RESEARCH ARTICLE

PHYSICIAN BELIEFS CONCERNING STRUCTURAL AND INSTITUTIONAL RACISM IN HEALTH CARE

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KEYWORDS:

Beliefs

Bias

Disparities

Health Care

Institutional Racism

Race

ABSTRACT:

Perceived discrimination in medical settings remains prevalent within the U.S. health care system. However, the details of these experiences and their associations with perceived quality of care are not well understood. This study evaluates any potential difference in African Americans' systemic health care discrimination and Latinx perceived by African American and Latinx patients and physicians. The New England physician alumni from the University of New England College of Osteopathic Medicine were sent surveys. Two hundred fifty-one practicing physicians' responses to the 2018 study address their beliefs toward African Americans and Latinx' racism within the health care system. High scores indicate more significant perceived discrimination among these groups. Physicians have lower discriminatory belief scores across gender, patient racial distribution and specialty.

INTRODUCTION

Physicians from distinct racial minorities have the privilege of being highly educated professionals, often with power dynamics and societal respect. On the other hand, we are part of a system that provides unequal treatment to people of our same skin color and recognize there are significant perceived racial biases in the health care system. Populations in the U.S. that experience the greatest health disparities also suffer from negative cultural stereotypes, and implicit bias among physicians may impact clinical decision-making in ways that perpetuate health care disparities.[1-14]

The perception of racism in the health care system by African Americans and Latinx is not unfounded and contributes to empirically demonstrated racial disparities in health and health care in the U.S.[14] Structural issues act as real obstacles appropriate to care and contribute to the perceptions of racism that result in health care avoidance. Recent studies show that physicians continue to make decisions along racial lines and demonstrate acts of unconscious bias and microaggression.[15-19] These subconscious acts can inadvertently undermine African American and Latinx patients' comfort in their care.[20] Therefore, it is at this interface between patients and their providers where improvements in racial bias perception can occur. A 2011 study by Todd found that perspective-taking or actively contemplating others' psychological experiences can combat automatic expressions of racial biases.[21] In addition, a 2016 study demonstrated perspective-taking efficacy in reducing transphobia within its study cohort.[22] Empathic feelings contribute to pro-social behavior.[23] Therefore, a physician's ability to show empathy for the African American and Latinx experience in health care might indicate the potential to perform acts of unconscious bias.

In 1999, the Henry J. Kaiser Family Foundation surveyed 1,189 African Americans and 983 Latinx, which revealed significant perceived racial biases within the health care system.[22,23] Frederick M. Chen, MD, MPH, utilized this data to quantify the degree to which African Americans and Latinx perceived racism and correlated those perceptions with physician preference and satisfaction with care.[24,25] The degree of perceived racism was quantified into what was termed a "discriminatory belief score." Subsequent studies have found further evidence that perceived racial biases inform patient choices within health care and can result in negative health outcomes.[24,25] Perceived discrimination is antecedent to disparities in cardiovascular health in minorities and poor glycemic control in diabetic African Americans.[25,26] These outcomes and others may occur because perceived discrimination modifies behaviors by decreasing preventive health services contributing to poor medication adherence and influencing chronic engagement in unhealthy behaviors to cope with stress.[27-31] The Henry J. Kaiser Family Foundation survey findings may have some degree of validity today, as perceptions of racial discrimination in health care persist. Furthermore, that perception may continue to guide health care.[32-35]

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 Print ISSN: 1877-573X
DOI: 10.33181/13032

This current study aimed to ask whether physicians share the perspective of African Americans and Latinx about the degree of racial bias against them in the health care system. A physician's discriminatory belief scores could potentially identify physicians at high risk for committing acts of unconscious bias. Discriminatory belief scores could then become a tool for improving the physician/patient relationship, lessening the bias perceived by minority patient cohorts. We sought to meet these aims by utilizing the discriminatory belief scoring system derived by Chen.[23]

METHODS AND RESULTS

The initial hypothesis was that physicians believe less strongly that racial discrimination exists within the health care system than that thought by African American and Latinx patients. Therefore, physicians expect to have lower average discriminatory belief scores than African American and Latinx patients. Research is needed to understand racial and ethnic discrimination in the health care setting, which likely impacts health care perceptions and outcomes.

Chen *et al*. devised a formula to quantify discriminatory beliefs using the Henry J. Kaiser Family Foundation survey.[23] His team of authors independently identified survey items that they believed reflected patients' beliefs about racism. They identified nine survey items. Each item had been responded to by an African American or Latinx patient during the Kaiser Family Foundation survey using scaled Likert categories. These categories allowed for these items to be quantified and combined into a summated discriminatory belief scale. The items-chosen by the authors for their purposes-focused on various aspects of racism in health care, including unfair treatment, access to services, quality of care and cost.

The current study used the same nine items and Likert categories. However, we modified the survey's wording to assess physician perspectives on patient experience. The physician's views could be ascertained independently of one another to determine any differences in their own perceived discrimination. No question assesses specific patient-physician interactions or evaluates whether the physicians' practice knowingly or unknowingly discriminates against African American and Latinx patients. We instructed the physicians to assess their health care system experiences and their interaction with African Americans and Latinx patients. Table 1 shows the survey questions.

This study maintained the Kaiser Family Foundation's standards and Chen *et al*. by scaling with three or four Likert categories.[23] One item had respondents answer a binary yes or no. The raw scale score ranged from 9–30. The scores were then transformed by subtraction from the maximum score. This transformation allowed higher scale values to signify more significant racial discrimination of African American and Latinx patients by the health care system. The target cohort included physicians currently in active practice in New England. The alumni association from the University of New England College of Medicine (UNE-COM) distributed the survey to maintain their physician members' confidential email contacts. The doctors were faculty of the medical school, regional clinical sites and local medical practices. The organizations did not have permission to access the survey responses and, therefore, were anonymous. The design of the electronic study could be completed once by a given email address. An email with the survey link included a statement of consent. Physicians could either provide consent and complete the survey, decline consent and not complete the survey or ignore the link altogether. Consenting physicians received demographic and survey questions.

TABLE 1:

Survey items for calculating discriminatory scores

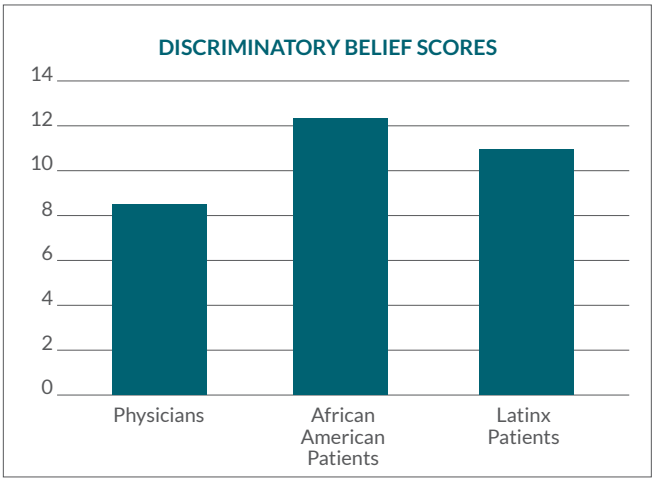
1. How often do you think our health care system treats people unfairly based on what their race or ethnic background is?
2. How often do you think a person's race or ethnic background affects whether they can get routine medical care when they need it?
3. How often do you think racism occurs when a patient and doctor are of different racial or ethnic backgrounds?
4. How often does racism occur if the patient and doctor are of the same racial or ethnic backgrounds?
5. Do you think most African Americans/Latinx receive the same quality of health care as whites?
6. Is racism a major problem in health care?
7. For the average African American/Latinx, how big a problem is being able to afford the cost of health insurance and medical care?
8. For the average African American/Latinx, how big a problem is having enough physicians and other health providers near where they live?
9. For the average African American/Latinx, how big a problem is having difficulty getting care because of their race or ethnic background?

These questions asked about the age, gender, race, ethnicity, medicine, specialty, level of training and average daily patient racial distribution in their current practices. Survey links remained open so physicians could complete them at a time and setting of their choosing. The survey was closed once we had 250 responses. Overall, the survey platform was open for 10 weeks, and 251 completed surveys were received. In addition, two declinations of consent and one survey were deemed invalid because the respondent was no longer in active practice. Comparisons were quantified using a one-way analysis of variance. A p-value of less than 0.05 is defined to be statistically significant.

The physicians demonstrated an average discriminatory belief score of 8.59. These were lower scores found for African American (12.4) and Latinx (11.0) patients in Chen *et al*'s 2005 study[23] (Table 2). We could not determine the significance of these scores in the absence of the raw data and standard deviations for African American and Latinx patients. No significant group within the physician cohort showed the same average discriminatory belief score as African American or Latinx patients. The one African American respondent in this physician cohort had a discriminatory belief score of 13.0. The four physicians who identified as Hispanic or Latinx had an average discriminatory belief score of 8.25. These scores were not statistically significant.

TABLE 2:

Discriminatory belief scores for physicians with those obtained for African American and Latinx patients



Significant differences in the mean discriminatory belief score were found based on gender, patient population and specialty (Table 3). Females (9.30) had higher discriminatory belief scores than males (7.78, $p<0.001$). Physicians with only white patients, mostly white patients, half white/half African American and/or Latinx patients and primarily African American and/or Latinx patients reported scores of 10.2, 8.76, 7.23 9.21, respectively ($p<0.01$). There were no physicians with only African American and/or Latinx patients. [The respondents' specialties were medical, surgical, both and neither. These specialties are compared in Table 3. Medical (8.68), Surgical (7.92) Both (5.25) and Neither (9.14), respectively ($p<0.05$)].

There were no significant differences in discriminatory belief scores based on age, level of training, race and ethnicity of the responding physician (Table 3). There was also no significant difference between physician discriminatory belief scores against African Americans (8.58) and Latinx (8.60). Therefore, the mean discriminatory belief scores are the combined perception of the African American and Latinx experience.

DISCUSSION

The findings of this study suggest that physicians believe that the health care system discriminates against African American and Latinx patients to a lesser degree (discriminatory belief score: 8.59) than do African American (12.4) and Latinx patients (11.0). This finding is consistent with the current hypothesis. This is the first study to quantify physician beliefs about the degree of systemic racism encountered by African American and Latinx patients in their utilization of health care. Even though we did not have a broad diversity among the doctors surveyed, the conclusions are still valid. Two hundred fifty doctors who are alumni from of UNE-COM responded to this survey. Many of these physicians practice in Maine, which is known to have a racial composition of 94.48% white, 1.34% African American and 2.19% of two or more races. The UNE-COM currently uses the survey questions and methods. Chen's surveyed a national sample of 3,884 telephone interviews with adults 18-years-old and older, including 1,479 whites, 1,189 African Americans and 983 Latinx. Research studies about patient discrimination and racism in our health care system continue to be published. Racism and discrimination in health care continue to be a big issue; what has changed is our awareness and our ability to address these issues.

The difference in belief scores could be due to a deficit in physicians' education about health care disparities. There may be an in-group bias preventing admissions of the fault within the health care system. Furthermore, automatic biases and microaggressions occur subconsciously, so there may be an inherent lack of awareness of biased interactions between physicians and minority patients.[21,27,36-45] Studies have attempted to address the presence of these social cognitions in physician care of patients.[46] To fight racism, we all need to identify our own implicit bias. Methods have been proposed to increase awareness and overcome racism and discrimination in health

TABLE 3:

Discriminatory belief scores of physician respondents

	DISRIMINATORY BELIEF SCORE					
AGE	(20–29) **9.13**	(30–39) **8.96**	(40–49) **8.03**	(50–59) **8.28**	(60–69) **9.16**	(70+) **7.6**
GENDER	F **9.30**	M **7.73**	Decline **5**			
RACE	African American **13**	American Indian **9.25**	Asian **9.57**	Other **6.8**	Caucasian **8.56**	
ETHNICITY	Non-Hispanic or Latinx **8.59**	Hispanic or Latinx **8.25**				
SPECIALTY*	Both **5.25**	Internal Medicine **8.68**	Surgical **7.92**	Neither **9.14**		
LEVEL OF TRAINING	Attending **8.46**	Fellow **8.08**	Resident **9.25**			
PATIENT RACE*	Caucasian **10.23**	Mostly Caucasian **8.76**	Half AA and LA **7.23**	Mostly AA/or LA **9.21**	Only AA and or LA **0**	

The specialties are designated 'Both' for interventional radiology or anesthesiology subspecialties. 'Internal Medicine' designation is defined for an internist, internal medicine subspecialty, pediatrics or pediatric subspecialty, emergency medicine or specialties with an internal medicine intern year as radiology or dermatology. A 'Surgical' designation is for a general surgeon or surgical subspecialty and 'Neither' is for family medicine or osteopathic manipulative medicine specialist. AA – African American, LA – Latinx. *statistically significant.

care.[46-50] The American Medical Association (AMA) has developed a Health Disparities Toolkit. This kit focuses on DVD interviews with physicians, nurses and patients on cultural competence and literacy topics. The integration of community health care workers on inter-professional teams is another promising strategy. Community health training for medical students, nurses, doctors and other community health workers improves our awareness. Whether the discriminatory belief scores we found relate to implicit biases remains to be seen.

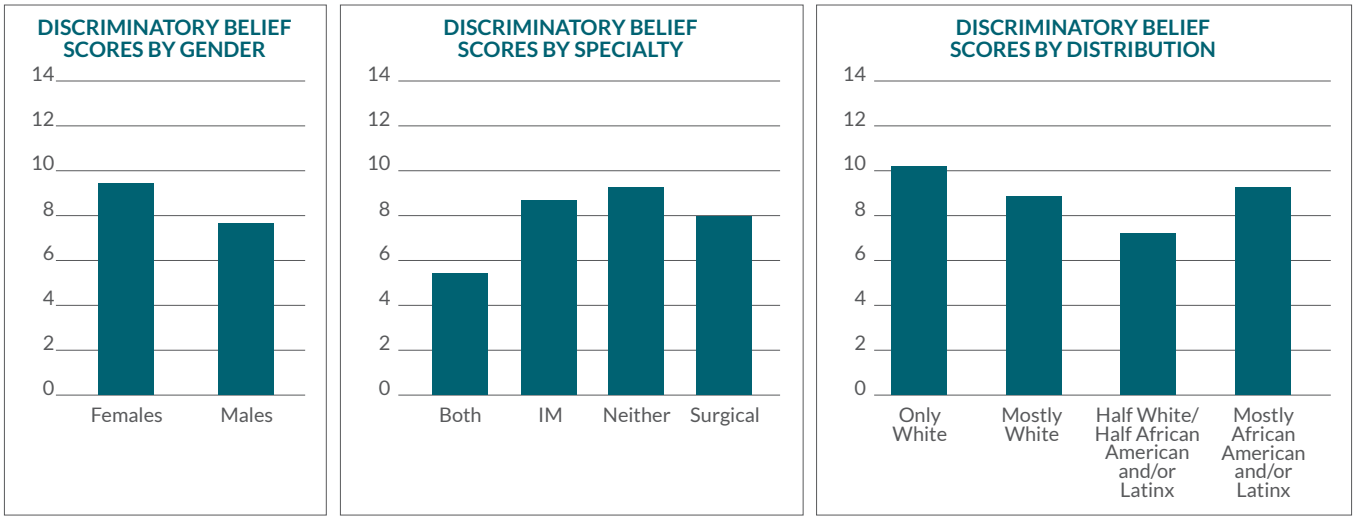
Physician demographics stratified discriminatory belief scores. Female physicians believe there is health care discrimination against African American and Latinx patients to a significantly greater degree than male physicians.[51] Studies that find a difference across genders in racial attitudes suggest that women have a more favorable opinion of minority groups, their experiences and policies designed to improve their general condition.[49,50] These findings and those of the current discriminatory belief scores may be influenced by gender socialization, wherein women are expected to be more compassionate toward others than men.[50] Women's awareness of their vulnerabilities to discrimination may contribute to our results. Studies demonstrate female physicians experience their share of discrimination throughout their medical training.[51,52] These scores suggest that perspective-taking to decrease automatic, unconscious biases may be a more straightforward exercise for women.[53] However, more research is necessary to verify this conclusion.

Physicians who exclusively saw white patients perceived more discrimination against African American and Latinx patients than those who saw mostly African American and Latinx patients.[30,42,44] In contrast, those whose average daily patient racial distribution was approximately half white, half African American and/or Latinx perceived less discrimination against these groups.[43,44] These findings are influenced by cognitive biases like group attribution error and the availability heuristic.[53,54,55] Physicians may have been strongly influenced by their personal experiences—or lack thereof—with these racial and ethnic groups in their practice rather than considering the broader trends. Those who saw exclusively white patients may have been more objective in assessing the African American and Latinx experience because they could answer without implicating themselves as potential racial bias sources, while those whose average daily patient racial distribution was approximately half white, half African American and/or Latinx saw African Americans and Latinx and presumed that they had equitable health care encounters as white patients. It is possible they then attributed this experience to these racial and ethnic groups at large. More research is needed to ascertain how physician-patient profile impacts discriminatory belief scores.

Specialities differ significantly in their discriminatory belief scores (Table 4). The discriminative belief scores were lower in interventional radiology and anesthesiology specialties. These doctors tend to have transient relationships with their patients. The lack of physician involvement in these patients' longitudinal care may consider their patients' socioeconomic status. The questionnaire instructed respondents to view the entire health care system; however, their personal experience may have heavily informed our participants' responses. Those in family medicine had a mean score of 9.14—the closest in value to African American and Latinx patients in our specialty groupings. Family medicine and primary care doctors spend a considerable amount of time developing positive relationships with their patients. Primary care doctors in rural and underserved communities establish long-term relationships with their patients. They provide comprehensive care to patients of all ages and genders throughout all stages of life.

TABLE 4:

Discriminatory belief scores based on gender, specialty and patient racial distribution



These graphs show statistical differences found based on gender. Significant differences ($p < 0.001$) between female and male physician scores, with females having a score of 9.30 (SD = 3.14) and males having a score of 7.78 (SD = 3.45) are shown.in the graphs. These graphs show statistical differences found based on physician specialty ($p < 0.005$) with scores of 8.68 (SD = 3.33), 7.92 (SD = 3.00), 5.25 (SD = 4.24) and 9.14 (SD = 3.26) and differences ($p < 0.01$) between physicians with varying patient populations: Discriminatory belief scores by patient populations shows white patients, mostly white patients, half white/half AA &/or LA, mostly AA &/or LA reported scores of 10.2 (SD = 3.06), 8.76 (SD = 3.30), 7.23 (SD = 3.37), 9.21 (SD = 3.41) respectively.

There are not as many doctors around in rural areas and certainly fewer specialties. Family medicine doctors do more than they would in an urban neighborhood because they have fewer colleagues to assist them. Patients with a high level of trust in their family doctor had the highest level of satisfaction. The question is whether family medicine doctors show less racism and discrimination to their patients. Many African Americans and Latinx perceive racism in the health care system and those who do are more likely to prefer a physician of their race or ethnicity. African Americans who have preferences are more often satisfied with their care when their physicians match their preferences.

CONCLUSION

Physicians have lower mean discriminatory belief scores than African American and Latinx patients. This finding may suggest that physicians struggle with perspective taking a behavior shown to lessen acts of automatic, unconscious racial bias. Further research is necessary to link discriminatory belief scores and actions of automatic, unconscious racial bias.

AUTHOR DISCLOSURE(S):

No relevant financial affiliations or conflicts of interest. If the authors used any personal details or images of patients or research subjects, written permission or consent from the patient has been obtained. This work was not supported by any outside funding.

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