Patient–Provider and Patient–Staff Racial Concordance and Perceptions of Mistreatment in the Health Care Setting

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OBJECTIVES: To determine what roles patient–provider and patient–staff racial concordance play on patients' perceptions within the health care setting.

DESIGN, SETTING, PARTICIPANTS: Data from the Commonwealth Fund 2001 Quality of Care telephone survey. Analysis focused on the subsample of 6,066 adults who live in the continental United States and who reported having a regular provider or a usual source of care (*n*=4,762).

MEASUREMENTS AND RESULTS: We analyzed patients' responses about perceptions of disrespect, unfair treatment because of race and language, and the belief that he/she would have received better treatment if he/she belonged to a different race. We compared these perceptions of mistreatment with provider and staff racial concordance, controlling for sociodemographic variables. Contrary to our hypothesis, Hispanics were more likely to report being treated with disrespect if in a concordant relationship with their provider than if in a nonconcordant one (odds ratio [OR] 2.42, $P<.01$). Asians were less likely to report being treated unfairly because of race if in racially concordant relationships with providers than if in nonconcordant ones ($P<.05$). Hispanics were also less likely to perceive unfair treatment because of language when in concordant relationships with staff as compared to nonconcordant relationships with staff ($P<.05$).

CONCLUSIONS: Patients' perceptions of health care relationships may partially depend on racial concordance with providers and staff. The nature of the association between racial concordance and perceived disrespect varies by racial group, indicating that other race-specific factors may also need to be examined.

KEY WORDS: doctor–patient relationship; disparities; race and ethnicity.
DOI: 10.1007/s11606-007-0210-8
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The topics discussed in this paper were presented as an abstract at a conference for the Society of Academic Emergency Medicine, May 2006.
Received August 17, 2006
Revised March 6, 2007
Accepted March 30, 2007
Published online May 8, 2007

BACKGROUND

Despite attempts to eliminate health care disparities, many studies continue to demonstrate that differences in health and health care use persist across a wide number of domains.[1–4] Minorities have been shown to utilize health care services less even when controlling for income and insurance, so factors beyond a basic ability to pay must be examined to explain the differences.[1]

The nature of the patient–provider relationship in health care settings is 1 area that has not been explored to a great extent, yet may play a role in racial disparities. This relationship can potentially influence patients' perceptions of disrespect and unfair treatment,[5] which in turn can impact utilization of certain preventive care measures.[6]

Racial concordance in the patient–physician relationship impacts perceived quality and use of health care.[7–10] A study of health services utilization found that when patients were race concordant with their physicians, they were more likely to use needed health services, were less likely to postpone or delay seeking care, and they used more health services.[11] In addition, patients in race-concordant relationships tend to rate their physicians as more participatory.[1,11] Minorities have been shown to demonstrate a personal preference for physicians of their own race,[12] and satisfaction with care is greater for minority patients in race-concordant relationships with their physicians, especially among blacks.[13–15]

Although patient–provider race concordance has been associated with more positive ratings of physicians among black and white patients, the data on physician ratings have been less clear for Hispanics and Asians.[14,16] In addition, the influence of patient-provider racial concordance on patient perceptions of discrimination has been incompletely studied. Fewer studies have addressed patient–staff racial concordance, which may play a major role in patients' negative experiences in the health care encounter.[17]

We sought to determine the impact of racial concordance both between the patient and provider as well as between the patient and health care staff on patient perceptions of discrimination. We hypothesized that minority patients in racially concordant relationships with providers would be less likely than those in nonconcordant relationships to perceive disrespect and unfair treatment in the health care setting. Similarly, patients who receive their health care from facilities in which at least some of the staff share the patient's racial background would be less likely to report disrespect and unfair treatment in the medical setting than those without staff from the same racial background. We expected to see similar perceptions of these relationships across all minority groups.

To evaluate the role of provider and staff characteristics on perceptions of disrespect, we compared racial concordance data and data on negative perceptions of the patient–provider relationship from the Commonwealth Fund 2001 Health Care Quality Survey.

METHODS

Data for this analysis come from the Commonwealth Fund 2001 Health Care Quality Survey. Respondents form a nationally representative sample of 6,722 adults, age 18 and older, who live in the continental United States. Data were collected between April 30 and November 5, 2001. Our analysis was restricted to the subsample of respondents who reported a regular provider or a usual source of care (n=4,762 for the provider concordance analysis and n=6,066 for the staff concordance analysis).

The survey relied on data collected through random digit dialing with an oversample of telephone exchanges with higher than average numbers of minority households. In addition to the oversampling based on telephone exchanges, interviews were conducted with members of 394 households identified from a nationwide demographic tracking survey as having an Asian/Asian-American or African-American family member. Interviews were conducted in English, Spanish, Mandarin, Cantonese, Vietnamese, or Korean depending on respondent preference. The response rate for the entire sample was 53.1% of all calls in which final contact was made.

The sample was weighted to correct for the disproportionate sample design (such as oversampling minority racial groups), to adjust for the effects of nonresponse and to ensure that the sample is representative of all adults age 18 and older based on the March 2001 Current Population Survey (CPS). The final weighted sample is therefore representative of the 193 million adults in the United States who have telephones.[18] Analysis was performed on the weighted sample using STATA Version 6.0 with commands for complex survey design.[19]

Data about the race of the participant, provider, and staff were used to explore the relationship between racial concordance in the primary care setting and measures of perceived discrimination. Racial concordance was studied between: (1) patient and provider, and (2) patient and staff.

Independent Variables: Racial Concordance Measures

Two questions in the dataset addressed racial concordance in patient–provider/staff relationships. These were: (1) What is the race or ethnicity of the person (regular doctor or other health professional, such as a nurse or a midwife) you usually go to when you are sick or need health care? (Asked of persons who reported having a regular doctor, n=4,762); (2) Which best describes the ethnic or racial composition of the staff where you usually go for health care: all of the staff are the same ethnicity and race as you, most of the staff are the same ethnicity and race as you, some of the staff are the same ethnicity and race as you, about equal amounts of the staff are the same ethnicity and race as you, or none of the staff are the same ethnicity and race as you? (Asked of persons who reported having a usual source of care, n=6,066).

Racially/ethnically concordant patient–provider and patient–staff pairings were calculated for whites, blacks, Hispanics, and Asians. (For our study, the term “whites” refers to non-Hispanic whites, and “blacks” refers to non-Hispanic blacks.) Provider racial concordance was a dichotomous variable considered positive if the race of the provider and race of the respondent were the same. Persons who did not have a provider were not included in this analysis. The staff racial concordance variable was grouped into 3 categories: all/most of the staff where the respondent goes for health care are from the same racial/ethnic background, some/about equal numbers of the staff where he/she goes for health care are from the same racial/ethnic background, or none of the staff where he/she goes for health care are from the same racial/ethnic background. A dummy variable was included for unknown provider concordance and unknown staff concordance. Persons who did not report a usual source of care were excluded from this analysis.

Dependent Variables: Negative Perceptions of the Patient–Provider Relationship

Our principal dependent variables of interest were 4 variables measuring perceptions of mistreatment in the patient–provider relationship. We formulated these dependent variables from 5 survey questions to assess the patient’s perception of treatment within the patient–provider relationship. Specific questions were: (1) Did the doctor treat you with a great deal of respect and dignity, a fair amount, not too much, or none at all? (4-point scale); (2) Please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the statement, “I often feel as if my doctor looks down on me and the way I live my life.” (4-point scale); (3) Thinking about all of the experiences you have had with health care visits in the last 2 years, have you ever felt that the doctor or medical staff you saw judged you unfairly or treated you with disrespect because of your race or ethnic background? (yes/no); (4) Thinking about all of the experiences you have had with health care visits in the last 2 years, have you ever felt that the doctor or medical staff you saw judged you unfairly or treated you with disrespect because of how well you speak English? (yes/no); (5) Do you think that there was ever a time when you would have gotten better medical care if you had belonged to a different race or ethnic group? (yes/no).

The response items “treated with respect” and “looked down upon” (questions 1 and 2) were combined into a single dichotomous variable characterized as “treated with disrespect” because both response items describe a similar negative perception of the health care encounter. (In our sample, Asians were more likely to report being “treated with disrespect” and blacks and Hispanics were more likely to report being “looked down upon”, which we believe represents a different cultural interpretation of a similar perception.)

Demographic Variables

Demographic variables were included in the multivariate analysis to control for various socioeconomic characteristics that could have potentially affected the analysis. Education was grouped into some high school or less, high school graduate, and some technical school/college, or more. Primary language spoken at home was dichotomized into non-English

Table 1. Characteristics of Study Sample

	Whites (%)	Blacks* (%)	Hispanics* (%)	Asians* (%)
Overall sample	73.8 (*n*=3,367)	11.9 (*n*=1,016)	10.5 (*n*=1,088)	3.8 (*n*=595)
Education				
Less than high school	10.8	19.0†	36.8†	9.4
High school graduate	32.7	36.5	28.9	17.2†
Some college/ Technical school or more	56.2	44.0†	33.8†	72.9†
Income as percent of poverty level				
<200%	25.0	41.9†	45.6†	23.1
>200%	57.9	40.2†	33.0†	56.3
Unknown	17.1	17.9	21.4§	20.6
Insurance status				
No insurance	10.0	20.0†	29.5†	12.3
Medicaid	2.4	8.6†	6.3†	2.5
Private/ Medicare/ Other	87.6	71.5†	64.1†	85.1
English as primary language	99.9	99.6	62.8‡	90.5‡
Age				
18–39	36.0	47.9†	56.5†	53.9†
40–64	44.0	38.3 §	33.8†	36.0§
65+	18.8	12.4‡	9.3†	7.7†
Male gender	43.9	41.6	44.1	49.9
Usual source of care				
Community clinic	6.9	10.0§	21.7†	7.5
Hospital outpatient	3.0	9.0†	3.4	7.3†
Emergency department	4.3	11.1†	7.2§	4.2
Private clinic	83.2	67.5†	64.2†	76.5§

**Percentages from chi-squared analysis in each racial/ethnic group compared to whites. The term "Whites" refers to non-Hispanic whites; "Blacks" refers to non-Hispanic blacks.*
†P < 0.001
‡P < 0.01
§P < 0.05

and English. The federal poverty level groupings,<200% and >200%, were used to categorize household income, with a dummy variable accounting for those with unreported income. Insurance status was classified as no insurance, Medicaid, and all other insurance. Usual source of care was divided into emergency department, community clinic, hospital outpatient department, and private clinic. Gender was dichotomized into male and female. Age was dichotomized into ages 18–64 and age 65 and over. Language was included as a control variable only for Hispanics and Asians, as these were the only groups with a sizable number of non-English speaking individuals that reported provider race. In a few instances, sample size made it difficult to divide demographic variables into more than 2 subcategories owing to small numbers in individual analysis cells (e.g., education and insurance); for these analyses, we instead dichotomized the variables (e.g., education was dichotomized into high school or less and college or more).

Analysis

The relationship between negative perceptions in the patient–doctor relationship and racial concordance with provider and staff was examined using both bivariate (chi-squared) analysis and multivariate logistic analysis, controlling for sociodemographic characteristics. We performed separate analyses for each racial/ethnic group (e.g., for whites, blacks, Hispanics, and Asians). Native Americans and Native Hawaiians/Pacific Islanders were excluded because of inadequate sample size. Persons identifying themselves as "other race" were also excluded because it was not possible to determine concordance.

RESULTS

Sample Characteristics

Our sample demographics are shown in Table 1. Non-Hispanic whites had the highest percentage of racially concordant provider and staff pairings (Table 2).

Racial Concordance of Provider

Asian respondents with same-race physicians were less likely to report unfair treatment because of race than those with different-race physicians in both bivariate analysis and multivariate analysis. Whites in concordant relationships were also less likely to report unfair treatment because of race and were additionally less likely to report that they would have received better treatment if they belonged to a different race. Hispanics, however, were more likely to report being treated with disrespect if in concordant provider pairings than in nonconcordant ones even when controlling for sociodemographic factors (OR 2.42, 95% CI 1.23–4.73). Results of the multivariate analyses are shown in Table 3.

Table 2. Percent of Respondents in Racially Concordant Relationships

	Whites (%)	Blacks* (%)	Hispanics* (%)	Asians* (%)
Racially concordant provider	(*n*=2,851)	(*n*=771)	(*n*=710)	(*n*=430)
Concordant	81.6	22.9†	26.4†	48.4†
Nonconcordant	14.4	70.5†	69.3†	52.2†
Unknown	4.0	6.6	4.3	4.4
Racially concordant staff	(*n*=3,367)	(*n*=1,016)	(*n*=1,088)	(*n*=595)
None	2.0	17.3†	14.0†	27.0†
Some/equally divided	31.6	51.7†	50.1†	35.3
All/most	59.7	25.9†	31.2†	27.3†
Unknown	6.7	5.0	4.7	10.3§

**Percentages from chi-squared analysis in each racial/ethnic group compared to whites. The term "Whites" refers to non-Hispanic whites; "Blacks" refers to non-Hispanic blacks.*
†P < 0.001
‡P < 0.01
§P < 0.05

Table 3. Relationship of Racial Concordance of Provider to Measures of Disrespect/Mistreatment

	Looked down on/ Treated with disrespect (%)	Treated unfairly because of race (%)	Treated unfairly because of language (%)	Would have received better care if different race (%)
Whites	(*n*=2,850)	(*n*=2,708)	(*n*=2,708)	(*n*=2,851)
Concordance	1.04 (0.63,1.73)	0.07 (0.02, 0.21)*	0.31 (0.07, 1.38)	0.27 (0.10, 0.74)†
No concordance	1.00	1.00	1.00	1.00
Blacks	(*n*=771)	(*n*=731)	(*n*=731)	(*n*=771)
Concordance	1.33 (0.64, 2.74)	1.05 (0.31, 3.51)	1.57 (0.27,9.17)	1.10 (0.57, 2.11)
No concordance	1.00	1.00	1.00	1.00
Hispanics	(*n*=710)	(*n*=651)	(*n*=651)	(*n*=710)
Concordance	2.42 (1.24, 4.73)†	2.39 (0.84, 6.81)	0.71 (0.16,3.15)	1.62 (0.75, 3.51)
No concordance	1.00	1.00	1.00	1.00
Asians	(*n*=430)	(*n*=385)	(*n*=385)	(*n*=430)
Concordance	1.01 (0.45, 2.30)	0.01 (0.001, 0.19)*	0.33 (0.07, 1.49)	0.44 (0.17, 1.17)
No concordance	1.00	1.00	1.00	1.00

Odds ratios with 95% Confidence Intervals from Multivariate Regression

This table reports percentages derived from our multivariate regression. The dependent variables of interest are: "looked down on/treated with disrespect," "treated unfairly because of race," and "would have received better care if different race." The model controls for income, insurance, usual source of care, age, gender and education; for Hispanics and Asians, language was added as an additional control variable.

*$P < 0.001$

†$P < 0.01$

‡$P < 0.05$

Racial Concordance of Staff

Racial concordance between patient and staff members was found to be significantly associated with lower rates of perceived mistreatment than nonconcordance (Table 4). Hispanics who reported receiving care at clinics where some of the staff were of the same race were less likely to perceive being treated with disrespect or looked down upon in the patient–provider relationship than were those patients with nonracially concordant staff. Hispanic respondents with some racially concordant staff were also less likely to report being treated unfairly because of language ($P<.05$). Among whites, patient–staff racial concordance was associated with a lower likelihood of all categories of negative perceptions than nonconcordance.

DISCUSSION

As hypothesized, racial concordance between minority patients and staff (as compared to nonconcordance) was found to be associated with lower rates of negative perceptions among Hispanics and blacks. Contrary to the hypothesis, however, racial concordance of providers did not appear to be a factor in reducing perceptions of disrespect among these populations. Asians were the only minority group to report more favorable interactions when in concordant patient–provider relationships.

These results are surprising, given prior evidence demonstrating the positive relationship between satisfaction and racially concordant dyads between patients and providers.[8–10] These findings were particularly unexpected for Hispanics, with a higher number reporting negative perceptions when in a racially concordant patient–provider relationship. For Hispanics, factors such as availability of interpreter services may play a bigger role than provider race alone in the perception of disrespect or mistreatment in the patient–provider relationship; however, even with language added as a control variable, this relationship was still demonstrated in our analysis. Another factor that may play a role is cultural background. The majority of Hispanics in our dataset are of Mexican origin, yet data on the provider's specific background is not available. Cultural concordance in this instance may have a greater importance than racial/ethnic concordance. Sociodemographic differences between provider and patient and practice setting may also account for perceptions of disrespect. If Hispanic patients are being treated in busy practices, they may perceive disrespect because their providers spend less time with them. Possible differences in the resources and qualifications among physicians based on race are important considerations, as well. Some data indicate that providers who serve minority patients are more likely to work in settings that are not ideal for timely and efficient care. For example, physicians treating black patients were found to be less likely to provide high-quality care because of limited access to subspecialists and diagnostic procedures.[20] Another study showed that physicians with larger numbers of black patients are less likely to be board-certified than physicians with white patients.[20] Although we were unable to adequately capture such aspects of the practice setting in our analysis, our overall results remained unchanged even when controlling for usual source of care.

Factors that are difficult to measure, such as racial perceptions in general society and differences in communication style based on provider race, may affect results. Because of societal perceptions, patients may have preexisting ideas about what to expect from certain races of providers or as a patient of a certain race.[21] Similarly, patients may negatively react to certain styles of communication, independent of racial concordance factors, leading to greater perceptions of disrespect.

This analysis confirms the need to explore a multifactorial approach to decrease perceptions of mistreatment within the health care setting. Our results showed that having a staff with a similar racial background to that of the patient may play an important role in reducing patient perceptions of disrespect and unfair treatment. Ancillary staff, including nurses, receptionists, and other support staff, may have key roles in making the patient feel comfortable within the health care setting, influencing patients' overall impressions of the health care experience. Therefore, it may be important to consider work-

Table 4. Relationship of Racial Concordance of Staff to Measures of Disrespect/Mistreatment

	Looked down on/ Treated with disrespect	Treated unfairly because of race	Treated unfairly because of language	Would have received better care if different race
Whites	(*n*=3,356)	(*n*=3,126)	(*n*=3,126)	(*n*=3,367)
Concordance				
All/Most	0.42 (0.18, 0.94)*	0.06 (0.01, 0.31)†	0.10 (0.03, 0.39)†	0.10 (0.03, 0.42)†
Some/Equal	0.38 (0.16, 0.86)*	0.31(0.08, 1.26)	0.14 (0.04, 0.54)‡	0.13 (0.03, 0.54)‡
None	1.00	1.00	1.00	1.00
Blacks	(*n*=1,012)	(*n*=935)	(*n*=935)	(*n*=1,016)
Concordance				
All/Most	0.92 (0.45, 1.88)	1.11 (0.31, 3.97)	0.66 (0.15, 2.96)	0.73 (0.34, 1.58)
Some/Equal	0.51 (0.25, 1.04)	1.78 (0.59, 5.32)	0.29 (0.10, 0.88)*	1.08 (0.59, 1.97)
None	1.00	1.00	1.00	1.00
Hispanics	(*n*=1,076)	(*n*=942)	(*n*=942)	(*n*=1,088)
Concordance				
All/Most	0.64 (0.31,1.35)	0.29 (0.08, 1.05)	0.38 (0.12, 1.22)	0.80 (0.35, 1.84)
Some/Equal	0.44 (0.21, 0.92)*	0.55 (0.22,1.44)	0.26 (0.09, 0.75)*	1.00 (0.43, 2.31)
None	1.00	1.00	1.00	1.00
Asians	(*n*=595)	(*n*=508)	(*n*=508)	(*n*=595)
Concordance				
All/Most	1.63 (0.67, 3.99)	0.18 (0.03,1.13)	1.20 (0.30,4.86)	0.85 (0.30, 2.42)
Some/Equal	0.69 (0.27, 1.80)	0.24 (0.04, 1.50)	0.26 (0.06, 1.21)	0.59 (0.19, 1.87)
None	1.00	1.00	1.00	1.00

Odds ratios with 95% confidence intervals from multivariate regression.
This table reports percentages derived from our multivariate regression. The independent variables of interest are: "looked down on/treated with disrespect," "treated unfairly because of race," and "would have received better care if different race." The model controls for income, insurance, usual source of care, gender, and education; for Hispanics and Asians, language was added as an additional control variable.
*$P< 0.05$
†$P < 0.001$
‡$P < 0.01$

force diversity beyond the provider level. Because there is evidence that efforts to increase the number of minority physicians in practice may help decrease racial disparities in health,[22] the majority of existing incentives focus on increasing the number of minority physicians,[23] and very few target underrepresented minorities for ancillary staff positions. Recruiting minority staff to racially concordant practice settings and promoting grants and programs that train ancillary minority medical staff may be necessary to improve the experience for minority patients within the health care system. These findings are consistent with those of Lieu et al.[24], who demonstrated that parent-reported asthma outcomes are better when children receive care in settings with more racially concordant staff.

Non-concordance of staff was associated with more perceived disrespect, indicating that cultural sensitivity training may be needed for all health care staff members. Physician cultural competency training can occur in medical school and in specialized training programs after graduation,[25–27] but ancillary staff may not receive opportunities to learn cultural competency during employment training, so the responsibility for training may rest with individual institutions. An important component of cultural competency is the availability of adequate interpreter services, and studies have demonstrated that interpreter services improve patient–provider communication.[28] Our results demonstrate that this may be particularly important for the Hispanic population, as patients were more likely to perceive unfair treatment because of language when in a nonconcordant relationship with staff.

There were several potential limitations to this study. The analysis relies on use of a secondary dataset, and therefore we are restricted to previously constructed variables. The few studies that have looked at the impact of concordance using primary data collection focused on communication styles between provider and patient and not on perceptions of disrespect/unfair treatment or the patient–staff relationship. In addition, these studies had small numbers of Asian and Hispanic participants.[8,11]

The study is also limited to those patients reporting a regular provider. Because of this, there are a large number of persons who are insured in our sample, which therefore may not be fully representative of the general population. The use of random digit dialing also limited our sample to respondents with telephones, further affecting generalizability.

A significant number of minorities did not report a regular provider—for example, as many as 41% of Hispanics. Of those who did have a regular provider, relatively small numbers of minorities were in racially concordant dyads, restricting the power of our analysis. In addition, the wording of the question referring to race of regular provider may exclude nontraditional health care providers, such as curanderos or shamans, who may be more likely to be used by Hispanics and Native Americans, and may be associated with more positive experiences within the health care setting. Finally, restrictions in sample size limited our ability to conduct multivariate analyses to examine the effect of other factors, such as interpreter services, on our findings.

Overall, our findings suggest the importance of a multifaceted approach to patient care that includes health care staff in addition to the provider. Racial/ethnic concordance between patient and staff in particular has a significant impact on patients' perceptions of mistreatment in the health care setting, which have been shown to be linked to utilization of medical services.[6] To better understand how provider and staff

race/ethnicity impact utilization, further research is needed with larger datasets that report more detailed information about both providers and patients.

Acknowledgment: *This paper was written with the support of the Commonwealth Fund, which provided data and funding.*

Conflict of Interest: *None disclosed.*

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