

# Attitudes Toward Breast-feeding Among Mexican-American Women

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Although several studies have examined factors influencing breast-feeding<sup>1-3</sup> there are almost no studies of the attitudes prevalent in the Mexican-American population. The purpose of this study was to document attitudes and beliefs pertinent to breast-feeding prevalent in the Mexican-American culture. Specifically, we attempted to determine the relationship of attitude and knowledge to intention to breast-feed in this population. We also examined various demographic variables as possible predictors of attitude, knowledge, and intention. This research was intended as a confirmation and extension of the one study we could find in the literature focusing on attitudes about breast-feeding in a group of Mexican-American primigravidas.<sup>4</sup>

## Method

### Respondents

The respondents were 31 Mexican-American women. They were approached on a random basis while waiting for their regularly scheduled pre-natal visits at a university-affiliated community-based family medicine clinic located in a primarily Spanish-speaking Southern California neighbourhood. Over a period of 3 months, 45 pre-natal patients were asked to participate in the study. Criteria for inclusion in the study were as follows: (1) primarily Spanish-speaking (2) in either the 1st, 2nd or 3rd trimester of a diagnosed pregnancy (3) with no known physical or psychological complicating conditions. Agreement to participate was 68.9 per cent. Reasons for refusal included insufficient time, other responsibilities, and anxiety about being interviewed. Interviews were conducted in Spanish in a private room at the clinic, usually immediately following the pre-natal check.

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Subjects ranged in age from 16 to 31 years with a mean of 23.8 years. Most of the respondents ( $n=23$ , 74.2 per cent) were either married or living with the father of their child. Their education level ranged from none to completion of high school, with the majority having been educated to the sixth grade. Twenty-seven respondents (87.1 per cent) had been born in Mexico; the remaining four (12.9 per cent) had been born in the United States. The majority of the respondents ( $n=17$ , 54.8 per cent) had other children present in the household. The mean number of years in the U.S. was 6.26. Annual income was generally low: 86.2 per cent ( $n=25$ ) of the sample reported annual incomes under \$7,000. Most respondents ( $n=20$ , 64.5 per cent) reported that their spouses worked in semi-skilled or unskilled jobs. Most of the respondents themselves were unemployed ( $n=21$ , 67.7 per cent), but 29.1 per cent ( $n=9$ ) held unskilled or semi-skilled jobs.

### Procedure

A mixed closed and open-ended oral interview schedule was prepared in consultation with representatives of local clinics promoting breast-feeding among the Mexican-American population in Southern California, and with Spanish-speaking nurses, patients, and social workers in the community clinic where the research was conducted. The interview schedule consisted of demographic information; prior education about breast-feeding; current breast-feeding plans, as well as the subject's reason for the decision; prior breast-feeding history; attitude toward breast-feeding; knowledge of breast-feeding; and work-related influences. The survey also included items found in other research reported in the literature on breast-feeding to successfully discriminate between breast-feeding and bottle-feeding mothers. Thirty-six closed-ended statements with which the respondents were asked to agree or disagree were included in the interview. The items were designated as indicating either a respondent's attitude toward breast-feeding or a respondent's knowledge of breast-feeding. A scale of the respondent's attitude and a scale of the respondent's knowledge were formed from the sum of the responses on these items. The interviews were administered individually in Spanish

by a bilingual, Mexican-American female pre-medical student, and lasted approximately 20–30 minutes.

#### *Breast-feeding plans*

Most of the women ( $n=21$ , 67.7 per cent) planned to breast-feed. For those subjects choosing to breast-feed, half gave no reasons why, and only a few women mentioned better feelings, lower costs or healthier for baby. For the women who chose not to breast-feed, most subjects also gave no reason.

#### *Breast-feeding history*

Ten (32.2 per cent) of the women had previously breast-fed at least one child, with six of these having breast-fed one or two children, and four having breast-fed three or more. Of those mothers who had previously nursed, 88.9 per cent found the experience 'enjoyable'. Seventy per cent of the women who had nursed children previously had nursed more than 7 months. Seventy per cent had also used some kind of supplementary feedings.

#### *Opinions of significant others*

Fourteen of the women thought that their spouses liked the idea of their breast-feeding, while five reported their spouses had either a negative opinion or no opinion. Several ( $n=6$ , 19.4 per cent) of the women had never discussed the subject with their husbands; seventeen (54.8 per cent) of the women reported that it would not bother their husbands if they nursed in public. The women perceived that their own mothers had a generally favorable attitude towards breast-feeding; 54.8 per cent ( $n=17$ ) of the women reported that their mothers liked the idea of their breast-feeding, and 77.4 per cent ( $n=24$ ) added that they themselves had been breast-fed by their mothers, a factor shown previously to be positively correlated with the decision to breast-feed.<sup>5</sup>

#### *Advantages and disadvantages of breast-feeding*

The women in our sample were asked to state three advantages to themselves and to their babies as well as three disadvantages to themselves and to their babies of breast-feeding. The most notable aspect of this open-ended part of the interview was that our subjects had difficulty in answering these items. Twenty-two women (71 per cent) did not state a single advantage to the baby of breast-feeding, while twenty-one (67.7 per cent) did not mention any advantages to themselves in breast-feeding. On the other hand most of the women could not report any disadvantages either to the baby with breast-feeding ( $n=29$ , 93.5 per cent) or to the mother ( $n=27$ , 87.1 per cent). The few advantages to the baby mentioned were that the baby would receive a superior kind of food, and also that the baby would be healthier. The disadvantages to the mother mentioned were undressing, and the inability to work and nurse simul-

taneously. Both advantages and disadvantages were similar to those reported in the literature.<sup>6–8</sup>

#### *Education about breast-feeding*

Nearly half of the sample ( $n=14$ , 45.2 per cent) denied reading or having been told anything by either physicians, relatives, or peers about the best method for feeding a baby. When asked to describe the composition of infant formula, only 16.1 per cent ( $n=5$ ) had a basically correct idea.

#### *Work and breast-feeding*

To the question: 'Has your work or financial considerations influenced your decision to breast-feed or bottle-feed?', four of the women replied no, nine replied yes, and the rest did not respond to the question. When asked whether they thought it was possible for a mother to work and breast-feed at the same time, 7 thought it was, 6 disagreed, and 18 had no opinion. When the 10 working mothers were asked, 'If you were not working, would you nurse your baby?', 6 responded in the affirmative.

#### *Responses to the knowledge scale*

Most of the women surveyed seemed knowledgeable about the value of breast-feeding. The majority of these mothers-to-be were aware that breast milk provides protection against disease,<sup>9</sup> helps prevent allergies,<sup>10</sup> and is generally healthier than bottle-feeding for the baby.<sup>11</sup> On the other hand, most of the respondents disagreed with the items containing incorrect or negative information about breast-feeding. The responses to only two of the knowledge items reflected misinformation held by a substantial number of the respondents. Twenty respondents (64.5 per cent) believed that breast-feeding causes the breasts to sag. More than one-third ( $n=11$ , 35.5 per cent) of the respondents believed that breast-feeding would transmit bad feelings to the baby.

#### *Responses to the attitude scale*

Generally positive attitudes toward breast-feeding were indicated by our patient sample. Over two-thirds of the women agreed with statements reflecting positive attitudes towards breast-feeding: 'I like the idea of a baby sucking at my breast';<sup>3</sup> and 'I like the idea of breast-feeding my baby'.<sup>6</sup> Alternatively, one-quarter or less of our sample agreed with the following statements reflecting a negative attitude toward breast-feeding: 'I would feel tied down if I breast-fed my baby'; 'My breasts are so small that I would not be successful at breast-feeding';<sup>12</sup> and 'Breast-feeding will make me get fat'.

However, the data did suggest several areas where ambivalence or possible attitudinal problems remain. Nearly one-third of the sample agreed with the statement, 'I would like to breast-feed my baby but I work all day';<sup>13</sup> while almost two-thirds expressed the belief that 'If I were in Mexico, there would be more

support for breast-feeding my baby'.<sup>4</sup> More than one-third of the women indicated that they did not often speak with their friends about breast-feeding.<sup>12</sup>

A majority of our sample agreed with these three negative beliefs about breast-feeding: if a breast-feeding mother experiences strong negative emotions, it will harm the baby, a replication of an earlier finding with Mexican-American subjects;<sup>4</sup> if a breast-feeding mother eats certain foods they will harm the baby; as long as babies receive enough milk, it doesn't matter whether they are breast-fed or bottle-fed.<sup>3</sup>

*The relationship of attitude and knowledge*

The attitude and knowledge scales were highly correlated with each other ( $r=60$ ,  $n=31$ ,  $p 0.001$ ). Those women who had more correct information about breast-feeding tended to have a more positive attitude toward breast-feeding and vice versa.

*Determinants of intention to breast-feed*

*Attitude and knowledge*

Table 1 presents the relationship of the attitude scale and the knowledge scale to the intention to breast-feed. The zero order correlation of attitude to intention was highly significant ( $r=0.45$ ,  $p 0.005$ ). Knowledge alone was not a significant predictor of intention. Attitude and knowledge combined were significant predictors of intention ( $r=0.49$ ,  $p 0.05$ ).

TABLE 1

*The relationship of attitude and knowledge to the intention to breast-feed*

Multiple Regression: Intention = Attitude and Knowledge			
Multiple $R=0.49$	$n=31$	$F=4.48$	$p<0.05$
Attitude	$\beta=0.60$	$F=8.42$	$p<0.05$
Knowledge	$\beta=0.24$	$F=1.35$	<i>n.s.</i>
Point Biserial Zero Order Correlations with Intention			
Attitude	Knowledge		
$r=0.45$	$r=0.12$		
$n=31$	$n=31$		
$p<0.005$	<i>n.s.</i>		

Several of the individual items of the attitude scale were significantly associated with the intention to breast-feed. Two attitude items were negatively related to intention. They were the item identifying a conflict between maintaining modesty and breast-feeding ( $X^2=6.4$ ,  $p<0.05$ ) and the item reflecting the feeling of being restricted and tied down by breast-feeding ( $X^2=7.80$ ,  $p<0.01$ ). A significant positive relationship to intention was found with three attitude scale items: the belief that breast-feeding improves the emotional relationship between mother and child ( $X^2=10.77$ ,  $p<0.005$ ); liking the idea of breast-feeding ( $X^2=4.57$ ,  $p<0.05$ ); and feeling com-

fortable speaking with friends about breast-feeding ( $X^2=6.51$ ,  $p<0.005$ ).

*Other determinants of intention*

Past experience was significantly associated with intention ( $X^2=6.77$ ,  $p 0.05$ ). Those mothers who had previously breast-fed other children also intended to breast-feed the coming child. Other studies have also demonstrated this strong positive association between breast-feeding an earlier child and decision to breast-feed the current infant.<sup>3</sup> The perceived opinion of the husband was significantly associated with the intention to breast-feed ( $X^2=17.90$ ,  $p<0.05$ ). Those women who indicated that their spouse had a positive opinion about breast-feeding were most likely to intend to breast-feed, a finding confirmed by other research.<sup>1-5</sup> Demographic variables such as marital status, place of birth, years in U.S., age, income, spouse's occupation were not associated with the intention to breast-feed.

**Discussion**

This pilot study provides some evidence for the conclusion that while attitude and knowledge are closely related, attitude is the significant predictor of intention to breast-feed. Similarly, the study provides supporting evidence for the contributory importance of past experience and opinion of significant others (particularly, in this case, the spouse) in determining intentionality.

Analyses of responses to the individual attitude and knowledge items revealed that cultural factors also influenced the mothers' opinions. Many of the women believed that breast-feeding would transmit bad feelings of the mother to the baby. Even more believed they could make their babies ill by eating improper foods. The majority believed that women suffering from 'rabia' or 'corajes' (strong negative emotions), could not only make their nursing babies ill, but might actually kill them.

Almost a quarter of the women were uncomfortable with the idea of a baby sucking at their breast. This may be related to feelings of modesty, or to a difficulty in acknowledging the sexual connotations of breast-feeding. Similarly, many of the women felt they were uncomfortable with the idea of nursing in public. Particular attention to the area of cultural differences seems appropriate.

In terms of personal attitudes, liking the idea of breast-feeding and believing in its role in maternal-infant bonding were strong predictors of intentionality. However, there was some evidence of ambivalence in this area as well, which justifies further exploration. For example, many of the women did not frequently talk about breast-feeding, a possible handicap to a good information flow about breast-feeding. Finally, several of the women were concerned about integrating breast-feeding with work.

*Concluding remarks*

The scope of this study did not allow for follow-through to assess the relationship between intentionality and actual practice of breast-feeding. However, both research<sup>5,7,9</sup> and theoretical models<sup>10,11</sup> provide some evidence of a significant association between intention to breast-feed during pregnancy and final method of feeding. The relationship of behavioral intentions to actual behavior is clearly a critical link. Based on data from the hospital where these women delivered, a smaller percentage of mothers actually chose to breast-feed their babies than the percentage indicated by our data on intentions. The crucial question is why mothers, who initially intend to breast-feed, subsequently change their minds at the time of delivery or shortly thereafter. Future research should be directed to the important question which examines the factors which intervene to change the infant feeding practices among those who initially intend to breast-feed.

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## Dietary Practices and Aversions During Pregnancy and Lactation Among Sudanese Women

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The role of maternal health and nutrition has been emphasized by the recognition of the problem of low birth weight which affects some 20 million newborns annually, mainly in developing countries and which is essentially an end result of interference with fetal growth following inadequate nutrition and infections in pregnant women in these countries.<sup>1</sup> It was shown that small-for-date infants had congenital anomalies eight times more frequently than normally grown infants.<sup>2</sup>

In the British Perinatal Survey<sup>3</sup> it was found that the likelihood of normal labour was better in women brought up in good circumstances, who had eaten a satisfactory diet from birth to maturity, who received good medical care and who continued to have these advantages during pregnancy compared to women of poor socioeconomic classes. The chances of such

women producing healthy babies were also better. Butler and Bonham<sup>4</sup> and Butler *et al.*<sup>5</sup> showed that mothers from low social class had a less successful reproductive performance compared to mothers from higher and middle socioeconomic classes as judged by perinatal mortality rates, mean birth weights, or the frequency of major maternal and fetal complications. The diet of the pregnant women of the upper socioeconomic class in Scotland contained more energy, protein, calcium, and vitamins than the diet of women in the lower socioeconomic class;<sup>5</sup> and the average weight of the full-term babies in the former class was higher than those in the lower socioeconomic class. There is good statistical evidence to show that a high energy intake during pregnancy is associated with birth weight that is above the average.<sup>6</sup>

In India, 29 per cent of babies of women from the