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

LA BEST BABIES NETWORK
Healthy Babies. Our Future.

PROVIDER ENCOURAGEMENT IMPACTS BREASTFEEDING INITIATION AND CONTINUATION IN LOS ANGELES COUNTY

Introduction

Breastfeeding is a crucial first step in protecting the health of mothers and infants, as it promotes healthy infant development and attachment and is recommended by all major medical organizations.[1] Although the many benefits of breastfeeding are well recognized, exclusive breastfeeding rates at three and six months in Los Angeles County are below national public health recommendations, while initiation rates have surpassed recommendations (Table 1).

A large national survey found that provider encouragement was associated with a positive influence on breastfeeding initiation across all populations in the same size[2]. A health provider can significantly influence a mother's decision to breast-feed. Prenatal support and pediatric and maternal visits are all-important components of breast-feeding promotion and successful feeding.[3] Prenatal encouragement increases breastfeeding rates and identifies potential problem areas. Women who discuss breastfeeding with their providers are more likely to initiate breastfeeding and have a longer duration of breastfeeding compared to women who do not receive provider encouragement for breastfeeding prenatally.[4] The Cochrane Review of breastfeeding support evaluated 34 randomized trials that included 29,385 women.[5] The analysis found that women who were encouraged by health care providers to breastfeed were less likely to stop breastfeeding at 4 months after birth. Because health care providers can and do influence their patients' decisions about the choice of infant feeding, it is important to consider how and when to translate the information into a message health care providers can deliver. Early exposure can identify possible challenges, myths and risks the woman may perceive and will give ample time to address these barriers and make breastfeeding a more positive and successful experience.

Comparison of Healthy People 2020 Goals for Breastfeeding to California and Los Angeles County Breastfeeding Rates			
	Healthy People 2020 Goals*	California Rates (2007)**	Los Angeles County Rates (2007)**
Ever Breastfed Babies	81%	86.6%	81.9%
Breastfeeding at 6 months	60%	53.80%	50.5%
Breastfeeding at 1 year	33%	31.4%	30.1%
Exclusive Breastfeeding at 3 months	45%	40%	17.2%
Exclusive Breastfeeding at 6 months	25%	38.6%	16.2%
Data Sources: *U.S. Department of Health and Human Services Healthy People 2020. **National Immunization Survey, Centers for Disease Control and Prevention, Department of Health and Human Services			

Table 1. Comparison of Healthy People 2020 Goals for Breastfeeding to California and Los Angeles County Breastfeeding Rates

Los Angeles County is ahead of national public health goals for mothers starting to do *any* breastfeeding. However, fewer mothers start *exclusively* breastfeeding or *continue* to exclusively breastfeed in Los Angeles County than public health goals intend. In 2010, eighty percent of surveyed LAMB mothers initiated any breastfeeding after delivery, which represents approximately 107,000 babies being breastfed; however only 60% (approximately 80,000 babies) continued to breastfeed for 3 months.

Provider encouragement and their impact on breast feeding trends also vary geographically within Los Angeles County. For public health planning purposes, the County is broken down to eight geographic district areas known as Service Planning Areas (SPA) (Figure 1). Provider encouragement and breast feeding practices data are now available at the SPA level to indicate marked differences among SPAs.

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[1] U.S Department of Health and Human Services. *The Surgeon General's Call to Action to Support Breastfeeding*, Washington, DC. (2011).
[2] Lu, MC., Lange, L., Slusser, w., Hamilton, J., & Halfon, N. (2001). Provider encouragement of breast-feeding: Evidence from a national survey. *Obstetrics and Gynecology, 97*, 290 – 295.
[3] Moreland, J., and Coombs, J. (2000). Promoting and supporting breastfeeding. *American Family Physician, 61*, 2093 – 2100.
[4] Humenick SS, Hill PD, Spiegelberg PL. Breastfeeding and health professional encouragement. *J Hum Lact*. 1998;14:305–10.
[5] Britton C, McCormick F, Renfrew M, Wade A, King S. (2007). Support for breastfeeding mothers. Cochrane Database Systematic Review. T*he Cochrane Library*, Oxford: Update Software 2007

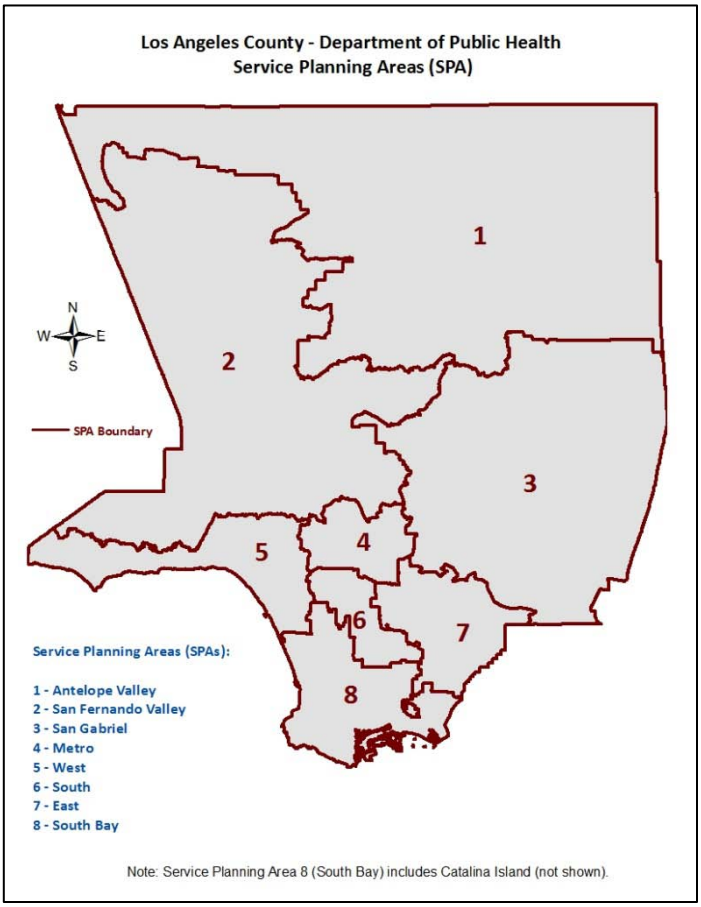


Figure 1. Los Angeles County - Department of Public Health Service Planning Area (SPA) Map

Encouragement from health care providers is one means of support that significantly increases breastfeeding success among American women of all social and ethnic backgrounds.[6] In this health brief, we present and discuss the prevalence rates of provider breastfeeding help/encouragement in the delivery hospital and during subsequent well-baby visits. Associations between provider help/encouragement at both visits and breastfeeding practices are further examined to determine:(1) the influence that the provider may have on a woman's decision to initiate and continue breastfeeding, and (2) if rates of provider encouragement vary depending on the mother's demographic characteristics.

Methods

Data were analyzed from the 2010 LAMB (Los Angeles Mommy and Baby) Survey (6,494 singleton mothers). LAMB is a population-based mail survey, distributed to women in Los Angeles County that recently gave birth to a live-born infant. Mothers were selected by randomly sampling birth certificate records. Women were asked if their providers helped or encouraged them to breastfeed at the delivery hospital and during the well-baby checkup.

[6] Lu, MC., Lange, L., Slusser, w., Hamilton, J., & Halfon, N. (2001). Provider encouragement of breast-feeding: Evidence from a national survey. *Obstetrics and Gynecology, 97*, 290 – 295.

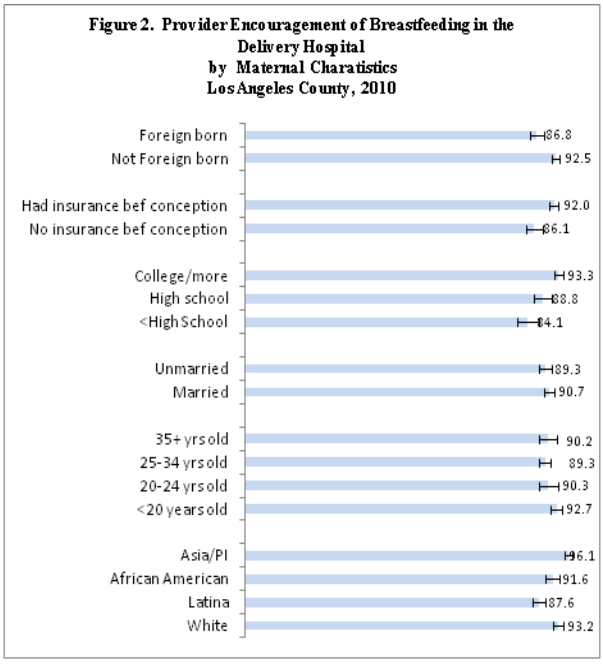
The LAMB survey asks recent mothers in LAC whether or not they have ever breastfed or pumped breast milk to feed their baby after delivery. It also asks mothers about if they were continuing to breastfeed upon completing the survey. Multiple logistic regression models were performed for each breastfeeding practice. Appropriate sampling weights adjusted for design effect and non-response bias.

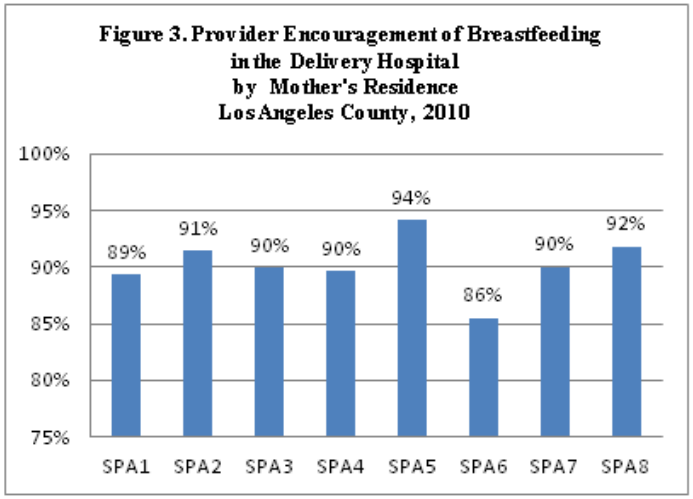
Key Findings

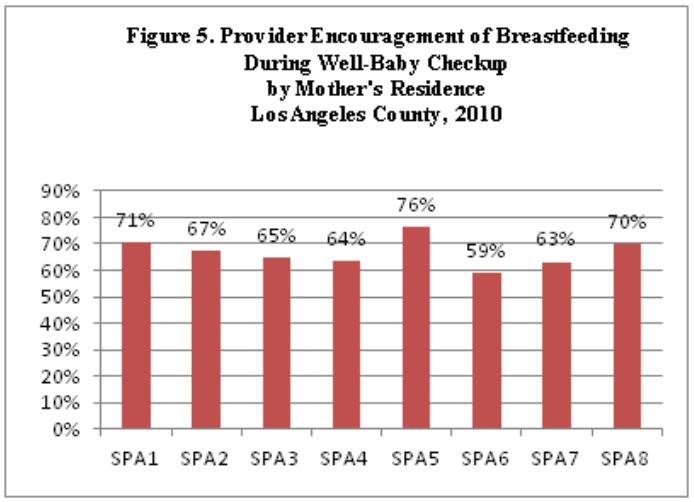
I. Prevalence of Provider Encouragement

Encouragement in the Delivery Hospitals:

- Ninety percent (90%) of mothers were encouraged to breastfeed by a doctor or nurse in the hospital after delivery. Figure 2 shows that mothers born in the United States were more likely to be encouraged to initiate breastfeeding by healthcare providers at the delivery hospital compared to foreign born mothers (93% and 87%, respectively). A higher proportion of mothers with a college education (93%) received encouragement compared to mothers with less than a high school education (84%).Latinas (88%), mothers lacking health insurance prior to conception (86%), and foreign-born mothers (87%) were among those least likely to receive provider encouragement in the hospital.
- The provider encouragement rate among mothers living in SPA 6, South Los Angeles, was also low (86%) compared to mothers living in the rest of LAC (see Figure 3).

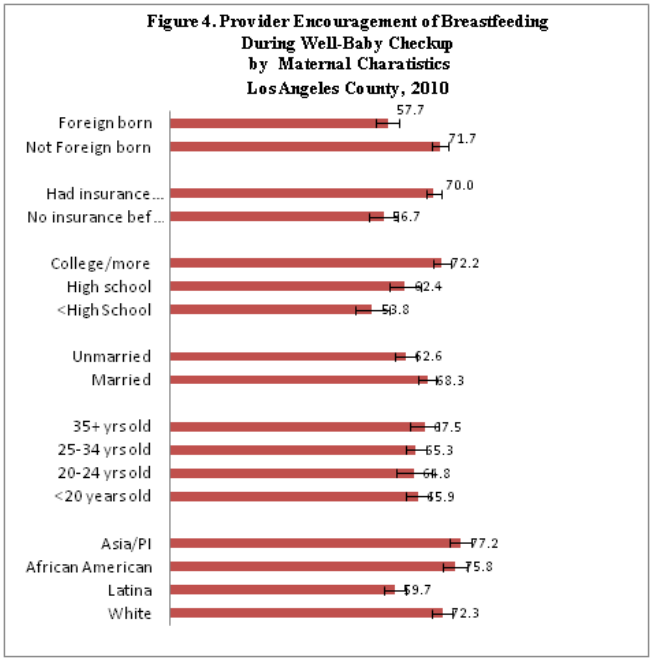






Encouragement during Well-Baby Visits:

- While almost all mothers (90%) received provider encouragement in the hospital to initiate breastfeeding, many fewer mothers received encouragement during subsequent well-baby visits. Only 66% of surveyed mothers reported breastfeeding encouragement from healthcare providers at well-baby visits. These tended to: be native born (72%), have insurance before conception (70%), have a college education (72%), and be married (64%) (Figure 4). Mothers who were: living in SPA 6 (59%) (Figure5), Latina (60%), or foreign born (58%) reported the lowest rates of provider encouragement at well-baby visits.



II. Provider Encouragement and Breastfeeding Practices

- After controlling for potential risk factors (race, education, marital status, health insurance, late prenatal care), mothers who received provider encouragement at delivery hospitals were nearly three times more likely to *initiate* breastfeeding (aOR=2.6, 95%CI=1.8-3.8). However, provider encouragement *at delivery* was not associated with breastfeeding continuation at 3 months postpartum (Table 2).

- Encouragement received *at well-baby visits*, however, was positively associated with continuous breastfeeding at 3 months (aOR=1.4, 95% CI= 1.1-1.7) after controlling for potential confounding variables (Table 2).

Table 2. Provider Encouragement and Breast Feeding Practices

	Breastfeeding Initiation		Breastfeeding Continuing in 3 Months	
	Odds Ratio	95% CI	Odds Ratio	95% CI
Received Encouragement in delivery hospitals Yes vs. No	2.64**	[1.81-3.84]	0.74	[0.52-1.04]
Received Encouragement during the Well-Baby Checkup Yes vs. No	--	--	1.35**	[1.09-1.67]
Race/Ethnicity				
White vs. African American	3.28**	[2.25-4.78]	2.20**	[1.69-2.84]
Hispanic vs. African American	1.66**	[1.23-2.24]	1.47**	[1.16-1.85]
Asian/PI vs. African American	3.03**	[1.96-4.69]	1.87**	[1.44-2.44]

II. Ethnicity, Encouragement and Practices

- At the time of delivery, greater numbers of Asian/Pacific Islanders (96%), non-Hispanic Whites (93%) and African Americans (92%) reported encouragement compared to Latinas (88%) (Figure 2).

- Though African American women reported encouragement more than Latinas, African American women were still statistically less likely to initiate or continue breastfeeding than Hispanics (OR =1.7, 95%CI 1.2-2.2, and OR=1.5, 95%CI 1.2-1.9, respectively) (Table 2).

Discussion

Physicians play an important role in breastfeeding initiation and continuation. Promotion of the benefits and risks associated with infant feeding practices significantly impact maternal decisions to breastfeed and likelihood of success, particularly if the provider adds clinical support. Encouragement during the hospital stay can increase a mother's confidence and self-efficacy in initiating breastfeeding, but *ongoing provider encouragement and support beyond the hospital is necessary* for her to continue through three and six months.

Mothers born in the United States, with insurance prior to conception, and with a college degree are most likely to receive encouragement in the hospital and in the community. On the converse, mothers who have immigrated, lack insurance prior to delivery, and have less than a high school degree are least likely to receive encouragement in the hospital and in the community.

Differences in provider encouragement and practice among ethnicities suggest that disparities in language, health literacy and quality of care may play important roles in breastfeeding support. For the many immigrant Latinas in LA County who do not speak English, a provider who does not speak Spanish fluently and/or who fails to use a certified translator may lead to confusion or difficulty in understanding. Many patients who receive care at public clinics or through public programs have lower literacy skills.[7] These are also more likely to be persons of color, immigrants, without a high school diploma, unemployed, of low-income, and living in inner-city areas.[8]Patients with low health literacy skills often do not understand verbal explanations given by healthcare providers and are especially reluctant to admit this to their physicians. Thus, effective health counseling is even more critical for this population before, during, and after delivery.[9]Encouragement and education needs to include both visual and verbal methods in order to ensure that the mother understands the information, has her questions answered, and has take-home reminders.

There is also a clear discrepancy between the service planning area (SPA) a woman lives in within Los Angeles County and her likelihood of receiving provider breastfeeding support; notably between SPA 5, the West Side, and SPA 6, South Los Angeles. Various factors that might explain this include the difference in the quality of care provided in these two areas, provider-patient ratios, and patient insurance types, educational levels and health and cultural literacy[10]. Women in SPA 6, predominantly Latina and African American, receive less provider encouragement and display lower breastfeeding rates.

There is a clear decline in recalled provider encouragement after hospital discharge during well baby visits. This might simply be due to a lower number of women who chose to continue breastfeeding and require encouragement. Physicians may consider encouraging breastfeeding in mothers who have chosen to stop as unproductive or insensitive.

Though encouragement right after delivery results in a threefold increase in breastfeeding initiation, it does not ensure continuation through 3 months. Encouragement during early well-baby visits (at 3-5 days, 1 month, and 2 months) does increase continuation at 3 months by 50%.

Thus there is a need for widespread effort to promote breastfeeding once families leave the hospital, especially during early well-baby visits. Education, support and encouragement from providers during pregnancy, immediately after delivery, and during early well-baby visits will help support mothers to achieve their breastfeeding goals.

Conclusion

- The relationship between provider encouragement and breastfeeding practices highlights the need for health care providers to understand the preventive impact of breastfeeding on illness and how to handle common lactation problems. It also highlights the need to improve provider communications about

[7]Schillinger, D., et al. (2002). Association of health literacy with diabetes outcomes. *The Journal of the American Medical Association, 288*, 475 – 482.

[8] Somers S (ed): Health Literacy: A National Conference. Proceedings of Health Literacy: A National Conference, Washington, DC, June 3, 1997.

[9] Davis TC, Crouch MA, Wills G, et al: The gap between patient reading comprehension and the readability of patient education materials. J Fam Pract 1990; 31:533-538

[10] Hough, R. L., et al. (1987). Utilization of health and mental health services by Los Angeles Mexican Americans and Non-Hispanic Whites. *Archives of General Psychiatry, 44*, 702 – 709.

breastfeeding, particularly among at-risk groups in Los Angeles County.

Recommendations

Health Care Providers & Systems

- Educate physicians and care providers on the benefits of breastfeeding and the importance of their support to new families.
- Provide all information and instruction, whenever possible, in the mother's native language and constantly assess for literacy level and understanding.
- Incorporate different health and cultural literacy techniques to ensure all mothers understand the information provided.
- Continue to provide encouragement to mothers after hospital discharge, even if they stop exclusively breastfeeding.
- Understand how a partner's perspective and beliefs may affect breastfeeding success and educate partners as well.
- Establish referral networks so all mothers with indications of clinical lactation problems can be seen by a lactation consultant, preferably in consultation with their pediatrician.
- Ensure that significant breastfeeding issues are addressed by a Board Certified Lactation Consultant.
- Ensure that lactation services and medical equipment are billed for appropriately, as the Affordable Care Act mandates that insurance coverage.
- Monitor breastfeeding rates internally and utilize available EMR breastfeeding and health outcomes data for quality improvement.

Public Health

- Expand public health education and programs to include health care professionals who see patients of childbearing age and infants.
- Continue to vigorously support breastfeeding efforts and policies.
- Ensure that breastfeeding research and surveillance is put to beneficial use in programming and policy.

Research & Surveillance

- Create reliable, valid surveillance to track breastfeeding initiation, continuation, and exclusion of formula.
- Extend surveillance of breastfeeding through 6, 9, and 12 months.
- Monitor trends of provider encouragement and breast feeding by social and demographic characteristics
- Research and identify reasons why providers do not encourage mothers during well-baby visits.
- Publish both successful and unsuccessful evidence-based practices/research to communicate best-practices with other researchers, public health professionals, and practitioners.
- Consult previously conducted studies and evidence-based practices when planning new research or surveillance.
- Encourage use of EMR (Electronic Medical Record) data of breastfeeding and health outcomes as *Meaningful Use* criteria for research and surveillance.
- Adopt uniform definitions of standard terms such as breastfeeding, duration, and exclusivity adapted from the World Health Organization.

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