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Long-Term Breastfeeding Support: Failing Mothers in Need

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Abstract This qualitative study analyzes mothers' reports of breastfeeding care experiences from pregnancy through infancy. Most research on medical support for breastfeeding examines a specific practice or intervention during an isolated phase of care. Little is known about how mothers experience breastfeeding education and support from the prenatal period through their child's first year. A convenience sample of 75 black and white WIC participants with infants was recruited at three Maryland WIC agencies. In-depth interviews covered mothers' comprehensive experiences of breastfeeding education and support from pregnancy through the interview date. Most mothers received education or support from a medical professional prenatally, at the hospital, or during the child's infancy, but most also reported receiving no education or support at one or more of these stages. Mothers often felt

provided education and support was cursory and inadequate. Some mothers received misinformation or encountered practitioners who were hostile or indifferent to breastfeeding. Mothers were not given referrals to available resources, even after reporting breastfeeding challenges. Mothers received inconsistent messages regarding breastfeeding within and across institutions. Mothers need consistent, sustained information and support to develop and meet personal breastfeeding goals. Medical professionals should follow guidelines issued by their own organizations as well as those from the US Surgeon General, Healthy People 2020, and the Baby Friendly Hospital Initiative. Prenatal, postnatal, and pediatric care providers should coordinate to provide consistent messages and practices within and across sites of care.

Keywords Breastfeeding · Prenatal · Post-partum · Pediatrics · Qualitative

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Introduction

Breastfeeding has long been recognized as the optimal form of infant nutrition by medical groups throughout the United States, including the American Medical Association [1], the American College of Obstetricians and Gynecologists [2], and the American Academy of Pediatrics [3]. These organizations recommend that babies breastfeed exclusively for 6 months and continue to breastfeed in addition to eating complementary foods until at least a year of age. Despite these recommendations, in the United States, only 75% of mothers initiate breastfeeding, and only 13% meet the recommendation to breastfeed exclusively for 6 months [4]. Lower income mothers, especially those enrolled in the USDA's Special Supplemental Nutrition Program for Women, Infants and Children

(WIC), are less likely to breastfeed than their higher income counterparts [5]. Breastfeeding is economically and environmentally advantageous: if rates of exclusive breastfeeding for 6 months increased to 90% for all US infants, each year there would be \$3.6 billion saved and 911 deaths prevented [6]. Savings for families include not purchasing formula, reduced incidence of short-term and chronic illnesses for infants and mothers, and fewer work absences to care for a sick infant [3, 7–9].

Receiving sustained education, support and one-to-one counseling increases a mother's likelihood of initiating breastfeeding and of having longer breastfeeding duration [10], but many physicians lack breastfeeding knowledge, and many have little or no formal training in assisting patients with breastfeeding [11–15]. Studies show that while many physicians believe they provide adequate counseling on breastfeeding, mothers generally find provided counseling insufficient and ineffective [16, 17]. Recent reviews of major obstetric and gynecology, pediatrics, and maternal-child nursing textbooks found that most texts had significant omissions and inaccuracies in breastfeeding information [18–20]. Additional research has shown that doctors express opinions regarding breastfeeding based on personal experience rather than abiding by professional recommendations [15]. In addition, physicians and the institutions where they work often use items distributed by formula companies and offer formula giveaways, undermining messages about the importance of breastfeeding [21].

Mothers' experiences with medical professionals influence both breastfeeding initiation and duration [22–25]. A mother's decision to breastfeed is often made before or early in pregnancy and can be impacted by her obstetrician [26]. Her birth experience and post partum hospital stay can impact her breastfeeding decisions and breastfeeding success: vaginal birth, few interventions, and labor support from a doula all promote breastfeeding initiation and longer duration, while Cesarean birth impedes breastfeeding [27–33]. When health professionals follow Baby Friendly practices outlined by UNICEF and the World Health Organization (e.g. initiating breastfeeding within an hour of birth, not offering infant formula unless medically indicated, having mothers and infants room in, and providing breastfeeding support and referrals to new mothers) breastfeeding rates rise [34–36]. For mothers who initiate breastfeeding, support is crucial in the early postpartum period if breastfeeding is to continue successfully [37]. Inconsistent or conflicting messages from healthcare providers can be detrimental to breastfeeding [15].

Though every stage of care potentially impacts breastfeeding, most research examining the influence of medical professionals focuses on clinical interventions and addresses only one stage of health care: prenatal, in-hospital, or

pediatric. There is a dearth of research regarding mothers' own reports of their experiences with breastfeeding and the medical community, and researchers have recommended examining mothers' breastfeeding experiences within their specific social contexts [38]. This paper analyzes in-depth, self-reported experiences of WIC participants regarding the prenatal, in-hospital, and pediatric breastfeeding education and support they received beginning in pregnancy and continuing through their child's infancy. It examines mothers' perspectives on the quality and consistency of the information and support they received within each institutional setting as well as across institutions.

Methods

This study sought to explore the comprehensive infant feeding education and support experiences of mothers enrolled in the Maryland WIC program. WIC offers healthful foods and nutrition education to pregnant women, postpartum and breastfeeding mothers, and children under 5 in families with household income under 185% of the poverty line and who are at nutritional risk. Babies under a year may receive iron fortified infant formula through the program. WIC also offers breastfeeding education and support. All WIC staff members are trained to support breastfeeding as the normal way to feed babies, and Breastfeeding Peer Counselors (PCs) are available in most of the state's WIC agencies.

This analysis is based on data from the qualitative Maryland WIC Breastfeeding Peer Counselor Evaluation. The evaluation included in-depth, semi structured interviews at three representative Maryland agencies, including one urban, one suburban, and one semi-rural agency. A PhD behavioral scientist and an advanced graduate student in sociology designed a field guide, and from 2007 to 2009, interviewed a convenience sample of 75 clients of the peer counseling program. Interviews were limited to black and white clients, as these two groups have the lowest breastfeeding rates among Maryland WIC participants (Latinas and Asians have much higher rates). Only clients who had an infant and had met at least once with a PC were interviewed. When interviewers were available, WIC staff invited all eligible clients to participate. Clients were further screened for eligibility by the interviewers. There were a total of five refusals, all for time constraints.

Semi-structured interviews included questions regarding prenatal breastfeeding intentions, experiences with obstetricians and other prenatal health care providers regarding breastfeeding, birth experiences, feeding experiences in the hospital, experiences regarding breastfeeding education and support from pediatric care providers, breastfeeding support

from WIC, and support from family and friends. Questions were designed to address the myriad influences on infant feeding in order to identify target areas for improving education and intervention in the PC program. Interviews lasted approximately 30 min. The research was approved by IRBs at Johns Hopkins and at Maryland WIC. Mothers received written information about the study and gave verbal consent in order to preserve anonymity. Mothers received a photo album in gratitude for participation, and toys and snacks were provided for any older children present. Interviews were recorded using a digital recording device, were transcribed verbatim by a professional transcriber, and were entered into Atlas.ti software (ATLAS.ti. Version 5.2. [Computer software] (2006) Berlin, Scientific Software Development) for coding and analysis.

Results

Among mothers who participated in the study, 49 were black and 26 were white. On average, they were 25 years old, with a range from 18 to 42. Infants' average age was around 5 months, but ranged from 6 days to 12 months. Mothers' educational attainment spanned from ninth grade to having a Master's degree, with the average mother having a high school diploma. Mothers had an average of two children, with a range of one to 6 and a mode of one. All mothers birthed at hospitals and 24 had cesareans. Within our sample, 57 mothers (76%) tried breastfeeding at least once.

Prenatal Care

When receiving prenatal care, almost half of mothers (49%) received some education about breastfeeding from their obstetrician. This education took many forms, most commonly giving the pregnant woman a pamphlet or making a statement that breastfeeding was the healthiest choice:

[My doctor] gave me literature on breastfeeding. [It] just said that it was the best thing for the baby, the best thing for the mother, especially me having gestational diabetes. It would help lose a lot of weight, that would help, you know, maybe not get diabetes after the baby was born. Things like that.

One mother explained that she was told breastfeeding was the best choice but wasn't given tangible resources:

Everyone I've always talked to kind of forced me. [They'd] say, "Okay, you should really think about breast-feeding." They put emphasis on breast-feeding. That was the most thing that they said about feeding but, other than that, that was mainly it.

Some mothers reported receiving information that appeared misleading or inaccurate. For instance, one teen mother said,

They asked me if I was going to breastfeed or bottle-feed and they told me that breastfeeding would be more healthier as long as I kept my diet up right.

This mother decided not to breastfeed, in part because she believed she could not do so safely without changing her eating habits.

More than a quarter of mothers (27%) said no obstetrician or other medical care provider made mention of breastfeeding at their prenatal visits. Sometimes providers assumed that mothers would be bottle feeding. One mother had the following exchange with the interviewer:

Interviewer: Did they talk about feeding when you were in prenatal care?

Mother: Mm-hmm. Like, don't prop her bottle, you have to hold her and feed her. Just like the normal stuff.

I: Did they talk to you about breastfeeding at all?

M: No, actually.

Other mothers said that the topic of feeding was never broached:

Nobody talked to me about feeding him until I came to WIC. Yeah, my doctor didn't tell me anything.

An additional 14% of mothers said their doctor asked their feeding plans but provided no information or support:

They asked me was I going to breastfeed, and I told them, yeah I will. I had intentions on breastfeeding. They just asked. They didn't really give me no pamphlets or nothing.

Only 10% of mothers reported that they received one-to-one education and counseling, most often provided by a lactation consultant either on site or through a referral. Mothers generally found this level of care to be helpful in making the decision to breastfeed. One mother (who used a midwifery service rather than an obstetrician) reported:

Yeah, actually I had a breastfeed[ing] coach when I was going to the clinic. I went to the medical center, and one time a lady came in and they were [asking] what you're doing, surveying the number they would call to check up and see if the baby was born yet, give us breastfeeding tips and different things like that. So that really got me into wanting to breastfeed.

Hospitals

Mothers who birthed vaginally generally reported that their births involved interventions such as epidural anesthesia,

narcotic pain relief, IV drips, Pitocin, rupturing of the amniotic sac, forceps delivery, and episiotomy. Only one mother reported that she had the support of a doula during her labor. Though some mothers were able to hold their babies within an hour of birth, usually the baby was taken to be “cleaned up” before being brought to the mother. Only one mother was visited by a lactation consultant within the first hour.

Twenty-four mothers in our sample—nearly a third—gave birth by cesarean, a rate close to the national average of 32% [39]. Mothers who had cesareans with previous children were not given the option of vaginal births and were usually told that repeat surgery was necessary for the safety of the baby. Mothers reported that cesarean delivery in particular made breastfeeding difficult. Most were not allowed to hold their babies until hours after the birth:

I had to wait [to hold my baby] because I was numb. So I had to wait about, I’m going to say a couple of hours maybe? Two or three hours.

Pain from surgery was reported as a deterrent to breastfeeding:

And when I had the C-section, [the surgery] also made me lose a little interest in breastfeeding because it’s so painful to hold him like that...with the incision.

Mothers were also concerned that medication from surgery would harm the baby if they breastfed:

I wound up giving [my baby] the bottle [of formula]. Because I was afraid that all the medication that I had would [get to her]. Because I had the shot and some other type of medication and I didn’t want her to get it.

More than a quarter of babies born by cesarean were fed infant formula without their mother’s consent. Often hospital staff simply fed the baby before the mother had a chance. In other cases, it was against the expressed wishes of the mother. One first-time mother reported the following:

They rolled me out back into my room. And I was begging [to hold the baby]. [The father] put him on me and they let him. I couldn’t feel him but I was just looking at him. And then they took him. I told them I wanted to breastfeed. They told me there’s really no way I could breastfeed because of the kind of condition I was in. And I told them I was going to. And they rushed him back down. They gave him one little [bottle] ready-made... and I told them I didn’t want him to have it. They got mad.

During their post-partum stay, most breastfeeding mothers—regardless of mode of birth—reported that nurses or other hospital staff suggested that they supplement

with formula. Sometimes there was a stated need for supplementation, such as the baby’s low blood sugar or jaundice, though supplementation in these cases is not necessarily the recommended course of action [40, 41]. At other times, nurses suggested a bottle so that the mother could rest instead of breastfeeding. In other cases, suggestions to supplement were made in response to a mother’s expressed concern. Mothers often worried that they were not making enough milk, and the advice they received at the hospital often reinforced this perception. One mother reported the following to the interviewer:

Yeah, we had to give her a bottle because the breast milk that was coming out, it wasn’t enough. She would still be hungry and the milk would have stopped completely coming out of the breast. She would still whine and sniff around, so they were saying give her as much that will come out, and whatever she wants after that, give her the bottle.

All babies admitted to the neonatal intensive care unit were supplemented with formula, even if the mother was pumping milk. One mother was told to pump just once per day. Although using artificial nipples for supplementation can cause breastfeeding difficulties [42], and the Baby Friendly steps include a prohibition against artificial nipples for breastfed infants [36], only one mother reported that her baby was supplemented with a syringe rather than a bottle.

Formula companies provide hospitals with diaper bags that contain formula samples and coupons as well as pamphlets produced by the formula companies that contain feeding and other baby care information. Distribution of these bags has been shown to reduce breastfeeding duration and exclusivity [10], but all hospitals used by mothers in our study distributed these bags, and almost every mother received one at discharge, even if she planned to breastfeed exclusively:

They gave me a little care bag with everything already in there. It had the formula from—is that Isomil?—for the breastfed baby. It had the little pack that comes eight in a pack. It comes eight in a pack that was in the bag, too, and it said for breastfed baby’s milk.

Overall, less than 20% of mothers said that the hospital staff was universally supportive of breastfeeding. An additional 45% reported that they received support from some staff, but not others. Twenty-seven percent of mothers reported that they received no support for breastfeeding, and 7% said that hospital staff was hostile toward their intentions to breastfeed.

Pediatricians

Mothers in our study often regarded their baby’s pediatrician as a primary source of education and support for

breastfeeding, but pediatricians frequently did not meet this expectation. One-third of mothers in our sample reported that their pediatrician did not mention feeding at all during their visits. Slightly more than a third reported that the doctor simply asked how they were feeding the baby but asked no further questions and provided no further information. Pediatricians sometimes made assumptions. One breastfeeding mother reported.

The doctor just said a little bit and then he's like, oh, you're bottle-feeding? I'm like no, I'm breastfeeding. He's like, oh, that's okay.

The doctor provided no further information, and a few weeks later when the mother felt her milk production had decreased, she began supplementing.

A quarter of the mothers said their pediatricians expressed verbal support for breastfeeding. For instance, one mother reported that when she asked her pediatrician about her breastfeeding concerns, he advised, “stay away from the bottles.” Another reported:

She asked how it was going, was it going good and everything, but [the baby] had problems latching on, so it was kind of difficult. That's why it didn't last that long.

Only 2 mothers reported that their pediatrician offered hands-on support and referrals in response to the mother's concerns about breastfeeding. These mothers were grateful for the pediatrician's time and concern:

She really gave me a lot of coaching. As a matter of fact, we go back tomorrow, because she said normally it's a two-week process. But since she knows that I'm trying with the breastfeeding and she's trying to help me, she wants me to come back tomorrow to see how things are going. Because one of the things that she was telling me that I wasn't making enough attempts. Because I try maybe once a day. And she was saying that wasn't enough, that I needed to try once every 3 hours or every time I'm about to feed her try to give her the breast first. So she was very, very helpful.

Discussion

Breastfeeding support and education is important at all stages of pregnancy, during the postpartum hospital stay, and through infancy and beyond. For education and support to be most effective, it must be consistent across these stages, helping mothers understand the importance of breastfeeding and commit to initiating, and offering needed resources to meet their breastfeeding goals. Despite the official endorsements for breastfeeding made by medical

organizations, doctors, nurses and other medical professionals offer inconsistent support, not only *within* specific sites and institutions [43], but *across* sites and institutions. Routine practices by some doctors and hospitals may actually discourage breastfeeding. These include not providing prenatal information and education, assuming mothers will not breastfeed, pressuring mothers to breastfeed without offering support, high cesarean rates, not following Baby Friendly practices, recommending supplementation without confirmed medical need, and not providing time or resources for mothers with breastfeeding concerns at pediatric check-ups.

Prenatally, doctors must go beyond pressuring a mother to agree to try breastfeeding and provide her with appropriate information, support and resources. Similarly, it is not enough for a pediatrician or pediatric nurse to verbally support breastfeeding; mothers need individualized assistance when they face breastfeeding difficulties. Mothers often felt their pediatricians were the breastfeeding experts and were reluctant to turn to anyone else for help. If the doctor cannot provide the level of attention a mother needs, referrals must be available. Lay workers such as doulas and breastfeeding PCs have been shown to be effective in helping mothers to initiate and sustain breastfeeding [31, 44]. Only one mother in our study had access to a doula, and no mother mentioned that her physician or hospital had offered her the option of doula care. All of the mothers in our study had access to WIC breastfeeding peer counselors, yet no pediatrician recommended WIC as a resource for breastfeeding assistance. Increased collaboration between medical professionals and breastfeeding lay support could increase breastfeeding, particularly in the vulnerable population addressed here.

Most importantly, breastfeeding education and support must be offered consistently, reinforcing accurate information and providing assistance and resources from the first prenatal visit until the child is weaned. Medical practices and institutions must communicate with one another and follow established guidelines so that mothers' positive breastfeeding intentions will not be derailed at any stage. This is especially important among lower-income mothers, who are already vulnerable to formula use and may not have access to support outside of the medical system. Only one mother of the 75 we interviewed reported receiving consistent, positive information and support prenatally, at the hospital, and from her pediatrician (perhaps not surprisingly, she was also the only mother we interviewed who reported never having given her child, who was 10 months, a formula supplement).

Maryland is particularly disadvantaged by having no Baby Friendly hospitals and no hospitals that were “bag free” (did not give out formula sample bags) from 2007 to 2009. Public health and medical policy should embrace

new Healthy People 2020 Guidelines, the Baby Friendly Hospital Initiative, and the Surgeon General's Call to Action to Support Breastfeeding in order to develop steps to offer consistent prenatal breastfeeding education, lower the cesarean rate, provide doulas as a standard element of birth practice, implement Baby Friendly practices at hospitals, ban formula discharge bags, and develop standards for pediatricians to provide breastfeeding support and referrals.

This research has some limitations. Our study was qualitative, and thus was not a random sample. Mothers were drawn from three specific WIC agencies and may not represent experiences of WIC participating mothers in other areas. All information was derived from mothers' reports, and it is possible that they did not always remember events accurately. Future research should expand upon the base provided here by considering a broader range of race-ethnicities and considering social influences that may reinforce, exacerbate or mitigate the influences of medical professionals.

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References

1. American Medical Association. (2005). *Report 2 of the council on scientific affairs* [Internet]. Available from: <http://www.ama-assn.org/ama/no-index/about-ama/15169.shtml>. Cited 13 Dec 2010.
2. American College of Obstetricians and Gynecologists. (2003). *Breastfeeding* [Internet]. Washington DC. Available from: <http://www.acog.org/departments/underserved/breastfeedingstatement.pdf>. Cited 2 Nov 2010.
3. American Academy of Pediatrics Work Group on Breastfeeding. (2005). Breastfeeding and the use of human milk. *Pediatrics*, 115, 496–506.
4. Centers for Disease Control and Prevention. (2010). *Breastfeeding report card: United States, 2010* [Internet]. Atlanta. Available from: <http://www.cdc.gov/breastfeeding/data/reportcard.htm>. Cited 13 Dec 2010.
5. Centers for Disease Control and Prevention. *Breastfeeding among U.S. children born 1999–2007, CDC national immunization survey* [Internet]. Atlanta; c2010. Available from: http://www.cdc.gov/breastfeeding/data/NIS_data/index.htm. Cited 13 Dec 2010.
6. Bartick, M., & Reinhold, A. (2010). The burden of suboptimal breastfeeding in the United States: A pediatric cost analysis. *Pediatrics*, 125(5), e1048–e1056.
7. The National Women's Health Information Center. (2010). *Breastfeeding* [Internet]. Washington DC. Available from: <http://www.womenshealth.gov/breastfeeding/>. Cited Dec 2010.
8. Irigoyen, M., Glassman, M., Chen, S., et al. (2008). Early onset of overweight and obesity among low-income 1- to 5-year olds in New York City. *Journal of Urban Health*, 85(4), 545–554.
9. Weimer, J. (2001). *The economic benefits of breastfeeding: A review and analysis*. Food and Rural Economics Division, Economic Research Service, US Department of Agriculture. Food Assistance and Nutrition Research Report No. 13. pp. 1–14.
10. Rosenberg, K. D., Eastham, C. A., Kasehagen, L. J., et al. (2008). Marketing infant formula through hospitals: The impact of commercial hospital discharge packs on breastfeeding. *American Journal of Public Health*, 98, 290–295.
11. Ritzen, A., Johnson, D., Bekemeier, B., et al. (2009) [cited 2010]. Breastfeeding survey of Washington state pediatricians. *Washington State Journal of Public Health Practice* [Internet]. 2(2):1–12. Available from: <http://www.wsphajournal.org/V2N2Ritzen.pdf>.
12. Bernaix, L. W. (2000). Nurses' attitudes, subjective norms, and behavioral intentions, toward support of breastfeeding mothers. *Journal of Human Lactation*, 16, 201–209.
13. Hellings, P., & Howe, C. (2000). Assessment of breastfeeding knowledge of nurse practitioners and nurse-midwives. *Journal of Midwifery and Women's Health*, 45, 264–270.
14. Register, N., Eren, M., & Lowdermilk, D. (2000). Knowledge and attitudes of pediatric office nursing staff about breastfeeding. *Journal of Human Lactation*, 16, 210–215.
15. Szucs, K. A., Miracle, D. J., & Rosenman, M. B. (2009). Breastfeeding knowledge, attitudes, and practices among providers in a medical home. *Breastfeeding Medicine*, 4, 31–42.
16. Taveras, E. M., Li, R., Grummer-Strawn, L., et al. (2004). Mothers' and clinicians' perspectives on breastfeeding counseling during routine preventive visits. *Pediatrics*, 113, e405–e411.
17. McInnes, R. J., & Chambers, J. A. (2008). Supporting breastfeeding mothers: Qualitative synthesis. *Journal of Advanced Nursing*, 62, 407–427.
18. Ogburn, T., Philipp, B. L., Espey, E., et al. (2011). Assessment of breastfeeding information in general obstetrics and gynecology textbooks. *Journal of Human Lactation*, 27(1), 58–62.
19. Philipp, B. L., Merewood, A., Gerendas, E. J., et al. (2004). Breastfeeding information in pediatric textbooks needs improvement. *Journal of Human Lactation*, 20(2), 206–210.
20. Philipp, B. L., McMahon, M. J., Davies, S., et al. (2007). Breastfeeding information in nursing textbooks needs improvement. *Journal of Human Lactation*, 23(4), 345–349.
21. Lawrence, R. A. (2011). The obstetrician as the lynchpin to successful breastfeeding. *Breastfeeding Medicine*, 6(1), 1–2.
22. Queenan, J. (2011). Academy of breastfeeding medicine founder's lecture 2010: Breastfeeding: An obstetrician's view. *Breastfeeding Medicine*, 6(1), 7–14.
23. Lu, M., Lange, L., Sulusser, W., et al. (2001). Provider encouragement of breast-feeding: Evidence from a national survey. *Obstetrics and Gynecology*, 97(2), 290–295.
24. DiGirolamo, A., Grummer-Strawn, L., & Fein, S. (2008). Effect of maternity-care practices on breastfeeding. *Pediatrics*, 122(Suppl 2), S43–S49.
25. DiGirolamo, A. M., Grummer-Strawn, L. M., & Fein, S. B. (2003). Do perceived attitudes of physicians and hospital staff affect breastfeeding decisions? *Birth*, 30(2), 94–100.
26. Arora, S., McJunkin, C., Wehrer, J., et al. (2000). Major factors influencing breastfeeding rates: Mother's perception of father's attitude and milk supply. *Pediatrics*, 106, E67.
27. Baxter, J. (2006). Women's experience if infant-feeding following birth by caesarean section. *British Journal of Midwifery*, 14, 290–295.
28. Klaus, M., & Klaus, P. (2010). Academy of Breastfeeding Medicine Founder's Lecture 2009: Maternity care re-evaluated. *Breastfeeding Medicine*, 5, 3–8.
29. McFadden, C., Baker, L., & Lavender, T. (2009). Exploration of factors influencing women's breastfeeding experiences following a caesarean section. *Evidence Based Midwifery*, 7, 64–70.
30. Mottl-Santiago, J., Walker, C., Ewan, J., et al. (2008). A hospital-based doula program and childbirth outcomes in an urban,

- multicultural setting. *Maternal and Child Health Journal*, 12, 372–377.
31. Nommsenrivers, L. A. (2009). Doula care, early breastfeeding outcomes, and breastfeeding status at 6 weeks postpartum among low-income primiparae. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 38, 157.
 32. Pérez-Ríos, N., Ramos-Valencia, G., & Ortiz, A. P. (2008). Cesarean delivery as a barrier for breastfeeding initiation: The Puerto Rican experience. *Journal of Human Lactation*, 24, 293–302.
 33. Rowe-Murray, H. J., & Fisher, J. (2002). Baby friendly hospital practices: Cesarean section is a persistent barrier to early initiation of breastfeeding. *Birth: Issues in Perinatal Care*, 29, 124–131.
 34. DiGirolamo, A. M., Grummer-Strawn, L. M., & Fein, S. B. (2008). Effect of maternity-care practices on breastfeeding. *Pediatrics*, 122, S43–S49.
 35. Murray, E. K., Ricketts, S., & Dellaport, J. (2007). Hospital practices that increase breastfeeding duration: Results from a population-based study. *Birth*, 34, 202–211.
 36. Baby Friendly Hospital Initiative. (2010). *The ten steps to successful breastfeeding* [Internet]. Available from: <http://www.babyfriendlyusa.org/eng/10steps.html>. Cited November 1, 2010.
 37. Gross, S., Resnick, A., Nanda, J., Cross-Barnet, C., Augustyn, M., Paige D. (2011). Early postpartum: A critical period in setting the path for breastfeeding success. *Breastfeed Medicine*. Available from <http://www.liebertonline.com/doi/abs/10.1089/bfm.2010.0089>.
 38. Spencer, R. L. (2008). Research methodologies to investigate the experience of breastfeeding: A discussion paper. *International Journal of Nursing Studies*, 45, 1823–1830.
 39. Menacker, F., & Hamilton, B. E. (2010). *Recent trends in cesarean delivery in the United States. NCHS data brief, no 35*. Hyattsville, MD: National Center for Health Statistics.
 40. Kelly, J. (2011). AP Sets Guidelines for Neonatal Hypoglycemia. Medscape Medical News [Internet]. Available from: <http://www.medscape.com/viewarticle/738204>. Cited 2010.
 41. American Academy of Pediatrics. (2004). Management of hyperbilirubinemia in the newborn infant 35 or more weeks of gestation. *Pediatrics*, 114, 297–316.
 42. Howard, C., Howard, F., Lanphear, B., et al. (2003). Randomized clinical trial of pacifier use and bottle-feeding or cup feeding and their effect on breastfeeding. *Pediatrics*, 111, 511–518.
 43. Nelson, A. M. (2007). Maternal-newborn nurses' experiences of inconsistent professional breastfeeding support. *Journal of Advanced Nursing*, 60, 29–38.
 44. Gross, S., Resnik, A., Cross-Barnet, C., Nanda, J., Augustyn, M., & Paige, D. (2009). The differential impact of WIC peer counseling programs on breastfeeding across the state of Maryland. *Journal of Human Lactation*, 25(4), 435–443.