Initiation of Prenatal Care by Low-Income Hispanic Women in Houston

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SYNOPSIS

Objective. To understand why many Hispanic women begin prenatal care in the later stages of pregnancy.

Methods. The authors compared the demographic profile, insurance status, and health beliefs—including the perceived benefits of and barriers to initiating prenatal care—of low-income Hispanic women who initiated prenatal care at different times during pregnancy or received no prenatal care.

Results. A perception of many barriers to care was associated with later initiation of care and non-use of care. Perceiving more benefits of care for the baby was associated with earlier initiation of care, as was having an eligibility card for hospital district services. Several barriers to care were mentioned by women on open-ended questioning, including long waiting times, embarrassment the physical examination, and lack of transportation.

Conclusions. Recommendations for practice included decreasing the number of visits for women at low risk for poor pregnancy outcomes while increasing the time spent with the provider at each visit, decreasing the number of vaginal examinations for low risk women, increasing the use of midwives, training lay workers to do risk assessment, emphasizing specific messages about benefits to the baby, and increasing general health motivation to seek preventive care through community interventions.

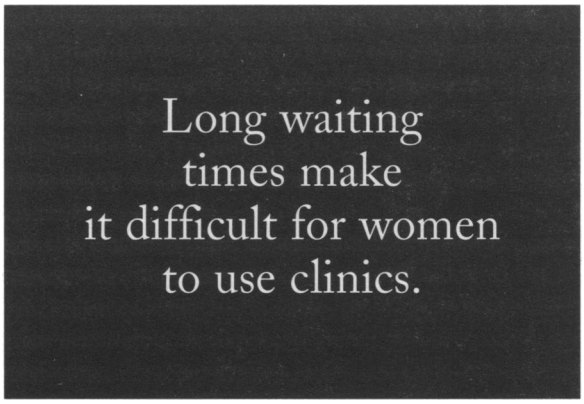
As a group, Hispanic women in the United States are less likely to seek early prenatal care than non-Hispanic white women.[1] Among Hispanic women, Mexican American women reportedly had the lowest rate (64.8%) of first trimester care, a rate lower than women of all other ethnic groups.[1] This is far short of the Healthy People 2000 national objective that 90% of all women receive early prenatal care.[2]

Hispanic women—especially those who speak exclusively Spanish—have lower rates than other ethnic groups of low birth weight babies and infant mortality.[3] Early prenatal care is important for the promotion of good nutrition, education about drugs and cigarettes, early diagnosis of problem pregnancies, and in the detection and treatment of sexually transmitted diseases that may endanger both the mother and the fetus. Syphilis and HIV infection are on the

increase in the United States, including among the Hispanic population.[4]

To look at some of the reasons why Hispanic women as a group do not receive early prenatal care, the authors compared the demographic profile, insurance status, and health beliefs—including the perceived benefits of and barriers to initiating prenatal care—of low-income Hispanic women who initiated prenatal care at different times during pregnancy or received no prenatal care. The belief variables were suggested by the Health Belief Model, which is widely used to explain health-related behavior. The model postulates that people will take action to prevent or control illness if they believe they are susceptible to the illness, believe the illness would have serious consequences for them, believe that the action would help prevent or control the illness, and believe that the benefits of taking the action would outweigh the barriers to doing so.[5]

Methods



From March 1, 1994, to September 9, 1994, bilingual health workers interviewed women in the post-partum unit of a public hospital in Houston about the prenatal care they had received during the pregnancy just completed. All women who (*a*) had delivered their second or third infant in a viable singleton birth, (*b*) were indicated as Hispanic on the record, and (*c*) were available on the post-partum floor for interviews were eligible to participate, regardless of the infant's health status. Delivery at the public hospital was used as the criterion to define women as low income. The study was approved by the institutional review board of the hospital district and the University of Texas-Houston Health Science Center.

Trimester of initiating care was determined by self-report after careful questioning to assure that the first visit was not simply for a pregnancy test and that the timing of the visit was not confounded by a long wait for an appointment after contact with the clinic was made.

All medical records on the post-partum unit were reviewed daily to identify women who met the criteria of parity and Hispanic ethnicity, and eligible mothers were assigned to groups based on self-reported trimester of initiating care. The three study samples consisted of 100 women who initiated care in the first trimester, 100 who initiated care in the second trimester, and 100 who initiated care in the third trimester or received no care. Equal numbers were selected for each sample monthly so that any seasonal differences in prenatal care services or population characteristics would be operating in all groups. We continued interviewing women who fell into each trimester of initiation until the monthly quota was filled for that group. Fewer women fell into the third trimester/no care group than into the other groups.

The interview schedule consisted of pretested questions covering sociodemographic characteristics (age, education, place of birth), insurance status, Health Belief Model constructs, problems during pregnancy, and problems with prenatal care and possible solutions. Included in questions about insurance status was a question about "county card" status. The county card assures access to urgent care clinics and hospitals but is not needed to receive prenatal care at city clinics, where the majority of women (68%) in the study went for care. All of the women in this study had access to free prenatal care.

To help develop the Health Belief Model section of the survey instrument, three focus groups consisting of women of childbearing age from the Houston Hispanic community met to discuss barriers to care and beliefs about pregnancy and prenatal care, and the issues raised were included in the survey instrument. In terms of health beliefs, the independent variables were (*a*) perceived susceptibility to problems during pregnancy (ten questions), (*b*) perceived seriousness of potential problems (nine questions), (*c*) perceived benefits of early prenatal care (nine questions), (*d*) and perceived barriers to receiving prenatal care (nine questions).

Through factor analysis, the Health Belief Model variables of perceived seriousness, perceived susceptibility, and perceived benefits were found to contain distinct subgroups of items pertaining to either the mother or the baby. Thus, perceived seriousness of problems for the baby and perceived seriousness of problems for the mother were used rather than a combined score of seriousness for both baby and mother.

We also asked two open-ended questions: "What is it that *women* don't like about going for prenatal care?" and "What is it that *you* don't like about going for care?"

The instrument was translated into Spanish and administered by four trained bilingual interviewers. Each woman was interviewed in her hospital room in the language of her choice within 24 hours post-partum. Information about the infant's and mother's health problems during the pregnancy was collected from the chart and during the interview.

(The instrument in English and Spanish and the psychometric data are available from the first author.)

Results

Over the course of the study period, 1001 women were found to be eligible, 306 were asked to participate in the

Table. Selected characteristics of women in study sample by trimester in which prenatal care was initiated (*N*=300)

	Trimester care began							
	First n=100		Second n=100		Third n=55		No care n=45	
Variable	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Country of origin[a]								
Mexico	71	71	57	57	30	54.5	22	48.9
El Salvador	16	16	19	19	14	25.5	9	20
United States	4	4	11	11	6	10.9	8	17.8
Other	9	9	13	13	5	9.1	6	13.3
Age in years[b]								
16–19	4	4	19	19	6	10.9	8	17.8
20–24	38	38	50	50	29	52.7	22	48.9
25–29	39	39	21	21	13	23.7	13	28.9
30 and older	19	19	10	10	7	12.7	2	4.4
Pregnancy[b]								
Planned	39	39	18	18	14	25.5	7	15.6
Unplanned	61	61	82	82	41	74.5	38	84.4
Insurance status[c]								
Insured	30	30	16	16	15	27.3	5	11.1
No insurance	70	70	84	84	40	72.7	40	88.9
County card status[b]								
Card	86	86	79	79	42	76.4	13	28.9
No card	14	14	21	21	13	23.6	32	71.1
Language at home[a]								
Spanish	94	94	88	88	48	88	37	82.3
English	3	3	7	7	3	5	6	13.3
Both	3	3	5	5	4	7	2	4.4

[a]Not significant
[b]$P < 0.02$
[c]$P < 0.002$

study, and 300 agreed to be interviewed. The sample consisted largely of women of Mexican descent, and the majority spoke exclusively Spanish (see table).

Initiating care in the first trimester was significantly associated ($P < 0.05$) with being older than age 24, having insurance (other than the county card), and reporting that the pregnancy was planned. Having a county card during the pregnancy was also associated with first trimester initiation of prenatal care. Having problems during a previous pregnancy was not associated with the trimester of initiating care in the pregnancy just completed. Women whose babies had health problems at birth had significantly higher scores on the scale measuring seriousness of a potential problem with the baby, even if the problem was unlikely to have been expected. There was, however, no difference in scores on perceived susceptibility and perceived seriousness of potential problems for the mother between women who reported that they had health problems during the pregnancy and those who did not.

Asked what women in general don't like about care, interviewees' commonest complaint was, "You have to wait too long in the clinic." All groups except the no prenatal care group said, "The exam is too embarrassing," while four of the women not receiving prenatal care said, "The exam is painful." A statistically significant difference was seen across the groups in the women's answers to the question about what they themselves did not like about prenatal care: women who began care in the first trimester were more likely than each of the other groups to say that there was nothing they did not like. Again, the most common answer across all four groups was "You have to wait too long in the clinic." Many women also felt that after they waited, the doctor spent very little time with them. Embarrassing or painful examinations were mentioned most often by women initiating care after the first trimester. Those initiating care in the third trimester or having no care also cited lack of childcare as a problem more often than first trimester-initiators.

Women who perceived fewer barriers to care, were older, or had a county card were significantly ($P < 0.05$ in each case) more likely to enter prenatal care earlier. In addition, for women who did not have a county card, earlier entry was associated with a stronger belief in the benefit of care for the baby. These variables (perceived barriers, age, county card

status, and benefits to baby) taken together explained 22% of the variance in month of prenatal care initiation.

Recommendations for Practice

There is controversy among maternal and child health advocates about whether interventions to improve use of prenatal care should focus on individual psychosocial factors or on the broader system factors that may reduce access to care. Findings from this study of women for whom prenatal care was free suggest that both system and individual factors should be addressed. Perceived barriers to care, many of which relate to the system, are associated with timing of entry into prenatal care. Long waiting times make it difficult for working women to use clinics since often they are not paid for hours away from the job. Waiting times and lack of childcare for other children are frequently cited as barriers to access across racial and ethnic groups.[6] Another common complaint was that the physician spent only a few minutes doing an examination and almost no time answering questions. This lack of time for doctor-patient interaction is especially unsettling for Hispanic patients, who tend to have expectations of a more personal and warm relationship with the provider.[7,8]

Prenatal care programs targeting Hispanic women must reach the whole family. Clinic waiting areas should be large enough for family members, and patients should not be forbidden to bring children with them to the clinic.

Waiting times might be shortened if routine risk assessment—weight and blood pressure monitoring and urine testing for glucose and protein—were done at sites in the community. Clinic visits could then be scheduled that would include sharing the risk assessment results as well as in-depth health promotion activities such as nutrition education, childbirth education, and parenting education. Lay health workers could be trained to do relatively simple tests such as urine dipstick tests for glucose and protein and to report results to clinic staff, who would then follow up on problems during a scheduled appointment.

According to Stein and Schreiber and their associates,[9,10] Hispanic women seem especially likely to feel embarrassed during medical procedures, particularly if the care provider is male. Women from rural areas of Mexico are accustomed to having lay midwives as birth attendants, and many women living on the border of the United States and Mexico use lay or nurse midwifery services.[11] Although some clinics in Houston use certified nurse midwives, consideration should be given to expanding the use of such providers. In addition, both male and female providers can learn to make the examination procedure less embarrassing. The Expert Panel on the Content of Prenatal Care has recommended that the number of vaginal examinations during pregnancy be limited to two for women not at risk for complications of pregnancy: one during the first pregnancy visit and another after 40 weeks' gestation.[12] Reducing the number of vaginal examinations would further reduce women's anxiety about prenatal care.

According to the National Coalition for Hispanic Health and Human Services Organizations,[7] Hispanic patients also expect that the family will be involved in health care decisions. Prenatal care programs targeting Hispanic women must reach the whole family. Clinic waiting areas should be large enough for family members and patients should not be forbidden to bring children with them to the clinic.

Perceived benefits of prenatal care to the baby also was associated with early initiation of prenatal care in this group. To encourage low-income Hispanic women to use prenatal care, messages about the benefits of care for the baby should be increased. Again, the outreach should be to the whole family, and the woman's partner in particular, since others can influence her decision to seek care. The possibility of early transmission of infections to the fetus even though the mother may be asymptomatic and the availability of treatment to avoid harm to the infant are important messages for Hispanic women, as they would increase perceived seriousness and susceptibility and perceived benefits of care for the baby.[4,13]

Women with a county card were more likely to use care and to begin care earlier. Given the difficult process involved in obtaining a county card, having the card may be a proxy for health motivation and, perhaps, familiarity with the clinic system. If so, then increasing general health motivation in the community should increase the use of care. Community interventions should be developed to increase awareness of the value of preventive care. Successful programs in the Hispanic community have included using the

mass media to tell stories of women who are similar to women in the target group and the use of community volunteers to help spread health messages to their peers and provide reinforcement for positive health behaviors.[14,15] Community activities, apart from health care services, held at the clinics could serve to familiarize area residents with the clinic and its staff.

All women need access to prenatal care in order to reduce the chances of poor pregnancy outcomes. Although there are system issues that must be addressed to improve access to care, it is also important to consider the psychosocial variables that might encourage women to use early prenatal care. There is still much about the factors associated with initiation of care that is not understood, and more research on psychosocial and cultural factors is needed. In the meantime, these practice recommendations can be implemented to increase the use of prenatal care by low-income Hispanic women.

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