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## Reducing Racial Health Care Disparities: A Social Psychological Analysis

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### Abstract

Large health disparities persist between Black and White Americans. The social psychology of intergroup relations suggests some solutions to health care disparities due to racial bias. Three paths can lead from racial bias to poorer health among Black Americans. First is the already well-documented physical and psychological toll of being a target of persistent discrimination. Second, implicit bias can affect physicians' perceptions and decisions, creating racial disparities in medical treatments, although evidence is mixed. The third path describes a less direct route: Physicians' implicit racial bias negatively affects communication and the patient-provider relationship, resulting in racial disparities in the outcomes of medical interactions. Strong evidence shows that physician implicit bias negatively affects Black patients' reactions to medical interactions, and there is good circumstantial evidence that these reactions affect health outcomes of the interactions. Solutions focused on the physician, the patient, and the health care delivery system; all agree that trying to ignore patients' race or to change physicians' implicit racial attitudes will not be effective and may actually be counterproductive. Instead, solutions can minimize the impact of racial bias on medical decisions and on patient-provider relationships.

### Keywords

health disparities; minority health; bias in health care; implicit racial bias; disparities in health care

### Introduction

Pervasive health disparities exist between White and Black Americans. Despite generally improving health and falling mortality rates in the United States, the health gap between White and Black Americans persists (National Center for Health Statistics [NCHS], 2012). Blacks' mortality rates are about 20% higher than those of Whites, resulting in a 4-year lower life expectancy (NCHS, 2012). This disparity is essentially the same as it was in 1950.

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Among men, racial disparities in mortality rates have actually *increased* over this time period. Blacks also suffer a disproportionate burden of illness and chronic disease (NCHS, 2012), with worse outcomes than Whites. For example, Black women are *less* likely to develop breast cancer than White women, but they are 40% *more* likely to die from this disease (Penner, Eggly, Griggs, Orom, & Underwood, 2012).

Health disparities involve multiple factors. Higher socioeconomic status (SES) generally predicts better health, but SES does not fully account for racial health disparities, which remain even at higher income levels (Williams, Mohammed, Leavell, & Collins, 2010). Also, population groups do differ in their susceptibility to certain conditions because of genetic or other biological factors that vary across groups, but these factors do not sufficiently explain current racial disparities in health. For example, Black men are much more likely than White men to develop prostate cancer, but the disparity in mortality is far greater than the difference in incidence.

Social, political, and economic processes that affect health directly (e.g., differential exposure to environmental toxins or to social stressors) and systematic differences in access to quality health care contribute to health disparities above and beyond biological factors (Braveman, 2012). However, even when the former factors are controlled and access is the same (e.g., as in the military), racial health disparities remain (Smedley, Stith, & Nelson, 2003). One factor in these persistent disparities, the focus of the present article, is systematic differences in the *quality* of health care received by Blacks and Whites.

Racial biases play a role in these health care disparities. We restrict our focus to Black patients (and non-Black physicians) in the United States both because documented disparities in health care are most pronounced for Black relative to White patients and because research in social psychology primarily focuses on racial bias. Our review is limited to bias among physicians simply because most research on health care disparities focuses on this group of providers.

## Disparities in Health Care

According to the 2012 National Healthcare Disparities Report (DHSS Agency for Healthcare Research, 2012), Blacks received lower quality health care than Whites on 43% of 191 measures; Blacks received better care on only 18% of the measures. Disparities in care range from quality of annual examinations to treatments for life-threatening diseases (Penner & Hagiwara, 2014), and they occur among patients with equivalent levels of insurance and SES.

Consider the following examples: An analysis of more than one million clinical visits for children with symptoms of respiratory infections found that Black children were significantly less likely than White children to receive antibiotics, even after eliminating relevant medical and socioeconomic variables (Gerber et al., 2013). Another national study revealed that Black children who lose a finger are half as likely as White children to have the finger reattached (Squitieri, Reichert, Kim, Steggerda, & Chung, 2011). A review of almost 800,000 hospital discharge records found that Blacks with peripheral arterial disease were 77% more likely than Whites to have the affected limb amputated (Durrazzo, Frencher,

& Gusberg, 2013); this disparity was greatest in the best-resourced medical facilities. Black women receiving chemotherapy for breast cancer were significantly more likely than White women to receive nonstandard treatment regimens (Griggs et al., 2007). These disparities cannot be explained by differences in the specific disease characteristics, patients' insurance, or SES. Racial bias among physicians could contribute to these disparities (Penner, Hagiwara, et al., 2013).

## Racial Bias Today

As widespread condemnation of overtly racist comments made by political leaders and other public figures illustrates, explicit or “old-fashioned” racial bias is unacceptable in contemporary U.S. society. This is especially true in the medical profession, which uniformly disavows explicit racial bias in any form. At the same time, subtle forms of racial bias are pervasive in society and exist in health care as well. *Implicit racial bias*, which is automatically activated and often unconscious, plays a central role in this subtle, frequently unintentional form of racial bias. Whereas explicit bias is measured by asking people to self-report their prejudice, implicit bias is typically measured by how quickly people respond to race-related words or images.

The most widely used measure of implicit bias is the Implicit Association Test (IAT; Greenwald, Poehlman, Uhlmann, & Banaji, 2009). The IAT rests on the well-established finding that stronger mental associations between two concepts produce faster responses when the concepts are paired. Hence, racial biases held by non-Black Americans are revealed in more rapid responses to pairing White faces with positive words and Black faces with negative words than to the opposite pairings. Because people must respond to these pairings within milliseconds, the IAT measures responses that normally cannot be consciously controlled.

The majority of non-Blacks in the United States exhibit implicit biases against Blacks (Greenwald et al., 2009). They can result from repeated exposure to negative stereotypes and widespread media portrayals of certain ethnic/racial groups, as well as generalized reactions to specific negative personal experiences and reactions. Furthermore, most non-Blacks who show implicit bias are not explicitly biased. This suggests that implicit bias may be particularly relevant to understanding the insidious nature of racial disparities in health care, despite strong norms against it in the medical profession. Numerous studies have measured physicians' implicit racial bias using the IAT. On average, White, Hispanic, and Asian physicians all display relatively large implicit racial preferences for Whites over Blacks (Oliver, Wells, Joy-Gaba, Hawkins, & Nosek, 2014; Sabin, Nosek, Greenwald, & Rivara, 2009). Physicians also hold implicit stereotypes, characterizing Whites as more compliant and overall “better patients” than Blacks (Oliver et al., 2014). Thus, although physicians generally have relatively unprejudiced explicit attitudes toward Blacks, like many Americans, they generally show substantial implicit biases against Blacks.

## Racial Bias and Health Disparities

Figure 1 illustrates how racial bias can create health disparities, via three paths. The Discrimination Path concerns how everyday experiences of racial bias can directly affect the

health of Blacks. Being the target of persistent discrimination creates stress that erodes overall health and increases susceptibility to disease and certain medical conditions. Experiencing persistent discrimination is an important contributor to health disparities (Major, Mendes, & Dovidio, 2013), but space limitations allow only brief discussion of this path here.

The other two paths indicate the quality of health care as an intermediate process to health outcomes. The Physician-Decision Path posits a fairly direct effect of clinician implicit bias on medical judgments and treatment decisions concerning Black patients. The Physician-Patient Relationship Path posits a more indirect effect of provider implicit bias on clinical communication, which then reduces patients' trust and acceptance of treatment. We briefly summarize scientific evidence regarding each of these pathways.

### **Everyday Discrimination and Health**

The direct effect (top path in Figure 1)—repeated experiences of discrimination on health—is well documented (Major et al., 2013). Daily discrimination activates negative, stress-related physiological and psychological responses, with major consequences for health. Perceived discrimination is associated with higher incidence of hypertension, diabetes, respiratory problems, cardiovascular disease, and depression (Penner & Hagiwara, 2014).

### **Physician Decision Making**

The middle path in Figure 1 depicts the potential role of racial bias in physicians' diagnosis and treatment of patients. Research demonstrates that physicians have more negative stereotypes of Black than White patients, regarding their general qualities (e.g., intelligence) and patient-relevant characteristics (e.g., cooperativeness; van Ryn, Burgess, Malat, & Griffin, 2006). Some evidence suggests that Blacks may receive different diagnoses and treatment because of racial stereotypes. For example, after reading a medical case involving a Black versus White patient at risk of HIV, medical students indicated that the Black patient would be more likely to engage in risky sexual activity if given prophylactic antiretroviral drugs. This belief reduced their willingness to provide the drugs (Calabrese, Earnshaw, Underhill, Hansen, & Dovidio, 2014).

Physicians' implicit negativity toward Blacks, at least sometimes, also predicts decisions that lead to lower quality health care for Black relative to White patients. In one study, physicians read about a hypothetical patient exhibiting symptoms of an acute coronary syndrome. Physicians with greater implicit bias were less likely to recommend clot-reducing drugs for Black than for White patients (Green et al., 2007). In another study of hypothetical treatment for pain, greater physician implicit bias was associated with less willingness to prescribe narcotics to Black than White pediatric patients (Sabin & Greenwald, 2012).

Evidence for the influence of implicit bias on physicians' treatment decisions is not, however, consistent across medical problems. Physician implicit bias did not predict racial disparities in physicians' treatment decisions about urinary tract infection, attention deficit hyperactivity disorder (ADHD), or asthma (Sabin & Greenwald, 2012). Other research has also failed to find effects of physician implicit bias on treatment decisions (Oliver et al., 2014).

To our knowledge, only one study has investigated physicians' implicit bias and *actual* medical treatment, rather than responses to a hypothetical scenario, and it found no racial bias. Blair and colleagues (2014) assessed implicit bias among primary care physicians and then examined medical records of a random sample of patients diagnosed with hypertension. An analysis of patients' medications showed that treatment intensification—physicians' decisions to start a new medication or increase medication dosage—bore no relation to patients' race or physicians' implicit racial biases. Furthermore, although hypertension control was worse among Black than White patients, this difference was unrelated to physicians' implicit racial biases.

To summarize, although some findings suggest that implicit racial bias *can* influence treatment decisions involving Black patients, research does not definitively show that implicit racial bias *necessarily* results in less appropriate treatments for Black than White patients. Implicit bias likely exerts a stronger influence on physicians' thoughts and actions when they are experiencing time pressure, high cognitive demand, or fatigue, and when their actions are difficult to monitor or control. In contrast, physicians in the *scenario studies* are not likely to feel pressured or fatigued and thus may be especially thoughtful and deliberative about their decisions. Similarly, physicians in the hypertension study had many opportunities to reflect on and adjust treatments over multiple office visits. Under these conditions, physicians may proactively adhere to high standards of care for Black patients, limiting the influence of implicit biases. Thus, if physicians have the time and opportunity to reflect on treatment decisions, implicit bias should have limited impact on health care disparities via physicians' biased medical decisions.

### Doctor–Patient Interactions

The third path implicates the clinical relationship. Studies consistently reveal that when non-Black physicians interact with Black patients, implicit bias affects their behavior in ways that could negatively affect their patients. Physicians higher in implicit bias speak faster, speak more, have shorter visits, and tend to be less patient-centered with Black than with White patients (Cooper et al., 2012; Hagiwara et al., 2013). Also, physicians higher in implicit bias use more anxiety-related words when they interact with Black patients (Hagiwara, Slatcher, Eggly, & Penner, 2014).

Black patients are sensitive to these often subtle, negative behaviors associated with physicians' implicit bias. Higher physician implicit bias is associated with Black patients reporting less patient-centered care and lower levels of trust and satisfaction (Blair et al., 2013; Cooper et al., 2012; Hausmann et al., 2014; Penner et al., 2010; Penner, Albrecht, & Eggly, 2014). Such consistent evidence is remarkable considering that these studies were conducted in different geographic regions of the United States, with physicians of different ethnicities and varying experience, in different health care delivery systems, and for both new patients and patients with established relationships with their physicians.

Explicit bias alone does not typically affect patients' responses, but the *combination* of explicit and implicit bias may matter (Penner et al., 2010). The most negative immediate and long-term patient reactions were to physicians who reported low levels of explicit bias but

showed high levels of implicit bias. Perhaps physicians' efforts to control their implicit bias interfered with communication during the medical encounter (Dovidio & Gaertner, 2004).

Although physician implicit bias clearly links to a lack of patient-centered communication, few studies have directly examined the link between bias-related communication and patients' health-related behaviors and outcomes. Rather, much of the evidence supporting negative effects is circumstantial. For example, lower patient-centeredness (not specifically linked to racial bias) is associated with worse emotional health 2 months after medical interactions and fewer subsequent diagnostic tests and referrals (Stewart et al., 2000). Similarly, lower trust among Black patients has been associated with poorer post-visit adherence and subsequent health (Hagiwara et al., 2013).

Only two studies have directly examined physician implicit bias and patients' health-related judgments and behavior. Perceived patient-centeredness (associated with an oncologist's implicit bias) affected Black cancer patients' attitudes toward recommended treatment (Penner et al., 2014). Specifically, perceptions of low patient-centeredness led patients to have less confidence in the recommended treatment, think its side effects would be worse, and expect more difficulty completing it. However, in another study, physician implicit bias did affect patient perceptions of patient-centeredness, but these perceptions were unrelated to patients' medication adherence or hypertension control (Blair et al., 2014). Nevertheless, the findings on physician implicit bias and quality of clinical interactions are quite consistent: Greater non-Black physician implicit bias predicts less positive, productive medical interactions with Black patients.

### **Bias and Racial Disparities in Health and Health Care: Summary**

Evidence implicates racial bias as a contributor to health disparities between Whites and Blacks, either directly through stress-related processes or indirectly through quality of treatment decisions and quality of clinical communication (see Figure 1). Most physicians are consciously committed to eliminate racial disparities in health care, but they are not immune to the cultural and social forces that lead many Americans to implicit, often unconscious, racial biases. Although researchers still do not fully understand the role of such biases in health disparities, all the observed effects are uniformly in the direction of greater racial bias leading to lower quality care for Black patients. These documented biases demand the attention of health care administrators and providers who are committed to providing high quality care for all patients.

Understanding when, where, and how physician implicit bias contributes to disparities in health care and outcomes is a significant challenge for health care researchers. Many factors besides implicit bias affect treatment decisions and medical outcomes. These include a patient's medical history and specific presenting problem, the quality of treatment facilities, the available treatment options, and what treatments are covered by the patient's insurance. Ultimately, any racial bias must be placed in the context of these other factors. What's more, the path(s) from implicit bias to health care and health status must be better specified. However, it is not reasonable to deny the role of racial bias in health care disparities simply because it is complex. Understanding bias in health care can guide interventions for reducing racial disparities and improve health outcomes.

## Reducing Racial Disparities in Health Care

Because racial health care disparities have multiple causes, often operating in concert, interventions must address the multiple ways that bias influences health care. The success of medical care involves responses of both physicians and patients, so interventions need to focus on physicians, patients, and their interaction. Other sources of bias are embedded in the health care system and require structural interventions. Appropriate policies that address the multiple sources of bias can reduce racial disparities in health care. This section reviews particularly promising interventions.

### Physician-Focused Approaches

The Institute of Medicine report on health care disparities (Smedley et al., 2003) had a substantial impact on medical school training and post-graduate medical education. One result was introducing more courses on racial health disparities into the curriculum of many medical schools. Sensitizing medical students and physicians to past and current disparities is an important step. Making people aware of unfair treatment in the medical profession can motivate efforts to reduce personal manifestations of bias (Monteith & Mark, 2009).

Simply offering coursework is insufficient. First, individual-level approaches to combat bias, such as antibias education programs, have only limited impact unless they have strong institutional support (Kalev, Dobbin, & Kelly, 2006). Second, even when physicians are aware of racial disparities in health care, they may not recognize how their personal beliefs and actions contribute to these disparities. As noted, physicians may be largely unaware of their implicit biases and their effects. Implicit bias does not appear in blatant displays of racist attitudes or behavior. Rather, implicit bias appears in subtle verbal and nonverbal behaviors that a physician may not recognize or consciously control (Penner & Dovidio, in press). These behaviors often reflect discomfort with Black patients rather than hostility.

Third, even when physicians are aware of personal implicit bias, efforts focused on eliminating this bias may have only limited success. Implicit biases are habits of mind acquired over time (Dovidio & Gaertner, 2004). Like other habits, they are difficult to unlearn. People sometimes can exert conscious control to reduce (or correct for) their implicit biases, but it requires continuous concentrated effort (Lai et al., 2014). However, like other habits, these strongly learned associations can reactivate in certain situations (e.g., with fatigue or cognitive overload) or in response to particular cues (e.g., a more vocal Black patient). In addition, people often exhibit backlash against external efforts to change how they think. Thus, instruction on racial inequities, past or present, would seem insufficient to substantially reduce physicians' implicit racial biases and their effects.

Rather than trying to eliminate implicit racial biases, interventions for physicians should develop specific techniques and skills to limit the impact of physician implicit bias when interacting with Black patients. Problems in interracial medical interactions reflect misunderstandings that often occur when members of different social groups interact. Thus, solving this problem can come from the research literature on how to limit the impact of intergroup bias in social interactions.

One key recommendation encourages physicians to *individuate* patients, that is, to see each patient as a unique individual rather than mainly as a representative of some racial or social group. This approach is particularly difficult in a medical context because physicians learn in their medical training about the diagnostic value of considering differences in base rates of medical conditions and illnesses that occur among different populations. Yet, focusing also on individual characteristics of a Black patient—as a unique human being—can reduce the activation of erroneous racial stereotypes (e.g., about risk behavior or adherence) that can unfairly lower the quality of care.

One kind of training that could achieve this end is already being implemented with many medical students and practicing physicians. It is teaching them the skills needed to engage in *patient-centered communication*. In a patient-centered interaction, physicians recognize that their patient is a unique human being (Saha, Beach, & Cooper, 2008). In working toward a treatment decision, the physician understands that this should be a joint decision, and thus, the physician attempts to share power and responsibility with the patient. Effective patient-centered communication requires developing a positive interpersonal relationship. This, in turn requires that physicians acknowledge and respect the unique qualities of the patient. Note that physicians in an effective patient-centered interaction would not attempt to ignore a patient's race; in fact, this would likely have quite negative effects on Black patients because it denies a valued aspect of their identity (Penner & Dovidio, in press). Effective patient-centered communication instead recognizes racial differences but shifts interracial medical encounters from interactions between members of separate racial or ethnic groups to an exchange between two coequal individuals.

### Patient-Focused Approaches

Besides direct attempts to change physicians' behavior, interventions may also attempt to make patients less vulnerable to the effects of bias. Most Blacks report experiences of bias and discrimination in a variety of settings, including health care (Dovidio et al., 2008). Patients may respond to bias in a variety of ways, some of which can interfere with the effectiveness of the medical encounter.

Because of their prior experiences with discrimination, Black patients often experience stereotype threat in medical encounters (Aronson, Burgess, Phelan, & Juarez, 2013). The term *stereotype threat* describes members of a stereotyped group fearing they will be judged by the stereotype, and any misstep will confirm the stereotype (Aronson et al., 2013). In medical visits, a Black patient might be concerned about confirming negative stereotypes of Blacks as hostile or unintelligent. Indeed, physicians often hold these stereotypes (van Ryn et al., 2006). The stress created by this concern might manifest itself as an appearance of being cold, inattentive, or disrespectful. Patients under stereotype threat may be reluctant to ask questions or volunteer relevant medical information (Aronson et al., 2013). Such an appearance might lead to negative responses from the physician, appearing to confirm the patient's fear of being judged according to a negative stereotype.

One way to reduce stereotype threat and strengthen a person's self-integrity is by affirming important personal values. For example, people identify values that characterize them best and then write a paragraph about why these values are important. Values affirmation can



address stereotype threat in health care. In one study (Havranek et al., 2012), Black patients with hypertension completed a values affirmation exercise or a control exercise just before a regularly scheduled primary care visit. Patient–physician communication was then assessed by coding the subsequent conversation. The patients who completed the values affirmation exercise requested and provided more information about their medical conditions and had interactions that were more positive in emotional tone. Preliminary evidence also suggests that values affirmation can increase patient adherence.

More patient-focused interventions are needed. However, again, these interventions should not focus explicitly on the patients' racial attitudes or stereotype threat. Such an approach might engender considerable resistance among Black patients and potentially increase their distrust of medical care. Blacks' perceptions of discrimination are not illusory, and considerable evidence documents past racism in medical care. Thus, an intervention that implied Blacks' feelings of mistrust are unfounded is disingenuous and essentially blames the victims of health disparities.

### Physician–Patient Relations Interventions

The quality of health care is affected by physicians' implicit bias and by Black patients' previous experience with discrimination, distrust of the health care system, and personal feelings (Dovidio et al., 2008). Although addressing the effects of each of these causes independently has the potential to reduce racial disparities in health care, interventions to improve the quality of the *social exchange* between physicians and patients may be particularly valuable.

Treatment disparities could reflect uninformed or medically irrelevant decisions (i.e., not based on the best current medical practice and the particular patient's characteristics; Albrecht et al., 2008). Uninformed decisions result from miscommunication: Effective communication with a patient requires clearly transmitting *technical information* about diagnosis, prognosis, and care, with effective *relational communication* as well. Effective relational communication requires the physician forming an alliance with the patient, which should increase patient understanding and trust. Patient-centered communication may provide one path to alliance building, but there may be other ways.

One method tries to change the perspective of people from different racial groups from an “us versus them” to a sense of “we-ness”—creating a common ingroup identity (Gaertner & Dovidio, 2012). In intergroup relations, a common ingroup identity reduces intergroup bias and increases intergroup cooperation and trust. This shared identity can be induced when members of different groups focus on common interests or goals. A common ingroup identity was created between Black patients and their physicians in a primary care facility by using strategies that included messages and symbols that repeatedly stressed the team nature of the interaction (Penner et al., 2013). Compared with patients in a standard-of-care control condition, patients who received this intervention trusted their physicians more and adhered more to their recommendations 4 months later.

## System-Focused Approaches

Besides individual interventions, system policies can reduce health care disparities. Some policies are directly relevant to the social psychology of potential causes of health care disparities.

Large health care systems now provide at least 65% of the private health care in the United States (Forbes, 2014, <http://www.forbes.com/sites/physiciansfoundation/2014/01/22/giant-healthcare-systems-higher-prices-fewer-choices-and-impersonal-care/>). This percentage will likely grow in the coming years. These systems typically have a single administrative structure that manages multiple hospitals and clinics. The growth of large health care systems, especially those owned by large, for-profit investment companies, is of substantial concern to many public health professionals because they fear these systems will sacrifice high quality health care in exchange for corporate profits. We personally share such concerns but believe they may also provide opportunities to reduce racial disparities in health care.

One possibility is *aggregating information* within large health care systems to make any racial disparities apparent. Subtle bias is difficult to recognize in individual cases because it is often cloaked by seemingly nonracial explanations (Dovidio & Gaertner, 2004). Indeed, in one study, a large majority of physicians reported that they personally give better medical care in their practice to Black than to White patients (Sabin, Rivara, & Greenwald, 2008). Health care systems, however, collect extensive data on treatments and outcomes (e.g., changes in medication, number of return visits, length of time to return visits). These data could easily be aggregated and analyzed by patient race and other variables related to racial disparities (e.g., low SES). Analyses would move racial treatment disparities from an abstraction that occurs “elsewhere” to an immediate administrative problem within a particular organization. Such feedback often stimulates changes within organizations, which could ultimately reduce racial health care disparities. Note that this solution does not require any direct attempt to change or even measure attitudes; it simply provides data to the system leaders and to physicians who may already be consciously committed to fair treatment of all patients.

Aggregated data can also help develop more effective, evidence-based interventions that reduce the influence of racial bias. Racial bias is often more influential when criteria for decisions are less clear or standardized (Dovidio & Gaertner, 2004). Noted surgeon and writer Atul Gawande (2012) proposed a new approach, standardizing treatment criteria and procedures, *reducing unnecessary variability* in medical treatments. Gawande’s proposal is controversial but innovative: monitoring physicians and surgeons by requiring oversight by individuals with organizational responsibility for quality of service. Because of less latitude for racial bias to operate, more quality control and standardized treatments would reduce racial disparities among patients with the same symptoms and medical problems. Racial bias would have less chance to influence these treatment decisions.

Treatment standardization would represent a radical departure from how medical care is currently provided and may generate considerable resistance among health care professionals. Some resistance would almost certainly come from advocates of patient-

centered approaches because this new model seems antithetical to the individuation of patients. Given these concerns, such an approach to medical care needs to be used judiciously. Nevertheless, a reasonable adoption of standardized care does have potential for reducing the racial disparities in health care, while improving the quality of care for everyone.

## Caveats

Before closing, our discussion of health care disparities and solutions needs some qualification. First, most research on the impact of racial bias in health care focuses on the role of physicians. However, in many settings (especially under-resourced ones), other providers (e.g., physician assistants, nurses) may spend much more time with patients than do physicians. Research and interventions should focus on these providers and support staff (e.g., receptionists, medical technicians) as well.

Second, we have addressed the impact of implicit bias only on Black patients. Implicit bias also affects other racial/ethnic minority patients, but it may not appear in the same way or produce the same reactions as among Black patients (Blair et al., 2013). These potential differences, along with similarities, need to be considered when designing interventions that focus on health care disparities that affect other groups.

Finally, the proposed solutions reduce the impact of racial bias, rather than changing physicians' racial attitudes. Reducing implicit bias in the long term is difficult, and physicians may react against implications of bias. However, reducing racial bias remains an important goal. The proposed interventions for reducing health care disparities are designed to complement, not supplant, efforts to increase awareness of racial health care disparities and reduce physicians' racial bias. The persistence and complexity of racial bias in health care require interventions that address the multiple causes of disparities. These interventions should have the same value as other aspects of medical training.

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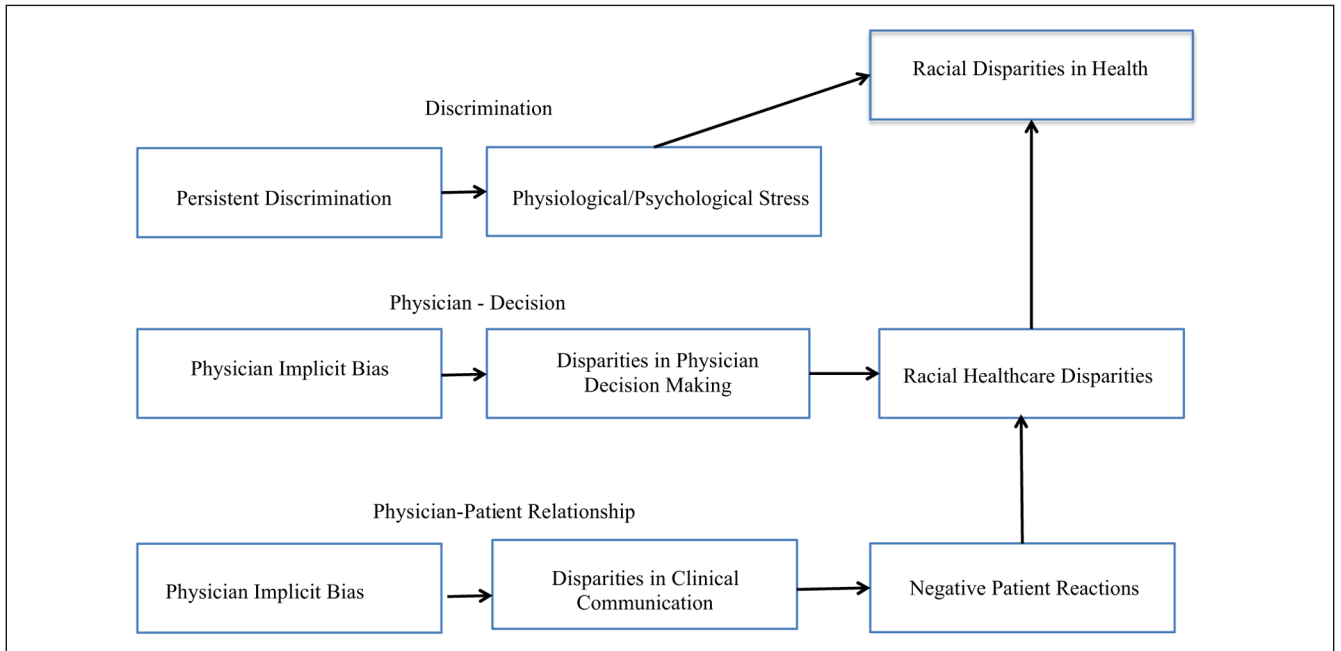
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Implicit racial bias hurts physician judgment and patient relations, but there are ways to minimize its impact on racial health disparities.

### Key Points

- Black–White health disparities can result from (a) the stress of daily discrimination, as already established; (b) implicit biases that affect physician judgment and decision making, although evidence is mixed; and (c) implicit biases that damage physician–patient relationships, which evidence consistently supports.
- Physicians can reduce disparities by individuating patients and using patient-centered communication.
- Patients can reduce bias’s impact by using self-affirmation strategies.
- Relational communication can lead to a common ingroup identity or physician–patient alliances.
- In large health care systems, aggregating information can reveal racial disparities, and standardizing treatment can reduce unwarranted racial differences in treatment decisions.





**Figure 1.**  
Three ways in which bias can cause racial disparities in health.