

Health and Health Care Disparities

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Word Count: 10,135

Correspondence regarding this chapter should be sent to the first author, c/o Karmanos Cancer Institute 4100 John R. Detroit Michigan 48201 e-mail: pennerl@karmanos.org. Preparation of the chapter was partially supported by a grant from the National Institute of Child Health and Development (1R21HD050450) to the first author and by a grant from the National Cancer Institute (U01CA114583) to Terrance L. Albrecht and Peter Lichtenberg. Heather Orom was supported by an AHRQ training grant (HS013819).

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“Of all the forms of inequality, injustice in health care is the most shocking and inhumane.”
Martin Luther King Jr.

This chapter concerns the roles of stereotypes, prejudice and discrimination in health disparities. The term, health disparities, is somewhat ambiguous, and has been defined in a number of different ways. In this chapter we use the definition proposed by Braveman (2006):

Health disparities do not refer to all differences in health. A health disparity is a particular type of difference in health; it is a difference in which disadvantaged social groups—such as the poor, racial/ethnic minorities, women, or other groups who have persistently experienced social disadvantage or discrimination—systematically experience worse health or greater health risks than more advantaged social groups. (p. 167)

A critical aspect of Braveman’s definition is that health disparities result from social, political, and economic processes and thus, at least theoretically, can be prevented from occurring or can be eliminated once identified.

Although almost any social group may experience health disparities, we will focus on disparities in health status and health care between people in the United States who self-identify as White or non-Hispanic European American and people who self-identify as Black or African-American (or Afro-Caribbean).¹ America is not the only country where health disparities among people of different ethnicities exist. Even in countries where the governments provide health care to all citizens or at least subsidize health care to a much greater extent than in the U.S. (for example, Canada and the United Kingdom), health disparities among people of different ethnicities still occur (Banks, Marmot, Oldfield, & Smith, 2006; Lasser, Himmelstein, & Woolhandler, 2006; Millett, Gray, Saxena, Netuveli, Khunti, & Majeed, 2007). Racial/ethnic

health disparities in the U.S. have, however, been better documented and more thoroughly studied than health disparities in other places in the world. This is the reason why we focus on health disparities in the United States; we assume the processes we discuss are also related to health disparities elsewhere in the world. We begin by briefly presenting some data on Black-White health disparities in the United States.

In the United States, Whites are physically and mentally healthier than Blacks, Hispanics, or Native-Americans; and the largest differences in health status are between Whites and Blacks (DHSS, 2000, 20006; IOM, 2003; National Center for Health Statistics, 2003, 2006; National Health Care Disparities Report, 2005). The average life expectancy for Blacks (73.1 years) is less than Whites (78.3 years) (National Center for Health Statistics, 2006). Annual mortality rates among Black infants are almost three times as great as among White infants and this difference between Blacks and Whites persists more or less across the life span (National Center for Health Statistics, 2003). These mortality statistics become more disturbing when placed in a historical context. Not surprisingly, mortality rates among both Blacks and Whites have declined dramatically over the last half century. However, the disparity in Black-White mortality rates has actually increased (National Health Statistics, 2006). In 1950, the age-adjusted death rate per 100,000 people among Blacks was 1.22 times greater than the death rate among Whites; in 2004, the death rate among Blacks was *1.31* times greater than the death rate among Whites.

The incidence rates for almost all diseases and illnesses are higher among Blacks than Whites (National Health Statistics, 2006). For example, the incidence rate of tuberculosis infections among Blacks is approximately eight to nine times the rate among Whites; the incidence rate of asthma is four to six times as high, and the incidence of diabetes is about twice as high (Howard University National Genome Center, 2006). In national surveys, Blacks are

more likely than Whites to report that they are in poor health and have physical limitations on their daily activities (National Center for Health Statistics, 2006). Also, birth weights of neonates are lower, preterm births are more common, maternal mortality is higher, and prenatal care is less frequent among Blacks than among Whites (National Health Statistics, 2006). For ten of the most common kinds of cancer, Blacks have lower five year survival rates and higher mortality rates than Whites (SEER, 2005). These cancer survival/mortality differences remain even when Blacks and Whites are equated on incidence rates and the stage at which the cancer was diagnosed. Socioeconomic status (SES) certainly plays some role in these differences, but there are still substantial Black-White differences in health status and mortality rates after SES and related factors (e.g. insurance coverage) are controlled (Chu, Miller, & Springfield, 2007; Williams & Collins, 1995)

In this chapter we discuss how prejudice, stereotyping, and discrimination may contribute to these health disparities. The chapter has four sections. In the first, we present a brief history of early research on the causes of health disparities between Blacks and Whites. This is followed by a discussion of contemporary research. Then we summarize the current state of knowledge about how prejudice, stereotyping, and discrimination may contribute to health disparities, and we propose a framework for integrating theory and research on this topic. Finally, we briefly discuss future research on health care disparities that might inform both contemporary theories of prejudice and stereotyping and practical efforts to reduce racial/ethnic health disparities.

A Brief History of Research on Black-White Health Disparities

Almost from its beginnings, Western medicine embraced the assumption that innate genetic differences existed between the races and that some races are biologically superior to others (Byrd & Clayton, 2000, 2002). Over the years, the belief that differences in the character,

abilities, and physiology of people were linked to their racial identity/color became widely accepted among medical scientists (Byrd & Clayton, 2000). The emergence of the slave trade in the 14th and 15th centuries further exacerbated such beliefs, as did conflicts between European Christians and darker-skinned North African Muslims. The notion of large racial differences became part of scientific doctrine during the so-called “age of enlightenment.” For example, Carl Linnaeus, known as the “Father of Biological Classification,” believed that Blacks and Whites were separate species and assigned degrading psychological and behavioral attributes to Blacks (Byrd & Clayton, 2000).

In the United States polygenism—the theory that human races were separate biological species—dominated scientific theory from the early 17th century until perhaps as recently as the early 20th century (Byrd & Clayton, 2000). Polygenism may provide a rationale for the infamous Tuskegee syphilis experiments. Started in the 1930s, these studies were originally based on the premise that the long-term effects of syphilis would be different among Black men than among White men. To study the progression of the disease, United States Public Health Service denied treatment to large numbers of Black men afflicted with syphilis long after effective treatments for syphilis became available (Jones, 1993).

The Black sociologist and social activist, W. E. B. Du Bois edited the first scholarly monograph that seriously challenged widely-accepted biological explanations of poorer health among Blacks relative to Whites in the United States. In *The Health and Physique of the Negro American* Du Bois (1906) used census data and insurance company records to make the case that with improved sanitary conditions, education, economic opportunities, and better medical care, the health of Blacks would steadily improve until it was equal to that of Whites.

Although Du Bois' ideas were widely accepted among Black civic and health organizations, they had relatively little impact on medical science or practice of the time. The problem of Black-White health disparities was largely ignored by the federal government until the late 1990s. In 1999, the U.S. Commission on Civil Rights issued a report arguing that the federal government's failure to enforce anti-discrimination laws was a major source of health disparities in the United States (*The Health Care Challenge: Acknowledging Disparity, Confronting Discrimination and Ensuring Equality*). Four years later, the *Institute of Medicine* (IOM) issued its report on health disparities, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* (IOM, 2003), which concluded that the major cause of disparities in the health status of Blacks and Whites was large and widespread disparities in the quantity and quality of the health care received by Blacks and by Whites. Further, the IOM believed that processes related to prejudice, stereotyping, and discrimination played a direct, proximal role in health care disparities.

More recently research has shifted its emphasis from explanations of health *differences* based on the biological inferiority of Blacks to explanations of health *disparities* based on contemporary understanding of genetics and economic, sociological, and psychological factors. This relatively dramatic shift is due to work by: public health and medical researchers, who demonstrated that differences in health care were as powerful as genetic factors in predicting survival rates from diseases (e.g., Bach et al., 2002) and that the health care Blacks receive was almost invariably poorer than that received by Whites (Lee et al., 1997); sociologists, who found that socioeconomic variables and environmental differences were typically more powerful predictors of people's health status than their phenotypic race or ethnicity (e.g., Williams & Collins, 1995); psychologists, who identified the health consequences of being the target of

prejudice and/or discrimination (e.g., Clark, Anderson, Clark, & Williams, 1999); and communication researchers, who found that Black patients and White patients were treated differently by their health providers (e.g., Cooper-Patrick et al., 1999).

Contemporary Research on Black-White Health Disparities

Any overview of research on the causes of Black-White health disparities must acknowledge the fact that there is no single cause. Multiple interdependent causes operate simultaneously at societal, interpersonal and intrapersonal levels to explain Black-White disparities. Although our focus will be on the roles of stereotyping, prejudice, and discrimination in health disparities, there are other important causes as well. In Figure 1, we present a model (adapted from Penner, Albrecht, Coleman, & Norton, 2007) of the possible causes of Black–White disparities in health status in the United States. This model provides an organizational framework for this section of the chapter. However, we acknowledge that this model is still preliminary because even a multi-element model with several mediated paths may not contain all the possible causes of health disparities.

The model identifies three *exogenous* causes of Black-White health disparities: Genetic Factors, Socioeconomic Factors, and Prejudice and Related Processes. The effects of the latter two variables are primarily mediated through Disparities in Healthcare.

Insert Figure 1 about here

Genetic Factors

Contemporary genetic explanations of differences in the health status of Blacks and Whites should not be confused with racist theories of the innate biological inferiority of Blacks discussed in the previous section. Many diseases have a genetic component; and people inherit some degree of genetic susceptibility to various diseases. Blacks and Whites come from different genetic populations and have different genetic admixtures (i.e., the percentage of genes

that come from various populations, such as African or Northern European). Therefore, the argument is that some significant portion of Black-White differences in health status originates from genetics (Frank, 2007).

Genetic explanations of *some* Black-White differences in health status are valid. For example, Huntington's disease is most prevalent among people of European ancestry; and sickle cell anemia most commonly affects people of African and Mediterranean ancestry. Thus, as indicated in Figure 1, genetic factors are a plausible direct source of some disparities (or perhaps *differences*) in the health status of Blacks and Whites. However, the influence of these genetic factors must be placed in context. Health status, like almost any human characteristic, reflects the complex interplay between genes and environment. To identify either one of them as the unitary or even dominant cause may be a dangerous oversimplification of how genes express themselves in a complex environment.

Further, placing too much emphasis on genetic explanations of Black-White differences in health status can have some negative consequences. One consequence of over-emphasizing the role of genetics in Black-White differences in health is that it may lead some people to grossly misuse the colloquial concept of race (Frank, 2007) and resort to racial/ethnic stereotypes. A racial phenotype (e.g., the color of a person's skin) or a social construction of a person's race (what race others believe the person to be) is, at best, a rather imperfect proxy for the person's actual genetic population admixture (Gower, Fernandez, Beasley, Shriver, & Goran, 2003). Further, the genetic differences among people from the five major population groups (African, Asian, Caucasian [White], Native American, and Oceanic [Pacific Islander]) are quite small in the United States, where there has been extensive admixing of populations. Race has a

great deal of meaning to social psychologists who study stereotyping, prejudice, and discrimination, but it has little biological meaning.

Socioeconomic Factors

The second exogenous variable in the model is Socioeconomic Factors. No matter how they measure socioeconomic status (SES) (i.e., education, income, occupational prestige, or some combination of the three), researchers find that the lower individuals' SES, the poorer their mental and physical health (Laveist, 2005). Further, SES predicts health status, rather than the reverse (Williams & Collins, 1995). In the United States, Blacks, as a group, have lower incomes, and less education than Whites (LaVeist, 2005). Thus, many researchers view SES as a major cause of Black-White health disparities.

As shown in the model, SES is associated with disparities in Health Literacy/Health Behaviors, which concerns: (1) knowledge of and attitudes about appropriate health care activities, and/or (2) engaging in these activities (Sentell & Halpin, 2006). SES also directly affects people's access to health care and the quality of health care they receive (IOM, 2003). Finally, SES is associated with Difficult Social Environments, which includes things such as chronic exposure to difficult living conditions, environmental hazards and other acute and chronic stressors that may negatively affect people's health (Mays, Cochran, & Barnes, 2007).

Socioeconomic factors are clearly an important source of Black-White health status disparities, but their influence on disparities must be placed in context. As noted earlier, when differences in SES are statistically controlled, large Black-White disparities in health status still remain. For example, in a study of mortality rates, it was found that after equating Blacks and Whites in the United States on education and income, there was still an excess of 38,000 deaths

per year among Blacks (Franks et al. 2006). Thus, SES provides only a partial explanation of health status disparities.

Prejudice, Stereotyping, and Discrimination

The final exogenous variable in the model, Prejudice and Related Processes, is the major focus of this chapter. This variable contributes to disparities in health status through multiple paths. For example, prejudice and discrimination may force people to live in difficult social environments (e.g., isolated and/or segregated housing) that create feelings of social exclusion and other stressors that, as noted above, have serious negative health consequences (e.g., Everson-Rose & Lewis, 2005).

The model also posits that people who report that they have been the target of discrimination (Perceived Discrimination) experience poorer mental and physical health (e.g., Borrell et al., 2006; Williams, Neighbors, & Jackson, 2003). Mays et al. (2007) and others (e.g., Clark, Anderson, Clark, & Williams, 1999; Pascoe & Richman, 2009) propose that prejudice and discrimination increase allostatic load on the body, which makes people more susceptible to disease. This explanation is intuitively appealing, but it has been difficult to establish a definitive causal link between perceived prejudice/discrimination and physiological stress responses (see, for example, Brown et al., 2006; further examination of the relevant physiological and psychological stress responses is outside the scope of this chapter). Thus, we now turn to the primary question of interest: How are stereotyping, prejudice, and discrimination related to health care disparities?

Stereotyping, Prejudice, Discrimination and Health Care Disparities

As previously discussed, the IOM committee (2003) found large and persistent disparities between Blacks and Whites in the health care received by Blacks and by Whites. These

disparities were present even when variables such as socioeconomic status, geographic location, and insurance status were controlled. The IOM committee argued that stereotyping and prejudice were major contributors to health care disparities. We now consider how they may be manifested among both patients and providers.

The Patient Perspective. When Blacks interact with health care providers, the social context is likely to be quite different from when Whites interact with providers. About 75% of Black patients' medical interactions are racially discordant (i.e., the interaction is with a provider of a different race/ethnicity); compared to about 20% for Whites (Chen, Fryer, Phillips, Wilson, & Pathman, 2005). Thus, if feelings and thoughts related to ethnicity and racial relations are activated in medical interactions, this is much more likely to occur in interactions involving Black patients.

Clear differences have been found between how Blacks and Whites feel about their medical care. National surveys find that, relative to Whites, Blacks are significantly more likely to believe their race negatively affects their health care (Johnson, Saha, Arbelaez, Beach, & Cooper, 2004) and that discrimination occurs in their interactions with White physicians (Malat & Hamilton, 2006). Blacks also trust their physicians less (Halbert, Armstrong, Gandy, & Shaker, 2006). However, Black patients tend to be more satisfied with their medical encounter (LaVeist & Nuru-Jeter, 2002) and their medical care (LaVeist & Carroll, 2002) when their physician is Black than when their physician is White. LaVeist, Nuru-Jeter, and Jones (2003) reported that Black patients were more likely to schedule appointments with their physicians and were less likely to postpone or delay these appointments when they had a Black physician rather than a White physician.

Several explanations have been posited to explain Black patients' negative reactions to medical interactions, especially racially discordant ones. The first is that Black patients' knowledge of the past history of racism in medical science (see above) might create mistrust of medical care. This proposal, while reasonable, is a matter of some dispute. Brandon, Issac, and Laveist (2005) found that Blacks were no more aware of the Tuskegee experiment than Whites; and when Blacks were told about Tuskegee this did not significantly increase their distrust of their medical care (however, cf. White, 2005).

A second explanation is that Blacks' feelings of mistrust in the health care system are due to their perceptions of the general level of racism in society. The more racism Blacks perceive in the world around them, the less trust they report in the health care system (Benkert, Peters, Clark, & Keves-Foster, 2006). Preliminary results from our own work (Penner, Dovidio, Edmondson, Dailey, Markova, Albrecht, & Gaertner, 2009a) are consistent with this explanation. We found that among very low SES Black patients, reports of perceived past discrimination were negatively correlated with satisfaction with their own medical care, and evaluation of the specific physician who treated them.

A third explanation of why Blacks may respond negatively to racially discordant medical interactions comes from the work of Dovidio and colleagues (e.g., Dovidio, Penner, Albrecht, Norton, Gaertner, & Shelton, 2008). They propose that Blacks may mistrust White health care providers because of the mixed cues Blacks receive in interracial interactions. This proposal builds on Dovidio and Gaertner's (2004) theory of aversive racism, which posits that many Whites simultaneously hold both positive, explicit or conscious racial attitudes and stereotypes, and negative, implicit or nonconscious racial attitudes and stereotypes. These people are labeled

“aversive racists” because such individuals would actually find their implicit racial feelings and thoughts aversive if they became aware of them.

These conflicting thoughts and feelings may affect Whites’ behaviors in interracial interactions. Easily controllable verbal behaviors (e.g., greetings, how polite they are) reflect Whites’ conscious attitudes toward Blacks, and communicate positive regard. However, Whites’ more subtle and less controllable nonverbal behaviors (or verbal behaviors that are not carefully monitored) reflect their automatic or implicit attitudes and communicate negative regard (see Dovidio, Kawakami, Johnson, Johnson & Howard, 1997). Thus, Whites can give mixed signals to Black partners in an interaction.

Research further suggests that when Blacks and Whites interact, they are differentially sensitive to different kinds of behaviors and channels of communication. Whites tend to focus on conscious intentions and controllable behaviors, and not to recognize when their actions are racially biased (Swim, Scott, Sechrist, Campbell, & Stangor, 2003). Conversely, Blacks tend to show heightened attentiveness and sensitivity to nonverbal cues of prejudice (Richeson & Shelton, 2005). If Blacks attend to Whites’ nonverbal behaviors, which may signal more negativity than Whites’ verbal behaviors, Blacks are likely to form more negative impressions of the encounter, be more distrustful of their White partner, and be less satisfied with the interaction than Whites (Dovidio, Gaertner, Kawakami, & Hodson, 2002).

Trust and related kinds of affect have direct health care consequences. If Black patients mistrust their provider and/or perceive discrimination, they are less likely to obtain further health care, obtain needed screening tests (e.g., mammogram, blood pressure tests) and adhere to prescribed drug regimens (Bird, Bogart, & Delahanty, 2003; Thompson, Valdimarsdottir, Winkel, Jandorf, & Redd, 2004). Recently, Penner et al. (2009a) found that that perceived past

discrimination was negatively associated with Black patients' adherence to their physicians' recommendations, which in turn, affected their health.

The Provider Perspective. It seems unlikely that provider-based disparities in contemporary health care are primarily due to the blatantly racist stereotypes and attitudes that were more common in United States 50 or 60 years ago, or to the racist medical theories discussed in the history section. We suspect an overwhelming majority of health care providers sincerely reject explicit forms of racial prejudice in both their personal and professional lives. However, as noted above, contemporary ethnic bias takes more subtle and indirect forms and this kind of bias likely contributes to disparities in health care. There are two separate, but related ways in which subtle prejudice and stereotyping might produce health care disparities: (1) through their impact on diagnosis and treatment recommendations; (2) through their impact on the quality of interactions between patients and providers.

Diagnoses and Treatment Recommendations. The theory of aversive racism proposes that aversive racists' negative feelings and implicit attitudes affect their behavior towards Blacks in subtle and indirect ways that would not immediately identify them as racially biased. For instance, Hodson, Dovidio, and Gaertner (2002) found that aversive racists discriminated against Black job applicants only when there was ambiguity about the applicants' qualifications for the job. Given such findings, Penner et al. (2007) proposed that there would be greater differences in how physicians treat Black and White patients when physicians are in high-discretion situations (such as making a referral for a procedure) than in low-discretion situations, such as administering standard treatments for clearly diagnosed diseases. In fact, this is what is generally found (Geiger, 2003). LeVeist, Morgan, Arthur, Plantholt, and Rubenstein (2001), for example, found that Blacks were significantly less likely than Whites to be *referred* for diagnostic testing

for heart disease, but among Blacks and Whites who received these tests there were no subsequent differences in the receipt of *treatment* (a lower discretion situation).

A similar pattern emerges for prostate cancer treatment, a disease for which there is no universally agreed upon standard of care (Underwood et al., 2004). Blacks diagnosed with prostate cancer are significantly more likely than Whites to receive no immediate treatment (“watchful waiting”) (Shavers, Brown, Klabunde, et al., 2004a). Further, among patients who receive watchful waiting, Blacks wait longer before their first medical monitoring visit and are monitored less frequently than Whites (Shavers, Brown, Potosky, et al., 2004b). Griggs and her associates report a similar kind of finding. They studied breast cancer patients who are given adjuvant or prophylactic chemotherapy to increase the probability of successful surgery and/or reduce the probability of recurrence of the disease. They found that in these cases Black women were less likely than White women to receive the recommended doses of chemotherapy (Griggs, Sorbero, Stark, Heininger, & Dick, 2005; Griggs et al., 2007).

These data are, of course, correlational but there is experimental work on health care disparities as well. Schulman et al. (1999) asked primary care physicians to view video tapes of patients complaining about chest pain (in actuality, the patients were actors). The gender and ethnicity of the patients (Black or White) were systematically manipulated. Schulman et al. found that Blacks were significantly less likely than Whites to be referred for further testing. These results are consistent with findings from archival studies of differences in the treatment of Black and White cardiology patients (see, for example, Vaccarino et al., 2005; cf. Arber et al., 2006).

Contemporary theories of prejudice also predict that physicians’ implicit racial attitudes and stereotypes are better predictors of their treatment decisions than are their explicit attitudes

and stereotypes. A recent study by Green et al. (2007) supports this prediction. Green et al. first assessed physicians' explicit and implicit attitudes toward Blacks and Whites. Next, physicians read vignettes about hypothetical emergency room patients with symptoms of serious heart problems, in which race of the patients in the vignettes was systematically varied. The physicians showed no explicit biases against Blacks; however, on the implicit measure (the *Implicit Association Test*, Greenwald, McGhee & Schwartz, 1998), physicians' attitudes were more negative toward Blacks than Whites and they were more likely to associate uncooperativeness with Blacks than Whites. More importantly, Green et al. found that physicians' implicit biases were strongly associated with their recommendations to give patients blood-thinning drugs (the appropriate treatment given the symptoms); physicians who were more biased were less likely to recommend these drugs for Black patients. (Sabin, Rivera, and Greenwald, 2008, replicated the bias findings, but the implicit biases were not related to treatment recommendations.)

van Ryn and associates (van Ryn, 2002; van Ryn & Burke, 2000; van Ryn, Burgess, Malat, & Griffin, 2006) proposed a social-cognitive model of how patient ethnicity influences physicians' treatment decisions. Specifically, they posited that patient ethnicity constitutes a potent means whereby physicians place patients in social categories, which activate implicit and explicit stereotypes about individuals who belong to these categories. These stereotypes influence physicians' interpretations of patient's symptoms, which then affect physicians' decisions about diagnosis and treatment. Consistent with this model, van Ryn et al. found that physicians do stereotype Black patients (e.g., as less educated and less likely to comply with medical recommendations than Whites) and that these stereotypes mediated physicians' decisions about the suitability of Black patients for coronary bypass surgery.

Similarly, Bogart, Catz, and Kelly (2001) found that physicians rated hypothetical Black HIV patients as significantly more likely to be nonadherent than White HIV patients. The medical significance of this finding is that adherence to treatment is one of the major predictors of whether physicians will even provide antiretroviral therapies (see also Delahanty, Ram, Postrado, Balis, Green-Paden & Dixon, 2001; Martin, 1993). Finally, Abreu (1999) found that implicit priming of stereotypic attributes of Blacks caused therapists to rate patients as more hostile. Collectively, these studies support van Ryn and Williams' (2003) argument that, "patient sex, age, social economic status... and race/ethnicity can influence providers' beliefs about and expectations of patients independent of other factors" (p. 497).

Health Care Interactions. The second way in which prejudice and stereotypes might affect health care is via their impact on face-to-face health care interactions. Relative to racially concordant medical interactions (i.e., patient and physician share the same race/ethnicity), racially discordant medical interactions (most commonly White physician-Black patient) are shorter in length (Cooper et al., 2003), less patient-centered (Johnson, Roter, Powe, & Cooper, 2004), and characterized by less positive affect (Johnson, et al., 2004). They involve fewer attempts at relationship building (Siminoff, Graham, & Gordon, 2006) and less patient participation in decision making (Cooper-Patrick et al., 1999; Kaplan, Gandek, Greenfield, Rogers, & Ware, 1995; Koerber, Gajendra, Fulford, BeGole, & Evans, 2004). Further, racially discordant medical interactions are more likely to be verbally dominated by the physician, (Johnson, et al., 2004), and contain less information for the patients (Gordon, Street, Sharf, & Soucek, 2006; Penner, Eggly, Harper, Albrecht, & Ruckdeschel, 2007). Finally, Oliver, Goodwin, Gotler, Gregory, and Strange (2001) found that White physicians spent significantly less time planning treatment, providing health education, assessing health knowledge, engaging

in informal conversation, and answering questions with Black as compared to White patients. Physicians spent more time discussing what they hoped to accomplish and assessing substance abuse with Black than White patients.

As we close this section, it must be noted that while these disparities in medical interactions, are consistent and pervasive, there are no published studies that have assessed pre-interaction thoughts and/or feelings of providers and correlated these with behaviors in medical interactions. However, the present authors have some preliminary data that suggest physicians' implicit and explicit racial attitudes do, in fact, affect their interactions with Black patients. Briefly, our participants were physicians at a primary care facility that served an exclusively Black patient population. We measured physicians' explicit and implicit attitudes (using the IAT) toward Blacks. After each interaction between a physician and a Black patient, we assessed the physician's commonality with the patient and willingness to share the decision-making with the patient and the patient's commonality with the physician, satisfaction with the interaction, and perceptions of physician warmth. Physicians' implicit and explicit attitudes predicted physician reports of commonality and shared decision-making and patient reports of commonality and satisfaction with the interaction; physicians' implicit attitudes also predicted patient perceptions of physician warmth. In all relationships more anti-black physician bias was associated with less positive reactions to the interaction. As noted, these findings of a relationship between racial attitudes and physician and patient reactions to a medical interaction are preliminary. However, they are consistent with social psychological theories of how racial bias can affect social interactions between Blacks and Whites (e.g., Dovidio et al., 2008). We discuss these theories more in the next section.

Analysis of the Current State of Knowledge

The following statements would seem to summarize the current state of knowledge about Black-White health care disparities. First, there are instances where Blacks respond as favorably to White health care providers as to Black providers. However, when given a choice, there is a clear preference among Black patients for providers who are also Black. Second, when there is a Black-White disparity in diagnoses and treatments, almost invariably it is Black patients who receive the less valid diagnoses and the less effective or appropriate treatments. Third, there are instances where racially concordant and racially discordant medical interactions are similar in content, tone, and outcomes, but it is much more common for there to be disparities. If there is a disparity, racially discordant medical interactions are almost invariably less positive and productive than racially concordant interactions. How can we best understand these findings?

We believe that one very useful approach is to view health care disparities through the lens of social psychological theories of intergroup bias: “the systematic tendency to evaluate one’s own group ... or its members more favorably than a nonmembership group or its members” (Hewstone, Rubin, & Willis, 2002, p. 576). Intergroup bias is associated with a social categorization process that is more or less automatic and spontaneously activates positive feelings and beliefs about ingroup members and less positive or even negative feelings about outgroup members (Gaertner & Dovidio, 2000). The activation of such thoughts and feelings can take place outside of conscious awareness and control (Blair, 2001; Wittenbrink, Judd, & Park, 1997) and is often played out in the interactions between members of an ingroup and members of an outgroup (Wilder & Simon, 1998).

The activation of an in-group-out-group distinction is most likely to occur when the physician and patient come from different racial or ethnic groups, but an ethnic difference is not the only cue that would activate these processes. Social class is likely an important cue as well.

Substantial differences between the education and income of the provider and the patient are more likely in racially discordant than racially concordant medical interactions. In addition to these demographic and socio-economic cues to group differences, Stewart and her colleagues (Stewart et al, 2000; Stewart et al., 1995) have argued that most physicians view themselves as members of one group (health care providers), who, as part of their job, interact with members of another group (patients). This difference in roles would probably on its own lead to intergroup bias and social categorization processes. The role differences may also reinforce and make more salient the other social class differences that exist between physicians and many minority patients. This would make intergroup bias and social categorization still more likely. .

There are other factors that may also contribute to the perception of strong ingroup-outgroup differences in interactions involving Black patients. In the United States, patients who are poor and members of ethnic minorities are less likely than wealthier majority patients to have continuity in their medical care. That is, they are less likely to see the same physician on different visits and, thus, less likely to have an ongoing provider-patient relationship with one physician (Doescher, Saver, Fiscella, & Franks, 2001). Intergroup bias is typically more probable among strangers than familiars (Pettigrew & Tropp, 2006).

Further, poor and minority patients are substantially more likely than wealthy, majority patients to see physicians trained outside the United States (most commonly from India or Pakistan) (IOM, 2003). For example, Bellochs and Carter (1990) found that, in the poorest neighborhoods in New York City, over 70% of the health care providers were graduates of foreign medical schools. The social and cultural differences between Black patients and foreign-trained providers may be even greater than the differences between Blacks and White American providers. This would make the probability of intergroup bias still higher.

Intergroup bias may heighten explicit thoughts and feelings, such as Black patients' distrust of White providers discussed earlier. It is also quite likely that these explicit processes are accompanied by implicit stereotypes and attitudes about members of another ethnic group among both providers and patients. As suggested above, these implicit biases will almost certainly affect the perceptions and behaviors of both patients and providers.

This does *not* mean that racially discordant medical interactions will automatically and invariably be more difficult and less productive than racially concordant ones. However, the conditions we have discussed do make such negative outcomes more likely to occur. Further, they may occur despite the best intentions of both parties to the interaction.

Directions for Future Research

We must begin this section by repeating the caveat offered earlier. The premise that stereotyping, prejudice, and discrimination are major causes of health care disparities is intuitively appealing, widely accepted by most professional medical organizations, and was at the core of the IOM report. However, the evidence in support of it is still largely circumstantial. Thus, one major task for future research is to further investigate these relationships and confirm or disconfirm the importance of stereotyping, prejudice, and discrimination in health care disparities. As reported above, we do have some preliminary data that show this relationship, but clearly much more empirical work is needed. The remainder of this section is based on the assumption that this future research will confirm the importance of these phenomena as causes of health care disparities.

First, we consider more “basic” social psychological research. Racially discordant medical interactions provide an excellent natural laboratory in which to study how subtle forms of stereotyping and prejudice might affect both affective and cognitive processes. For example,

van Ryn and her colleagues (Burgess et al., 2006), have laid out a detailed set of hypotheses about when racial stereotyping would affect health providers' diagnostic and treatment decisions. These hypotheses provide some rigorous and precise tests of Kunda and Spencer's (2003) theories about when people will and will not rely on stereotypes when interacting with minority group members. Specifically, Burgess et al. propose that stereotypic judgments about minority group patients are most likely to occur, "(w)hen providers must make complicated judgments quickly, with insufficient and imperfect information" (p. 123). Testing this idea in a health care setting would add to the body of knowledge about when and why stereotyping occurs. It might also be useful to study how stereotypes affect communication between physicians and patients. That is, it seems unlikely that stereotypes only affect the physicians' treatment decisions. Rather, it seems quite probable that they also affect the physicians' behaviors toward and communication with their patients. For example, van Ryn and Burke (2000) found that physicians are likely to believe that Black patients are less intelligent, less well educated, and less pleasant and rational than White patients who were actually equivalent to the Blacks on these attributes. If a physician who is having a conversation with a Black patient about some treatment decision implicitly holds these stereotypes, this may well affect the physician's behavior toward the patient. For example, the physician may do less to elicit questions or opinions from the patient and as a result the patient will probably actually ask fewer questions. The patient's behavior will thus reinforce the stereotype and influence the physician's treatment decision. Further, the physician's communication will almost certainly affect how the patient responds to recommendations for treatment (See Albrecht et al., 2008)

As another example of research possibilities, Amodio and Devine (2006) have argued that implicit cognitive and affective processes are independent and have unique explicit

correlates. Specifically, their theory predicts that cognition predicts judgments and impressions, while affect predicts interpersonal preferences and social distance. If so, then diagnoses and treatment decisions involving Black patients should be better predicted by implicit stereotypes (i.e., cognitions) than by implicit attitudes (i.e., affect), while behavior towards Blacks during medical interactions would be better predicted by implicit attitudes.

Finally, racially discordant medical interactions might provide a context in which to further test Dovidio et al.'s (2002, 2008) proposals about the causes and consequences of mistrust in Black-White interactions. Some of our own work can be used to illustrate this. As noted earlier, we have examined how Black patients' feelings of being the target of past discrimination, in general, affect their reactions to specific medical interactions and physicians. As expected, the more perceived discrimination (i.e., the less racial trust), the less satisfied the Black patients were with the interaction and the less connection or commonality they felt with their physician (Penner et al., 2009a).

Turning to applied or "action" research, social psychological theories of stereotyping, prejudice, and discrimination may be of considerable practical value in developing interventions aimed at reducing health care disparities. For example, Gaertner and Dovidio (2000) proposed that replacing individuals' separate social or group identities with a *common group identity* will reduce intergroup bias. Penner et al. (2009b) posited that increasing a common group identity would improve the quality of interactions between low income Black patients and foreign-born and trained physicians. They developed an intervention designed to create a common identity between the patients and the physicians. Specifically, prior to interactions between the patients and physicians, Penner et al. gave each of them instructions and materials (e.g., buttons and pens with same the team name on them) intended to increase their sense of being members of the

same team working on a common problem—improving the patients’ health. The intervention resulted in significantly more trust of physicians among experimental group patients relative to control group patients for as long as four months after the intervention.

Burgess, van Ryn, Dovidio, and Saha (2007) made several recommendations for ways to reduce “unintentional bias” among health care providers. The recommendations came almost entirely from social psychological theory and research. For example, Burgess et al. suggested some interventions that would make physicians view minority group patients as individuals rather than as members of an outgroup. The specific rationale for these interventions came from research on how and when it is possible to change stereotypes (e.g., Blair, 2001). In another example, they used the contact hypothesis (Pettigrew & Tropp, 2006) as the basis of suggestions on how to reduce providers’ anxiety and unease when interacting with members of ethnic minorities. Specifically, Burgess et al. suggested physicians be provided with opportunities to engage in, “interactive, facilitated discussions (with) colleagues of different race and ethnicity ... to enhance providers’ confidence in interracial interactions” (p. 884). Other suggestions included exposing providers to information about their own unconscious negative racial stereotypes and attitudes. This proposal was based on findings from Rokeach (1973) and others (e.g., Leippe & Eisenstadt, 1994) that indicate such self-confrontation procedures may cause negative emotional states that motivate people to counteract the effects of these prejudiced thoughts and feelings.

In summary, future research on health disparities offers a unique opportunity for a symbiotic relationship between basic and applied research. That is, this research may simultaneously help social psychologists better understand the processes responsible for

stereotyping, prejudice, and discrimination and help public health researchers develop effective ways to address the important and pervasive social problem of health disparities.

Summary and Conclusions

Overall the health of both Blacks and Whites in the United States has improved over the last 50 years; however, Black-White disparities in health status and health care are pervasive and show no sign of diminishing in the near future. Early research on health disparities offered overly simplistic and often racist biological explanations of why Whites were generally healthier than Blacks. Such explanations have largely been abandoned in favor of more sophisticated ones that consider genetic, economic, sociological, and psychological factors as causes of health disparities. Contemporary research strongly suggests that prejudice, stereotyping, and discrimination play critical roles in Black-White health disparities. For example, prejudice and discrimination are environmental stressors that take a physiological toll on their targets. Prejudice, stereotyping, and discrimination also affect the quality of the health care patients receive in several different ways. Being part of a group that has been the target of prejudice and discrimination creates mistrust, which negatively affects patient health-related behaviors and their reactions to health care. On the provider side, there is remarkably consistent evidence that Blacks receive poorer health care than Whites and there is reason to believe that implicit and explicit prejudice and stereotyping among health care providers play important roles in treatment disparities. There is much less current evidence demonstrating a link between implicit and/or explicit bias and disparities in medical interactions, but social psychological theory and research on the effects of racial bias in social interactions makes it very likely that such a relationship exists. This creates substantial research opportunities for both basic and applied researchers. That is, medical interactions in which the provider and patient are from different racial/ethnic

groups provide a unique opportunity to test current theories of how explicit and implicit racial thoughts and feelings are manifested in social interactions in the real world. And at the same time, these theories may provide a valuable means to develop interventions to reduce health care disparities.

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Footnotes

1. Following the conventional usage in the research literature in this area, we use the term “Black” to describe people who self-identify as Black African-American and Afro-Caribbean; and the term “White” to describe people who self-identify as non-Hispanic European-American and Caucasian. Also, as used here, “race” refers to a social construction, not a description of a group’s genetic characteristics.

Author Note

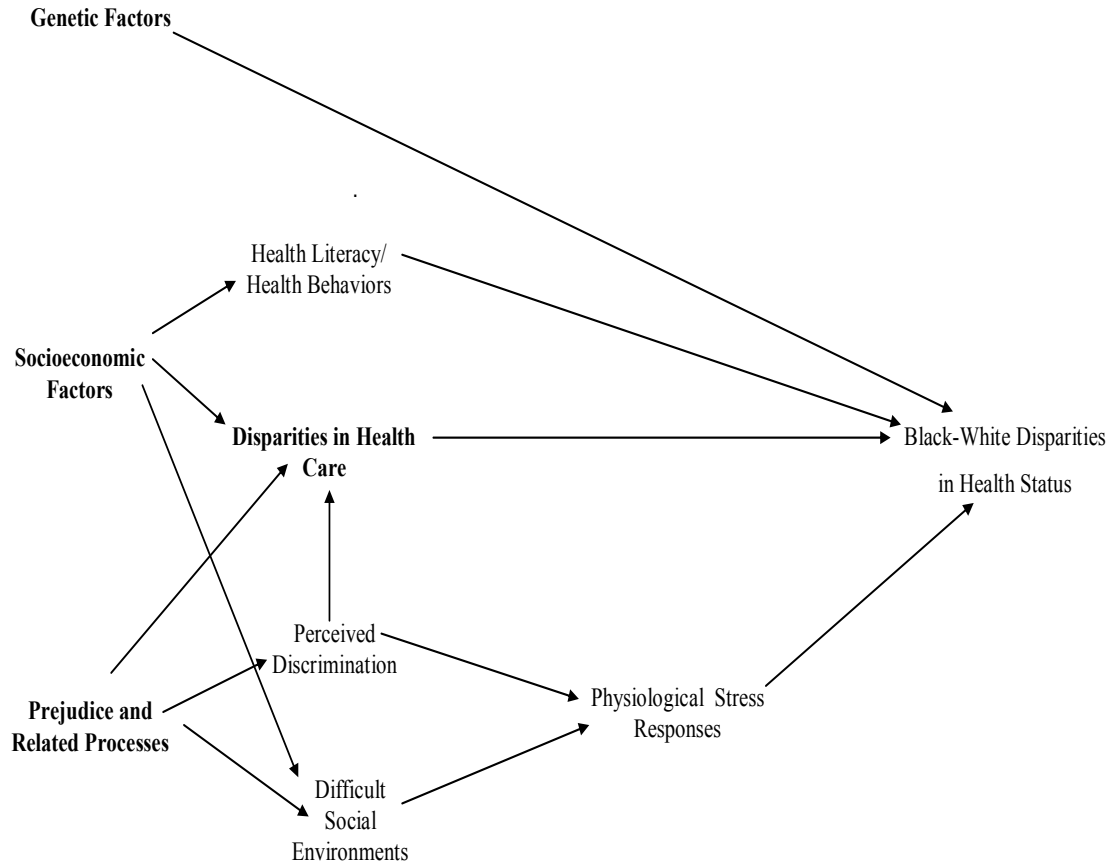
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Possible Causes of Health Disparities (after Penner et al., 2007)

Figure 1