

# Reproductive Health Service Preferences And Perceptions of Quality Among Low-Income Women: Racial, Ethnic and Language Group Differences

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**CONTEXT:** Eliminating racial and ethnic disparities in health care is an important national priority. Despite substantial research documenting such disparities, this topic has received limited attention in the reproductive health field.

**METHODS:** Logistic regression was used to test for group differences in three service delivery preferences and five service quality perceptions among a nationally representative sample of 1,741 low-income black, Latina and white women aged 18–34; the data were collected in 1995 and represent the most recent data available for looking at these issues.

**RESULTS:** English-speaking Latinas and Spanish-speaking Latinas were more likely than whites to prefer a female clinician at their visits (odds ratios, 1.8 and 3.6, respectively) and to highly value clinician continuity (1.7 and 2.2). English-speaking Latinas and blacks were more likely than whites to prefer receiving reproductive health care at a site delivering general health care (1.5 and 1.6). Both groups of Latinas were less likely than whites to give the facility environment or the patient-centeredness at their most recent reproductive health visit the highest rating (0.3–0.5). Blacks were more likely than whites to report ever having been pressured by a clinician to use contraceptives (2.3).

**CONCLUSIONS:** Efforts to reduce racial, ethnic and language group differences in clients' perceptions of reproductive health service quality should focus on improving client-clinician communication, the service environment and contraceptive counseling. Future research should continue to assess group differences and try to determine their underlying causes.

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Racial and ethnic disparities in health care are well documented, and eliminating them is an important national priority.<sup>1</sup> Most of the research in this area has measured quality of care from a technical perspective, evaluating differences in whether specific medical procedures were performed when indicated, but a growing literature has measured quality from the client's perspective. Clients' perspectives on quality are important because clients' views of and experiences with care influence such factors as their satisfaction with care, their adherence to therapies, their likelihood of returning and even their health outcomes.<sup>2</sup> Although client evaluations were once considered potentially useful proxy measures for the technical quality of care, it now appears that perceived quality is only weakly correlated with more objective measures of technical quality.<sup>3,4</sup>

In the reproductive health field, limited research has been conducted on how clients' racial and ethnic backgrounds influence their perceptions of and experiences with care (other than prenatal care). A review of the literature yielded only one previous study on the topic. That study, carried out in 1995 with a nationally representative sample of 1,852 low-income black, white and Latina women, found that the odds of rating the most recent reproductive health service experience highly were significantly lower among blacks, English-speaking

Latinas and Spanish-speaking Latinas than among whites (odds ratios, 0.2–0.5).<sup>5</sup>

Clients' racial, ethnic and language background may be associated with their reproductive health service experiences. Factors such as communication problems caused by language barriers or cultural differences in styles of communication,<sup>6,7</sup> differing expectations of care,<sup>8</sup> and discrimination and biased treatment<sup>7</sup> all may affect the service experiences of minority clients in ways they do not affect those of whites. Further, studies in other areas of health care have found that minority clients, particularly non-English speakers, report lower levels of satisfaction with health care and worse health care experiences than whites.<sup>9–18</sup> Asians tend to report the worst health care experiences of all groups.<sup>10,11,13</sup> Nevertheless, group differences found in previous studies tend to be small, and satisfaction ratings generally high.

Previous research has also found that the factors associated with quality perceptions vary by racial and ethnic background. Research on prenatal care quality has found evidence of interactions between race or ethnicity and education,<sup>19–22</sup> and marital status.<sup>21,22</sup> In one study, having less than a high school education and being unmarried were associated with inadequate prenatal care among black and white women, but not among Latina women.<sup>22</sup> In another study, client-clinician race concordance was a more important correlate of

satisfaction among black clients than among white or Latina clients.<sup>23</sup>

Assessing racial, ethnic and language-based differences in client perceptions of the quality of reproductive health care is important for social justice reasons, as these perceptions may indicate differences in the quality of services available to different groups and may be linked to disparities in reproductive health outcomes.<sup>1,24</sup> Racial and ethnic disparities in reproductive health outcomes have been well documented.<sup>25</sup> Black women are at higher risk for having a low-birth-weight baby<sup>26</sup> and STDs<sup>27</sup> than white women. Blacks and Latinas have higher rates of unintended pregnancy than whites,<sup>28</sup> and higher levels of contraceptive failure, even when using the same methods.<sup>29</sup> Although these disparities have numerous causes, differences in the quality of the reproductive health care women receive may play a role. If women do not get the information, skills and support they need from health care clinicians, or if they are treated poorly when they get care, they may have difficulty protecting their reproductive health and may avoid seeking care when needed.

Learning more about racial, ethnic and language-based differences in clients' experiences with reproductive health services is timely, given the projected growth of the minority population. By 2050, minorities are expected to constitute one-half of the U.S. population.<sup>30</sup> Examining the problems with health care faced by minority clients is a priority now, before an even larger number of people is affected.

The purpose of our study was to assess racial, ethnic and language-based differences in women's preferences for reproductive health service delivery and in their perceptions of its quality. We hypothesized that minority groups would rate service quality lower than and have different service delivery preferences than whites. We also hypothesized that certain characteristics associated with quality perceptions (being unmarried, having a low level of education, being the same race as one's clinician, having continuity with one's clinician and being seen by a clinician of one's preferred gender) would have differential importance by client race, ethnicity and language; we expected that these characteristics would be more strongly related to quality perceptions among minority women than among whites.

Our study uses data collected from a nationally representative sample of low-income black, Latina and white women in 1995. Although the data are more than 10 years old, they were the most recent data we could find from a nationally representative sample that could be used to test our hypotheses. In a previous study using these data, researchers analyzed only a summary measure of service quality perceptions.<sup>5</sup> Our analysis builds on this because we analyze four domains of service quality perceptions; the domains we study are based on a conceptual framework,<sup>31</sup> and we used factor analysis to develop our measures. Further, we consider a broader range of correlates of service quality perceptions than were considered in

the previous study, including characteristics identified in other studies.<sup>23,32,33</sup> In addition, we evaluate whether the characteristics associated with quality perceptions vary by the client's racial, ethnic or language background, a perspective that has not been previously studied. Finally, we study differences in clients' service delivery preferences, a topic that has also not been previously studied.

## METHODS

### Data

The data come from the Opening Doors study, a cross-sectional telephone survey. The procedures used to select the sample have been described previously.<sup>5</sup> In brief, women were eligible to participate if they were black, white or Latina, were aged 18–34, had a family income below 200% of the federal poverty level and were at risk of an unintended pregnancy (i.e., were sexually active in the past 12 months, not currently pregnant or wanting to become pregnant, and not protected by their own or their partner's sterilization). Participants were selected from four sampling frames created from telephone exchanges in low-income areas (i.e., areas where at least 25% of households had an income below \$15,000). Blacks and Latinas were oversampled so that the sample was roughly 50% Latina, 25% black and 25% white.

During recruitment, 2,054 eligible women were identified, 90% of whom agreed to participate. Participation rates ranged from 86% to 94% across the four sampling frames. Interviews were carried out over the phone by trained interviewers in English or Spanish, and lasted approximately 25 minutes.

The final sample included 1,852 women—454 whites, 451 blacks and 947 Latinas. Our analyses use data from the 1,741 women who reported having made a reproductive health visit in the preceding five years (since only these women were asked about quality of services) and had answered questions on their racial, ethnic and language background. In the survey, reproductive health care was defined as “services related to getting or using methods of contraception or birth control and services related to women's health, like pelvic exams, breast exams or treatment of vaginal infections.”

### Outcome Measures

- *Service delivery preferences.* We created three measures of women's service delivery preferences. The first assessed women's preferences with respect to clinician continuity. It was based on the question “Is it important to you to see the same person at every visit, or do you not care either way?” The response options were “important,” “unimportant” or “don't care.” Those answering “important” were compared with all others. The second measure assessed women's preference for being seen by a female clinician at reproductive health visits. It was based on the question “Do you prefer to have GYN exams performed by a male or female, or does it not matter either way?” Those who reported a preference for a female clinician

were compared with all others. The third measure assessed women's preferences regarding where they receive reproductive health services. It was based on the question "If you had your choice, would you prefer to get GYN services at a place that provides birth control and GYN services only, a place that provides prenatal and baby care in addition to GYN services, or a place that provides general health care including GYN services?" Women who preferred a place providing general health care, had no preference or did not know were grouped together and compared with those who preferred one of the other locations. They were grouped in this way to separate those who had a preference for receiving care in a specialized setting from those who did not.

• **Service quality perceptions.** Our conceptual framework describes eight domains of family planning service quality.<sup>31</sup> Survey items could be used to develop measures of four of the domains: structure and facility quality (e.g., the facility's appearance, how crowded it is, how comfortable it is), client-staff interaction (how clients feel they are treated during their visits), patient-centeredness (the degree to which services are tailored to clients' needs and preferences) and contraceptive method choice (whether clients are offered a range of options and can freely choose the one that suits them). Multiple survey items were available to measure structure and facility quality and client-staff interaction, but only one question was relevant for each of the other domains. Because measures created using multiple items are more reliable than those created from single items, we created scales for the two domains for which multiple survey items were available, using exploratory and confirmatory factor analysis. Details about these analyses are available upon request from the authors.

Structure and facility quality was measured using survey questions that asked respondents how much they agreed or disagreed with the following statements about their most recent reproductive health care visit: "The waiting rooms are often too crowded," "I don't feel comfortable waiting with the other patients who go there" and "The services there are often disorganized." The response choices were on a five-point scale ranging from "completely agree" to "completely disagree." A scale was created by averaging responses to the questions (Cronbach's alpha, 0.52). Because the scores were highly skewed, we dichotomized the scale, grouping all participants with the highest possible score, who we considered to have rated services optimally, and all of those with lower scores (who did not rate services optimally).\*

Client-staff interaction was measured using survey questions that asked respondents how much they agreed

or disagreed with the following statements about the site of their most recent reproductive health care visit: "The people who work there are courteous and helpful," "The staff there treat me with respect" and "The GYN care I receive there is good quality." The response options and procedures for coding were the same as those for structure and facility quality; for the client-staff interaction scale, the Cronbach's alpha was 0.65.

Patient-centeredness was measured using a question that asked respondents to consider the site of their most recent reproductive health visit and to state how much they agreed or disagreed with the statement "The people who work there do not make an effort to find out my needs." The response choices were on a five-point scale ranging from "completely agree" to "completely disagree." We created a dichotomous measure by grouping respondents who said "completely disagree" (the most positive response option) and those who chose other responses.

Two measures of contraceptive method choice were created. The first assessed whether various contraceptive options were discussed at women's most recent reproductive health visit. It was based on the question "Before providing you with [method], did anyone at the clinic or doctor's office talk to you about a variety of possible methods of birth control?" Those who said yes were compared with those who said no. This question was asked only of the 1,032 women who reported having received a method at their most recent visit. The second measure assessed whether women had ever been pressured by a health care clinician to use a contraceptive method. Respondents were asked, "Have you ever felt pressured by someone at a clinic or doctor's office to use or continue to use a particular method of birth control when you would have rather used another method or no method at all?" Those responding yes were compared with those who said no. Among the 113 women who reported having ever been pressured by a health care clinician to use a contraceptive method, the methods most commonly reported were the pill (52%), the injectable (20%), condoms (13%), implants (11%) and sterilization (10%); women could report having been pressured to use more than one method.

### Independent Variables

• **Race, ethnicity and language.** Women's race and ethnicity was based on self-report. Women were classified into three groups: non-Hispanic whites; non-Hispanic blacks; and Hispanics, or Latinas. Latinas were further classified into two groups: Spanish-speaking (those with a low level of English-language acculturation) and English-speaking (those with a moderate to high level of English-language acculturation). We measured English-language acculturation on the basis of women's answers to three survey questions (their native language, the language they read and speak best, and the language they usually speak at home) and whether they completed the survey in English

\*Although we had anticipated using this scale as a continuous variable, its nonnormal distribution posed a problem. We tested various transformations of the variable to see if we could achieve a more normal distribution, but none fixed the problem. As a result, we opted for a dichotomous variable.

or Spanish. These items were found to measure a single factor and to have high internal consistency (Cronbach's alpha, 0.87), so a factor scale was created. We divided the scale scores into quartiles, and categorized women in the lowest quartile as "Spanish-speaking" and the rest as "English-speaking."

• **Othercovariates.** The other covariates were client, clinician and consultation characteristics hypothesized to be confounders.

The client characteristics were age (18–19, 20–24, 25–29, 30–34); marital status (married, cohabiting, formerly married, never-married); parity (zero, 1–2, three or more); education level (less than high school, completed high school or GED, at least some college); and insurance coverage in the previous 12 months (private, Medicaid, none).

The clinician characteristics were the type of clinician the woman saw (doctor only, nurse only, other clinician only, combination of clinicians) and the gender of the clinician who performed the gynecologic exam (male, female).

The consultation characteristics were the site where care was received (private doctor's office, HMO, hospital, health department clinic, Planned Parenthood or family planning clinic, other clinic); the purpose of the visit (contraceptive care, routine gynecologic care, pregnancy-related care, other health need, multiple reasons); whether care was received at the same site where the woman gets general health care (yes, no); the woman's level of continuity with the clinician (a first visit, a repeat visit in which the client was treated by a doctor or nurse she knew, a repeat visit in which the client was treated by a doctor or nurse she did not know); the client's race concordance with the clinician (yes, no, did not know); the amount paid for services (nothing, less than \$20, \$20–59, \$60 or more); and whether the clinician was the client's preferred gender (yes, no, no preference).

### Analyses

First, we conducted bivariate analyses to examine differences by race, ethnicity and language group in women's personal characteristics, the characteristics of the most recent reproductive health visit, and women's service delivery preferences and perceptions of service quality. Next, we used logistic regression to estimate crude and adjusted odds ratios and 95% confidence intervals for the association between race, ethnicity and language and the outcome measures. The covariates in the adjusted models were variables associated with the outcomes in the bivariate analyses at the  $p < .10$  level. We estimated three adjusted models, entering variables in a stepwise fashion so we could see what effect controlling for specific variables had on the racial, ethnic and language differences. The first model included race, ethnicity, language, and women's social and demographic characteristics. The second added the site of women's most recent reproductive health care visit and their type of insurance coverage.

The third added the consultation characteristics found to be associated with the outcomes at the  $p < .10$  level in bivariate analysis. To make the model results comparable, the same set of covariates was controlled for at each step. For the measures of service delivery preference and whether women had been pressured to use contraceptives, only the crude model and the first adjusted model were estimated, because these outcomes were not specific to the last visit, as the covariates in the other adjusted models were.

The final analytic step was to test for interaction by race, ethnicity and language in the models assessing perceptions of quality. Interactions were tested between race, ethnicity and language and education, marital status, women's continuity with the clinician, whether women saw a clinician of their preferred gender and whether women were race-concordant with their clinician. We

**TABLE 1. Percentage distribution of a nationally representative sample of low-income women aged 18–34, by selected characteristics, according to race, ethnicity and language spoken, 1995**

Characteristic	Total (N=1,741)	White (N=437)	Black (N=437)	Spanish-speaking Latina (N=346)	English-speaking Latina (N=521)
<b>Age***</b>					
18–19	15	13	25	4	14
20–24	39	42	34	25	40
25–29	27	28	23	36	24
30–34	19	17	19	35	23
<b>Marital status***</b>					
Married	44	50	17	66	46
Cohabiting	15	14	13	17	18
Formerly married	9	9	9	9	10
Never-married	33	27	60	9	27
<b>Education***</b>					
<high school	20	14	17	73	33
High school diploma/GED	39	40	43	18	37
≥college	41	46	40	9	31
<b>Parity***</b>					
0	33	38	29	8	25
1–2	53	52	54	58	57
≥3	14	10	17	35	19
<b>Medical insurance in the past 12 mos.***</b>					
Private	40	47	36	9	22
Medicaid/other public	31	24	49	30	44
No coverage	29	29	15	61	34
<b>Familial country of origin***,‡</b>					
United States	16	na	na	1	25
Mexico	60	na	na	82	46
Dominican Republic/ Puerto Rico/Cuba	15	na	na	7	20
Other	10	na	na	10	9
<b>Length of time in United States***,‡</b>					
Born in United States	33	na	na	1	51
>15 years	13	na	na	11	15
6–15 years	35	na	na	54	24
≤5 years	19	na	na	35	10
Total	100	100	100	100	100

\*\*\*Differences among groups significant at  $p < .001$ . ‡Asked only of Latinas. Notes: na=not applicable. Percentages are weighted; sample sizes are unweighted. Percentages may not total 100 because of rounding.

**TABLE 2. Percentage distribution of low-income women, by characteristics of most recent reproductive health visit, according to race, ethnicity and language spoken**

Characteristic	Total	White	Black	Spanish-speaking Latina	English-speaking Latina
<b>No. of years since last visit**</b>					
<1	89	89	93	83	83
1–5	11	11	7	17	17
<b>Purpose of visit**</b>					
Contraceptive care	22	22	20	24	21
Routine gynecologic care	47	49	51	31	38
Pregnancy-related care	6	5	6	12	12
Other	15	14	15	24	20
Multiple reasons	10	10	8	10	9
<b>Site where care was received***</b>					
Private doctor's office	44	51	36	18	34
HMO	5	4	9	5	4
Hospital clinic	11	9	16	11	16
Health department clinic	16	13	21	22	17
Planned Parenthood/ family planning clinic	17	16	15	33	23
Other clinic	7	8	3	11	7
<b>Visit was to same place where client gets general health care</b>					
Yes	39	39	44	35	34
No	61	61	56	65	66
<b>Type of clinician seen**</b>					
Doctor	68	70	72	54	62
Nurse	16	15	16	23	17
Other	3	3	2	1	3
Combination	13	12	10	22	18
<b>Clinician continuity***</b>					
Client had not visited site before	21	18	18	42	36
Client had seen the clinician before	58	62	58	35	41
Client had not seen the clinician before	17	16	20	21	19
Missing	4	4	4	3	4
<b>Gender of clinician</b>					
Male	51	52	52	43	52
Female	49	48	48	57	48
<b>Clinician was client's preferred gender***</b>					
Yes	35	37	29	41	32
No	10	8	9	19	19
Client had no preference	55	56	62	39	49
<b>Client perceived herself as race-concordant with clinician***</b>					
Yes	61	83	24	31	25
No/did not know	39	18	76	70	75
<b>Amount client paid for services***</b>					
\$0	42	37	53	43	49
<\$20	15	14	13	23	17
\$20–59	21	24	17	15	15
≥\$60	19	22	13	13	14
Missing	4	3	5	6	5
Total	100	100	100	100	100

\*\*Differences among groups significant at  $p < .01$ . \*\*\*Differences among groups significant at  $p < .001$ . Notes: Percentages are weighted. Percentages may not total 100 because of rounding.

added interaction terms to the final models and tested their statistical significance using the Wald test.

All analyses were carried out using Stata, version 9. A design-based analysis was conducted that accounted for the stratified sampling design.<sup>5</sup> The weighted data are representative of low-income U.S. women who live in low-income areas and are at risk of unintended pregnancy.

Missing data were handled using listwise deletion; however, for covariates that were missing more than 2% of values, a “missing” category was created. This allowed individuals with missing values on these variables to remain in the analysis if they answered the other questions.

**RESULTS**

In our sample, 63% of respondents were white, 21% were black, 6% were Spanish-speaking Latina and 10% were English-speaking Latina. Fifteen percent of the women were 18–19 years old, 39% were 20–24 years old, 27% were 25–29 and 19% were 30–34 (Table 1, page 205). One-third had never been married, and one-fifth had less than a high school education. Among Latinas, most were of Mexican descent. Thirty-three percent of Latinas were born in the United States; of the 67% who had immigrated, 19% had done so in the five years before the survey.

Women’s personal characteristics differed by race or ethnicity and language group. Among black women, 17% reported being married; this was true for 66% of Spanish-speaking Latinas. Although 14% of whites and 17% of blacks had less than a high school education, for English-speaking and Spanish-speaking Latinas, the proportions were 33% and 73%, respectively. Spanish-speaking Latinas were older than women in the other groups, had the highest parity and were the most likely to have had no health insurance in the previous 12 months.

The majority of women in the sample (89%) reported a reproductive health visit in the year preceding the survey (Table 2). Among all women, the most common reason for their last visit was routine gynecologic care (47%), but 22% had made the visit to obtain contraceptive care. Almost all characteristics of women’s visits differed significantly according to racial, ethnic and language group. The exceptions were use of a source of general health care for reproductive health services and clinician’s gender.

**Service Delivery Preferences**

In our adjusted model (Table 3), both groups of Latinas had significantly higher odds than whites of reporting a preference for a female clinician (odds ratios, 3.6 for Spanish speakers and 1.8 for English speakers). However, blacks and whites did not differ with respect to this preference. Both groups of Latinas were also more likely than whites to consider clinician continuity at reproductive health visits important (2.2 for Spanish speakers and 1.7 for English speakers); blacks and whites were similar with respect to this preference. Blacks and English-speaking Latinas were significantly more likely than whites to prefer receiving reproductive health services at a site delivering general health care than at a site more tailored to delivering reproductive health care (1.6 and 1.5, respectively). The data suggest that Spanish-speaking Latinas shared this preference, but the finding was only marginally significant.

The covariates associated with reproductive health service delivery preferences were parity, education and age (not shown). Women with children were significantly less likely than childless women to prefer a female clinician (odds ratios, 0.6 for women with 1–2 children and 0.5 for women with three or more). Women who had children were more likely than women without children to consider clinician continuity important (2.1 for women of parity 1–2 and 3.2 for women of higher parity), while women with less than a college education had reduced odds of considering clinician continuity important (0.5 for women with less than a high school education and 0.6 for those who had completed high school). Age, parity and education were associated with women's preferences regarding where reproductive health services are delivered. Women younger than 30 were less likely than older women to prefer receiving these services at a site delivering general health care (0.4 for each age-group younger than 30), and women with children were less likely to express this preference than were those who had no children (0.6). By contrast, women with less than a high school education were more likely than those with more schooling to prefer receiving reproductive health care at a site delivering general health care (2.1).

### Perceptions of Service Quality

In crude analysis, we found significant racial, ethnic and language differences for all five quality perception measures (Table 4). Adjusting for women's personal and demographic characteristics (Model 1) had relatively minor effects on the crude results, except with respect to whether women had been informed about different contraceptive methods; the adjustment eliminated the only significant difference among the groups. Adding an adjustment for the site where care was received and the type of insurance coverage women had (Model 2) eliminated the significant differences between blacks and whites in terms of satisfaction with the structure and facility and client-staff interaction. Further adjusting for consultation factors that were significant in the bivariate analyses (Model 3) had the largest effect in reducing group differences. It eliminated the significant differences between English-speaking Latinas and whites on satisfaction with client-staff interaction and between blacks and whites on satisfaction with patient-centeredness.

In our final adjusted models (Model 1 for the variable regarding pressure to choose a method and Model 3 for all others), we found no significant racial, ethnic or language group differences for two of our quality perception measures: client-staff interaction and contraceptive method counseling. For three other measures, we did find significant differences. In terms of structure and facility quality, the odds of optimal ratings (i.e., giving the highest possible rating) were significantly lower for both groups of Latinas than for whites (odds ratios, 0.5 for English speakers and 0.4 for Spanish speakers). Similarly, for patient-centeredness, the odds of optimal ratings were

**TABLE 3. Percentage of low-income women expressing selected service delivery preferences, by race, ethnicity and language spoken, and odds ratios from logistic regression analyses assessing associations between service delivery preferences and these characteristics**

Preference and characteristic	%	Crude odds ratio	Adjusted odds ratio†
<b>Prefers female clinician for gynecologic exams</b> (N=1,738)			
Black	29	0.73†	0.80
English-speaking Latina	46	1.49*	1.75**
Spanish-speaking Latina	58	2.49***	3.58***
White (ref)	36	1.00	1.00
<b>Thinks clinician continuity is important</b> (N=1,728)			
Black	70	1.21	1.25
English-speaking Latina	77	1.68**	1.72**
Spanish-speaking Latina	83	2.49***	2.22**
White (ref)	66	1.00	1.00
<b>Prefers to receive reproductive health care at a general health care site</b> (N=1,741)			
Black	62	1.64**	1.63*
English-speaking Latina	61	1.57**	1.45*
Spanish-speaking Latina	69	2.23***	1.51†
White (ref)	50	1.00	1.00

\*p<.05. \*\*p<.01. \*\*\*p<.001. †p<.10. ‡Adjusted for age, marital status, education and parity. Notes: ref=reference group. Percentages and odds ratios are weighted; sample sizes are unweighted.

**TABLE 4. Percentage of low-income women reporting selected perceptions of service quality, by race, ethnicity and language spoken, and odds ratios from logistic regression analyses assessing associations between service quality perceptions and these characteristics**

Perception and characteristic	%	Crude estimate	Model 1‡	Model 2§	Model 3††
<b>Optimal rating of structure and facility at last visit</b> (N=1,687)					
Black	20	0.51***	0.61*	0.70	0.69
English-speaking Latina	16	0.40***	0.43***	0.47***	0.51*
Spanish-speaking Latina	10	0.22***	0.25***	0.31***	0.38**
White (ref)	33	1.00	1.00	1.00	1.00
<b>Optimal rating of client-staff interaction at last visit</b> (N=1,716)					
Black	64	0.62*	0.63*	0.72	0.84
English-speaking Latina	64	0.61**	0.62*	0.68*	0.89
Spanish-speaking Latina	70	0.80	0.73	0.85	1.24
White (ref)	74	1.00	1.00	1.00	1.00
<b>Optimal rating of patient-centeredness at last visit</b> (N=1,709)					
Black	64	0.58**	0.59*	0.59*	0.67†
English-speaking Latina	53	0.36***	0.35***	0.36***	0.41***
Spanish-speaking Latina	38	0.20***	0.20***	0.21***	0.25***
White (ref)	76	1.00	1.00	1.00	1.00
<b>Informed about different contraceptives at last visit‡‡</b> (N=1,024)					
Black	82	1.56	1.36	1.05	1.10
English-speaking Latina	84	1.80*	1.61	1.47	1.54
Spanish-speaking Latina	84	1.72†	1.29	1.28	1.38
White (ref)	75	1.00	1.00	1.00	1.00
<b>Was pressured by a doctor/clinic staff to adopt a contraceptive</b> (N=1,738)					
Black	11	2.62**	2.30*	na	na
English-speaking Latina	5	1.20	0.99	na	na
Spanish-speaking Latina	3	0.75	0.55	na	na
White (ref)	5	1.00	1.00	na	na

\*p<.05. \*\*p<.01. \*\*\*p<.001. †p<.10. ‡Adjusted for age, marital status, education and parity. §Adjusted for all Model 1 covariates plus type of insurance coverage and site where care was received. ††Adjusted for all Model 2 covariates plus purpose of visit, whether care site provides general health care, clinician continuity, whether clinician was preferred gender and whether client perceived she was race-concordant with clinician. ‡‡Based on 1,032 women who received a method at visit. Notes: ref=reference group. na=not applicable. Percentages and odds ratios are weighted; sample sizes are unweighted.

**TABLE 5. Odds ratios from logistic regression analyses assessing the association between selected characteristics and service quality ratings**

Characteristic	Optimal rating of structure and facility at last visit (N=1,633)	Optimal rating of client-staff interaction at last visit (N=1,655)	Optimal rating of patient-centeredness at last visit (N=1,648)	Informed about different contraceptives at last visit (N=1,001)	Was pressured to adopt a method (N=1,727)
<b>Age</b>					
18–19	0.58	0.85	1.05	1.59	2.27
20–24	0.93	0.77	0.81	1.75	2.17†
25–29	1.04	1.25	0.75	1.67	1.62
30–34 (ref)	1.00	1.00	1.00	1.00	1.00
<b>Marital status</b>					
Married (ref)	1.00	1.00	1.00	1.00	1.00
Cohabiting	0.90	0.71	0.82	1.05	2.35*
Formerly married	1.51	0.61	1.16	0.95	1.39
Never-married	0.70	0.97	0.95	1.11	1.07
<b>Education</b>					
<high school	0.69	0.99	0.85	0.81	0.99
High school diploma/GED	1.21	1.08	0.65*	1.25	0.91
≥college (ref)	1.00	1.00	1.00	1.00	1.00
<b>Parity</b>					
0 (ref)	1.00	1.00	1.00	1.00	1.00
1–2	0.66†	1.20	1.30	1.01	0.82
≥3	0.86	1.27	0.91	4.85**	3.58**
<b>Medical insurance in the past 12 mos.</b>					
Private (ref)	1.00	1.00	1.00	1.00	na
Medicaid/other public	0.94	0.81	0.83	1.76	na
No coverage	1.16	0.88	0.84	1.13	na
<b>Purpose of visit</b>					
Contraceptive care	0.89	0.86	0.90	1.00	na
Routine gynecologic care (ref)	1.00	1.00	1.00	1.00	na
Pregnancy-related care	0.63	1.15	0.95	3.17*	na
Other	0.79	0.96	0.90	0.91	na
Multiple reasons	0.84	1.07	0.69	1.18	na
<b>Site where care was received</b>					
Private doctor's office (ref)	1.00	1.00	1.00	1.00	na
HMO	0.71	0.61	0.73	1.44	na
Hospital clinic	0.55†	0.61†	0.72	0.71	na
Health department clinic	0.36**	0.66	0.94	2.94**	na
Planned Parenthood/family planning clinic	0.74	1.11	1.09	1.45	na
Other clinic	0.61	0.70	0.57	0.39†	na
<b>Visit was to same place where client gets general health care</b>					
Yes	1.46†	0.94	0.97	0.66	na
No (ref)	1.00	1.00	1.00	1.00	na
<b>Clinician continuity</b>					
Client had not visited site before	0.86	0.75	1.04	0.57	na
Client had seen the clinician before (ref)	1.00	1.00	1.00	1.00	na
Client had not seen the clinician before	0.87	0.57*	0.99	0.69	na
Missing	0.71	0.49†	1.40	0.97	na
<b>Clinician was client's preferred gender</b>					
Yes	0.95	0.92	1.08	0.82	na
No	0.47*	0.40***	0.72	1.24	na
Client had no preference (ref)	1.00	1.00	1.00	1.00	na
<b>Client perceived herself as race-concordant with clinician</b>					
Yes	1.03	1.33	1.27	1.01	na
No/did not know (ref)	1.00	1.00	1.00	1.00	na

\*p<.05. \*\*p<.01. \*\*\*p<.001. †p<.10. Notes: ref=reference group. na=not applicable. Odds ratios are weighted; sample sizes are unweighted. All models were adjusted for race, ethnicity and language spoken; results for these characteristics are shown in Table 4 (page 207).

significantly reduced for both groups of Latinas (0.4 and 0.3, respectively). Finally, black women had higher odds than whites of reporting ever having been pressured by a health care clinician to use a contraceptive method (2.3).

Two covariates were associated with women's likelihood of giving an optimal rating to the structure and facility quality of their reproductive health care site (Table 5). The odds of an optimal rating were lower for clients seen at health department clinics than for those seen at private doctors' offices (odds ratio, 0.4); they were also reduced for clients who were seen by a clinician who was not their preferred gender (0.5). Optimal ratings of client-staff interaction were reduced for those who lacked clinician continuity at their visits (0.6) or who were seen by a clinician who was not their preferred gender (0.4). Women with a high school education were less likely than those with more schooling to give optimal ratings to patient-centeredness (0.7). The odds of having been informed about multiple contraceptive options were higher for women with at least three children than for those with none (4.9), for women whose visit was for pregnancy-related care than for those whose visit was for routine gynecologic care (3.2) and for women seen at health department clinics than for those seen at private doctors' offices (2.9). The likelihood of ever having been pressured by a health care clinician to adopt a contraceptive method was increased for women who were cohabiting (2.4) and for women with a parity of three or higher (3.6).

We found no evidence supporting our hypotheses that the specific covariates associated with quality perceptions would vary by women's race, ethnicity and language (not shown).

## DISCUSSION

In this study, we used data from a nationally representative sample of low-income women to test for racial, ethnic or language group differences in women's reproductive health service delivery preferences and perceptions of the quality of that service. We found significant group differences in both of these areas. Although we were unable to directly explore the reasons for the observed differences, we have several ideas about why they occurred. The fact that preferences pertaining to clinician gender and clinician continuity were more strongly held in both groups of Latinas than among whites suggests that cultural values may play a role. Values that may be important include female modesty,<sup>34</sup> particularly in relation to sexuality, and the importance of personal social relationships, a value referred to in Spanish as *personalismo*.<sup>8</sup> *Personalismo* may mean that it is especially important for Latinas to have ongoing relationships with health care clinicians so that trust can be established. The finding that blacks and English-speaking Latinas had a stronger preference than whites for receiving reproductive health services at a site that delivers general health care may reflect that minorities are more likely than whites to be in fair or poor health<sup>35</sup> and may need the convenience of addressing

multiple health needs at a single location. The marginally significant finding for Spanish-speaking Latinas suggests that they are similar to other minority groups in this regard.

Three theories may help explain why group differences in perceptions of service quality occur. First, participants of different racial, ethnic and language backgrounds may interpret and respond to survey questions on quality differently. Second, they may have differing expectations of care. Third, their care experiences may actually differ.<sup>36</sup> We believe that the lower ratings of structure and facility quality and patient-centeredness observed among Latinas in this study may partly reflect actual differences in these women's experiences with care. Factors such as language barriers, low literacy and lack of familiarity with the U.S. health care system may have made it more challenging for Latinas to navigate the health system, made the system seem confusing and disorganized, and adversely affected communication between women and their clinicians. Previous studies have found Latinas to experience problems in health care, including difficulties in communicating,<sup>18,37,38</sup> so this explanation is plausible.

Our finding that black women were more likely than whites to report ever having been pressured by a health care clinician to use a contraceptive method may reflect differences in the degree to which clinicians pressure women to use methods or differences in women's perceptions of pressure. There are previous cases in which low-income women, particularly minorities, were pressured to adopt family planning,<sup>39</sup> so the differences we found may reflect actual differences in how women are counseled. However, women's knowledge of these previous cases may have affected how black women interpreted their clinicians' behavior and contributed to their feelings of mistrust, making them more likely to perceive pressure, even if this was not intended by the clinician.

### Limitations

Several limitations of this study are important to recognize. First, our measures of quality perceptions and service delivery preferences had low reliability because few items were used to create the measures. Second, because of limitations of the data, we were able to study only limited domains of quality perceptions and service delivery preference, and we were unable to measure all aspects of the domains. Our measure of patient-centeredness, for example, assessed only the degree to which women felt the staff at their most recent reproductive health visit made an effort to understand their needs. This measure is quite narrow, considering the multidimensional definitions of patient-centeredness reported in the literature.<sup>40,41</sup> A better measure of patient-centeredness would assess whether individual needs, wants and perspectives were taken into account when care was provided, as well as the degree to which clinicians share power and responsibility with clients during health encounters, and the degree to which clients and clinicians

develop personal relationships. Third, our quality perception measures may have been affected by recall or reporting bias if women were unable to accurately recall their reproductive health visits or if women of different backgrounds interpreted or responded to survey questions differently. Fourth, selection bias may have occurred if women's likelihood of participating in the study was associated with their racial, ethnic and language background and their quality perceptions. For example, if minorities with the worst care experiences participated in the study less often than whites with the worst care experiences, our study would have underestimated the group differences. Fifth, because our sample was restricted to low-income black, Latina and white women living in households with phones located in low-income neighborhoods, our results cannot be generalized to groups not represented.

Finally, an important consideration is that the data were collected in 1995. Several changes have occurred since then, including an increase in awareness about racial and ethnic disparities in health care among health professionals, researchers and policymakers. In keeping with this trend, several initiatives have been created to address disparities in health care, including the setting of national standards in 2000 by the U.S. Department of Health and Human Services, mandating that health care be delivered in an equitable, effective, and culturally and linguistically appropriate manner.<sup>1,42</sup> Further, in light of the rapid growth of the Latino population nationwide, health professionals may have greater experience in addressing the needs of Latinos today than they did in 1995. Given these changes, racial, ethnic and language group differences in clients' ratings of reproductive health service may have diminished. Even if this is the case, our findings can serve as an important baseline against which future findings can be compared.

### Implications

Our findings have implications for reproductive health programs and policies. They suggest that ensuring access to a female clinician at reproductive health visits and ensuring clinician continuity across visits are important, especially for Latinas. Although these preferences were most strongly held by Latinas, seeing a clinician of one's preferred gender and having clinician continuity across visits were associated with better perceptions of service quality among all groups of women. Strategies that give women access to a clinician of their preferred gender and that enable women to see the same clinician across visits might be important ways to improve women's service experiences.

Our finding that English-speaking Latinas and black women preferred that reproductive health services be provided at a site that delivers general health services rather than at a site tailored to women's health is also noteworthy, because it conflicts with how women's health care is currently organized. Women commonly seek care



for reproductive and nonreproductive needs at different sites, and even care for different types of reproductive needs at different sites.<sup>43</sup> Our results suggest that this fragmentation of services may not be ideal in many women's minds.

We observed racial, ethnic and language differences on some, but not all, indicators of service quality perceptions; these findings suggest areas that should be targeted to reduce group differences. High priority should be placed on interventions to improve client-clinician communication—for example, by providing access to interpreters when needed—or to help make the facility environment more comfortable and easier for women to navigate. In addition, our finding that black women, as well as high-parity women and those in cohabiting relationships, were more likely than others to report ever having been pressured to adopt a contraceptive method suggests that a renewed emphasis on informed choice in contraceptive counseling would be useful. It is important for clinicians to respect client preferences regarding contraception, even if they disagree with them.

Future research should continue to investigate racial, ethnic and language group differences in service delivery preferences and service quality perceptions. It should go beyond description and study the factors underlying group differences. Such research can yield important information about how differences might best be addressed. Finally, because differences in reproductive health care experiences may underlie disparities in reproductive health outcomes, future research should try to better understand the link between service quality and reproductive health outcomes.

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