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Determinants of breastfeeding for Mexican migrant women : research note

Research Not

The Determinants of Breastfeeding for Mexican Migrant Women

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This article develops an economic model for assessing Mexican agricultural migrants decision to breastfeed. The resulting hypotheses from our model are linked to health care and welfare program access, cultural factors, and employment. Using a probit analysis of our variables, a major finding is that non-traditional practices such as out of home childcare, birth control and alcohol use have a negative impact on the probability of breastfeeding. We also found that working women in our sample population are less likely to breastfeed.

Few studies have focused on factors determining the incidence rates and/or duration rates of breastfeeding among Mexican agricultural migrants in the United States. Most studies examining migrants or rural households have studied problems in the Third World where there are considerable differences in social and economic conditions. In addition, many of these studies relied on descriptive statistics which can be useful for estimating incidence rates and providing an overview of the breastfeeding choice problem. However, serious limitations with respect to causal inferences arise with descriptive studies, and linear estimation techniques may not be appropriate if there are relevant binary dependent variables. Thus, the purpose of this article is to provide information on breastfeeding practices of Mexican-origin agricultural migrants, develop an economic theoretical basis for the observed practices of these women, and present an empirical analysis of the determinants of breastfeeding among these women.

In the empirical analysis of breastfeeding determinants, our model avoids the inherent statistical problems associated with binary dependent variables by using a non-linear estimation technique, probit. By using this model, one can estimate the determinant of the probability of breastfeeding among these women. A similar approach was developed by Akin, *et al.* (1981) in the analysis of the World Fertility Survey (WFS) data for Sri Lanka. They used a probit model to isolate the significant socioeconomic factors that influence breastfeeding.

Within the last fifteen years a general consensus has developed among the medical community concerning the superiority of breast over bottle feeding for infant and maternal health. With respect to infant health, human milk is superior to its substitutes due to its nutritional superiority, protective effects against infection such as *Escherichia coli* diarrhea, antiallergic effects, and influence on maternal neonate bonding (*c.f.*, Jeliffe and Jeliffe, 1977a). In addition, prolongation of the period of post partum amenorrhea and suppression of the mother's ovulatory cycle assist in preventing unwanted pregnancies and promote child spacing (*c.f.*, Akin, *et al.*, 1981). Both birth spacing and contraception in underdeveloped countries has been associated with decreasing maternal morbidity and mortality (*c.f.*, Lillig and Lackey, 1982).

In many third world countries breastfeeding declined between 1940 and the mid 1970s. For example in Mexico, the extent of breastfeeding declined from 98 percent in 1960 to 41 percent in 1966 at six months, and in Singapore from 79 percent in 1951 to 4 percent in 1971 at three months (Bader, 1976:611). This decline in breastfeeding, particularly in the Third World, generated a flurry of debates and literature focussing on reasons for the significant decline in breastfeeding. In particular, the research of Jeliffe and Jeliffe (1977b) argued that the decline in breastfeeding was due to the unethical marketing of commercial concerns in the Third World which promoted the use of formula over breastmilk. Others viewed industrialization and the subsequent increased employment of women outside the home as inducing the decline in the incidence and duration of breastfeeding (*c.f.*, World Health Organization, 1983).

During this same period the United States experienced a similar downward trend in breastfeeding (*c.f.*, Hendershot, 1984:591). Nevertheless, the post 1972 period signaled a reversal of this trend and the prevalence of breastfeeding in the United States increased. However, among ethnic and racial minority groups in the United States this reversal did not occur. According to one national study black, Hispanic and poor women experienced either a later upward trend, a slower upward trend or never experienced any change in breastfeeding trends (*c.f.*, Hendershot, 1984:601). A major study of the Hispanic population along border countries suggested that among Mexican origin women there was a decrease during the 1971-79 period of breastfeeding (*c.f.*, Smith, *et al.*, 1982). Another study focussing on Mexican origin agricultural migrants observed low incidence rates of breastfeeding (Mines and Kearney, 1982). Clearly, this cursory evidence suggests that Hispanic women, particularly migrants, may be experiencing significantly lower rates of breastfeeding. Yet, why is this occurring? Is employment or health care access the critical component in their decision to breastfeed or bottle feed? Or are the breakdown of kinship ties or other cultural forces significant in influencing their choices?

This article specifically addresses these questions. The first section presents the underlying economic model and resulting hypotheses that motivate the selection of the probit model. Section II describes the sample and discusses summary statistics of our sample. Section III presents a discussion of the empirical findings. In the final section we discuss our conclusions and suggestions for continued research in this area.

THE THEORETICAL MODEL

Seasonal migrant women are constrained by a limited choice set of health care alternatives. A reasonable assumption is that these women make their health care choices to maximize their individual utilities subject to their technical and budget constraint sets. Thus, it can be hypothesized that the choices these women make concerning breastfeeding are rational choices, but, given their constraints, they may not be able to maximize the optimum level of breastfeeding for their infants.

An economic model of breastfeeding, developed by Butz (1981), was adapted to generate plausible hypotheses concerning the breastfeeding choices of Mexican migrant women. Assuming these women maximize their utility by the number of their surviving children and all other goods, we have the following utility function.

(1) $U=u(N,G)$

where N= the number of surviving children and G= all other goods (Butz, 1981:97).

(2) $N=S*B$

where S=common survival probability of the children and B= the number of live births.

Unlike the Butz formulation, we assume that both S and B are products of both household and labor market activities. The subsequent production function which influences S, the common survival probability, then becomes the following:

(3) S=a (breastfeeding (BF), education, income,)

The marginal products of these inputs are assumed to be positive. Studies have shown that mothers that typically breastfeed have greater interaction with their offspring inducing both physically and emotionally healthier children (*c.f.*, Jelliffe and Jelliffe, 1978a). Thus, there is a high probability of a positive outcome for children who are breastfed. The last two variables should have a direct and positive relationship on the morbidity and mortality rates of their children.

Since we are most concerned with the decision to breastfeed we will focus on the production function for Breastfeeding, BF. Unlike Butz, we will not assume that lactation depends solely on nutritional status and duration of breastfeeding. Rather, given the current empirical evidence on breastfeeding, there are few if any, significant biological constraints on a women's ability to breastfeed. Indeed, there are studies that indicate that women under severe physical duress such as famine and war have been able to produce breast milk (Richardson 1986:102). Also, duration of breastfeeding although critical in a biological sense for milk production, is constrained by cultural, economic and social forces in the woman's environment (Huffman, 1984:173). Thus, in modeling lactation the appropriate production function should be the following:

(4) BF=B (health and welfare program access, cultural and kinship ties, employment,)

The marginal products are assumed positive for cultural and kinship ties and health and welfare program access. The former reflects an array of cultural variables such as familial and village networks and culturally specific infant care practices. The latter refers to prenatal health care access and income based welfare programs where information about breastfeeding is provided. Employment can be positive or negative depending on the type and conditions of female employment (*c.f.*, Forman, 1984). Thus, we argue that these inputs will determine the major constraints to breast milk production. Therefore, the factors that determine the survival probability, as illustrated in equations (3) and (4), reflect primarily the socioeconomic constraints, rather than biological constraints. This interpretation realistically mirrors recent empirical evidence in the breastfeeding literature (Forman, 1984:673).

In addition to the technical production constraint, these women face budget or income constraints. In this model we modify the Butz budget constraint to the following:

(5) $HP_H + GP_G + W_w(T_S + T_{BF}) = W_wT + Y$

where $T = T_S + T_{BF} + T_W$

And the income constraint variables are:

HP_H = the total cost of health services purchased
GP_G = the total cost of all other market goods and services
W_w = the woman's wage
T_S = time spent in home childcare (not breastfeeding)
T_{BF} = time spent breastfeeding
T_W = hours employed
Y = husband or other family member's income and transfer payments.

Thus, assuming utility maximization by the women subject to the production function and new budget constraint a supply and demand model can be

developed for breastfeeding.[1] However, a critical factor that merits further discussion in this model is the perception of breastfeeding as an inferior good. Such an outcome is plausible among low income households where emulation of upper class values include the consumption of the perceived superior good, bottlefeeding (Simopoulos and Grave, 1984:606).

Using this proposed theoretical model for breastfeeding, one can develop several testable hypotheses which should provide greater understanding of the breastfeeding practices of Mexican origin migrant women. The first set of hypotheses is that contact with health professionals would increase the probability of breastfeeding. We assume that health care professionals would advise women to breastfeed as recommended by the American Pediatric Association. In particular, access to prenatal health care will increase the likelihood of breastfeeding. The second set of hypotheses states that strong cultural and kinship ties will positively effect breastfeeding decisions. Traditionally, rural Mexican women have breastfed their children and we would expect those women who have cultural and kinship ties to have a higher probability of continuing the practice. The final set of hypotheses reflects the impact of an increased female labor force participation in paid seasonal employment and the increase in real income from transfer payments.[2] An increase in transfer payments should increase breastfeeding if it is a normal good. However, if it is perceived as an inferior good, an increase in income derived from transfer payments may have a negative effect. Similarly, paid seasonal employment may have a negative effect on breastfeeding. Specifically, employment outside the home, under unfavorable working conditions may severely curtail adequate breast milk production. Other sets of hypotheses can be generated from the income and technical possibility constraints of the economic model, but, given our data limitations we will focus on the three specified sets.

DESCRIPTION OF THE SAMPLE

A sample of 137 women in seasonal farm labor households were interveiwed so as to obtain maternal and infant health data in three major California agricultural communities: San Joaquin, Stanislaus, and Tulare counties. A convenience sample was used to select the interviewed women who lived in farm labor households. Harvest employment was the major source of income for the families of these women and they all were Mexican origin (*i.e.*, place of birth was Mexico or U.S. born of Mexican descent). Approximately, sixty specific and open ended questions were asked concerning basic socioeconomic

[1] Diagrammatically these relationships are presented by William Butz (1981), where, in particular, he illustrates the impact of variations in supply and demand elasticities.

[2] "Transfer Payments (2-3): payments made (by the government) for which no good or services are produced in return. Example: welfare and social security". In R.J. Gordon, *Macroeconomics* 3rd edition. Little, Brown & Co.: Boston, 1984.

information, prenatal nutrition, problems of pregnancy, delivery and poor perinatal outcomes, child care, and infant feeding practices. Interviews were administered in both labor camps and rural health clinics by trained bilingual interviewers. Several of the clinics were within labor camps or within close proximity of these camps and were selected on the basis of their accessibility to the migrant community.

Characteristics of the interviewees in the labor camps and health clinics were analyzed to determine whether or not there was any statistically significant difference between the populations. Table 1 presents the results of mean variance tests and a proportion difference test of the two sample subgroups, clinic respondents and labor camp respondents, for age, education, and Mexican nativity. As evident by the small t-statistics for each of the selected variables, we cannot reject the null hypothesis that there is no significant difference between the means. Hence, even though the two subgroups of women were interviewed in different environments, we can assume that the subsamples have the same characteristics.

TABLE 1

MEAN-DIFFERENCE TESTS OF AGE AND EDUCATION OF CLINIC AND LABOR CAMP SUBSAMPLES AND PROPORTION DIFFERENCE TEST FOR NATIVITY

Age	
Mean Age Clinic	28.3 years
s.d.	6.84
Mean Age Labor Camp	28.1
s.d.	7.04
Test Between Ages of Two Samples at 95% confidence (accept null)	t = -.124
Education	
Mean Years Clinic	6.7 years
s.d.	3.6
Mean Years Labor Camp	6.4 years
s.d.	3.7
Test Between Years of Education Between Two Samples at 95% Confidence (accept null)	t = -.49
Mexican Nativity	
Clinic	74%
Labor Camp	81%
Test for Population Proportion Difference at 99% Confidence (accept null)	t approx = 0

TABLE 2

DESCRIPTIVE STATISTICS OF THE 137 SEASONAL FARM LABOR WOMEN SOCIOECONOMIC CHARACTERISTICS

Age			
Mean	28.2 years		
s.d.	3.63		
Marital Status			
Number Married	130	Number Single	7
Mean Age	30.7 years	Mean Age	24 years
Education Mean	6.6 years		
s.d.	3.6		
Current Harvest Employment			
Number Employed	96	Number Unemployed	41
Mean Age	30.3	Mean Age	30.4
Nativity			
Mexico	113	U.S.	24
Mean Age	30.8 years	Mean Age	28.2 years
Migrant Status			
Migrants	88	Permanent	49
Mean Age	31.6 years	Mean Age	28.3 years

TABLE 3

BREASTFEEDING PATTERNS AND INFANT MORTALITY SUMMARY STATISTICS

Total Number Breastfed [a]	114	Not Breastfed	23
Mean Age	30.5 years	Mean Age	30.2 years
Number of Women that Experienced at Least One Infant Death	11 women		
Number of Women that Reported Miscarriages	31 women		
Number of Women that Reported Stillbirths	6 women		

Note: [a] This total includes both women that breastfed only and those who combine breastfeeding with bottle feeding.

The mean age of the sample was 28.2 years, 95 percent were married and 70 percent were employed as seasonal harvest labor during the time of the interview. The mean education was 6.6 years, slightly more than the equivalent of "primaria" in Mexico and over eighty percent of the sample was born in Mexico. Sixty-four percent of the respondents identified themselves as migrants. In general, migrants were slightly older than permanent seasonal agricultural workers. (For a summary of this data see Table 2).

In addition to these sociodemographic responses we summarized in Table 3 the relevant breastfeeding patterns and infant mortality statistics for these women. Independent of the duration of breastfeeding and the degree of augmentation to breastmilk, 83 percent of our respondents breastfed. This relatively high incidence rate must be interpreted with some caution as the majority of respondents that breastfed did not rely on breast milk as the sole source of nourishment for their infants. Only 17 percent of the sample relied entirely on breastmilk for their infants. Infant mortality was 8 percent, 23 percent of the sample indicated that they had experienced at least one miscarriage and 4 percent reported one stillbirth.

RESULTS

We selected several variables to test our three major hypotheses regarding the effects of significant determinants on the probability of breastfeeding. The following are the three basic hypothesis groups we tested:

(1) Health Care Access

(2) Cultural and Kinship Ties

(3) Employment and Transfer payments

We used a binary probit model to estimate the probability of breastfeeding for each of the variables tested in each hypothesis group (*See*, Appendix I for a more detailed explanation of the probit model). A variable regarding national origin was used in addition to the variable of interest to account for the differences in the sample population. Our results are summarized in Table 4.

The first set of hypotheses is based on the assumption that contacts with health care professionals would increase the probability of breastfeeding. To test this hypothesis we evaluated the effects of visits to a physician during the third trimester and whether or not it was an emergency birth. We found a negative, but statistically weak relationship between third trimester doctor visits and the probability of breastfeeding. Our results do not support our original hypothesis, however, they are consistent with the results of others in this field (Forman, 1984). Possible explanations for this result are language

TABLE 4

FACTORS DETERMINING THE PROBABLITY OF BREASTFEEDING[1]

Factor	Direction of Sample [a] Association	Referente [b] Association
I. Health Care		
1. Third Trimester Doctor Visit	(+) (-)	(-)
2. Hospital Birth	(+) (-)	(-)
3. Emergency Birth	(+) (-)	(-)
II. Cultural and Kinship Ties		
1. Paid Child Care	(-)	N/A
2. Labor Camp Child Care	(+) (-)	N/A
3. Additional Children Desired	(+) (-)	(-)
4. Parity	(+) (-)	(+) (-)
5. Practiced "La Cuarentena"	(+)	N/A
6. Use of "Faja"	(+) (-)	N/A
7. Use of Birth Control	(-)	(-)
8. Female Use of Birth Control	(-)	N/A
9. Alcohol Use	(-)	N/A
III. Employment and Transfer Payments		
1. Work	(-)	(-)
2. WIC Participation	(+) (-)	N/A

Notes: [1] *See* Table 5 in Appendix I for the statistical results.

[a] If the probablity of breastfeeding increases due to the numbered variables a positive sign, (+), will be noted. If the probablity declines a negaitve sign, (-) will be noted. Where the statistical results were weak we have designated that the direction could be positive or negative.

[b] Reference associations are the results of various research projects in this area and are summarized in Forman (1984).

and cultural barriers which limit transmission of positive information about breastfeeding, scarcity of trained Mexican origin health professionals, and large medical caseloads in rural clinics which prevent the provision of quality health care advice and services.

The second set of hypotheses is based on the assumption that stronger cultural and kinship ties would increase the probability of breastfeeding. We assumed that traditional methods of infant feeding, breastfeeding, would be used by women with these characteristics. We tested this hypothesis by evaluating the effects of child care arrangements, whether or not additional children were desired, parity, whether or not they practiced *La Cuarentena*,

use of the *Faja*, birth control practices, and alcohol consumption. In particular, *La Cuarentena* and use of the *Faja* reflect culturally specific practices of traditional rural Mexican women. The former practice consists of both dietary and sexual restrictions that limit the women's activities during the postpartem period. The latter requires the mother, relative or friend to bind the umbilicus of the newborn to prevent undesirable umbilical cord bulging and entry of "mal aire" (bad air) which would be harmful to the infant (*c.f.*, Zepeda, 1982).

Our results indicated that the probability of breastfeeding declined when either paid or labor camp child care services were used. The paid child care variable had significantly greater explanatory power than the labor camp child care variable. There are two plausible explanations for these results which are consistent with our original hypothesis. First, traditional women would care for their own children and be more likely to breastfeed. Second, if a woman is using child care services it implies that she is working away from the home and as a result it may be logistically impractical to breastfeed.

We also assumed that women with large families and those desiring more children were more traditional and thus more likely to breastfeed. However, our results on the effects of the desire to have more children, and parity, the number of children already in the family, were statistically inconclusive. The coefficient for the variable regarding the preference for additional children was negative, but, it was small and statistically insignificant. Other studies have also found this relationship to be negative. The parity coefficient was positive, but, statistically insignificant. Other researchers have found this relationship to be either negative or positive (*c.f.*, Forman, 1984).

Practicing *La Cuarentena* increased the probability of breastfeeding which is consistent with our hypothesis regarding women who practice traditional customs. Our results regarding the use of the *Faja* were not strong. Nevertheless, examining our proxies for the strength of traditional values we found that practices that were inconsistent with traditional values had a negative impact on the probability of breastfeeding. The use of birth control, especially use of birth control devices by women such as oral contraceptives, had a negative effect on the probability of breastfeeding. Alcohol consumption, considered linked to greater urbanization and assimilation of non-traditional values, also had a negative impact. Thus, our general findings are consistent with our original hypothesis.

The third set of results addressing seasonal migrant labor force participation and transfer payments present interesting findings. First, we found that the probability of breastfeeding declined when the mother worked outside the home. This result is consistent with other studies that suggest that socio-economic changes such as employment outside the family negatively affects the incidence and duration of breastfeeding (*c.f.*, World Health Organization, 1983). Unfortunately, examining the impact of transfer payments was less

clear. Using their participation in the Women, Infant and Children program, WIC, as a proxy for transfer payments, we did not have statistically significant results.

CONCLUSIONS

In this study we have examined three sets of hypotheses regarding the factors that determine whether or not California seasonal farm labor women will choose to breastfeed. Based on a microeconomic model, we assumed that seasonal migrant women maximize their utilities subject to their constraint sets. We empirically tested our hypotheses using a non-linear estimation technique, probit, which resulted in several important conclusions. One of our major findings was that non-traditional practices such as out of home child care, birth control and alcohol use have a negative impact on the probability of breastfeeding. These findings were consistent with our hypothesis that women with more traditional values would be more likely to breastfeed. We also found that working women in our sample are less likely to breastfeed. These results are consistent with our hypotheses and with other empirical studies in this area. Our results regarding the influence of medical professionals on the decision to breastfeed, as well as, the impact of transfer payments were not conclusive and suggest that additional analysis in this area is needed.

REFERENCES

Acosta Johnson, C.
1980 "Breastfeeding and Social Class Mobility". In *Twice a Minority-Mexican American Women*. Edited by M. Melville, Mosby Company.

Akin, J., *et al.*
1981 "The Determinants of Breast-Feeding in Sri Lanka", *Demography*. 18(3):287-307.

Almroth, S., *et al.*
1979 "Economic Importance of Breastfeeding", *Food and Nutrition*. 5(2):4-10.

Auerbach, K.G.
1984 "Employed Breastfeeding Mothers: Problems They Encounter", *Birth*. 11(1):17-21.

Bader, M.
1976 "Breastfeeding: The Role of Multinational Corporations in Latin America", *International Journal of Health Services*. 6(4):609-625.

Butz, W.P.
1981 "The Changing Role of Breastfeeding in Economic Development: A Theoretical Exposition". In *Research in Human Capital and Development*. Edited by A. Khan an I. Sirageldin. Greenwich: Jai Press.

Eckhardt, K.W. and G.E. Eckhardt
1984 "Analysis of the Reversal in Breastfeeding Trends in the Early 1970s", *Public Health Reports*. 99(4):411-415.

Forman, M.R.
1984 "Review of Research on the Factors Associated with Choice and Duration of Infant Feeding in Less-Developed Countries", *Pediatrics*. Supplement: 667-694.

Gordon, R.J.
1984 *Macroeconomics*. Boston: Little, Brown & Co. 3rd edition.

Hendershot, G.
1984 "Trends in Breast-Feeding", *Pediatrics*. Supplement: 591-602.

Huffman, S.
1984 "Determinants of Breastfeeding in Developing Countries: Overview and Policy Implications", *Studies in Family Planning*. 15(4):171-183.

Jeliffe, B. and E.F. Patrice Jeliffe
1977a "Breast is Best: Modern Meanings", *The New England Journal of Medicine*. 297(17):912-915.

1977b "The Infant Food Industry and International Child Health", *International Journal of Health Services*. 7(2):249-254.

Lillig, K.K. and C.J. Lackey
1982 "Economic and Social Factors Influencing Women's Infant Feeding Decisions in a Rural Mexican Comminity", *Journal of Tropical Pediatrics*. 28(5):240-247.

Magnus, P.D.
1983 "Breastfeeding Among Hispanics", *American Journal of Public Health*. 73(5):597.

Mines, R. and M. Kearney
1982 *The Health of Tulare County Farmworkers: A Report of 1981 Survey and Ethnographic Research for the Tulare County Department of Health.*

Notzon, F.
1984 "Trends in Infant Feeding in Developing Countries", *Pediatrics*. Supplement: 648-665.

Richardson, B.D.
1986 "The Vicissitudes of Breastfeeding", *Journal of Tropical Pediatrics*. 32(3):102-103.

Simopoulos, A.P. and G.D. Grave
1984 "Factors Associated with the Choice and Duration of Infant-Feeding Practice", *Pediatrics*. Supplement: 603-614.

Smith, J.C., *et al.*
1982 "Trends in the Incidence of Breastfeeding for Hispanics of Mexican Origin and Anglos on the U.S. Border", *American Journal of Public Health*. 72(1):54-61.

Theil, H.
1971 *Principles of Econometrics*. New York: John Wiley & Sons.

World Health Organization
1983 "The Dynamics of Breast-Feeding", *Who Chronicle*. 37(1):6-10.

International Planned Parenthood Federation and the International Union of Nutritional Sciences
1979 "Lactation, Fertility and the Working Woman", *Tropical Pediatrics and Environmental Child Health*. 25(1):3-11.

Zepeda, M.
1982 "Selected Maternal Care Practices of Spanish-Speaking Women", *JOGN Nursing*. 11(6):371-374.

APPENDIX 1

We estimated the binary probit model with independent variables using the Newton-Raphson method. In this model the dependent variable, whether or not a woman breastfed her children, is a dummy variable, which is in turn a linear regression function of the independent variables. We evaluated the likelihood of breastfeeding as a function of the independent variables: age, national origin, employment, cultural varibles, medical visits, food stamps and WIC participation, and kinship ties. Thus,

$Y_i = X_i B + e_i$ i=1,...,n where y_i are unobserved

$D_i = 0$ if y_i is less than or equal to zero

$D_i = 1$ if y_i is greater than or equal to zero

We assume the distribution for Ei to be normal with mean zero and variance unity. The normality assumption allows us to write the log likelihood function:

$\log L_i = \log \text{Prob}\,(y_i = 0/X_i B)$ if $D_i = 0$

$= \log \text{Prob}\,(y_i > 0/X_i B)$ if $D_i = 1$

Summing over the $D_i = 0$ and $D_i = 1$ observations then,

$\log L(B) = S \log (1 - F(X_i B)) + S \log (F(X_i B))$

(S=sigma)

where $F(X_i B)$ is the cummulative normality probability function. The probit model maximizes this log likelihood function with respect to B by the Newton-Raphson method. (For more dicussion of this see Theil, *Principles of Econometrics*: 1971).

TABLE 5

STATISTICAL FINDINGS ON THE FACTORS DETERMINING THE PROBABLITY OF BREASTFEEDING
(N = 137)

I. Health Care			
	(1) BF = -.6745 (-2.424)	-.3008 Mex (-.9342)	-.2666 Tri (-.7489)
$x^2 = 1.87$			
	(2) BF = -.69 (-2.46)	-.39 Mex (-1.22)	+.028 Hosp (.55)
$x^2 = 1.58$			
	(3) BF = -.69 (-2.38)	-.35 Mex (-1.11)	+.07 Emerg (.19)
$x^2 = 1.33$			
II. Cultural and Kinship Ties			
	(1) BF = -.5476 (-1.9)	-.1882 Mex (-.582)	-.7012 PDCARE (-2.45)
$x^2 = 7.68$			
	(2) BF = -.6745 (-2.42)	-.3456 Mex (1.09)	-.2006 LCCARE (-.35)
$x^2 = 1.42$			
	(3) BF = -.6151 (-1.82)	-.3765 Mex (-1.18)	-.8067 E-01ACHILD (-.31)
$x^2 = 1.39$			
	(4) BF = -.2167 (-.73)	+.1938 Mex (.69)	.3437 E-01PAR (.76)
$x^2 = 1.1$			
	(5) BF = -.8750 (-2.53)	-.2863 Mex (-.89)	+.6951 Cuer (.99)
$x^2 = 2.261$			
	(6) BF = -.6715 (-2.41)	-.3585 Mex (-1.14)	-.8616 Faja (-.14)
$x^2 = 1.31$			
	(7) BF = .1122 (.37)	+.1479 Mex (.52)	-.2897 Cont (-1.31)
$x^2 = 2.25$			
	(8) BF = .2572 (.84)	+.1072 Mex (.37)	-.4834 WCont (-2.17)
$x^2 = 5.28$			

TABLE 5 (Continued)

STATISTICAL FINDINGS ON THE FACTORS DETERMINING THE PROBABLITY OF BREASTFEEDING
(N = 137)

	(9) BF = -.53 (-1.73)	-.44 Mex (1.36)	-.38 Alcohol (1.15)
$x^2 = 2.68$			
III. Employment and WIC			
	(1) BF = -.56 (-1.8)	-.39 Mex (-1.24)	-.31 Work (-1.05)
$x^2 = 2.45$			
	(2) BF = .6032 (-1.66)	-.3738 Mex (-1.18)	-.8569 E-01 WIC (-.30)
$x^2 = 1.38$			

Notes: BF = Breastfed
Mex = Mexican Native
Tri = 3rd Trimester Doctor Visit
Hosp = Hospital Birth
Emerg = Emergency Birth
PDCARE = Paid Child Care
LCCARE = Labor Camp Child Care
ACHILD = Additional Children Desired
PAR = Parity
Cuer = Practiced "la Cuerentena"
Faja = Use of "Faja"
Cont = Use of Birth Control
WCont = Female Use of Birth Control
Alcohol = Alcohol Use by Women
Work = Employment in Seasonal Agriculture
WIC = Participation in Women, Infant and Children Program