

Introduction

The problem of rural health care has been of great concern due to both specific occupational illnesses of this sector and the relatively high rate of rural poverty, 17% as compared to 15% of the total population in 1982. In addition, the rural poor share several characteristics "isolation, lack of power, social and cultural deprivation and membership in a racial minority group." ,Donham and Mutel: 1982, 512.. An important subgroup of the rural poor, that face unique health problems are seasonal farm labor women. As both agricultural workers and mothers, the health issues they face are twofold.

This paper will address the relatively unstudied area of seasonal farm labor maternal and infant health care. The main purpose of this research is to illustrate specific problems in this area such as inadequate prenatal medical care, low levels of prenatal nutrition, and the role of custom on both maternal and infant health care. A tentative hypothesis for this study is: inadequate prenatal, post partum, and infant care can be attributed to low utilization rates of federal programs, medical services, and the large influence of custom on maternal and infant health care. The influence of custom alone on health care is not considered negative, rather its lack of integration into maternal health services may result in negative consequences. Survey evidence will be used in order to examine the proposed problems.

I. Description of Survey and Sample

A sample of 150 seasonal farm labor households were interviewed in three major California agricultural counties, San Joaquin, Stanislaus, and Tulare Counties. The respondents in the sample consisted of 147 Chicana/Mexicana women, 1 Mexican man, 1 Black woman, and 1 Filipina woman. Interviews were administered in both labor camps and health clinics by bilingual interviewers.

Approximately sixty questions were asked ranging from basic socioeconomic data to questions concerning prenatal nutrition, birth related problems, child care, and infant feeding practices.

The following is a brief summary of pertinent socioeconomic data. Approximately seventy percent of the respondents were employed as seasonal field workers as well as worked in the home. The thirty that categorized themselves as housewives lived in households where seasonal farm labor was the main source of employment for the family. Of those women that worked outside of the home, 21% perceived that their income was equally important in supporting the family, 5% were sole supporters of the family, and 69% considered their husbands the sole financial supporter of the family. Eighty-five percent of the respondents were born in Mexico, and 46% of these individuals have been in California for less than a year, with 35% of these respondents coming from Mexico or other Southwestern states six months earlier. Although, a specific question about their legal status was not asked, given the evidence of birth place and migrant status, one can generally assume that few, if any of these individuals had legal work documents. The average level of education and most frequent response was six years, which is equivalent to completion of "primaria" in Mexico.

II. Discussion of Health Care Results

As mentioned earlier, the major concern of this study was on prenatal, post partum and infant/child health care. The results of this study will be compared to two studies: (1) A 1981 health survey of Tulare County farmworkers by Richard Mines and Michael Kearney, and (2) A survey of health problems and health service utilization among Mexican immigrants in San Diego by Wayne Cornelius, Leo Chavez, and Oliver Jones. The former survey has a sample size of 229 women and the later survey of approximately 197 women in their section concerning maternal

and child health. Although there is variation in the questions asked in each survey, there is significant overlap so as to allow for comparing results of similar questions.

One of the most critical components of prenatal health care is regular prenatal medical exams. Generally, women should seek medical advice throughout their pregnancy starting from the very critical first trimester of pregnancy. A relatively high percentage, 29% of the women sampled in the survey did not start prenatal care until their second trimester, and 14% waited until their third trimester for prenatal exams. Many of these women that waited until later on in their pregnancy for prenatal examinations were not consistent with their follow-up exams. Comparing these results with the Tulare study, 18% of the sample waited until the last trimester for prenatal medical care, and, even more shocking, in the San Diego study, 24% of the undocumented migrant women had received no prenatal care.

The most common response given by those women who waited until the last two trimesters to seek prenatal medical care was that they perceived having no problems during their pregnancy, hence, there was no need to see a doctor. This first response was then followed by responses concerning problems of transportation and cost. Similar results were found in the Tulare study where 46% did not think prenatal care was necessary, 35% were concerned with the high cost, and 27% were concerned with distance. Thus, both studies confirm that cultural beliefs of the "normal nature" of pregnancy and cost related problems result in lower utilization rates of prenatal medical services.

An important indicator of complications at birth is the rate of caesarian sections as compared to vaginal births. Recent evidence suggests that the rate of caesarian births is increasing in the United States.¹ The San Diego study showed the highest rate of caesarian delivery, 29%. The Tulare County study had a smaller

rate of c-section births at 16.5%. Similarly, this survey had a smaller rate of c-sections, 13%. Although one may conclude from the first study that there was a higher incidence of c-section births as compared to the total population, the later two surveys appear to fall below the current average rate of caesarian deliveries.

Perhaps, more significant, than the rate of caesarian deliveries, as an indicator of prenatal health is the incidence of miscarriages, stillbirths and infant deaths of this sample. Twenty-four percent of the sample experienced one or more miscarriages and/or stillbirths and 8% of the sample experienced at least one infant death. Fifty-two percent of those women that experienced miscarriages and/or stillbirths stated that to their knowledge these were not reported to health officials as most occurred at home. Hence, this could be an important indicator of underreporting of the level of miscarriages and/or stillbirths of this subgroup. Similarly, both the Tulare County survey had a high rate of miscarriage/stillbirths, 31% and the San Diego study had a rate of 28%. These relatively high rates indicate a need for more effective prenatal care for seasonal migrant women.

Finally, recent medical evidence suggests that family planning and smaller family size decrease morbidity and mortality rates during pregnancy, delivery and puerperium. ,Ordonez: 1983. The average family size of the sample was 3.5 children. Family size of the sample ranged from 0 to 16 children. Thirty-seven percent of the women interviewed did not want their last pregnancy. Therefore, over a third of the respondents would have planned a smaller family size. Sixty-six percent of the women use some form of birth control with the majority of these women stating they want to prevent further pregnancy. However, one-third of the sample used no method of birth control, which is similar to the results found in the Tulare survey. (See Table 1 for breakdown of birth control methods). Thus, this evidence suggests that many of these women want greater control over family size, and such control would potentially have a positive impact on prenatal and post partum health.

IIa. Nutrition During Pregnancy

Unlike the Tulare County and San Diego surveys, this survey delved further into maternal health by examining problems of nutrition during pregnancy. Eleven questions concerning weight gain, appetite and diet information, food preparation and utilization of federally funded nutrition related programs were asked. The evidence from these questions suggest that problems of inadequate nutrition during pregnancy exist.

Current medical studies have shown that pregnant women should gain a minimum of 24 pounds during pregnancy. Although weight gain may vary by individual, sufficient weight gain during pregnancy is crucial to avoid low birth weight, premature infants, and infant health problems. Thirty-seven percent of the women interviewed had gained less than 24 pound and 26% did not even know their weight gain during pregnancy. This latter statistic is significant as it is an indicator that these women are not monitoring their pregnancy for potential health problems. In addition, 6% of those women sampled suffered from underweight problems, an indicator of undernutrition, and 26% of the women expressed overweight problems during pregnancy which potentially could be indicators of edema. In both cases, calorie restrictions during pregnancy could result in limiting fetal development, and hence, adequate nutritional guidance is crucial.

Other indicators concerning problems of adequate nutrition during pregnancy are the level of appetite problems of nausea and vomiting, and regularity of eating habits. Seventeen percent of the women registered poor appetities throughout their pregnancy, 49% experienced nausea and/or vomiting during pregnancy, and 20% experienced irregular eating habits during pregnancy. All of these difficulties exacerbate the problem of adequate prenatal nutrition.

Recent medical evidence also indicates that pregnant women, in addition to

proper nutrition, must also use a vitamin supplement containing iron and folic acid as it is difficult to obtain these from diet alone. Folic acid is crucial in blood formation and in cell growth and development, and lack of iron, during pregnancy may result in anemia. Hence, they are both crucial in healthy fetal development. From this survey, 26% did not take vitamins during their last pregnancy. Since the average family size was 3.5, the need to use vitamin supplements increases as there is greater risk of body depletion of iron, minerals, and vitamins with each additional pregnancy.

Combined with the need for proper diet and vitamin supplements during pregnancy, is the need for increased fluid consumption. More fluid consumption is necessary during pregnancy due to the increased blood volume, amniotic fluid, and increased waste removal. For farm labor women, who often live in areas where heat is excessive, water consumption, to prevent dehydration, during pregnancy is crucial. Seventeen percent of women stated that they did not drink much water during their last pregnancy, and 6% stated they had problems of obtaining pure water.

A positive note in the study was in reference to use of alcohol and cigarettes during pregnancy. No women drank alcohol during their last pregnancy and only 4% occasionally smoked. For the total sample, only 2% drank alcohol on occasion and 5% smoked.² Alcohol consumption, during pregnancy, can cause birth defects and smoking can result in low birth weight.

Finally, utilization rates of federal programs, such as WIC (Women, Infant and Children Program) and food stamps, by the farm labor population are important indicators of the level of prenatal and infant nutritional education and the level of food supplements available to these women and children. The WIC program, in particular, is crucial in that it is the only mechanism by which these women are

counseled on prenatal care and nutrition. Only 25% of the women utilized the WIC program during their last pregnancy and 11% of the women used food stamps during their last pregnancy. Twenty-two percent used both WIC and food stamps during their last pregnancy. There was a lower utilization rate of the WIC program by pregnant women than by those women who utilized the program when they were not pregnant. (See Table II). In the Tulare survey, only 41% of the women utilized the WIC program. Given the potential nutritionally related health problems discussed earlier, higher rates of utilization of this program may be beneficial in curtailing nutritionally related prenatal and birth problems.

Ic. Post Partum and Infant Care

Two main areas in the survey are examined: (1) choice of infant diet, i.e. breast milk and/or formula, and (2) source of information for post partum and infant health care.

Recent studies have focused on the increased level of breast versus bottle feeding in the U.S. population. However, comparing the Anglo to the Hispanic population, one study concludes that the Anglo population has increased breast feeding infants over time, whereas Hispanics have decreased breast feeding.³

Also, if one examines studies in Mexico similar decreasing trends in breast feeding are evident. A study by Lillig and Lackey in a rural Mexican village illustrated that 61% of the women interviewed breastfed their infants for 3 months, whereas, six years prior to their study 91% of the infants were breastfed for six months.

Comparable results of low rates of breastfeeding were also exhibited in this survey. Twenty-four percent of the sample breastfed their infants for six months, 45% fed their infants commercial formula, and 27% breastfed initially and used formula. Comparable results were also found in the Tulare County study. (See Table III).

Table I
Current Method of Birth Control

	<u>% Sample</u>	<u>% Tulare Study</u>
None	34	37.6
The Pill	29.3	22.6
IUD	14	6.8
Tubal ligation	6.6	11.8
Condom	5.3	4.4
Diaphragm	0	2.2
Rhythm	2.6	
Vasectomy	0	0
Other	8.2	12.4
	N = 150	N = 181

Table II

Utilization of WIC and Food Stamps

	<u>Pregnant Women</u>	<u>Non-Pregnant Women</u>
WIC	21%	38%
Food stamps	11%	4%
Both Programs	22%	8%

N = 150

The most common response by women who opted for breast feeding their infants was their perception that this was a healthier method for feeding their child. The second most common response was it was a cheaper method. Only 6% of the sample indicated that a medical advisor suggested breastfeeding as a superior method of feeding.

Many women that preferred to formula feed their infants indicated that work was the primary motive for their decision, 32%. The next most common response was that they did not like to breast feed. Including the responses of lack of breast milk and insufficient breast milk with the response of work interfering with breastfeeding. The percentage of work-related reasons increases to 45.5%⁴

Finally, of those mothers who chose to both breast and formula feed, 42% stated that their work required them to include formula feeding in their infant diet. The second most common response was insufficient breast milk. Combining this response with work response, work-related reasons for introducing formula into the infant diet increases to 75%. (For summary of results, see Table IV).

The second component of post partum and infant care will be examined by analyzing the impact of traditional Mexican practices. Post partum care for traditional Mexican women is often determined by the custom known as "La Cuarentena," a 40-day post partum rest period. This custom encompasses both dietary restrictions and proper behavior so as to speed recovery from birth.⁵ ,Zepeda: 1982.

Results from the survey concluded that 67% of the sample observed "La Cuarentena," and only 30% chose not to observe this custom. A study by Marlene Zepeda of 30 Hispanic women in Southern California concerning

traditional infant and maternal care has even a higher rate of observation of "La Cuarentena," 80%. However, given her small sample size and limited geographic area, this result may certainly be an overestimate. Nevertheless, in both cases, the evidence suggests that custom plays a central role in post partum care.

Care of the umbilical cord by Mexican migrants can be used as an indicator of the role of custom on infant care. Mexican women often bind new born infants' abdomen with gauze, cloth, or special binders known as "fajeros." Reasons for this custom of binding are; (1) to avoid unattractive bulging of the umbilicas from the body, (2) to secure internal organs of newborns, and (3) to prevent "mal aire" (bad air).⁶, Zapeda: 1982, 371..

Concerning umbilical cord care of newborns, 13% of the sample had "fajeros" placed on the infant by the birth attendant. However, even more interesting, was 21% of the women placed a "fajero" after they left the hospital. Hence, 1/5 of the sample integrated this custom into infant care. Of those women that used fajeros, all, but two women, in the sample, observed "La Cuarentena."

A final indicator of the role of tradition on maternal and infant health care was where these women sought advice for infant care. With respect to pregnancy verification 83% would seek medical advice. This high result is similar to that found in the Tulare County study. However, concerning advice on infant care only 28% would rely on medical advice, and, the majority of women, 69% relied on relatives, friends, or their own life experience for infant care. This choice does not reflect solely the lower economic status of these women, but, rather it also reflects the influence of a tradition where childbirth and child-rearing are considered a "normal" part of women's lives. In addition, education concerning childbirth and care are products of their kinship ties.

Table III
Breast versus Bottle Feeding
Last Pregnancy

	<u>% Sample</u>	<u>% Tulare Survey</u>
Breast	23.6	22.9
Bottle	45	55.1
Both	27.4	22.0
Other	4	
	N = 131	N = 118

Table IV
Maternal Method of Infant Feeding

A. Choice of Breast Milk

Best Method	71%	
Easier	13%	
Medical Advice	6%	
Other	10%	N = 31

B. Choice of Formula Only

Work	32%	
Dislike Nursing	14%	
Lack of Breast Milk	13.5%	
Baby Refused to Nurse	10%	
Peer/Family Pressure	5%	
Illness	5%	
Coraje	3%	
No Answer	10%	
Other	7.5	N = 59

C. Choice of Both

Work	42%	
Dislike Nursing	2.7%	
Lack of Breast Milk	33%	
Medical Advice	11%	
Coraje	2.7%	N = 36
Other	8.6%	

II. Conclusion and Policy Implications

Three major areas, prenatal care and birth, prenatal nutrition, and post partum and infant care, were examined with respect to 150 seasonal, migrant households. It was observed that inadequate prenatal medical exams and nutritional problems during pregnancy may have resulted in a higher incidence of birth related problems. Underutilization of federal programs may also have resulted in not minimizing prenatal and post partum complications. Low rates of breast fed infants were also found in the sample resulting primarily from the role of work outside the home. In addition, few of these women indicated encouragement from medical advisors to breast feed. Finally, it was observed that custom plays a central role in post partum and infant care, and may influence these women to often times not seek medical advice concerning post partum and infant care problems.

Major policy implications from this study are: (1) to increase federal funding of prenatal, maternal and infant health programs that deal with community outreach and education; (2) increase the funding base for existing health programs so that the needs of this population may be met; and (3) educate health providers of the significance of custom in the lives of Mexican women so that it may be integrated in a positive way to health care practices.

FOOTNOTES

¹In 1970, 5.5 out of 100 births were c-sections, by 1978, 15.2 out of 100 births were c-sections and by 1982, this rate increased to 18.5 per 100 births. Wall Street Journal, Jan. 19, 1984, p. 1.

²Evidence indicates that Chicanos have a lower level of smoking than the Anglo population, Roberts and Lee: 1980..

³Between 1971 and 1975 breast feeding among Anglos, in this sample, increased by 31% and between 1976-79 it increased by 47%. However, Hispanics have decreased breast feeding from 25.7% (1971-75) to 21% (1976-79). ,Smith Mhango, et al.: 1982.

⁴Assuming that lack of breast milk and insufficient breast milk are work-related is a reasonable assumption as once formula is introduced to an infant this may act to decrease the mother's milk supply.

⁵The dietary customs entail restriction of acidic foods and restraints such as no heavy work, no sexual intercourse, and no contact with water.

⁶This concerns fear of illness directly related to air entering through an open aperture in the body.

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