

Perceived Racial/Ethnic Bias in Healthcare in Durham County, North Carolina:

A Comparison of Community and National Samples

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Abstract

Background: We sought to compare findings of a national survey of perceptions of racial/ethnic discrimination in healthcare to those of a community survey, with emphasis on the perceptions of Latinos.

Methods: Responses from a national survey were compared to a telephone survey of residents of Durham County, North Carolina.

Results: Black respondents in the Durham sample were more likely than those in the national sample to feel that a healthcare provider had treated them with disrespect because of health insurance status (28% vs 14%; $P < 0.001$). Approximately one third of Durham Latinos and 14% of Latinos in the national sample felt they had been treated with disrespect because of their English-language ability ($P < 0.01$). Compared to a national sample of white participants, white respondents in Durham were more likely to believe that black persons are worse off in terms of receiving routine medical care (40% vs 27%; $P < 0.01$) and having health insurance (58% vs 43%; $P < 0.01$). As compared to their national counterparts, there was a similar trend for how white respondents in Durham perceived how Latinos fared ($P < 0.001$ for all comparisons).

Conclusions: Overall, the perception of bias in healthcare was greater among Durham residents, especially among newly immigrated Latinos, than among their national counterparts.

Introduction

Over the past two decades, there has been growing interest in racial and ethnic disparities in the use of preventive health services and medical procedures for many conditions.^{1,2} Differential use of appropriate medical therapies is a crucial flaw in the United States healthcare system, impeding our ability to achieve the goals of *Healthy People 2010*.³ These goals include the elimination of disparities in care for cancer screening and management, cardiovascular diseases, diabetes mellitus, human immunodeficiency virus infection (HIV) and acquired immunodeficiency syndrome (AIDS), and child and maternal health.³

Attempts to develop interventions that rectify disparities in healthcare have had varying degrees of success. Interventions have included cultural competency programs,^{4,8} screening and

outreach services for minority populations,^{9,12} and programs to enhance patient-provider communication.^{13,14} Most reports of these programs do not describe a needs assessment component of the projects, although needs assessment is usually the first step in the development of an effective intervention, because it provides a comprehensive description of the problem and its origins.¹⁵

We set out to describe the local community of Durham County, North Carolina, regarding public perceptions of racial and ethnic discrimination in healthcare, with the goal of developing interventions designed to improve healthcare for minority patients. We were especially interested in exploring the healthcare experiences of newly immigrated Latino residents, a sizable and underexamined segment of the community. Durham County is a diverse community, having almost equal percentages of black and white residents¹⁶ and a rapidly growing Latino population.

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From 1990 to 2000, the Latino population in the Raleigh-Durham metropolitan area increased from 9,923 to 72,580, a 631% increase.¹⁷

The starting point of this study was the report of the Henry J. Kaiser Family Foundation (KFF) entitled *Race, Ethnicity & Medical Care: A Survey of Public Perceptions and Experiences*.¹⁸ The report offered the first national description of the public's knowledge of and attitudes about racial and ethnic differences in health and healthcare. Among 3,884 adult respondents living in the continental United States, approximately three quarters of respondents viewed racism as a problem in healthcare.¹⁸ However, it was not clear how we were to extrapolate the KFF findings to the local community. Any such extrapolation would be important in efforts to inform interventions that focus on local rather than national concerns and to encourage buy-in and endorsements by local governments and community organizations. Therefore, we sought to determine how applicable the findings of the national survey were to the local community, with special emphasis on exploring how members of the Latino community perceive their experiences with the healthcare system.

Methods

We compared responses to the KFF national survey and responses to a community-based survey. The KFF survey has been described elsewhere;¹⁹ the community survey is described below. This study was approved by the institutional review board of Duke University Medical Center.

Sample Design

Eligible subjects were adults living in Durham County, North Carolina, in households with telephones. The sampling design targeted interviews with disproportionately large subsamples of black and Latino adults. The sample was designed to generalize to the Durham County adult population in telephone households and to allow separate analyses of responses by black, Latino, and white respondents.^{20,21}

Two separate samples (Survey Sampling, Inc., Fairfield, Connecticut) were used to complete all interviews. The first was a disproportionately stratified sample drawn for telephone exchanges serving Durham County. The sample was drawn using standard, list-assisted, random-digit survey methodology. Active blocks of telephone numbers (area code + exchange + two-digit block number) that contained three or more residential directory listings were selected with probabilities in proportion to the number of listed phone numbers. After selection, two more digits were added randomly to complete the number. The resulting numbers were compared against business directories, and matching numbers were purged. Exchanges with higher than average density of black households were oversampled to increase the overall sample incidence of black respondents.

For the second sample, to achieve an oversampling of Latino respondents, participants were recruited by random-digit dialing from a list of households with Latino surnames. We selected this approach because Durham has few nonclustered Latino households.

Survey Development and Administration

The KFF survey was the foundation for our assessment.¹⁸ We adapted additional survey items from the California Health Interview Survey (CHIS),²² the El Centro Hispano/Proyecto LIFE survey,²³ and a review of the literature.^{24,25} Specifically, we used the Health Belief Model to identify potential barriers to care. The Health Belief Model was developed to explain why people fail to engage in disease prevention or screening tests before the onset of symptoms.²⁶ The model proposes that the likelihood of one carrying out a particular health behavior (e.g., seeking healthcare) is a function of personal beliefs about perceived susceptibility, severity, benefits, and barriers.²⁷

We augmented the candidate survey items with items derived from a provider survey. The brief, informal provider survey was administered by e-mail to PrimaHealth IPA Network providers (a provider network local to Durham County). The provider survey was used to identify perceptions of barriers regarding the provision of medical care for persons of different cultures. We also provided a draft of the survey to a convenience sample of community leaders (i.e., public health officials, public officials, community group leaders) for comment to ensure that we considered relevant factors that cause or contribute to local barriers to healthcare. Finally, we conducted a small pilot test by conducting cognitive interviews with black and Latino community members to assess content validity and to verify that many barriers to care were considered as pre-coded responses in the survey. For Latino participants, the final survey was translated into Spanish and back-translated for validation purposes.

Given the length of the survey, we split the survey instrument into three components—the core survey, additional items for split-half sample 1, and additional items for split-half sample 2. All subjects completed the core survey items and one of the split-half sets of questions.

Similar to the KFF survey, the survey was administered by telephone from October through December 2002 in either English or Spanish, according to the preference of the respondent, by Princeton Survey Research Associates (Washington, DC). At least 15 attempts were made to contact a respondent at every sampled telephone number. Calls were staggered over times of day and days of the week to maximize the chance of contacting potential respondents. Each household received at least one daytime call. In each contacted household, interviewers asked to speak with the youngest adult male currently at home. If no adult male was available, interviewers asked to speak with the oldest adult female at home. This systematic respondent selection technique is regularly used by the survey firm to produce samples that closely mirror the population in terms of age and gender. The proportion of working numbers where a request for interview was made was 77% (2,615/3,384). The proportion of contacted numbers where consent for interview was at least initially obtained was 54% (1,415/2,615). Eighty-three percent (1,175/1,415) of the contacted numbers were eligible for the study. (A household was considered ineligible if there was no adult in the household or if there was a language barrier). The proportion of initially cooperating and eligible interviews that were completed was 96% (1,131/1,175).

We developed survey weights to adjust for planned effects of the sample design and to compensate for patterns of nonresponse that might bias the results. Additional details on the weighted analysis are available from the authors upon request.

Measures

Since our survey was based on the KFF survey, our domains mirror themes described in the KFF report.¹⁸ The final survey domains were as follows: demographic characteristics, knowledge of differences in health and healthcare access, personal experiences with being treated unfairly, and perceptions of the influence of race/ethnicity and racism. The coding scheme described below refers to response categories for both the national and Durham surveys, unless otherwise noted.

For all measures described below, except for demographic characteristics, we included “don’t know” and “refused” in the “other” category, because we were interested in examining the probability of a participant responding in a certain manner compared to all other responses.

Demographic Characteristics

Demographic information included self-identified race/ethnicity, age, sex, country of origin, marital status, education level, income, home ownership, and health insurance status. Respondents were asked to indicate if they were Latino or of Latino descent and then to indicate their race (Asian, black, white, other). For purposes of this analysis, we excluded respondents who identified themselves as Asian or other. All respondents who reported that they were Latino or of Latino descent were coded as Latino, and the remaining sample was coded as black or white. Due to the relative homogeneity of country of origin among Latino respondents (69.4% reported Mexico as the country of origin), we recoded country of origin as a dichotomous variable (1 = United States, 0 = other). We also recoded marital status (1 = married, 0 = other), education level (1 = at least some college, 0 = other), and home ownership (1 = own home, 0 = other) as dichotomous variables. We created four sets of indicator variables for regression analysis. Two indicator variables were created to represent race, with white as the reference category. Three indicator variables (30 to 39, 40 to 49, ≥ 50) were created for age, with 18 to 29 serving as the reference group. We created three indicator variables for health insurance (i.e., Medicare, other, and no insurance), with private insurance as the reference group. Finally, financial status in the Durham survey was assessed using a single item with five response options, as follows: “you are having difficulty paying the bills, no matter what;” “enough money to pay for bills, but you have to cut back;” “enough money to pay bills, but little to spare for extras;” “bills are paid and still have enough for extras;” and “don’t know” or refused to answer. Due to small cell sizes, we combined the first two categories of financial status, resulting in low income as the reference category.

By comparison, the KFF survey asked respondents to report income in terms of income distribution (e.g., \$25,000 to < \$30,000), and three indicator variables were used to represent low income (< \$25,000; referent category), middle income

(> \$25,000 to < \$40,000), high income (\geq \$40,000). Due to small cell sizes, we combined “don’t know” and “refused to answer.”

Knowledge of Differences in Health and Healthcare Access

We used two questions to assess knowledge of racial/ethnic differences in health and healthcare access. The first question asked respondents how they thought black persons fared, compared to the average white person, in receiving routine medical care when they needed it, having health insurance, and getting needed healthcare. The second question was identical, except that it asked respondents how they thought Latinos fared, compared to the average white person. Response options for both questions were “better off,” “worse off,” “just as well off,” and “don’t know/refused to answer.” We dichotomized these variables as “worse off” and other.

Perceptions of the Influence of Race and Racism

We defined racism as being treated worse than others because of race or ethnicity. To give the perceived influence of race/ethnicity in healthcare a frame of reference, participants in both samples were asked about perceptions of the influence of race/ethnicity in major social institutions. Respondents were asked whether they thought racism was a major problem, a minor problem, or not a problem at all in education, the workplace, housing, and healthcare. We recoded the response options so that 1 indicates a major problem and 0 indicates other (including don’t know/refused to answer).

Respondents were then asked if they thought black and Latino persons received the same quality of care, higher quality of care, or lower quality of care compared to most whites. We dichotomized the response options so that 1 indicates lower quality of care and 0 indicates other (including don’t know/refused to answer).

Personal Experiences with Being Treated Unfairly

Respondents were asked to recall their experiences with healthcare in the past few years and whether they ever felt that healthcare providers or other staff members judged them unfairly or treated them with disrespect because of whether they had health insurance, how well they spoke English, or their racial/ethnic background. Responses included “yes,” “no,” and “don’t know/refused to answer.” We recoded the responses as 1 for yes and 0 for other.

Statistical Analysis

We used survey weights for all analyses to correct for the complex survey design and nonresponse bias. (A detailed report regarding the weighted analysis is available from the authors upon request.) Our first set of analyses compared responses between the two samples by race/ethnicity for 15 key questions. We used simple statistics to describe both samples, and we used normal approximations to compare the groups to calculate P values. Our large sample size afforded statistical power to detect very small differences. Thus, we considered a difference between the community and national samples practically significant only

if there was an absolute difference of $\geq 10\%$ and a P value ≤ 0.05 .

For the second set of analyses, we attempted to determine how perceptions of racism in education, the workplace, housing, and healthcare (hereafter termed institutions) differed across race/ethnicity after adjusting for demographic characteristics. Using survey-weighted multiple logistic regression analysis, we developed eight models. The first four models analyzed perceptions of racism across institutions for Durham respondents, and the remaining four models analyzed perceptions for national respondents. We included the following demographic characteristics in the models: age, sex, income, education level, and marital and health insurance status—all factors related to access to care. (We did not include country of origin in the models because it was strongly correlated with Latino ethnicity.) We converted parameter estimates for each variable to approximate relative-risk ratios using the method described by Zhang & Yu.²⁸

We performed all analyses using Stata version 8.0 (Stata Corporation, College Station, Tex).

Results

Table 1 shows the demographic characteristics of the Durham and national samples. The samples were similar across race/ethnicity with respect to marital status, and white and black respondents in Durham were similar to their national counterparts in terms of sex, country of origin, home ownership, and health insurance status. However, whereas 54% of white respondents and 41% of black respondents in the national sample had at least some college education, these figures were 72% for white respondents and 50% for black respondents in the Durham sample ($P < 0.001$; $P = 0.02$).

Durham Latinos differed from Latinos in the national sample in terms of age, sex, country of origin, education level, home ownership, and health insurance status. Durham Latinos were younger and were significantly less likely to report the United States as their country of origin, to have health insurance, to

have at least some college education, and to own a home ($P < 0.001$ for all comparisons). A greater percentage of Latino respondents in the Durham sample were men, as compared to the national sample (64% vs 50%; $P = 0.01$).

Knowledge of Racial/Ethnic Differences in Health and Healthcare Access

As shown in Table 2, when asked if the average black person is worse off than the average white person across a variety of factors, responses of white respondents differed greatly in the Durham and national samples. For example, 40% of white respondents in Durham thought that blacks are worse off in terms of receiving routine medical care, compared to 27% in the national sample ($P < 0.01$). Fifty-eight percent of Durham whites believed that blacks are worse off than whites in terms of having health insurance, compared to 43% in the national sample ($P < 0.01$). In most cases, black participants' responses differed by less than 4% between the two samples.

There was an even greater difference between the white samples on questions of whether Latinos are worse off than the average white person, with white respondents in Durham more likely to perceive that Latinos are worse off ($P < 0.001$ for all comparisons). Despite being quite different demographically, there were only small response differences on these items between the two Latino samples. The only major difference among the Latino samples was that 70% of Durham Latinos reported that Latinos were worse off than whites with respect to having health insurance, as compared to 54% of national Latinos ($P < 0.01$).

Perceptions of the Influence of Race and Racism

There were small differences between the national and community samples with respect to whether blacks receive lower quality of care than whites. However, more whites in the Durham sample than in the national sample perceived that Latinos receive lower quality of care ($P < 0.001$).

Overall, black respondents in Durham were less likely than

Table 1.
Subject Characteristics

Variable	White		Black		Latino	
	Durham (n=392)	National (n=1,479)	Durham (n=338)	National (n=1,189)	Durham (n=332)	National (n=983)
Age, mean (SE) ^a	46 (1.03)	46 (0.75)	43 (1.02)	43 (0.77)	34 (0.83) ^c	39 (0.87)
% Male sex	47	47	38	45	64 ^b	50
% United States-born	94	97	97	95	5 ^b	51
% Married	51	55	32	31	50	48
% At least some college	72 ^c	54	50	41	15 ^b	29
% Own home	69	68	40	46	15 ^b	43
% Having health insurance	91	88	77	82	32 ^b	69

All values are weighted.

a Eight responses from the Durham sample and 51 responses from the national sample were missing because the respondents refused to answer.

b Indicates a significant difference at $P \leq 0.05$ and a response difference of ≥ 10 percentage points in the comparison with race/ethnicity-matched respondents in the national sample.

c Indicates a significant difference at $P \leq 0.05$ and a response difference of > 2 years in the comparison with race/ethnicity-matched respondents in the national sample.

SE indicates standard error.

Table 2.
Comparison of Responses to Selected Questions^a

Variable	White		Black		Latino	
	Durham %	National %	Durham %	National %	Durham %	National %
Do you think the average African American is worse off as compared to the average white person in terms of...?						
Getting routine medical care when they need it	40 ^b	27	53	51	14	32
Having health insurance	58 ^b	43	56	59	28	36
Getting needed healthcare	45	36	57	53	10	37
Do you think the average Latino is worse off as compared to the average white person in terms of...?						
Getting routine medical care when they need it	51 ^b	33	54	52	50	47
Having health insurance	72 ^b	48	60	60	70 ^b	54
Getting needed healthcare	55 ^b	35	53	51	51	47
Have you ever felt that a healthcare provider judged you unfairly or treated you with disrespect because of...?						
Whether or not you have health insurance	12	10	28 ^b	14	20	21
How well you speak English	4	1	11	5	34 ^b	14
Your race or ethnic background	2	1	20	12	22	15
Do you think most African Americans receive lower quality of healthcare than most whites?	23	23	56	64	22	43
Do you think most Latinos receive lower quality of healthcare than most whites?	53 ^b	27	61	61	62	56
Do you think racism is a major problem in the following institutions?						
Education	22	27	40 ^b	50	40	40
Workplace	13	21	40 ^b	59	37	41
Healthcare	14	16	27	35	40 ^b	30
Housing	20 ^b	30	41 ^b	59	35	41

a Values are expressed as weighted proportions that agree with the statement, unless otherwise indicated.

b Indicates a significant difference at $P \leq .05$ and a response difference of ≥ 10 percentage points in the comparison with race/ethnicity-matched respondents in the national sample.

their national counterparts to perceive racism as a major problem in education ($P < 0.01$), the workplace ($P < 0.001$), and housing ($P < 0.001$) (see Table 2). While there were small differences between the Latino samples with respect to education, the workplace, and housing, 40% of Durham Latinos thought that racism was a major problem in healthcare, compared to 30% of national Latino respondents ($P = 0.02$).

Personal Experiences with Being Treated Unfairly

Black respondents in the Durham sample were more likely than those in the national sample to feel that a healthcare provider had treated them with disrespect because of health insurance status (28% vs 14%; $P < 0.001$). Thirty-four percent

of Durham Latinos and 14% of Latinos in the national sample felt they had been treated with disrespect because of their English-language ability ($P < 0.01$).

Multivariable Analysis

We performed multivariable analyses to determine whether racial/ethnic differences regarding perceptions of racism in the four social institutions held after adjusting for age, sex, income, education level, and marital and health insurance status. The magnitude of the adjusted differences in perceptions of racism was comparable to that found in the unadjusted analyses (see Tables 3 and 4).

Table 3.
Multivariable Analysis—Durham Sample: Racism as Major Problem in Social Institutions

Characteristic	Education RR (95% CI)	Workplace RR (95% CI)	Housing RR (95% CI)	Healthcare RR (95% CI)
Race/ethnicity				
White	1.00	1.00	1.00	1.00
Black	1.93 (1.51-2.37)	3.30 (2.51-4.14)	2.23 (1.75-2.73)	1.90 (1.36-2.56)
Latino	2.27 (1.65-2.88)	3.30 (2.25-4.44)	2.05 (1.43-2.73)	3.02 (2.07-4.05)
Age group				
18 to 29 years	1.00	1.00	1.00	1.00
30 to 39 years	1.21 (0.86-1.60)	1.02 (0.70-1.41)	1.09 (0.77-1.47)	1.27 (0.83-1.84)
40 to 49 years	1.03 (0.71-1.43)	0.79 (0.51-1.15)	0.96 (0.65-1.33)	1.18 (0.75-1.77)
50 to 98 years	0.97 (0.68-1.32)	0.75 (0.49-1.09)	0.81 (0.55-1.14)	1.01 (0.63-1.53)
Education level				
No college	1.00	1.00	1.00	1.00
At least some college	1.45 (1.12-1.81)	1.42 (1.05-1.85)	1.44 (1.09-1.82)	1.36 (1.00-1.79)
Sex				
Female	1.00	1.00	1.00	1.00
Male	0.82 (0.63-1.04)	0.94 (0.70-1.24)	0.91 (0.70-1.15)	0.83 (0.60-1.12)
Household income				
Low income	1.00	1.00	1.00	1.00
Middle income	0.77 (0.53-1.05)	0.80 (0.55-1.12)	0.69 (0.47-0.96)	0.80 (0.55-1.13)
High income	1.06 (0.77-1.39)	0.82 (0.56-1.13)	0.82 (0.57-1.12)	0.85 (0.58-1.21)
Don't know/refused	0.97 (0.43-1.74)	0.22 (0.06-0.71)	0.27 (0.09-0.69)	0.29 (0.09-0.82)
Health insurance status				
Private insurance	1.00	1.00	1.00	1.00
Medicare	1.06 (0.53-1.77)	1.19 (0.56-2.06)	1.43 (0.84-2.14)	1.33 (0.62-2.41)
Other insurance	0.88 (0.44-1.50)	0.98 (0.46-1.78)	0.47 (0.19-1.01)	1.05 (0.43-2.13)
No insurance	1.04 (0.74-1.40)	0.90 (0.61-1.28)	0.97 (0.68-1.33)	1.17 (0.80-1.66)
Marital status				
Not married	1.00	1.00	1.00	1.00
Married	0.94 (0.73-1.19)	1.01 (0.75-1.32)	1.06 (0.81-1.34)	1.03 (0.76-1.37)

RR indicates relative risk; and CI indicates confidence interval.

Discussion

Our goal was to compare the findings of a national survey of perceptions of racial/ethnic discrimination in healthcare to those of a community survey, with a special emphasis on the healthcare experiences and perceptions of newly immigrated Latinos.

Although the demographic characteristics of the samples were quite different, perceptions of racial/ethnic bias among Latinos in the national and Durham samples were similar. However, we found substantial differences in attitudes about health insurance and English-language ability on one's ability to receive medical care. Durham Latinos were significantly more likely than Latinos in the national sample to report that Latinos were worse off than whites in terms of having health insurance, and Durham Latinos were more likely to feel they

had been treated with disrespect by healthcare providers because of their English-language ability. Also, Durham Latinos were more likely to believe that racism was a major problem in healthcare.

One possible explanation for our findings is that a greater percentage of Latinos in Durham, compared to Latinos in the national sample, were born outside the United States (95% vs 49%). Research has shown that more acculturated Latinos have higher rates of insurance coverage and access to care.^{29,34} The Durham Latino population may be less assimilated than Latinos in the national sample and may not be as fluent with the English language. Latinos who have lived in the United States for longer periods might speak English better than recent immigrants and may be more likely to have acquired health insurance. A decrease in language barriers and greater access to health insurance may alleviate some of the negative perceptions

Table 4.
Multivariable Analysis—National Sample: Racism as Major Problem in Social Institutions

Characteristic	Education RR (95% CI)	Workplace RR (95% CI)	Housing RR (95% CI)	Healthcare RR (95% CI)
Race/ethnicity				
White	1.00	1.00	1.00	1.00
Black	1.80 (1.54-2.07)	2.74 (2.39-3.08)	1.93 (1.69-2.15)	2.14 (1.71-2.60)
Latino	1.47 (1.18-1.79)	1.82 (1.44-2.23)	1.39 (1.13-1.67)	1.78 (1.34-2.30)
Age group				
18 to 29 years	1.00	1.00	1.00	1.00
30 to 39 years	0.92 (0.68-1.18)	1.21 (0.89-1.57)	1.18 (0.91-1.47)	1.52 (1.03-2.14)
40 to 49 years	0.91 (0.66-1.18)	1.01 (0.74-1.36)	1.01 (0.76-1.29)	1.39 (0.93-1.98)
50 to 98 years	0.77 (0.58-1.01)	0.63 (0.45-0.88)	0.83 (0.62-1.08)	1.25 (0.86-1.77)
Education level				
No college	1.00	1.00	1.00	1.00
At least some college	1.34 (1.07-1.63)	1.02 (0.79-1.29)	1.41 (1.16-1.68)	1.05 (0.78-1.39)
Sex				
Female	1.00	1.00	1.00	1.00
Male	0.82 (0.66-1.01)	0.72 (0.56-0.90)	0.78 (0.63-0.95)	0.79 (0.60-1.03)
Household income				
Low income	1.00	1.00	1.00	1.00
Middle income	1.17 (0.89-1.48)	1.13 (0.85-1.45)	1.17 (0.90-1.45)	1.08 (0.76-1.49)
High income	1.15 (0.86-1.48)	1.09 (0.81-1.40)	1.18 (0.89-1.49)	0.98 (0.65-1.41)
Don't know/refused	0.73 (0.41-1.19)	0.75 (0.39-1.27)	0.73 (0.42-1.15)	1.19 (0.62-2.02)
Health insurance status				
Private insurance	1.00	1.00	1.00	1.00
Medicare	0.80 (0.54-1.16)	1.05 (0.72-1.44)	1.07 (0.77-1.38)	1.01 (0.62-1.56)
Other insurance	1.41 (0.96-1.75)	1.47 (0.99-1.92)	1.37 (1.00-1.67)	1.71 (1.07-2.42)
No insurance	1.27 (0.96-1.53)	1.09 (0.80-1.43)	1.17 (0.90-1.41)	1.19 (0.81-1.67)
Marital status				
Not married	1.00	1.00	1.00	1.00
Married	0.79 (0.62-0.97)	0.96 (0.76-1.20)	0.75 (0.60-0.93)	1.03 (0.78-1.34)

RR indicates relative risk; and CI indicates confidence interval.

that Latinos have of the healthcare system. Furthermore, the influx of Latino immigrants into Durham County is a recent phenomenon, and the local healthcare system may still be building up the infrastructure needed for this population. Nevertheless, Durham Latinos face considerable challenges in the healthcare system, and interventions to address their concerns should be developed.

Although black respondents in the Durham sample were less likely than those in the national sample to view racism as a major problem in education, the workplace, and housing, there was no difference between the national and community samples with respect to perceived racism in healthcare. One striking difference between national and community samples of black respondents concerns personal experiences with being treated unfairly. Compared to the national sample, twice as many blacks in the Durham sample felt that a healthcare provider had

treated them with disrespect because of their health insurance status. This may be attributable to the sources of insurance in the two samples: Although equal proportions of black respondents in both samples reported having health insurance, 16% of Durham blacks reported Medicaid as their primary source of insurance, compared to 8% of blacks in the national sample. We conducted a post hoc analysis to address this finding and found that Durham blacks with Medicaid had similar complaints about disrespect as those who reported being uninsured. Respondents with Medicaid may face greater challenges in accessing healthcare than do respondents with other types of insurance.

Compared to the national sample, white respondents in Durham reported a greater understanding of the lower quality of care and poorer health outcomes experienced by blacks and Latinos. These results may confirm the presence of barriers or

may reflect a greater awareness among whites living in the multiracial community of Durham County. Black residents of Durham County make up 39.5% of the population, compared to 12.3% nationwide.¹⁶ As a result, Durham whites may be more attuned to racial/ethnic differences and perceptions than their national counterparts.

A strength of this study was our ability to partner with community groups. Specifically, we collaborated with a grassroots organization that provides services to Latino residents, a community organization dedicated to promoting effective approaches to removing barriers to healthcare, and researchers from a local historically black university. The involvement of these groups ensured that our assessment addressed problems of interest to the local community.

Our study has several limitations. First, our survey method excluded people who did not have telephones, so persons of very low socioeconomic status may not have been able to participate. Also, the phone numbers used in the survey did not include mobile phone numbers, perhaps further contributing to sample bias. The low response rate for both the Durham and national surveys increases the likelihood that those who responded differ from those who did not. While our survey weights attempt to correct for nonresponse bias, this correction was limited to key demographic variables. However, for both limitations, it is difficult to estimate the magnitude of the potential bias. Moreover, the KFF survey was conducted in 1999, whereas the Durham study was conducted in 2002. Given the age of the KFF data, there is the possibility of a temporal bias.

In summary, we found significant variation in the experiences and perceptions of racism in healthcare between national and community cohorts. These differences are especially important at the community level for setting public policy priorities and

informing decision makers about issues of interest to the community. For example, according to Census 2000 data, 35% of black Durham County residents report having at least a college degree, compared to 17% statewide; and 23% of black Durham residents have annual incomes less than \$20,000, compared to 30% statewide.^{16,35} These data illustrate that there can be regional variation among state constituents and underscores the importance of conducting local needs assessments.

Furthermore, our findings regarding the perceptions of Durham Latinos could generalize to the experiences of other rapidly growing, newly immigrated Latino communities. Health concerns in these communities are understudied, and our findings provide preliminary data for researchers and community workers seeking to better understand this population. Finally, our findings show that racial/ethnic minorities perceive racism to be a major problem across four major social institutions after adjusting for several factors. Interventions that address the barriers to care identified in both the community and national surveys could be effective in reducing health disparities and improving the health of minority patients. **NCMedJ**

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