



The Los Angeles Mommy and Baby Project
Healthy Mommies and Healthy Babies



LA BEST BABIES NETWORK
Healthy Babies. Our Future.



BREASTFEEDING IN LOS ANGELES COUNTY: EXPLORING MOTHER'S BARRIERS TO INITIATION AND REASONS FOR STOPPING

Introduction

Exclusive breastfeeding through age six months engenders lifelong benefits to mother and baby. The costs of not supporting exclusive breastfeeding are astonishing. As one researcher notes, “if 90 percent of Los Angeles families were to comply with medical recommendations to breastfeed exclusively for six months, the savings to the Los Angeles economy would amount to \$471 million per year and 33 excess deaths prevented, nearly all of them infants.”¹ While Los Angeles County has surpassed the goal of 81.9% for the initiation breastfeeding set by Healthy People 2020, we continue to struggle to meet targets for the continuation of breastfeeding beyond the first few weeks and for exclusive breastfeeding². Importantly, rates of breastfeeding initiation and continuation vary widely by region and between different populations within the County.

As a mother prepares for the birth of her child, there are numerous health decisions to consider, including how she will feed her baby. For most mothers, the feeding decision is not made just once, but many times, as mothers confront varying challenges and/or barriers to exclusive and continued breastfeeding. This brief describes the characteristics of mothers who initiate and continue breastfeeding and explores reasons why mothers in Los Angeles County either do not initiate or do not continue breastfeeding past three months. Recommendations are suggested as ways to assist mothers to initiate and continue exclusive breastfeeding for at least age six months.

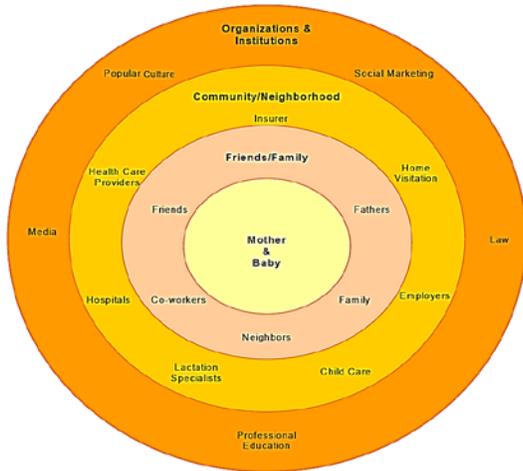
Factors Influencing Breastfeeding Initiation and Duration

The decision to breastfeed is generally made very early in pregnancy and often before. This decision is influenced by numerous factors that surround the woman including any past experience with breastfeeding, personal knowledge of

other women's breastfeeding experiences, support from her partner, family, and friends, social and cultural norms, knowledge about benefits, her belief in her ability to breastfeed, and education and non-judgmental consistent advice from healthcare professionals (Figure 1).^{3, 4} Actual initiation of breastfeeding is further influenced by her labor and birth experience, mode of birth, presence of medical complications occurring for her or her infant and provision of ongoing peer and professional assistance and support during the immediate hours and weeks following birth.^{5, 6}

Studies show that U.S. women who intend to breastfeed are more commonly white and have at least some college education, a higher income, fewer children and a family support system.⁷ Expression of the intention to breastfeed before and during pregnancy, confidence of the mother, and having support from the baby's father, the woman's partner, the baby's grandmother, and/or peer counselors are all associated with initiation, longer duration of breastfeeding and exclusive breastfeeding.^{8, 9} Grandmothers and female relatives strongly influence a new mother's decision to breastfeed. If grandmothers value breastfeeding and provide loving and nurturing encouragement to the new mother, she is more likely to initiate and continue breastfeeding.¹⁰ Healthcare providers also have a key role; women who report encouragement to breastfeed from their healthcare provider are four times more likely to initiate breastfeeding than those who do not report receiving this encouragement.¹¹ Cultural traditions influence attitudes and beliefs towards breastfeeding, supplementation and duration of breastfeeding.^{7, 12} Of interest, immigrant women in each racial/ethnic group demonstrate higher initiation rates and longer duration of breastfeeding than U.S. born women for income levels up to 200% of poverty.¹¹ Conversely, rates of initiation and duration of breastfeeding are significantly lower among new immigrant families with incomes above 200% of poverty compared with U.S. born women with similar income levels.¹¹

Figure 1. Breastfeeding Environment: Individual Perspective



High breastfeeding initiation rates (>75%) in the hospital suggests that most mothers intend to breastfeed their infants prior to birth; however, some may not receive sufficient support to overcome the multiple challenges they face, especially after leaving the hospital.¹³ The researchers suggested that society needs to “integrate, normalize and mainstream breastfeeding” into our culture in order for breastfeeding to become the community norm for feeding infants and toddlers¹⁴.

Methods

We analyzed data from the 2010 LAMB Survey (6,593 mothers). LAMB is a population-based mail survey, distributed to women in Los Angeles County (LAC) who recently delivered a baby. Mothers were selected in a random sampling of birth certificate records. The LAMB survey asks recent mothers in LAC whether they ever breastfed or pumped breast milk to feed their baby after delivery. For those who did not, it also asks to select reasons as to why they did not initiate breastfeeding in the hospital after delivery or stopped breastfeeding after initiation. Responses are not mutually exclusive and are summarized based on frequency of occurrence. Appropriate sampling weights are adjusted for design effect and non-response bias.

What do we know about breastfeeding initiation and continuation for three months among LA County mothers?

Provider Encouragement and Breastfeeding Practices

Breastfeeding was initiated by 88.1% of women in Los Angeles County in 2010. Breastfeeding initiation varies by maternal ethnicity, age, education, marital status, income and region of residence in Los Angeles County (Table 1 & Figure 2). Breastfeeding initiation rates are the lowest in the South region at only 79.9%. The West and San

Fernando regions have the highest breastfeeding initiation rates reported at 96.8% and 94.2%, respectively. Asian/Pacific Island and non-Hispanic white women have highest rates of breastfeeding initiation with nearly 95% of women reporting initiating breastfeeding (Figure 3). While African American women have the lowest rates of initiating breastfeeding (79.0%), it is encouraging that breastfeeding initiation increased by 5.0% between 2005 and 2010 among African American women compared to a 5.1% increase among non-Hispanic white women, a 2.4% increase among Asian/Pacific Island women and 1.5% increase among Hispanic women (Figure 3). While breastfeeding initiation remains highest among older women in 2010 (Figure 4), initiation rates increased by 6.9% between 2005 and 2010 among women less than age 20, reducing the gap in initiation rates among LA County’s youngest and oldest women.

Women who attained “ideal gestational weight gain” and those who were not obese before pregnancy, nor experienced depression during pregnancy more often initiated breastfeeding (Table 1).

Breastfeeding was initiated among more women who reported provider encouragement, but continued breastfeeding at 3 months age was not associated with provider encouragement (Table 1).

LAMB Questions Analyzed

Did you ever breastfeed or pump breast milk to feed your baby after delivery?

What were your reasons for not breastfeeding your new baby?

- My baby was sick and could not breastfeed
- I was sick and could not breastfeed
- I had too many household duties
- I did not like breastfeeding
- I went back to work or school
- My family and/or partner did not want me to breastfeed
- Other, Please tell us _____

How many weeks or months did you breastfeed or pump milk to feed your baby?

What were your reasons for stopping breastfeeding?

- I had difficulty nursing my baby
- Breast milk alone did not satisfy my baby
- I thought I was not making enough milk
- My nipples were sore, cracked, or bleeding
- I went back to work or school
- I did not like breastfeeding
- My family and/or partner did not want me to breastfeed
- Other, Please tell us _____

Did a doctor or nurse give you any help or encouragement for breastfeeding?

- During prenatal visits
- In the hospital after your baby was born

Table 1. Factors Associated with Breastfeeding Initiation and Continuation at 3 months, Los Angeles Mommy and Baby Survey (LAMB), 2010

	Have Ever Any Breastfeeding Practice (N=5,789)	Have Ever Continued Breastfeeding or Pumping Breast Milk at 3 months (N=3,403)	P-value	P-value
Age	(%)	(%)		
<20 years old	84.2	36.4	0.0028	<0.0001
20-24 years old	85.1	48.0		
25-34 years old	88.7	64.4		
35+ years old	90.6	70.4		
Education				
Less than High School	82.8	55.5	<0.0001	<0.0001
High School	83.6	47.7		
Greater than High School	92.6	68.1		
Marital Status				
Married	91.7	69.3	<0.0001	<0.0001
Never Married-living together	85.5	51.3		
Unmarried/Not living with partner ^a	79.4	43.5		
Household Income				
<\$20,000	83.1	49.8	<0.0001	<0.0001
\$20,000-\$39,999	89.4	56.4		
\$40,000-\$59,999	89.9	69.5		
\$60,000-\$99,999	94.1	74.2		
\$100,000 and more	96.5	79.8		
BMI before pregnancy				
Underweight (<18.5)	91.6	62.3	<0.0001	<0.0001
Normal Weight (18.5-24.9)	89.8	64.4		
Overweight (25.0-29.9)	88.6	59.6		
Obese (=30.0)	82.3	47.1		
Ideal Gestational Weight Gain^b				
Yes	89.2	57.6	0.0189	0.2133
No	85.8	60.4		
Received Adequate Prenatal Care (Kotelchuck)				
Yes	88.4	61.1	0.1639	0.0285
No	85.2	54.1		
Had Ever Maternal Depression During Pregnancy^c				
Yes	85.1	64.0	0.0015	<0.0001
No	89.4	52.3		
Had Ever received Provider Encouragement^d				
Yes	89.5	58.5	<0.0001	0.5145
No	74.0	61.0		

a. Unmarried/Not living with a partner includes divorced, widowed, separated and never married living apart; b. Ideal gestation weight gain was defined as 1) 28lbs<=weight gain<=40lbs (for underweight mom); 2) 25lbs<=weight gain<=35lbs (for normal weight mom); 3) 15lbs<=weight gain<=25lbs (for overweight mom); 4) weight gain>=15lbs (for obese mom); c. Had ever maternal depression during pregnancy was defined as: For two weeks or longer during pregnancy, if mother had ever experienced any of 1) Feel sad, empty or depressed for most of the day; 2) Lose interest in most things like work, hobbies, and other things you usually enjoyed; d. Had ever received encouragement was defined as whether mom receive any help with breastfeeding during prenatal care visit or in hospital after birth from doctors

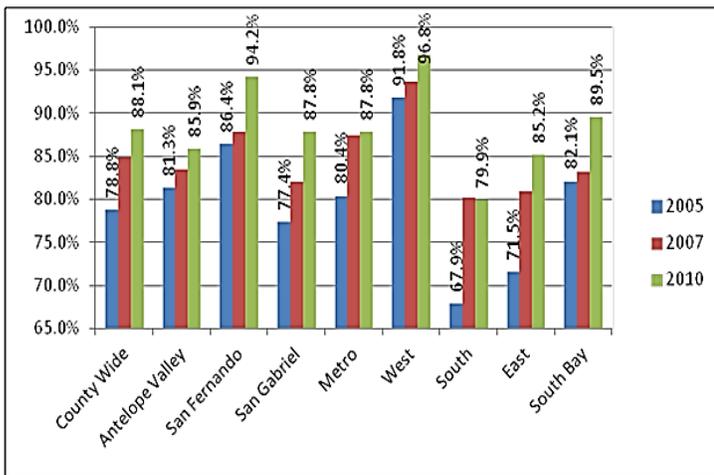


Figure 2. Percent of Mothers Who Reported Ever Breastfed or Pumped Breast Milk to Feed Their New Baby After Delivery, By Service Planning Area, LAC, 2005-2010

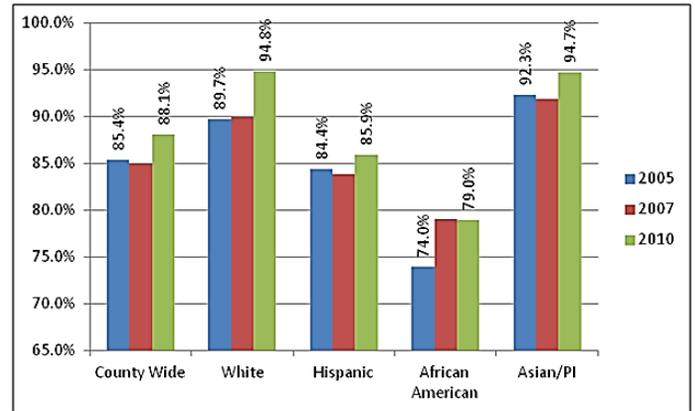


Figure 3. Percent of Mothers Who Reported Ever Breastfed or Pumped Breast Milk to Feed Their New Baby after Delivery, By Race/Ethnicity, LAC, 2005-2010

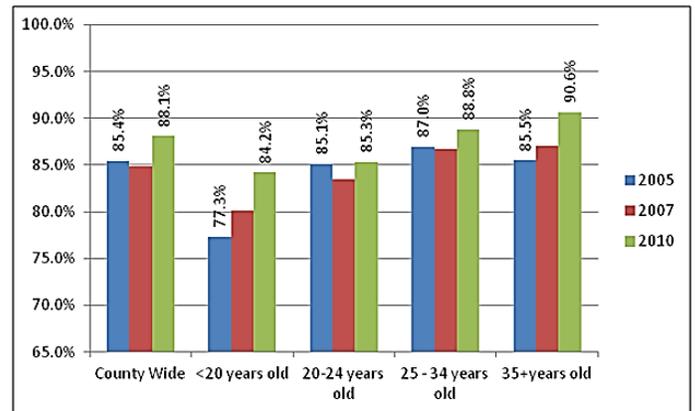


Figure 4. Percent of Mothers Who Reported Ever Breastfed or Pumped Breast Milk to Feed Their New Baby after Delivery, By Maternal Age, LAC, 2005-2010

Among women that delivered a baby in 2010, twelve percent did not breastfeed at all after giving birth. The two reasons most frequently cited for not doing so included mother “did not like breastfeeding” (29.4%) and “other” reasons (37.9%) (Table 2). Within “other reasons” women included: perception of having insufficient milk (22%), taking medications that were contraindicated for lactating mothers (11%), and chose not to breastfeed (7%) (Figure 5). Maternal illness following birth was cited by 13% of mothers as her reason for not breastfeeding after delivery and infant illness was cited by 10% of mothers as the reason she did not breastfeed. Additionally, going back to work or school was indicated among nearly 13% of women as the reason for not breastfeeding after delivery.

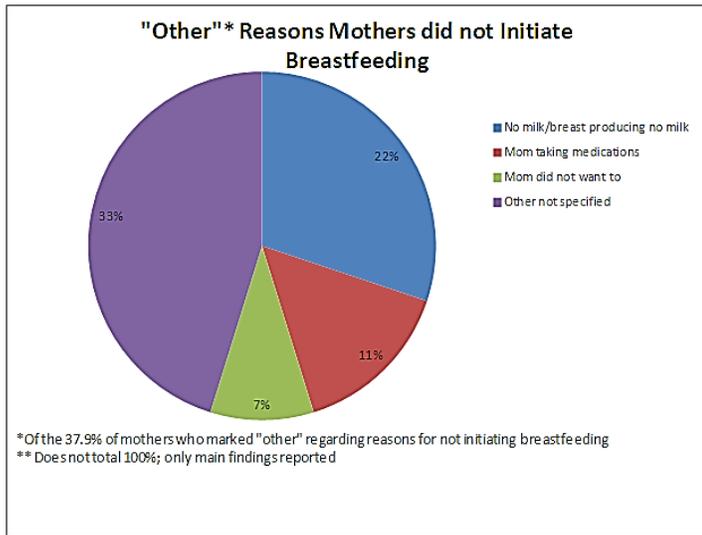


Figure 5. "Other" Reasons Mothers Do Not Initiate Breastfeeding

Table 2. Reasons Stated for not Breastfeeding

Among those women who had not breastfed at all after delivery, reasons why:	2010				
	n ¹	N ²	%	Upper Limit ³	Lower Limit
No breastfeeding or pumping breast milk to feed new baby after delivery	698	15683	12	10.8	13.3
Baby was sick and could not breastfeed	39	1521	9.7	6.1	13.3
Mom was sick and could not breastfeed	82	2011	12.8	9	16.6
Mom had too many household duties	54	1026	6.5	4	9.1
Mom did not like breastfeeding	259	4616	29.4	24.6	34.3
Mom went back to work or school	110	1993	12.7	9.2	16.2
Mom's family and/or partner did not want her to breastfeed	11	204	1.3*	0.13	2.5
Other	268	5937	37.9	32.5	43.2

Source: Los Angeles Mommy and Baby Survey, 2010

Notes:
 *statistically unstable due to low number of respondents
¹unweighted sample size
²weighted sample size
³95% confidence limits used to determine stability of estimates (%)

Continuation of Breastfeeding for Three Months

Overall 60% of mothers continued breastfeeding for up to 3 months following birth (Figure 6). Even though the initiation rate increased from 79% to 88% from 2007 to 2010, very little change is noted in the proportion of mothers continuing to breastfeed for 3 months between 2007 and 2010 (Figure 2). Similar to initiation, breastfeeding at age 3 months varies by maternal age, income, education level, marital status (Table 1), SPA region and race/ethnicity (Figures 5 & 6). Of concern, while continuation of breastfeeding to age 3 months increased by 10.0% between 2007 and 2010 among non-Hispanic white and Asian/Pacific Island women, there was no change in the percent of Hispanic women continuing to breastfeed at age 3 months and there was a 3.4% decrease in the percent of African American mothers continuing to breastfeed at age 3 months. Fewer women with obesity and depression continued breastfeeding at age 3 months (Table 1).

Figure 6. Percent of Mothers Who Reported Ever Breastfed or Pumped Breast Milk to Feed Their New Baby at 3 Months, By Service Planning Area

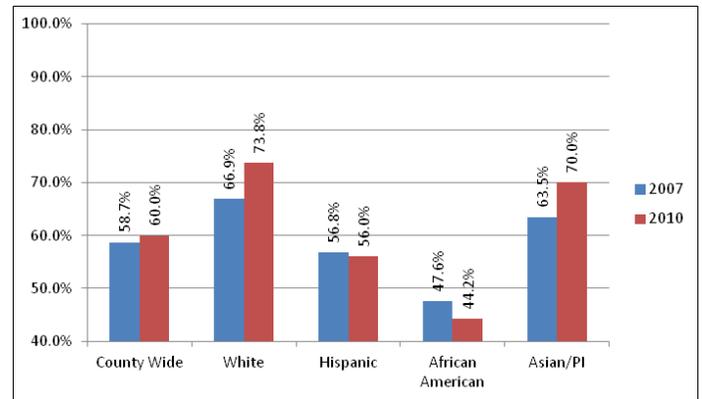


Figure 7. Percent of Mothers Who Reported Ever Breastfed or Pumped Breast Milk to Feed Their New Baby at 3 Months, By Race/Ethnicity, LAC, 2007-2010

Of those mothers who stopped breastfeeding, the most frequent reasons included the feeling that "breast milk alone did not satisfy baby" (32.3%) and feeling that she was "not producing enough milk" (33.0%). Additional reasons mothers reported for stopping were "Difficulty nursing the baby" (27.5%), "nipples were sore, cracked or bleeding" (14.3%) and mothers 'went back to work or school' (16.6%) (Table 3).

Table 3. Reasons for Stopping Breastfeeding

Stopped breastfeeding (n=3347)	2010				
Reasons for stopping to breastfeed:	n	N	%	Upper Limit	Lower Limit
Mom had difficulty nursing baby	961	18715	27.5	25.3	29.8
Breast milk alone did not satisfy baby	1039	21934	32.3	29.9	34.7
Mom thought she wasn't making enough milk	1114	22458	33	30.7	35.4
Nipples were sore, cracked, or bleeding	532	9729	14.3	12.6	16
Mom went back to work or school	521	11314	16.6	14.7	18.6
Mom didn't like it	202	3153	4.6	3.7	5.6
Family and/or partner didn't want mom to	87	1315	1.9	1.3	2.6

Source: Los Angeles Mommy and Baby Survey, 2010

Notes:
 *statistically unstable due to low number of respondents
¹unweighted sample size
²weighted sample size
³95% confidence limits used to determine stability of estimates (%)

Summary from LAMB Data

- In Los Angeles County 88.1% of women initiate breastfeeding. Yet, gaps remain between regions and subpopulations across the County (Figure 2).
- Among women who did not initiate breastfeeding (12.0%), nearly 30% said they “did not like it” (Table 2).
- Among women who indicated “other” reasons (37.9%) for not initiating breastfeeding, 22.0% stated that they did not have sufficient breast milk, 11% indicated taking contraindicated medications, and 7% stated that they “didn't want to” (Figure 5).
- Illness of the infant or the mother was reported as reasons to not initiate breastfeeding, (9.7% and 12.8%) (Table 2).
- Breastfeeding management problems were frequently reported by mothers who stopped breastfeeding by three months with nearly 28% stopping because they were having difficulty nursing baby, 32.3% felt that breast milk alone was not satisfying the baby, 33.0% felt that they were not making enough milk, and 14.3% reported cracked, sore or bleeding nipples (Table 3).
- Returning to work or school was reported as a reason for not initiating breastfeeding (12.7%) and not continuing to breastfeed (16.6%) (Table 2 and 3).

Insights from the LAMB Data

This review of the LAMB data from 2005 through 2010 sought to describe the population of women who initiate and continue breastfeeding for at least three months, and to explore reasons given by Los Angeles County mothers for not initiating breastfeeding or for stopping prior to age three months.

Los Angeles County can celebrate exceeding the Healthy People 2020 National Goal for initiating breastfeeding (81.9%) with over 88% of women initiating breastfeeding in 2010. For healthcare providers, advocates and families opportunities exist to close gaps in breastfeeding rates between regions and subgroups so that all families in Los Angeles County achieve the health benefits of meeting the national breastfeeding goals.

Findings from the LAMB study on reasons for not initiating and reasons for discontinuing breastfeeding provide opportunity and direction for further research, and

inquiry, especially as providers seek to promote optimal health practices and assist women in setting and achieving breastfeeding goals. Many of the reasons given for not initiating and for stopping can be addressed by effective education, counseling to explore motivation and ambivalence, facilitation of family and peer support, and provision of professional practical support and skill building during breastfeeding initiation until it is well established.

Return to work or school is a commonly cited reason for discontinuing breastfeeding, and reported by 16.6% of the mothers as their reason for stopping breastfeeding by three months. This is similar though slightly higher than the 13% discontinuation rate reported in a study by Lewallen and colleagues of predominantly white Southeastern U.S. women. Of concern nearly 13% of women who did not initiate breastfeeding reported their decision was based on their plan to return to work or school. Counseling about early benefits of breastfeeding and maximizing maternity leave could coach a number of these women to initiate breastfeeding. Still much work remains to address workplace barriers. In 2002, California passed Labor Code 1030-1033 providing employed breastfeeding women with the right to lactation accommodations in the workplace. However, since California passed this legislation, breastfeeding continuation rates have remained low, indicating that a return to work is still a primary barrier for exclusive breastfeeding. Fortunately, section 4207 of the Patient Protection and Affordable Care Act amended the Fair Labor Standards Act (FLSA) or federal wage and hour law and requires employers to provide reasonable break time and a private, non-bathroom place for nursing mothers to express breast milk during the workday for one year after the child's birth. The new requirement became effective when the Affordable Care Act was signed into law on March 23, 2010. As a result of increased attention to the importance of breastfeeding, California has made new advancements in workplace protections for employed breastfeeding mothers, by passing new pregnancy disability regulations, which reference reasonable accommodations for lactation. And on September, 2012, Governor Brown signed into law, AB 2386, making employed breastfeeding mothers a protected class under the Fair Employment and Housing Act, protecting them from workplace sex discrimination in harassment.^{15,16,17}

Among women who did not breastfeed at all after delivery (12%), nearly 10% said the reason she did not breastfeed was because the “baby was sick” and nearly 13% said “she was sick” and could not breastfeed. It would be of interest to probe further to determine if some of the infants were in fact preterm and could have benefited from expressed breast milk and/or if with assistance from skilled clinical staff, mothers might have been able to pump while they recovered, so that they were able to establish a milk supply and initiate breastfeeding once they were recovered. While this course is not optimal,

requires skilled and dedicated staff, and is very challenging for the mother, it has supported mothers with serious intra-partum and postpartum complications and infants who are premature or ill to meet their breastfeeding goals.

Most striking from the LAMB data are the percentages of women who either did not initiate or discontinued breastfeeding because of their “perception of not having a sufficient supply” (33.0%), feeling that “breast milk alone did not satisfy the baby” (32.3%), she had “difficulty nursing the baby” (27.5%) or “she had sore, cracked or bleeding nipples” (14.3%). Each of these concerns can be prevented or overcome with education and assistance from skilled peer counselors, professional lactation consultants and educators and healthcare providers. Knowledge of the actual amount of milk infants need and infant feeding cues, as well as tracking wet and dirty diapers, and infant weight, build the mother’s confidence that her infant is well fed. Providing similar education to her partner and family members helps engage their support for her efforts and give them tools to assist her. Assistance with feeding positions and latch can prevent many feeding difficulties and the associated pain, feelings of frustration, failure and helplessness.

While much remains to be learned about the most effective and efficient ways to promote and support breastfeeding initiation and continuation, there is evidence that supports the benefits of lactation education that begins prenatally, is augmented with practical support and assistance through the peri-partum hospitalization with continuity into primary care settings and continues for up to six months following birth.^{18,19} Women who receive prenatal preparation that is delivered one-on-one, individualized, and focused on building knowledge, self-confidence and support systems, and dispelling myths as needed, more often initiate breastfeeding than women who receive routine care with a single or series of classroom breastfeeding education sessions.^{17,20,21} Considerable information supports the effectiveness of hospital based, Baby-Friendly practices in increasing breastfeeding initiation and continuation.²² Following hospital discharge, women who receive in person early assessment and practical support (within 72 hours) from professional lactation counselors are more likely to breastfeed. Mothers who have ongoing peer and/or professional lactation in their home and via telephone for at least four to six weeks and up to six months more often continue breastfeeding and exclusive breastfeeding to six months postpartum.^{23,24,25,26}

Recommendations

Health Care Providers & Systems

- Provide a continuum of care beginning in the prenatal period, through hospitalization, and continuing through the early days and weeks following birth and for up to six months of age.
- Provide individualized education to mother and family members on health benefits of breastfeeding, and use culturally appropriate counseling techniques to explore knowledge, attitudes, beliefs, and personal ambivalence.
- Provide anticipatory guidance towards preventing and overcoming common barriers to breastfeeding to the woman and her supportive family members during pregnancy.
- Provide coaching to build the individual woman’s self confidence in her ability to breastfeed.
- Implement evidence based maternity care practices that support breastfeeding, i.e. Baby-Friendly Hospital Initiative’s *Ten Steps to Successful Breastfeeding*.
- During hospitalization and early weeks following birth, provide professional lactation consultation for all mother-baby dyads and especially for those with any risk factors (first-mothers, minorities, health concerns) that compromise breastfeeding success.
- Schedule a first follow-up visit for all infants within 3 to 5 days of hospital discharge, or sooner if breastfeeding problems are identified during hospitalization. At this visit, observe infant feeding, support mother’s success, and ensure access to a lactation consultant/educator or other health care professional trained to address breastfeeding questions or concerns.
- Provide close follow-up through clinic visits, home visits, peer counselors, and telephone contact until the infant is gaining adequate weight and parents feel confident about breastfeeding.
- Provide referrals to community support groups or peer counselors when needed.
- Assist mothers in developing their breastfeeding goals, including accommodations for returning to school or work and child care provision as needed.

Community

- Encourage and establish breastfeeding as a norm for the community and its residents through education, marketing and media techniques, and social support.
- Support community programs and health providers that encourage breastfeeding.
- Ensure that all schools and businesses have lactation accommodation facilities readily available for students, employees, and visitors.

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Vol. 125 No. 5 May 2010, pp. e1048-e1056 (doi:10.1542/peds.2009-1616). Extrapolating formula based on population data of 150,000 births in Los Angeles County annually (California Department of Public Health) and 4,140,000 births in U.S. annually (US Census).

² Healthy People. (2012). Maternal, Infant and Child Health accessed at <http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=26>

³ UCLA Center for Healthier Children, Family and Communities. (2002). *Breastfeeding Programs and Support Systems in Los Angeles County: A Needs Assessment*.

⁴ McFadden, A., & Toole, G. (2006). *Exploring women's views of breastfeeding: A focus group studying within areas with high-levels of socio-economic deprivation*. 2, 156 – 168.

⁵ Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN). Evidence-Based Clinical Practice Guideline. Breastfeeding Support: Prenatal Care Through the First Year, Second Edition. 2007.

⁶ Henderson J, Redshaw M. Midwifery factors associated with successful breastfeeding. *Child Care Health Dev* 2011;37(5):744-53.

⁷ Mitra, A. K., Khory, A. J., Hinton, A. W., & Carothers, C. (2004). Predictors of Breastfeeding Intention among Low-Income Women. *Maternal & Child Health Journal*, 8, 65 – 70.

⁸ Shahla, M., Fahy, K., & Kable, A. K. (2010). Factors that positively influence breastfeeding duration to 6 months: A literature review. *Women and Birth*, 23, 135 – 145.

⁹ Chapman DJ, Damio G, Young G, Perez-Escamilla R. Effectiveness of breastfeeding peer counseling in a low-income, predominantly Latina population. *Arch Pediatr and Adolesc Med* 2004;158:897-902.

¹⁰ Grassley, J., & Eschiti, V. (2008). Grandmother breastfeeding support: What do mothers need and want? *Birth: Issues in Perinatal Care*, 35, 329 – 335.

¹¹ Lu M, Lange L, Slusser W, Hamilton J, Halfon N. Provider encouragement of breast-feeding: Evidence from a national survey. *Obstet Gynecol* 2001;97:290-295.2001

¹² Singh GK, Kogan MD, Dee DL. Nativity/Immigrant Status, Race/Ethnicity, and Socioeconomic Determinants fo Breastfeeding Initiation and Duration in the United States, 2003. *Peds* 2007; 119(1):S38-S46.

¹³ Brenner, M. G., & Beausher, S. E. (2011). Breastfeeding: A clinical imperative. *Journal of Women's Health*, 20, 1767 – 1773.

¹⁴ Brenner, M. G., & Beausher, S. E. (2011). Breastfeeding: A clinical imperative. *Journal of Women's Health*, 20, 1767 – 1773.

¹⁵ State of California. California Code of Regulations. *Adopted Proposed Pregnancy Regulation*. State of California : Department of Fair Employment and Housing, 2012. Print.

¹⁶ Assem. Bill 2386, 2011-2012 Reg. Sess. (Cal. 2012).

¹⁷ Cal. Lab. Code § 1030-1033

¹⁹ Dyson L, McCormick FM, Renfrew MJ. Interventions for promoting the initiation of breastfeeding (Review). *Cochrane Database of Systematic Reviews* 2005, Issue 2. Art. No.: CD001688. DOI: 10.1002/14651858.CD001688.pub2.

²⁰ Chung M, Raman GM, Trikalinos T, Lau J, Ip S. Interventions in Primary Care to Promote Breastfeeding: an Evidence Review for the U.S. Preventive Services Task Force. *Ann Intern Med* 2008;149:565-582.

²¹ Koury, A. J., Moazzem, S. W., Jarjoura, C. M., Carothers, C., & Hinton A. (2005). Breastfeeding initiation in low-income women: Role of attitudes, support and perceived control. *Women's Health Issues*, 15, 64 – 72.

²² Stube AM, Bonuck K. What Predicts Intent to Breastfeed Exclusively? Breastfeeding Knowledge, Attitudes, and Beliefs in a Diverse Urban Population. *Breastfeeding Med* 2011;6(6):413-420.

²³ DiGirolamo AM, Grummer-Strawn LM, Fein SB. Effect of Maternity-Care Practices on Breastfeeding. *Pediatrics* 2008;122:S43-S49.

²⁴ Chantry, C. J. (2011). Supporting the 75%: Overcoming barriers after breastfeeding initiation. *Breastfeeding Medicine*, 6, 337 – 339.

²⁵ Aksu H, Küçük M, Düzgün G. The effect of postnatal breastfeeding education/support offered at home 3 days after delivery on breastfeeding duration and knowledge: A randomized trial. *J Mat-Fet & Neonatal Med* 2011;24(2):354-61.

²⁶ Mattar CN, Chong Y, Chan Y, Chew A, Tan P, Chan Y & Rauff MH. Simple antenatal preparation to improve breastfeeding practice: a randomized trial. *Obstet Gynecol* 2007;109(1):73-80.

²⁷ Gijbers B, Mesters I, Knottnerus JA, Kester ADM & Van Schayck CP. The success of an educational program to promote exclusive breastfeeding for 6 months in families with a history of asthma: a randomized controlled trial. *Pediatr Asthma, All & Immunol* 2006;19(4):214-222.

