

Hispanic Women's Perceptions of Patient-Centeredness During Prenatal Care: A Mixed-Method Study

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ABSTRACT: Background: Assessing the quality of prenatal care received by Hispanic women is particularly important, given the rapidly growing Hispanic population in the United States. The purpose of this study was threefold: to assess the prevalence of Hispanic mothers who perceived their prenatal care to be patient-centered, to determine whether Hispanic mothers were less likely to perceive their prenatal care to be patient-centered than non-Hispanic mothers, and to better understand Hispanic women's perceptions of the patient-centeredness of their prenatal care. **Methods:** Semistructured interviews were conducted with a proportionate, stratified random sample of 359 women initiating prenatal care in their first trimester and 68 women initiating prenatal care in their third trimester who delivered at 10 Palm Beach County, Florida, maternity hospitals between May and December 2003. Interviews assessed three aspects of patient-centered prenatal care using quantitative and qualitative methods. **Results:** Hispanic mothers were less likely than non-Hispanic mothers to perceive that doctors and nurses treated them with respect during their prenatal care appointments (adjusted OR, 0.29; 95% CI, 0.10–0.86), and to perceive that office staff treated them with respect during their prenatal care appointments (adjusted OR, 0.29; 95% CI, 0.12–0.73). Hispanic mothers were more likely to experience language or communication problems than non-Hispanic mothers (adjusted OR, 3.30; 95% CI, 1.40–7.76). Qualitative analyses found that lack of patient-centered care limited Hispanic mothers' ability to understand information given during prenatal visits, ability to ask questions about their prenatal care, and desire to return for subsequent appointments. **Conclusions:** Hispanic women could benefit from prenatal care that is more culturally and linguistically competent as well as care that is responsive to the group's cultural norms. One recommendation is the use of group prenatal care, which encourages groups of women with similar gestational ages to articulate and discuss cultural norms and attitudes about pregnancy during structured prenatal care sessions. (*BIRTH* 32:4 December 2005)

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Prenatal care is one of the most extensively used preventive health care services in the United States (1). National health care advisory groups have promoted early initiation and adequate utilization of prenatal care, largely based on the assumption that early and adequate prenatal care reduces low birth-weight and preterm birth (2,3). Several indices have been created to measure the adequacy of prenatal care (1). Using the Revised Graduated Index of Prenatal Care Utilization (R-GINDEX) (4) and Adequacy of Prenatal Care Utilization (APNCU) Index (5), Kogan et al's study of all live births in

the United States between 1981 and 1995 found that the proportion of women who received adequate prenatal care steadily increased (1). The authors also noted, however, that during the same period, low birthweight and preterm birth rates increased. This simultaneous increase in prenatal care adequacy and poor birth outcomes, along with evidence from other studies showing equivocal findings of adequate prenatal care's influence on low birthweight or preterm birth, raise questions about the relationship between adequate prenatal care and the promotion of healthy birth outcomes (6,7).

One possible explanation for previous research's equivocal findings is that the *quality* of prenatal care may also influence birth outcomes. Although existing prenatal care adequacy indices assess when prenatal care started, and in the case of the R-GINDEX and APNCU Index, whether a sufficient number of visits occurred, they do not measure what is communicated during prenatal visits, how that information is conveyed, or aspects of the physician-patient relationship. Thus, whereas existing prenatal care indices measure *quantity* of prenatal care, they do not measure the *quality* of prenatal care. Indeed, several studies have shown that enhanced prenatal care quality, such as augmented patient education, psychosocial support, and behavior interventions, has led to reductions in low birthweight (8,9).

The Context: Palm Beach County, Florida

The findings described in this paper are part of a larger study conducted by the first author to assess the adequacy and quality of prenatal care among women from various racial/ethnic groups in Palm Beach County, Florida, using quantitative and qualitative research methods. Although examining the quality of prenatal care for all pregnant women is important, assessing such care received by Hispanic women is particularly important, given the juxtaposition of a rapidly growing Hispanic population in the United States (10) and a Hispanic live birth rate higher than that of other racial/ethnic groups (11). Palm Beach County is a microcosm of these trends. In 2000, 12.4 percent of this county's population indicated that they were of Hispanic origin, up from 7.7 percent in 1990 (10). Moreover, in 2000 the birth rate for Hispanic women ages 15 to 44 years in Palm Beach County was 89.6 per 1,000 live births, considerably higher than the birth rate of 63.7 per 1,000 for all women ages 15 to 44 years in the county (12).

One aspect of prenatal care quality that is particularly relevant for Hispanic women is the extent to which prenatal care providers are responsive to their culture and language. The Institute of Medicine uses

the term *patient-centered* to describe a health care system that is responsive to the cultural and language needs, values, and preferences of the patient (13). Although a growing body of research has examined Hispanic patients' perceptions of their health care providers' responsiveness to their cultural and language needs (14–16), little of this research with Hispanic populations has examined perceptions of *prenatal care providers' responsiveness* (17,18). Bender et al used quantitative and qualitative methods to interview immigrant Latina women using two prenatal care clinics in North Carolina (17). Their findings indicated that some clinics did not have interpreters, making it necessary for women to use their older children and friends to interpret information given by English-speaking physicians. Oropesa et al found that 71 percent of Puerto Rican women were extremely satisfied with the understanding and respect given to them by their prenatal care providers (18). An additional 24 percent of women were somewhat satisfied, however, making it difficult for the authors to interpret client satisfaction, since about one-fourth of women fell short of giving the highest satisfaction rating.

This paper describes recently delivered Hispanic mothers' satisfaction with the patient-centeredness of their prenatal care. Our first goal was to determine the prevalence of Hispanic mothers who perceived their prenatal care to be patient-centered. Our second goal was to determine whether Hispanic mothers were more or less likely than mothers from other racial/ethnic groups to perceive their prenatal care to be patient-centered. Our third goal was to use qualitative data to better understand Hispanic women's perceptions of prenatal care providers' patient-centeredness.

Methods

Maternal Interviews

Sample

Our goal was to recruit a proportionate, stratified random sample of 427 mothers—369 women who initiated prenatal care during their first trimester (early initiators) and 70 who initiated in their third trimester (late initiators)—who delivered at 10 Palm Beach County maternity hospitals. To determine our sample, we used 2002 Palm Beach County birth data to approximate the number of women giving birth during a 2-month period at each hospital from the county's 4 main racial/ethnic groups: White/non-Hispanic, Black/non-Hispanic, Hispanic, and Haitian. Two months was the allotted time to conduct interviews at each hospital. During the

2-month period, we attempted to recruit 25 percent of early initiators and 50 percent of late initiators within each racial/ethnic group.

Our interviewers attempted to recruit 409 early initiators and 81 late initiators. Of the women recruited for the study, 359 early initiators (88%) and 68 late initiators (83%) agreed to participate. We were unable to meet our goals of 369 and 70 early and late initiators, respectively, due to the smaller than anticipated number of women who initiated prenatal care at study sites during the recruitment period.

Procedures

Five hospital liaisons conducted all interviews. These liaisons—employed by the Healthy Mothers/Healthy Babies Coalition of Palm Beach County—attempted to see all newly delivered mothers in the 10 maternity hospitals that were the study sites to provide information on services available for families with newborns. Liaisons received a 2-day training on the interview instrument and protocol.

Liaisons recruited mothers in their hospital room 24 to 48 hours after delivery. There, liaisons read a description of the study to eligible mothers and asked if they were interested in participating. Interested mothers signed an informed consent form. Interviews averaged 25 minutes and were audiotaped. Liaisons interviewing Hispanic women were fluent in Spanish and gave mothers their choice of conducting the interview in Spanish or English. Interviews with Haitian mothers were conducted in English; for Haitian mothers who primarily spoke Creole, a family member or friend translated interview questions and responses. On completion, mothers were given a \$20.00 gift certificate. Interviews were conducted between May and December 2003.

Measures and Analyses

Two semistructured interviews—one for early initiators and one for late initiators—were created. Both interviews asked mothers the same questions about 3 aspects of their prenatal care's patient-centeredness. First, we asked mothers: "Did doctors or nurses treat you with respect during your prenatal care appointments?" Second, we asked: "Did other office staff treat you with respect during your prenatal care appointments?" Third, we asked: "Did you have language or communication problems with your doctor or nurse during your prenatal care appointments?" Mothers were given 2 response choices for each question: yes or no.

We used chi-square and one-way analysis of variance to assess comparability of mothers from different

racial/ethnic groups on 7 key demographic variables: (a) level of education, (b) marital status, (c) insurance status, (d) age, (e) pregnancy history, (f) trimester of prenatal care initiation, and (g) number of months living in the United States. We used logistic regression to assess mothers' perceptions of the patient-centeredness of their prenatal care. A two-tailed alpha level of 0.05 was used to define statistical significance.

For each question to which a mother reported lack of respect or language/communication problems, liaisons asked the mother to explain her response. The first author analyzed qualitative data using the analytic software package Atlas.ti 4.1 (19). The analysis of interview data was ongoing and concurrent with data collection, and became more refined as linkages among key study concepts became clearer (20). Analysis began with descriptive, open coding and moved to more inferential and explanatory pattern coding (21).

Results

Quantitative Findings

Sample Demographics

Characteristics of the study sample are shown in Table 1. One hundred twenty-five (29%) mothers were Hispanic, and 302 mothers were non-Hispanic. Of the non-Hispanic mothers, 197 were White/non-Hispanic, 73 were Black/non-Hispanic, and 32 were Haitian. Hispanic mothers were less educated, younger, and less likely to have private insurance than non-Hispanic mothers. Hispanic mothers were also more likely to have initiated prenatal care in their third trimester and to have lived in the United States for a shorter length of time than non-Hispanic mothers. There were no statistically significant differences in marital status or pregnancy history.

As shown in Table 2, 86 percent of Hispanic mothers thought that doctors and nurses treated them with respect during prenatal care appointments. After adjusting for all the confounders identified in bivariate analyses, the odds of perceiving that doctors and nurses treated them with respect were lower for Hispanic mothers (OR, 0.29; 95% CI, 0.10–0.86) than for non-Hispanic mothers. Eighty percent of Hispanic mothers indicated that office staff treated them with respect during prenatal care appointments. After adjustment for confounders, the odds of perceiving that office staff treated them with respect were significantly lower for Hispanic mothers (OR, 0.29; 95% CI, 0.12–0.73) than for non-Hispanic mothers.

Twenty-seven percent of Hispanic mothers experienced language or communication problems with a

doctor or nurse during their prenatal care appointments. After adjusting for confounders, the odds of experiencing language or communication problems were significantly higher for Hispanic mothers (OR, 3.30; 95% CI, 1.40–7.76) than for non-Hispanic mothers.

Qualitative Findings

Qualitative data obtained from Hispanic mothers allowed this study to better understand why mothers did not perceive their prenatal care to be patient-centered. Selected quotations are provided below to

illustrate why and how Hispanic mothers thought that different aspects of their prenatal care were not patient-centered.

Lack of Respect from Doctors and Nurses. The main reason Hispanic women felt disrespected by doctors and nurses was related to their perceptions that prenatal care appointments were rushed and impersonal. For example, one Hispanic mother commented:

Sometimes they check you really fast and really rough, and they don't ask you anything. They just check rudely and quickly and they do it so fast . . . after a few visits I stopped

Table 1. Characteristics of Study Sample

Sample Characteristic	Hispanic		Non-Hispanic*		p†
	(n = 125)	(%)	(n = 302)	(%)	
Level of education					0.000
< High school degree	61	(49)	48	(16)	
High school degree or greater	64	(51)	254	(84)	
Marital status					0.101
Married	61	(49)	175	(58)	
Not married	64	(51)	127	(42)	
Insurance status					0.000
Private insurance	41	(33)	181	(60)	
Other insurance (e.g., Medicaid)	84	(67)	121	(40)	
Age (yr) (mean, standard deviation)		24.6 (6.1)		28.1 (6.4)	0.000
Pregnancy history					0.789
Primiparous	53	(42)	121	(40)	
Multiparous	72	(58)	181	(60)	
Initiation of prenatal care					0.000
Early initiator (1st trimester)	88	(70)	272	(90)	
Late initiator (3rd trimester)	37	(30)	30	(10)	
Number of months living in the United States (mean, standard deviation)		136.0 (111.8)		296.5 (111.9)	0.000

*197 White/non-Hispanic, 73 Black/non-Hispanic, 32 Haitian women.

†p values from chi-squared tests for categorical variables and one-way analysis of variance for continuous variables.

Table 2. Relation of Patient Race/Ethnicity with Patient-Centeredness of Prenatal Care

Patient-Centeredness Question	Sample Size	Number	(%) Yes	Adjusted Odds Ratio*	95% CI	p
Doctors and nurses treated client with respect during prenatal care appointments						
Non-Hispanic	302	285	(96)	1.0 (ref)		
Hispanic	125	106	(86)	0.29	0.10–0.86	0.026
Office staff treated client with respect during prenatal care appointments						
Non-Hispanic	302	280	(95)	1.0 (ref)		
Hispanic	125	98	(80)	0.29	0.12–0.73	0.008
Client had language or communication problems with doctor/nurse during prenatal care appointments						
Non-Hispanic	302	15	(5)	1.0 (ref)		
Hispanic	125	34	(27)	3.30	1.40–7.76	0.006

*Adjusted for level of education, insurance status, age, initiation of prenatal care, and months in United States.

trying to ask anything and just wanted to get it over as quickly as possible.

Another Hispanic mother gave a similar statement when describing her prenatal care doctors and nurses:

They would rush me and not talk to me during the appointments. They wouldn't answer my questions, which was so rude. It just seemed like they had too many appointments and didn't want to be bothered with me . . . They would tell me things and not let me ask questions . . . so I don't know a lot of what they told me.

In both examples, Hispanic mothers commented on how doctors and nurses did not adequately answer their pregnancy-related questions. In the first example, this failure caused the mother to stop asking questions at subsequent visits. In the second example, this failure kept the mother from fully understanding the information being given to her during her appointments.

Lack of respect from office staff. Hispanic women who said office staff did not treat them with respect consistently talked about the rude treatment they received. A Hispanic mother gave this response when asked why she said office staff did not treat her with respect:

There are some [office staff] that are not very friendly. It feels like I make their lives miserable . . . it always seems like when I go and I ask for an appointment they talk at me so harshly. And so . . . this isn't good. I don't feel like going back there and hearing that.

Another Hispanic mother echoed these sentiments about office staff:

It took a lot of effort asking where I needed to go to get something or to understand what they were saying . . . but nobody would try to help me. They would show me papers that you need to sign and tell me things that I don't understand . . . not any respect for me or understanding what I was going through. It was definitely difficult for me, but they don't seem to understand and don't help me out. I never want to go back.

In both of these quotations, the treatment received by Hispanic mothers from prenatal care providers' office staff appeared to influence their desire to return for subsequent appointments. Thus, the number of prenatal care appointments received by Hispanic mothers—a key component of prenatal care adequacy—may have been influenced by the treatment given by office staff at mothers' early prenatal care appointments.

Communication problems with doctors and nurses. Many Hispanic mothers mentioned how communication problems with doctors and nurses kept them from fully understanding the information being given to them during appointments. For example, one Hispanic mother commented:

They [prenatal care providers] speak English. They didn't speak to me in Spanish. The nurse understood me a little

but not much, and I couldn't talk to her . . . she talked . . . it was very fast and I didn't ask any questions . . . I don't know many of the things she told me at my visit.

Another Hispanic mother gave a similar comment:

They [doctors and nurses] didn't speak Spanish. They tried to speak a little Spanish when they could, but I speak Spanish not English so it's hard for me . . . it's hard to go to the appointments and not understand exactly what they're saying.

Discussion and Conclusions

This study found that fewer recently delivered Hispanic women perceived aspects of their prenatal care to be patient-centered than non-Hispanic mothers. We found the odds of perceiving that doctors and nurses, as well as office staff, treated them with respect were lower for Hispanic mothers than for non-Hispanic mothers. Moreover, the odds of experiencing language or communication problems with doctors or nurses during prenatal care appointments were greater for Hispanic mothers than for non-Hispanic mothers. Qualitative data illustrated that prenatal care providers' lack of patient-centered care limited Hispanic women's ability to understand information being provided at prenatal care visits and prevented Hispanic women from asking questions about their prenatal care. Moreover, it appeared that prenatal care providers' lack of patient-centered care influenced Hispanic women's desire to return for subsequent prenatal care appointments.

Previous studies have shown that Hispanic families underuse various health care services compared with families from other ethnic backgrounds (22). Our study's findings raise the possibility that Hispanic women's underuse of the health care system for postpartum visits, well-child visits, and child immunizations may, in part, have its origins in Hispanic women's unfavorable ratings of prenatal care providers' patient-centeredness. Specifically, Hispanic women who are neither treated with respect by physicians and office staff nor able to communicate with physicians may be disinclined to seek out health care in the postpartum period. In particular, recently immigrated Hispanic mothers may be most influenced by their prenatal care experiences, since prenatal care may be these mothers' first contact with the United States health care system.

This study's findings also highlight the need to provide culturally and linguistically competent health care, including prenatal care, to Hispanic women. In 2000, the Office of Minority Health released 14 standards on culturally and linguistically appropriate services in health care (23). Provision of language assistance services at no cost to patients, such as the

use of bilingual staff or interpreter services, is one of these standards. Recognizing the cost associated with providing language assistance services, we suggest that prenatal care providers better coordinate the use of these services. For example, based on this study's findings, several physicians within the same geographic area are attempting to coordinate the scheduling of Spanish-speaking mothers with limited English proficiency so that one bilingual staff person or interpreter can work at multiple caregivers' offices.

We also suggest adapting prenatal care to be more responsive to Hispanic women's cultural norms, such as an emphasis on close interpersonal relationships; warm, personalized styles of interaction; a relaxed sense of time; and a comfortable and informal atmosphere for communication (24). Group prenatal care, which provides between 8 and 12 women with 10 structured 2-hour prenatal care sessions at between 16 and 40 weeks' gestation, is one adaptation that has been used with Hispanic mothers (25). In this model, prolonged encounters between physicians and women help minimize women's feelings of being rushed or not having their questions fully answered. Moreover, they are encouraged to articulate and discuss their cultural norms and values about pregnancy. We recommend further examination of this model through the use of randomized controlled trials to determine its efficacy in promoting maternal and child health.

Our study was conducted with mothers living in one county in South Florida, making it unrepresentative of all recently delivered mothers. It is especially important not to generalize this study's findings to all Hispanic women. Despite this limitation, our data offer insight into Hispanic women's perceptions of their prenatal care providers' patient-centeredness. In particular, this study's qualitative data help to illustrate specific areas in which Hispanic women thought their prenatal care was not patient-centered. Given the increasing number of Hispanic live births in the United States, it is imperative that prenatal care providers strive to make their services responsive to the cultural and linguistic needs, values, and preferences of this population.

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