

Factors Affecting Breastfeeding among Women of Mexican Origin or Descent in Los Angeles

SUSAN C. M. SCRIMSHAW, PhD, PATRICIA L. ENGLE, PhD, LOLA ARNOLD, BA,
AND KAREN HAYNES, RN, MPH

Abstract: Data on breastfeeding intentions and behavior were collected in prenatal and postpartum interviews as part of a study on first birth among 518 women of Mexican origin or descent in two Los Angeles hospitals. The prenatal intentions of 82 per cent of the women to breastfeed were maintained postpartum in one hospital but dropped sharply in the other. A greater number of hours a day with

the baby in the hospital and earlier initiation of breastfeeding were associated with the hospital where prenatal breastfeeding intentions were more likely to be carried out. The intention to work postpartum was associated both with the decision not to breastfeed at all and with shorter intended duration of breastfeeding. (*Am J Public Health* 1987; 77:467-470.)

Introduction

Research on breastfeeding in the United States has not paid adequate attention to the various ethnic/cultural groups, and to the distinct subcultures within groups. While few studies make comparisons between subcultures in relation to breastfeeding, important differences exist. For example, in her analysis of infant feeding practices in Florida, Bryant reports that most Puerto Ricans in her sample think breastfeeding is better for babies, but almost half the Cuban women think bottle feeding is better.¹

Prior to 1960, the majority of Black and Latino women breastfed their first babies, and nursed longer than Whites.^{2,3} The decline in the proportions of women breastfeeding in the US began to reverse in the early 1960s, but this change appears to be occurring faster in Whites than in Latino, Asian, or Black populations.⁴ Current figures on breastfeeding at discharge from the hospital for Latinos range from 18 per cent in Upper New York State⁵ to 60 per cent in Northern California.⁶

Breastfeeding behavior has been found to relate to mother-infant contact immediately postpartum. One of the earliest research efforts demonstrating the importance of early mother-infant contact for breastfeeding using experimental and control groups was conducted in Guatemala by Sosa, *et al.*⁷ Rooming in and access to the nursery were also found to be important in a Houston hospital where one postpartum floor had those attributes and one did not.⁸

Several studies show that married women are more likely to breastfeed.^{6,9} Bryant, however, found that husbands were more often against breastfeeding in the Cuban and Puerto Rican families she studied.¹⁰ The husbands in both cultural groups were concerned about exposure of the breasts, interference with sexual activity, and the perceived "old-fashioned" nature of breastfeeding.¹⁰

The literature is clear that one major underlying obstacle to breastfeeding in all ethnic groups is the woman's need to work postpartum.^{1,5,6,11} While many women never even initiate breastfeeding because of postpartum work plans, others simply stop sooner in order to return to work.

This paper presents data on breastfeeding collected as part of a larger study on birth among primiparous women of

Mexican origin or descent in Los Angeles. In it we compare prenatal intentions to breastfeed with postpartum behavior and attempt to assess some of the factors related to both intentions and behavior. In particular, we explore hypotheses on the impact of postpartum work intentions and on the impact of hospital practices which emerged from our preliminary ethnographic work and from the literature.

Methods

Data Collection

From July 1981 through September 1982, 291 low-risk primiparous women of Mexican origin or descent delivering in two Los Angeles hospitals were interviewed, once in the last six weeks of pregnancy and again in the hospital between 24 and 48 hours postpartum for vaginal deliveries and between 48 and 72 hours postpartum for cesarean section deliveries. All were clinic patients (eligible for Medi-Cal) from county clinics in the catchment area of the two hospitals (which overlap to some extent) or from the hospital prenatal clinics. No private patients were included in the study in order to focus on women from lower socioeconomic groups. This group is referred to as the longitudinal sample.

Another 227 primiparous, low-income, low-risk women who delivered in both hospitals were interviewed only postpartum, although relevant questions from the prepartum questionnaire were asked. All but four had received prenatal care from sources other than the prenatal clinics. This group is referred to as the postpartum sample. The number of women identified at each time and interviewed are shown in Table 1.

Data on the medical course of labor and delivery were collected from the women's medical charts; there were few differences between the longitudinal and the postpartum only samples, so the entire sample of 518 women is discussed

TABLE 1—Number of Women Participating in Study, through Two Sampling Methods

	Longitudinal		Only Postpartum
	Prepartum	Postpartum	
Total identified*	406	372	237
Interviewed	372	291	227
Declined	34	1	10
Not located postpartum		74	
Not interviewed**		6	
Total cases for analysis		291	227

*Includes all women who met study criteria.

**Neonatal death (1), delivered at another hospital (5).

Address reprint requests to Susan C. M. Scrimshaw, PhD, Professor, School of Public Health, University of California, Los Angeles, CA 90024. Dr. Engle and Ms. Arnold are with California Polytechnic State University, San Luis Obispo; Ms. Haynes is with Ingham County Health Department, Michigan. This paper, submitted to the *Journal* July 12, 1985, was revised and accepted for publication August 29, 1986.

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TABLE 2—Selected Characteristics of the Study Sample

Characteristics	Percentage or Mean
Demographics	
Mean Age (years)	21.0
% born in Mexico	95.0
% self-identification as Mexican	93.0
% less than seven years in US	89.0
% less than one year in the US	26.0
% married	64.0
Education	
Mean years of education	7.6
Work	
% worked before pregnancy	53.0
% plan to work after baby	47.0
Language	
% prefer explanations in Spanish	85.0
Support	
% expecting financial aid from baby's father	82.0

except when differences between the two samples are of importance.

Characteristics of the Hospitals

Both hospitals are teaching hospitals associated with the same medical school. One is a university hospital, and one is a county hospital (but not the Los Angeles County/USC Medical Center). The population served by the university hospital is ethnically and socioeconomically more diverse than that served by the county hospital, but there were no significant differences in education, acculturation, marital status, and most of the relevant variables for the women in our sample by hospital of delivery (Table 2).

The only characteristic listed in Table 2 that differed by hospital was the woman's age (mean = 20.8 for county, 22.0 for university). The difference in age appeared to be due to a larger number of older mothers at the university hospital than at the county hospital. The percentage of teen-aged mothers was similar in the two hospitals.

The county hospital has four patients to a postpartum room and babies are brought in to the mother only for scheduled feedings. The university hospital has two patients to a postpartum room and babies may room in with the mother as many hours a day as she wishes unless she or the baby has medical complications. The university hospital nurses spend more time with postpartum patients, and there is a social worker who sees patients about breastfeeding and contraception; the county hospital has parenting classes which include breastfeeding techniques.

Breastfeeding

The women in the longitudinal sample were asked prenatally if they intended to breastfeed, why or why not, and for how long (if yes). Postnatally the same women were asked again if they planned to breastfeed; if yes, had they breastfed yet, and where (delivery room, recovery room, postpartum ward), how long they planned to breastfeed, why or why not they planned to breastfeed, and when (if at all) they planned to return to work. They were also asked who had influenced their decision regarding breastfeeding and how many hours a day they had the baby with them in their hospital room.

Demographic, Social and Psychological Variables

Acculturation was measured with questions concerning women's preferences for Mexican and for American cultural events and materials, for speaking English and Spanish,¹² number of years living in the US, self-identification, and

urban or rural place of birth.¹³ This combination of measures validated on various Latino populations in the US tests two important dimensions: biculturalism (the ability to participate in two cultures simultaneously) and ethnic loyalty.^{12,13} Biculturalism was evident in responses to questions about Mexican culture which showed a high degree of involvement with that culture with little variability in the study population. Orientation to the American culture, however, did show variability. Factor analyses were done on responses to the questions which measured orientation to American culture (including self-identification). Since most of the variance was accounted for by one factor, a single score was created for each woman consisting of the sum of her measures on each particular item multiplied by the item's weighting in the factor analysis. The higher the woman's score, the more comfortable she was with American culture.

Questions on social support produced two distinct factors: one regarding the woman's relationship with the baby's father, and the second summarizing her satisfaction in her relationships with her family and her friends.¹⁴

A knowledge factor included the woman's reports of her preparation for birth and prior experience with it, and specific questions (asked postpartum) testing her knowledge of the childbirth process. Most of the variance among these items was accounted for by a single factor so a score for each woman was constructed based on her response and each item's factor weighting.

Type of delivery was recorded from the medical records as vaginal, vaginal with forceps, vacuum extraction, or cesarean section (11 per cent). Older women were more likely to have forceps, vacuum extraction, or a cesarean section.

Results

This is a sample of young women, most of whom were born in Mexico and relatively recently arrived in the US (Table 2). While slightly less than two-thirds are married, over 80 per cent expect financial aid from the baby's father. Over half the women work, primarily in unskilled or semi-skilled jobs such as factory or manual labor and house cleaning although 3 per cent had jobs requiring more professional skills such as teaching or secretarial work.

Breastfeeding Intentions

Eighty-two per cent of the women interviewed prenatally planned to breastfeed. Twenty-six per cent planned to breastfeed for one to three months, 44 per cent for four to six months, and 30 per cent for over six months. There were no differences in breastfeeding plans between women who delivered in the county and university hospitals. The proportion of women planning to breastfeed at time of in-hospital, postpartum interview had dropped from 81 per cent to 70 per cent in the county hospital but was unchanged in the university hospital.

Table 3, based on the longitudinal sample only, shows that the two hospitals differ in the location of first attempt to breastfeed. While identical proportions of women first nursed

TABLE 3—Location of Mother's First Attempt to Breastfeed by Hospital

Hospital Type	% Delivery Room or Recovery Room	% Postpartum Ward	% Not Yet Had Opportunity	N
County	2	77	21	257
University	17	77	6	114

Chi square = 37.463 Significance = .001

TABLE 4—Hours a Day Mother Spends with Baby in Hospital by Hospital

Hospital Type	Hours a Day with Baby				N
	% <4 (N:160)	% 4-7 (N:168)	% 8-15 (N:120)	% 16 or more (N:33)	
County	39	40	20	—	349
University	18	20	37	24	132

Chi square = 114.271 Significance = .001.

TABLE 5—Breastfeeding Plans by Hours a Day with Baby in Hospital (as of postpartum interview)

Hours a Day with Baby in Hospital	% No (N:121)	% Yes* (N:362)
0-4	31	34
5-8	55	28
9-16	12	29
17-24	2	9
Total	100	100

Chi square = 33.754 Significance = .001

in their hospital rooms in the postpartum ward, proportionately more of the university hospital women first nursed in the delivery or recovery room and proportionately more of the county hospital women had not yet had the opportunity to initiate breastfeeding.

Table 4, based on interviews with both the longitudinal and postpartum samples, indicates that women in the university hospital spent substantially more time with their babies. Women who spent more time with their babies were somewhat more likely to report postpartum intentions to breastfeed (Table 5). We also found that most cesarean section patients (11 per cent) had a harder time getting access to their infants, and women with fevers or on medication were not permitted to nurse.

Socioeconomic and Cultural Factors

More women who were married or planning to be married than unmarried in this sample intend to breastfeed (77, 78, and 57 per cent, respectively). As Table 6 shows, the husband was reported as an important influence in favor of breastfeeding; other sources of social support such as her mother, nurse, and doctor are also influential. Bottle feeding, on the other hand, seems more often a decision made for and by the woman herself.

Fewer women planned to breastfeed if they planned to return to work soon; the proportion breastfeeding increased

with later return to work dates (Table 7). Women were more likely to return to work soon if they did not have economic support from the baby's father and if they were not married nor planning to marry.

An ordinary least squares linear regression was conducted to see which variables predicted intended duration of breastfeeding. Variables included in the regression were the woman's plan to work, hospital, hours per day the mother was with the child, and measures of support from the baby's father (whether the father would support her, marital status, and the quality of her relationship with the baby's father), support from her family, her age, years of schooling, and whether or not she had a cesarean section. Plans to work emerged as the variable most predictive of planned breastfeeding duration ($b = .48$, $SE = .18$). The only other variable to predict duration was the hospital type, ($b = -1.06$, $SE = .59$). The other variables in the regression were not significantly associated with intended duration of breastfeeding.

Although a woman's level of acculturation did not predict intended duration of breastfeeding, it was related to the decision whether or not to breastfeed in the first place. More acculturated women were less likely to initiate breastfeeding ($r = -.0836$); but the level of correlation is relatively low, and is perhaps best interpreted as a trend. This trend is consistent, however, with the relatively high rate of initiating breastfeeding in our sample as compared with the literature on populations which have been in the US longer.^{5,6}

Women who were less anxious both prenatally and postpartum were also more likely to breastfeed ($r = -.5451$ for prenatal anxiety and $r = -.1121$ for postnatal anxiety) as were women who expect to participate more actively in their labor ($r = -.0995$).

Work plans were stated as a reason for not breastfeeding by 44 per cent of the women who did not nurse. Other obstacles mentioned were no milk (10 per cent), breastfeeding difficult or painful (15 per cent), husband against (15 per cent), bad milk* (8 per cent), doesn't like breastfeeding (3 per cent), and miscellaneous reasons (7 per cent).

Reasons for breastfeeding centered on its perception as being healthier and better for the baby (83 per cent). Other reasons ranged from "easier" to encouragement by medical staff.

Discussion

In this sample of recently immigrated Mexican women experiencing their first birth, many chose to breastfeed "a little while," "at least the 40 days," and less acculturated

*These women consider "bad milk" to be milk which has been "damaged" by too much activity or emotional agitation on the part of the mother.

TABLE 6—Primary Influences on Infant Feeding Plans as Reported Postpartum

Primary Influences	% Bottle Feeding (N:120)	% Breast Feeding (N:372)	Total % (N:502)
Husband	11	22	19
Mother	4	13	11
Other relative/friend	3	5	4
Doctor	1	5	4
Nurse	7	14	12
Self	74	41	50
TOTAL	100	100	100

Chi square = 44.630 Significance = .001.

TABLE 7—Postpartum Work/Breastfeeding Plans at Postpartum Interview

Work Plans	% No (N:128)	% Yes (N:362)	% Total (N:490)
Yes, in 1–3 Months	50	31	36
Yes, in 4–6 Months	12	14	14
Yes, in 6+ Months	8	10	9
Not at all or don't know	30	45	41
TOTAL	100	100	100

Chi square = 14.753 Significance = .005

women were even more likely to make this choice. Work, however, appeared to limit the duration of breastfeeding. Many of these women were employed as domestics and in factories, situations which, in Los Angeles, make it virtually impossible to breastfeed during the working day, although some breastfeeding at night could be encouraged in this population. In much of the rest of the world, work is not incompatible with breastfeeding, indicating the need for changes in the US in order to facilitate breastfeeding.

The other major influence on actual behavior appears to be hospital practices, including cesarean section. It is also of note that the county hospital studied had considerably fewer nurses and other support staff available per patient in both the labor and delivery and postpartum services and there was less privacy in the recovery area. These factors make even the best of intentions more difficult to carry out. The county hospital itself cannot be faulted for this lack of resources, and in fact, has recently instituted "rooming in" procedures.

Both the sample (primiparas with uncomplicated pregnancies delivering in only two hospitals) and the variables have limitations for these analyses. Nevertheless, the data presented here indicate where research and policy efforts should be directed to promote breastfeeding in working mothers, and to strengthen those hospital policies and practices which will promote breastfeeding.

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