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Perceived Racial Discrimination in Health Care: A Comparison of Veterans Affairs and Other Patients

Leslie R. M. Hausmann, PhD, **Kwonho Jeong, BA**, **James E. Bost, PhD**, **Nancy R. Kressin, PhD**, and **Said A. Ibrahim, MD, MPH**
Leslie R. M. Hausmann and Said A. Ibrahim are with the Center for Health Equity Research and Promotion, VA Pittsburgh Healthcare System, Pittsburgh, PA. Said A. Ibrahim is also with the Division of General Internal Medicine, Department of Medicine, University of Pittsburgh School of Medicine, Pittsburgh. Kwonho Jeong and James E. Bost are with the Center for Research on Health Care Data Center, University of Pittsburgh, Pittsburgh. Nancy R. Kressin is with the Center for Health Quality, Outcomes and Economic Research, Boston VA Healthcare System, Boston, MA, and the Section of General Internal Medicine, Boston University School of Medicine, Boston.

Abstract

Objectives—We compared rates of perceived racial discrimination in health care settings for veteran and nonveteran patients and for veterans who used the Veterans Affairs health care system and those who did not.

Methods—Data were drawn from the 2004 Behavioral Risk Factor Surveillance System. We used logistic regression to examine whether perceived racial discrimination in health care was associated with veteran status or use of Veterans Affairs health care, after adjusting for patient characteristics.

Results—In this sample of 35 902 people, rates of perceived discrimination were equal for veterans and nonveterans (3.4% and 3.5%, respectively; crude odds ratio [OR]=1.00; 95% confidence interval [CI]=0.77, 1.28; adjusted OR=0.92; 95% CI=0.66, 1.28). Among veterans (n= 3420), perceived discrimination was more prevalent among patients who used Veterans Affairs facilities than among those who did not (5.4% vs 2.7%; OR=2.08; 95% CI=1.04, 4.18). However, this difference was not significant after adjustment for patient characteristics (OR=1.30; 95% CI=0.54, 3.13).

Conclusions—Perceived racial discrimination in health care was equally prevalent among veterans and nonveterans and among veterans who used the Veterans Affairs health care system and those who did not.

Amidst national efforts to understand and eliminate pervasive racial and ethnic health disparities,[1,2] research has documented the deleterious effects of perceived racial or ethnic

Requests for reprints should be sent to: Leslie R. M. Hausmann, VA Pittsburgh Healthcare System, 7180 Highland Dr (151C-H), Pittsburgh, PA 15206−1206 (e-mail: leslie.hausmann@gmail.com)..

Contributors

L. R. M. Hausmann originated the study, played a key role in implementing the study and writing the article, and participated in data analysis and interpretation. K. Jeong completed the analyses and assisted with interpretation of the findings. J. E. Bost assisted with data analysis and interpretation. N. R. Kressin contributed to interpreting the findings. S. A. Ibrahim contributed to designing the study and interpreting the findings. All authors helped to conceptualize ideas and review drafts of the article.

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Human Participant Protection

This study was approved by the VA Pittsburgh Healthcare System institutional review board.

discrimination on the health of patients. There is strong and consistent evidence that patients who perceive racial or ethnic discrimination are at greater risk for poor health, as defined by a host of health outcomes (e.g., mortality, depression, self-assessed health status) and health-related behaviors (e.g., smoking, substance abuse).[1-7] Moreover, racial or ethnic discrimination that occurs specifically within health care settings is associated with poorer health status, lower patient satisfaction with care, and, in some cases, less health care utilization.[3,8-15]

To support the development of targeted interventions to reduce instances of discrimination and minimize the negative consequences of perceived discrimination for those most at risk, it is necessary to identify vulnerable patient populations or health care settings in which patients are more likely to perceive discrimination. A higher prevalence of perceived racial discrimination in health care settings has already been found in some patient populations, such as racial/ethnic minorities and those who have limited economic resources.[3,12,16-19]

We examined rates of perceived discrimination for another patient population: military veterans. Veterans are a minority population (about 10% of US adults[20]) with unique health care needs. Not only do those serving in the military face substantial physical and psychological challenges that put their health at risk, but those who have served also become part of a culture of veterans that can shape the way they interact with the health care system.[21-23] One way to gauge whether the health care system adequately adapts to the needs of this patient population is to compare reports of perceived discrimination in health care among veterans and nonveterans.

We also compared the prevalence of perceived racial discrimination in health care among veterans who received health care from the Veterans Affairs (VA) health care system with veterans who received care outside of this system. Unique features of the VA health care system make it an interesting setting in which to examine rates of perceived discrimination. The VA patient population includes a disproportionate number of patients who belong to racial and socioeconomic groups that are at increased risk of experiencing discrimination.[24,25] This might suggest that perceived racial discrimination would be more prevalent among VA patients than among others. However, the VA has undertaken substantial efforts in recent years to improve its delivery of health care, including addressing potential racial/ethnic disparities in care.[26-28] These changes have yielded extraordinary improvements across a variety of quality indicators,[29] making the VA a model health care system both nationally and internationally.[30-32] These developments might suggest that patients in the VA health care system would be less likely than would other patients to perceive racial discrimination. We explored potential differences in perceived racial discrimination among VA and other patient populations with data from a national survey.

METHODS

We used data from the Behavioral Risk Factor Surveillance System (BRFSS), a national telephone survey conducted annually to monitor health conditions and risk behaviors of US adults.[33] It uses state-level sampling plans and data weights to obtain a sample that represents the population of households with telephones within each state. Complete BRFSS data files are publicly available on the BRFSS Web site.[33] We analyzed 2004 BRFSS data from the District of Columbia and states (Arkansas, Colorado, Delaware, Mississippi, Rhode Island, South Carolina, and Wisconsin) that administered the optional Reactions to Race module, which included a question about whether respondents perceived racial discrimination while seeking health care in the past 12 months.

Measures

The outcome of interest was perceived racial discrimination in health care, which was assessed with the following item: "Within the past 12 months when seeking health care, do you feel your experiences were worse than, the same as, or better than for people of other races?" Possible responses were worse than other races; the same as other races; better than other races; worse than some races, better than others; and only encountered people of the same race. We excluded the latter 2 responses from our analyses because relatively few people chose these responses (0.3% each) and they did not unambiguously indicate the presence or absence of discrimination. "Worse than other races" responses were coded as having experienced discrimination. Responses of "the same as other races" and "better than other races" were coded as not having experienced discrimination.

The primary predictors were veteran status and whether veteran respondents used VA medical facilities in the past12 months. Veteran status was assessed with the yes or no item, "Have you ever served on active duty in the United States Armed Forces, either in the regular military or in a National Guard or military reserve unit?" Respondents who answered yes were asked whether they were currently on active duty or in a National Guard or reserve unit, retired from military service, medically discharged from military service, or discharged from military service. To assess VA health care utilization, veterans were asked, "In the last 12 months have you received some or all of your health care from VA facilities?" Possible answers were yes, all; yes, some; and no VA health care received. Analyses of VA health care utilization included the subsample of veteran patients who reported receiving all or none of their medical care from VA facilities; those who received some care from the VA (n=422) were excluded because we could not determine whether health care discrimination reported by these patients occurred in VA or non-VA settings. Respondents who were on active duty or in a National Guard or reserve unit were also excluded from these analyses because they were not eligible to receive health care at VA medical facilities.

The following patient variables served as covariates in multivariable models: self-reported racial/ethnic group, racial salience (how often respondents thought about their race), gender, age, annual household income, highest educational attainment, health care coverage, affordability of medical care, health status, and state of residence. Race/ethnicity was categorized as White, African American, Hispanic, other (Asian, Native Hawaiian, Pacific Islander, American Indian, or Alaska Native), or multiple (more than 1 racial/ethnic group). Other and multiple racial/ethnic groups were excluded from the analyses because of the relatively small size of these groups (3.2% and 1.4% of respondents, respectively) and because their heterogeneity made drawing conclusions difficult.

Racial salience was included because it has been shown to be positively associated with perceptions of racial discrimination.[3] It was assessed by the item, "How often do you think about your race?" Possible responses were never, once a year, once a month, once a week, once a day, once an hour, and constantly. Responses were collapsed into 3 categories: once a month or less, once a week, and once a day or more. Health care coverage was assessed with the yes or no item, "Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?" Affordability of medical care was assessed with the yes or no item, "Was there a time in the past 12 months when you needed to see a doctor but could not because of the cost?" Self-reported health status was assessed with the item, "Would you say that in general your health is excellent, very good, good, fair, or poor?" Responses were dichotomized into excellent, very good, or good versus fair or poor.

Statistical Analyses

We summarized respondent characteristics for veterans and nonveterans and compared them using the χ^2 test. We used logistic regression models to estimate the crude association between veteran status and the prevalence of perceived racial discrimination, and to estimate the association after adjusting for respondent characteristics.

We conducted similar analyses on the subsample of veteran respondents, with VA health care utilization as the primary predictor. Specifically, we compared respondent characteristics for those who used VA medical facilities with those who did not. We then used logistic regression models to estimate the crude and adjusted associations between VA utilization and perceived racial discrimination.

To explore whether the associations between veteran status or VA utilization and perceived racial discrimination varied across racial/ethnic groups, we ran additional models to test for interactions between race/ethnicity and veteran status, as well as between race/ethnicity and VA utilization. These interactions were not significant and are not reported here.

State was included as a control variable in all adjusted models. In all analyses, we incorporated the BRFSS weighting and design variables into the models with Stata/IC version 10.0 for Windows (StataCorp LP, College Station, TX).

RESULTS

The study sample included 35 902 respondents, who represented 15 865 750 people when data were weighted to reflect state populations. Veterans and nonveterans differed significantly ($P<.001$) on almost all background characteristics (Table 1). For example, veterans were more likely than were nonveterans to be White (84.5% versus 79.3%) and male (93.1% versus 40.6%) and to have health care coverage (90.8% versus 84.1%). Veterans were also significantly older: 32.5% of veterans and 13.5% of nonveterans were older than 65 years.

Analyses comparing veteran VA health care users and nonusers included a subsample of 3420 respondents, who represented 1 547 552 people when data weights were applied (Table 2). VA users and nonusers differed significantly ($P<.04$) on the majority of background characteristics. VA users were more likely than were nonusers to be African American (22.9% versus 10.0%), Hispanic (3.9% versus 2.2%), and middle aged (23.4% versus 18.4% were aged 45−54 years, and 30.9% versus 24.8% were aged 55−64 years). VA users also differed significantly from nonusers on several variables indicative of socioeconomic status. VA users had lower incomes than did nonusers (20.4% versus 4.9% had annual incomes below $15 000), were less educated (11.6% versus 5.7% did not finish high school), were less likely to have health care coverage (81.9% versus 91.5%), and were more likely to report having to forgo medical care because of cost (12.0% versus 8.6%). VA users were also more likely than were nonusers to report fair or poor health status (37.8% versus 16.1%).

Perceived racial discrimination in health care was reported by 3.4% of veterans and 3.5% of nonveterans. This difference was not statistically significant in an unadjusted analysis (odds ratio [OR]=1.00; 95% confidence interval [CI]=0.77, 1.28) or in a multivariable model that adjusted for respondent characteristics (OR=0.92; 95% CI=0.66, 1.28; Table 3). In the adjusted model, higher odds of perceived discrimination were significantly associated with African American race, greater racial salience, male gender, younger age, an annual income of less than $15 000, having a high school diploma, having to forgo medical care because of cost, and fair or poor health status (Table 3).

In the veterans subsample, reports of perceived racial discrimination in health care were significantly more common among VA users than nonusers (5.4% versus 2.7%; $P<.03$). In a model that did not take into account additional respondent characteristics, veterans who received health care from the VA were 2.08 (95% CI=1.04, 4.18) times as likely to report perceived racial discrimination as veterans who received health care from non-VA facilities (Table 4). After we controlled for respondent characteristics, however, the likelihood of reporting perceived discrimination was not significantly different for VA users and nonusers (OR=1.30; 95% CI=0.54, 3.13). In the adjusted analysis, higher odds of perceived discrimination were significantly associated with African American race, greater racial salience (thinking about race once a day or more), age (25−34 years), an annual income of less than $15 000, and fair or poor health status (Table 4).

DISCUSSION

We used data from a national survey to examine whether rates of perceived racial discrimination in health care varied across different patient populations and health care settings. Specifically, we compared the prevalence of perceived discrimination among veterans and nonveterans and among veterans who received care in VA and non-VA health care systems. We found that rates of perceived racial discrimination in health care were low overall and did not differ for veterans and nonveterans. To our knowledge, this is the first study to compare rates of perceived racial discrimination in health care for veterans and nonveterans. Our findings suggest that, despite the unique experiences and health care needs of veterans, those who have served in the military are not more likely to perceive racial discrimination in health care settings.

We also found that, in the subsample of veterans who were eligible to receive health care from VA medical facilities, veterans who received all of their care in the VA system were twice as likely to report perceptions of racial discrimination in the health care setting than were veterans who received their care outside of the VA system. This difference, however, was eliminated after we controlled for differences in patient characteristics, such as race, indicators of socioeconomic status, access to health care, and health status.

Our findings are consistent with 2 previous studies that found no differences in rates of perceived racial discrimination in health care between VA users and nonusers.[13,34] The issue of perceived racial discrimination among veterans received national attention when a report was released in 2007 indicating that more than 50% of African American veterans could recall a situation in which they experienced discrimination wherever they received health care services, in either VA or non-VA facilities.[34] Although the overall rate of perceived discrimination documented in that study was much higher than in our study, that report found no differences in perceived discrimination between veterans who received care at VA facilities and those who did not. The earlier report was greatly limited by its reliance on a small convenience sample of 141 African American veterans within a single geographic location.

Another study examined the prevalence of racial discrimination in health care among patients drawn from university, community, and VA clinics.[13] Although examining the prevalence of discrimination across different health care settings was not the focus of the study, the authors reported that the prevalence of perceived racial discrimination was not significantly different among those recruited from VA clinics than among those from university or community clinics. That study was limited by its inclusion of patients from only 3 VA facilities and 2 non-VA health care systems; it also did not account for the possibility that patients received care from more than 1 health care system.

Our study, which used data from a national survey and included respondents from several states, provided more robust evidence that the prevalence of racial discrimination in health care settings does not differ between veterans and nonveterans or between patients who receive care at VA facilities and those who do not, once differences in characteristics of VA users and nonusers are taken into account. Although we found significantly higher odds of perceived discrimination among VA users than among nonusers in unadjusted analyses, this difference was likely attributable to the higher prevalence of patient characteristics that put patients at higher risk of discrimination (e.g., minority race and lower socioeconomic status) among VA users rather than to systemic differences between VA and non-VA health care settings that increased the likelihood of discriminatory experiences. The VA should keep the special nature of its patient population in mind when seeking to promote equity and fairness in the health care it provides for veterans.

Our study had several limitations. Because only a subset of states administered the Reactions to Race module that we analyzed, our sample was not representative of the entire US population. Furthermore, although the study sample was representative of the states from which respondents were drawn, it was not representative of veterans within those states. The findings may therefore not be generalizable to the entire population of US veterans, nor was it possible to assess potential nationwide geographic differences in perceived discrimination with the available BRFSS data.

Another limitation was that the BRFSS survey only assessed perceived racial discrimination in health care. It is possible that other types of perceived discrimination are more common in VA than in non-VA settings. For example, 1 study found that gender discrimination in health care was more commonly reported among women recruited from VA facilities than among those recruited from non-VA facilities.[13] It is also possible that veterans who receive care in non-VA settings may be more likely to perceive discrimination related to their veteran status than are those who receive care in the VA, but we could not examine this possibility within this data set.

Finally, our focus on discrimination in VA and non-VA settings represented a crude attempt to examine whether discrimination varied across different types of health care settings; information that would allow a more in-depth exploration of features of specific settings or facilities in which discrimination was perceived most often was not available. Future studies should examine whether rates of perceived discrimination are associated with additional features of health care settings, such as location, size, or the proportion of racial/ethnic minority or female providers.

Our study used the best available data to explore whether rates of perceived racial discrimination in health care varied among veterans and nonveterans and among veterans treated in VA and non-VA settings. Our findings of significant differences in unadjusted rates of perceived discrimination between veterans treated in VA settings and those treated in other settings suggest that the VA serves a special patient population that may be more vulnerable to experiences of discrimination. However, rates of perceived racial discrimination among veterans treated in VA and non-VA settings were similar once differences in characteristics of the patients served in these settings were taken into account. This suggests that the VA is doing as well as other health care providers in the way patients perceive they are treated while obtaining health care.

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TABLE 1

Sample Characteristics of Veterans and Nonveterans: Behavioral Risk Factor Surveillance System, 2004

	Veterans, %	Nonveterans, %	*P*
Race/ethnicity			<.001
White	84.5	79.3	
Hispanic	3.1	6.4	
African American	12.4	14.3	
Racial salience[a]			.45
≤1/mo	82.3	81.8	
1/wk	7.1	6.8	
≥1/d	10.5	11.4	
Gender			<.001
Women	6.9	59.4	
Men	93.1	40.6	
Age, y			<.001
18–24	4.5	15.4	
25–34	9.3	19.4	
35–44	13.9	21.2	
45–54	17.2	19.2	
55–64	22.6	11.3	
≥65	32.5	13.5	
Income, $			<.001
< 15 000	6.2	11.3	
15 000–24 999	16.1	18.2	
25 000–34 999	15.5	15.0	
35 000–49 999	20.6	17.1	
> 50 000	41.6	38.5	
Education			<.001
< High school	6.2	11.6	
High school graduate	31.2	32.6	
Some college	29.1	25.6	
College degree	33.5	30.2	
Health care coverage			<.001
Yes	90.8	84.1	
No	9.2	15.9	
Cost of medical care prohibitive in past 12 mo			<.001
No	91.3	86.0	
Yes	8.7	14.0	
Health status			<.001
Excellent, very good, or good	82.1	85.0	
Fair or poor	17.9	15.0	
State			<.001
Arkansas	13.0	12.0	
Colorado	20.3	20.3	
Delaware	4.1	3.7	
District of Columbia	2.0	2.8	
Mississippi	11.4	12.9	
Rhode Island	4.5	5.1	
District of Columbia	22.4	18.2	
Wisconsin	22.3	25.0	

Note. Percentages were based on weighted data. For veterans, unweighted n = 5 233; weighted n = 2 363 540. For nonveterans, unweighted n = 30 669; weighted n = 13 502 210.

[a]Defined as frequency of thoughts about one's own race.

TABLE 2

Sample Characteristics of Veterans Who Used the Veterans Affairs (VA) Health Care System and Veterans Who Did Not: Behavioral Risk Factor Surveillance System, 2004

	VA Users, %	VA Nonusers, %	*P*
Race/ethnicity			<.001
White	73.2	87.8	
Hispanic	3.9	2.2	
African American	22.9	10.0	
Racial salience[a]			.12
≤1/mo	79.6	83.5	
1/wk	6.3	7.0	
≥1/d	14.1	9.5	
Gender			.85
Women	6.2	6.4	
Men	93.8	93.6	
Age, y			.02
18–24	2.6	1.6	
25–34	4.7	7.8	
35–44	10.3	13.8	
45–54	23.4	18.4	
55–64	30.9	24.8	
≥65	28.2	33.6	
Income, $			<.001
< 15 000	20.4	4.9	
15 000–24 999	28.5	14.2	
25 000–34 999	20.9	14.2	
35 000–49 999	14.4	20.6	
> 50 000	15.8	46.2	
Education			<.001
< High school	11.6	5.7	
High school graduate	36.1	30.4	
Some college	33.3	27.9	
College degree	19.0	36.1	
Health care coverage			<.001
Yes	81.9	91.5	
No	18.1	8.5	
Cost of medical care prohibitive in past 12 mo			.04
No	88.0	91.4	
Yes	12.0	8.6	
Health status			<.001
Excellent, very good, or good	62.2	83.9	
Fair or poor	37.8	16.1	
State			<.001
Arkansas	18.2	11.8	
Colorado	14.0	21.5	
Delaware	3.5	4.4	
District of Columbia	3.4	1.7	
Mississippi	15.9	10.4	
Rhode Island	4.2	4.5	
South Carolina	26.8	21.3	
Wisconsin	14.0	24.5	

Note. Percentages were based on weighted data. For VA users, unweighted n = 362; weighted n = 140 672. For VA nonusers, unweighted n = 3 058; weighted n = 1 406 880.

[a]Defined as frequeny of thoughts about one's own race.

TABLE 3

Crude and Adjusted Odds Ratios (ORs) of Perceived Racial Discrimination in Health Care Among Veterans and Nonveterans: Behavioral Risk Factor Surveillance System, 2004

	Reported Discrimination, %	Crude OR[a] (95% CI)	Adjusted OR[b] (95% CI)
Veteran status			
Veteran		3.41.00 (0.77, 1.28)	0.92 (0.66, 1.28)
Nonveteran (Ref)		3.51.00	1.00
Race/ethnicity			
White (Ref)		2.01.00	1.00
Hispanic		5.22.73 (1.88, 3.98)	1.11 (0.66, 1.85)
African American		10.96.02 (5.03, 7.21)	3.27 (2.50, 4.28)
Racial salience[c]			
≤Once a mo (Ref)		2.41.00	1.00
Once a wk		4.21.83 (1.36, 2.47)	1.48 (1.03, 2.12)
≥Once a d		10.64.93 (4.06, 5.97)	2.55 (1.96, 3.32)
Gender			
Women (Ref)		3.11.00	1.00
Men		3.81.22 (1.03, 1.44)	1.34 (1.09, 1.66)
Age, y			
18−24		3.72.30 (1.59, 3.31)	1.69 (1.04 2.75)
25−34		4.12.55 (1.86, 3.50)	2.06 (1.35, 3.14)
35−44		3.42.08 (1.54, 2.82)	1.81 (1.22, 2.70)
45−54		4.02.48 (1.84, 3.32)	2.03 (1.37, 3.01)
55−64		3.52.17 (1.59, 2.96)	1.97 (1.33, 2.93)
≥65 (Ref)		1.61.00	1.00
Income, $			
< 15 000		8.95.63 (4.30, 7.36)	1.80 (1.21, 2.69)
15 000−24 999		5.73.45 (2.64, 4.50)	1.40 (0.99, 1.98)
25 000−34 999		2.81.68 (1.23, 2.29)	1.01 (0.69, 1.46)
35 000−49 999		3.01.75 (1.28, 2.38)	1.16 (0.82, 1.63)
> 50 000 (Ref)		1.71.00	1.00
Education			
< High school		5.62.81 (2.13, 3.71)	1.12 (0.74, 1.70)
High school graduate		4.62.29 (1.83, 2.87)	1.53 (1.15, 2.03)
Some college		3.01.46 (1.13, 1.89)	0.99 (0.73, 1.35)
College degree (Ref)		2.11.00	1.00
Health care coverage			
Yes (Ref)		2.71.00	1.00
No		7.93.08 (2.56, 3.72)	1.18 (0.92, 1.51)
Cost of medical care prohibitive in past 12 mo			
No		2.16.32 (5.32, 7.52)	3.64 (2.86, 4.63)
Yes (Ref)		12.21.00	1.00
Health status			
Excellent, very good, or good (Ref)		2.81.00	1.00
Fair or poor		7.62.90 (2.45, 3.44)	1.76 (1.39, 2.24)

Note. CI = confidence interval.

[a] Unadjusted ORs reflect the bivariate associations between perceived discrimination and each variable (weighted n = 13 374 133).

[b] Adjusted ORs reflect the association between perceived discrimination and each variable, after adjustment for all the other variables. State was included as an additional covariate in the adjusted model (weighted n = 11 036 142).

[c] Defined as frequency of thoughts about one's own race.

TABLE 4

Crude and Adjusted Odds Ratios (ORs) of Perceived Racial Discrimination in Health Care Among Veterans Affairs (VA) Health Care System Users and Nonusers: Behavioral Risk Factor Surveillance System, 2004

	Reported Discrimination, %	Crude OR[a] (95% CI)	Adjusted OR[b] (95% CI)
VA health care utilization			
VA user		5.42.08 (1.04, 4.18)	1.30 (0.54, 3.13)
VA nonuser (Ref)		2.71.00	1.00
Race/ethnicity			
White (Ref)		1.61.00	1.00
Hispanic		3.01.93 (0.48, 7.73)	1.43 (0.25, 8.23)
African American		13.09.23 (5.26, 16.20)	4.33 (1.70, 11.0)
Racial salience[c]			
≤Once a mo (Ref)		2.01.00	1.00
Once a wk		4.12.11 (0.80, 5.56)	1.43 (0.30, 6.67)
≥Once a d		11.56.46 (3.67, 11.39)	2.57 (1.02, 6.49)
Gender			
Women (Ref)		3.11.00	1.00
Men		3.10.98 (0.42, 2.29)	2.10 (0.56, 7.90)
Age, y			
18–24		7.34.70 (0.59, 37.45)	
25–34		6.84.31 (1.69, 10.98)	4.21 (1.12, 15.9)
35–44		3.11.88 (0.85, 4.18)	1.81 (0.66, 4.96)
45–54		3.32.05 (1.02, 4.12)	1.90 (0.72, 4.99)
55–64		3.21.96 (1.03, 3.73)	1.93 (0.77, 4.85)
≥65 (Ref)		1.71.00	1.00
Income, $			
< 15 000		9.06.40 (2.77, 14.78)	3.55 (1.26, 10.0)
15 000–24 999		4.32.93 (1.32, 6.47)	1.33 (0.47, 3.76)
25 000–34 999		3.42.28 (1.00, 5.20)	1.81 (0.70, 4.68)
35 000–49 999		2.61.71 (0.72, 4.09)	1.21 (0.45, 3.25)
> 50 000 (Ref)		1.51.00	1.00
Education			
< High school		2.91.56 (0.55, 4.44)	0.83 (0.17, 3.96)
High school graduate		4.22.33 (1.22, 4.44)	1.83 (0.78, 4.29)
Some college		3.31.82 (0.91, 3.65)	1.26 (0.49, 3.24)
College degree (Ref)		1.91.00	1.00
Health care coverage			
Yes (Ref)		2.61.00	1.00
No		8.53.55 (1.79, 7.01)	0.85 (0.37, 1.93)
Cost of medical care prohibitive in past 12 mo			
No (Ref)		2.41.00	1.00
Yes		9.94.44 (2.47, 7.99)	1.82 (0.77, 4.33)
Health status			
Excellent, very good, or good (Ref)		2.41.00	1.00
Fair or poor		6.22.64 (1.61, 4.34)	1.66 (0.81, 3.38)

Note. CI = confidence interval. Ellipsis indicates too few respondents with complete data to estimate in adjusted model.

[a] Unadjusted ORs reflect the bivariate associations between perceived discrimination and each variable (weighted n = 1 727 967).

[b] Adjusted ORs reflect the association between perceived discrimination and each variable, after adjustment for all the other variables. State was included as an additional covariate in the adjusted model (weighted n = 1 293 909).

[c] Defined as frequency of thoughts about one's own race.