THE EFFECTS OF HEALTH CARE ACCESS ON MATERNAL AND MIGRANT SEASONAL FARM WORKER WOMEN INFANT HEALTH OF CALIFORNIA

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INTRODUCTION

Major problems of rural health care have been accessibility to quality medical care and occupational related illnesses. In California there have been problems due to the special nature of the agricultural labor force. Over the last decade, the migrant seasonal labor force has changed from one dominated by single Mexican origin males to one that also includes women. Many of these men and women have been migrating with their families and this has resulted in a unique set of health problems.

Familial migration requires that we do not limit our analysis to occupational related illnesses but that we also examine the health of the entire family. This demands that we evaluate the health of women as mothers as well as seasonal migrant workers.

Many of these women are of child bearing age and will give birth to children in the United States. We are concerned with the health problems related to this phenomena. The health decisions of these women are linked to their income, their legal status, their cultural ties and the accessability of medical care. The positive relationship between access to adequate medical care and maternal and infant health, has been well established in the literature. In this paper, we will specifically address these links for the Mexican migrant seasonal labor force population.

By examining the number of miscarriages and infant deaths and linking them to the health decisions of these women, we will test the hypothesis that increases in adequate medical care will have a positive impact on infant mortality rates of this population. In order to test this hypothesis, data from a sample of 148 seasonal migrant women farm workers will be utilized to develop appropriate tests.

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Effects of health care access on maternal and migrant seasonal farm worker women : Infant health of California.

In Section I, we will describe the survey sample and discuss relevant socioeconomic characteristics of the population. In Section II, we will analyze and evaluate our survey results and in Section III we will summarize our conclusions and discuss policy implications.

DESCRIPTION OF SURVEY AND SAMPLE

A sample of 148 seasonal farm labor households were interviewed in three major California agricultural counties, San Joaquin, Stanislaus and Tulare Counties. Interviews were administered in both labor camps and health clinics by bilingual interviewers. Approximately sixty questions were asked from basic socioeconomic data to questions concerning prenatal nutrition, birth related problems, utilization of federal programs, child care practices, 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 husband the sole financial supporter of the family. Ninety-six percent of the sample was married and 82% 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.

ANALYSIS AND EVALUATION OF SURVEY RESULTS

California female seasonal migrant farm workers are constrained by a limited choice set of health care alternatives. These constraints include their legal status, their uneven cultural ties, i.e. the deterioration of village rooted kinship ties and at the same time, strong cultural beliefs regarding maternal health, their increased labor force participation, their accessability to medical care and income. We can assume that these women make health care choices that maximize their individual utilities based on their constraint set. We are hypothesizing that these women are making rational choices but, given their constraints, they are unable to obtain adequate health care. The consequences of these decisions spill over to their unborn children. If our hypothesis is correct, public policy should focus on the constraint set.

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.

The results can be compared with two other health surveys: (1) a 1981 health survey of Tulare County farm workers by Richard Mines and Michael Kearney, and (2) a survey of health problems and health service utilization among Mexicans immigrants in San Diego by Wayne Cornelius, Leo Chavez and Oliver Jones.1 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 trimester to seek prenatal 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 medical indicator of prenatal health is the incidence of miscarriages, stillbirths and infant deaths for a population. In this sample, approximately 24% of these women experienced one or more miscarriages and/or stillbirths. In addition, approximately 8% of the sample experienced at least one infant death. Similarly, the Tulare County survey had a high rate of miscarriages/stillbirths of 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 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. 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.

In order to test our hypothesis that increased access to adequate medical care will have a positive impact on infant health, we evaluated the effects of birth control and clinic visits on the rate of miscarriages and infant deaths. We expected that an increase in the use of birth control and clinic visits would lead to a decline in miscarriages and infant mortality. As stated earlier in this analysis, it has been shown that increases in the ability to avoid unwanted pregnancies results in increased maternal and infant health.

We tested the effects of the use of birth control on miscarriages and infant death by developing simple linear regressions. First, we tested the effects of the lack of birth control on miscarriages (see Table 1). The results agree with our hypothesis that an increase in the use of birth control would lead to a decline in miscarriages. The coefficient of the independent variable is statistically significant with a 98% level on confidence. The second equation tests the effects of lack of birth control on infant mortality. These results also agree with our hypothesis. We found a positive relationship between the lack of birth control and infant mortality. The coefficient of the independent variable is statistically significant with a 90% level of confidence.

Second, the effects of clinic visits on miscarriages and infant deaths were also tested using simple linear regression techniques (see Table 1). First, we tested the effects of clinic visits during the second trimester of pregnancy on the rate of miscarriages. We observed that as the number of second trimester visits increased, the number of miscarriages decreased. This result is also consistent with our hypothesis. The coefficient of the independent variable is statistically significant with a 95% level of confidence. Second, the results show that increases in visits to a clinic during the third trimester of pregnancy also result in a decline in miscarriages. The co-efficient of the independent variable is statistically significant with a 99% level of confidence.

Finally, we tested whether or not the number of miscarriages would increase if the mother's children were born in the United States. We expected that the rate of miscarriages would decline as the number of children born in the United States increased. The results of the regression show the opposite result (see Table 1). The coefficient of the independent variable, the number of children born in the United States, is negative and statistically significant with a 98% level of confidence. This finding may be explained by the reluctance of an undocumented mother to seek medical assistance during a pregnancy in the United States. This is consistent with the results of other studies that show that undocmented migrants tend to avoid clinics until a medical crises arises. The fear of apprehension by the Immigration and Naturalization Service may dissuade them from obtaining non-emergency medical care. These individuals will not have legal status as a barrier to obtaining medical care in Mexico.

SUMMARY AND POLICY IMPLICATIONS

We have examined the constraints on optimal prenatal health care choices by California migrant seasonal farm labor women. The results of our study support our hypothesis that increases in adequate medical care will lead to an improvement in maternal infant health. We showed that increases in the number of clinic visits during pregnancy had a negative effect on the number of miscarriages. We also showed that an increase in the use of birth control had a negative effect on miscarriages and infant mortality. Finally, an interesting result was that the number of miscarriages increases as the number of U.S. born children increase. Fear of apprehension may be a significant factor in dissuading the women from obtaining adequate prenatal care. Constrained by the limited choice set of health care alternatives available to these women, the 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, and (2) increase the funding base for existing health programs, so that the needs of this population may be present.

TABLE NO. 1

SOCIO-ECONOMIC IMPACT ON THE NUMBER OF MISCARRIAGES		
Miscarriages	= .608 - .120 secondtrimestervisits	
	(5.28) (-2.34)	
Miscarriages	= .630 - .111thirdtrimestervisits	
	(5.72) (-2.79)	
Miscarriages	= .236 + .0817USborn	
	(2.02) (1.86)	
Miscarriages	= .247 + .386nobirthcontrol	
	(2.58) (2.55)	
Miscarriages	= .25 + .373unplanned	
	(2.59) (2.47)	
Infantsdeath	= .067 + .116nobirthcontrol	
	(1.56) (1.70)	
Infantsdeath	= .068 + .112unplanned	
	(1.56) (1.65)	
Infantsdeath	= .094 + .144C-Section	
	(2.59) (1.50)	

NOTE

1. The former survey has a sample size of 229 women and the latter survey has approximately 197 women in their report 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.

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