleep on their backs. But I just think it's safer on their side just in case they spit up. So that's how I put the baby to sleep. [African-American Male supporter] |
| Q6. He likes to sleep on his stomach because he has acid reflux when he's on his back. It comes up, he don't know how to control it. He sleeps well on his stomach. [African-American Mother] |
| Q7. [On their side] that way if they did throw up they're on their side so they're not going to swallow any of it and they're still, their airway's still open so that's how I like to do it myself. [African-American Supporter] |

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

**Table 5**

Quotes about influences on parental sleep decisions

| |
|---|
| Q1. When I was pregnant I went to a Safe Sleep seminar and they taught me about how different things can happen when the baby's sleeping, suffocated so I just took they advice and I just…let her sleep by herself. [African-American Mother] |
| Q2. It would be nice if you have a nurse that came into your room maybe and just spent 10 min with you and showed you a couple of tips face-to-face or even instructed you as you did it." [African-American Mother] |
| Q3. It's a mixed message I think with the industry and then the safety part of it but it's also just it's not going to happen to me. I'm not going to, you know it's not going to happen to me…just because—you think you're a good mom and you try your best and you'll never intentionally do it. [American Indian Mother] |
| Q4. I just been informed about how safe it is and how better it is to have your baby sleeping on their back so that's just—then one of my relative's daughter she passed away from SIDS and it was kind of a situation where the lady had her sleeping and all the stuff they had in the crib… so that kind of sticks in my head. [African-American Mother] |
| Q5. I'm not going to lie or nothing. Even though we talk about don't sleep with my baby I'm still going to go home and sleep with my baby. I probably wouldn't have nothing to tell nobody because as soon as I leave here and go lay down, my baby going to go sleep with me. [African-American Mother] |
| Q6. Like I think it's right but I still do what's comfortable for my baby [so that] I can get him to sleep. [American Indian Mother] |
| Q7. I listen more to the elderly people because like the social workers and stuff some of them don't have kids. They just go by the book so what works for people that use the book might not work for the other people. So I feel like I listen more to like my grandparents or something. [African-American Mother] |
| Q8. Sometimes if you have a friend who you know is a good mother and they've had kids that are older than yours. You guys had kids at the same time but her baby's been through this and your baby hasn't exactly gotten there yet, you know, a mom-to-mom experiences makes a world of difference sometimes. [African-American Mother] |
| Q9. I'm adamant about the crib. Not in the bed which gets a little bit difficult with mother's breast feeding, it's real easy … for her to nurse in the bed. But I guess that's where I kind of stepped in and when he's done I'll take him out put him in the bassinet. We normally do about 3 months in the bassinet in the bedroom and then they gently get kicked out into their own room with a monitor. [African-American Male supporter] |
| Q10. Yeah definitely crib. Well I try to put her in the crib you know…I'm not [always] there at night. So but when I'm there definitely I try to do the crib. [African-American Male supporter] |