CHAPTER 2 The Effects of Discrimination and Implicit Bias on Health and Health Care

LEARNING OBJECTIVES

By the end of this chapter you will be able to:

- Describe the lasting effects of historical discrimination and segregation on health and health care.
- Explain the meaning and health-harming effects of implicit bias.

Introduction

In the chapter on social and structural barriers to health, we describe in detail many social factors that directly or indirectly contribute to poor health, or at least make it exceedingly difficult for vulnerable individuals and communities to achieve optimal health. In this chapter we single out two such factors—discrimination and bias—for separate treatment. Unfortunately, the nation's discriminatory history has left an indelible mark on the health of populations of color, and thus it serves as an important backdrop to subsequent discussions about social systems that lead to health disparities and injustices.

We note at the outset that blacks are hardly the only group that has suffered health-harming discrimination and marginalization. Other racial groups, ethnic minorities, the impoverished, religious minorities, people with disabilities, women, and others have all been excluded from the healthful benefits associated with full participation in society, and we discuss many of these groups in the next chapter in the context of health disparities. That said, we mainly focus in this chapter on blacks, due to the relatively intense harms that discrimination and bias have caused in this population.

Race-based discrimination can be expressed on three different levels: interpersonal, internalized, and structural/institutional. Interpersonal racism is unfair treatment of a person or group by individuals (e.g., denying a person a job or an apartment rental based on the person's race); internalized racism occurs when victims of racism internalize prejudicial attitudes toward themselves and/or their racial or ethnic group, resulting in, among other things, stress and a loss of selfesteem; and structural racism refers to prejudices that are built into policies, laws, and societal practices.¹ Structural racism can be particularly wicked: it can be rooted in overt racism from decades or centuries past, but can result in even unintentional discrimination today as policies and practices are passed on through the generations.

In addition, not all racism is conscious. "Implicit bias" refers to "bias in judgment and/or behavior that results from subtle cognitive processes (e.g., implicit attitudes and implicit stereotypes) that often operate at a level below conscious awareness and without intentional control."² In other words:

it is the automatic association of stereotypes with particular groups. These automatic associations become problematic when they are assumed to predict real world behavior and when decision making is based on them. Automatic negative associations with stereotypes or implicit racial attitudes, while existing in the unconscious, become displayed through the individual's behavior. These behaviors are often apparent in microaggressions, which are 'brief and commonplace daily verbal, behavioral, and environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative racial slights and insults to the target person or group.'³

As described below, evidence suggests that unconscious biases are deeply rooted and remain widespread.⁴

Regardless of whether race-based discrimination is interpersonal, internalized, structural, intentional, or subconscious, it can raise the risk of a host of health conditions, both emotional and physical.⁵ Furthermore, at the same time that discrimination has been woven into the fabric of society, it can be further sustained by weakening the legal machinery that enforces civil rights laws. For example, a review of the first proposed federal budget put forth by the Trump Administration reveals that it is aiming to broadly reduce the promotion and protection of civil rights. The budget proposes to disband the Labor Department's Office of Federal Contract Compliance Programs, which has some 600 employees and fights discrimination among federal contractors; it would gut the Environmental Protection Agency's environmental justice program, which combats pollution-related threats in minority communities; it would significantly cut staffing in the Education Department's Office of Civil Rights; and it would shift the manpower in the Justice Department that aims to curb civil rights abuses in police departments across the country.6 These types of policy shifts can result in both direct and indirect risks to health. At the time of this writing, it is not clear how many of these proposals will be implemented.

This chapter is devised of two parts. We first describe in broad strokes the legacy of historical health care discrimination. We then describe more fully the concept of implicit bias and discuss its implications for health.

The Legacy of Historical Discrimination In Health Care

There is simply no doing justice to the topic of health care discrimination in a handful of pages; the description and legacy of overt, legally sanctioned discrimination and segregation in health care are simply too massive to document in a short primer on health justice. Indeed, the most authoritative treatise on the subject—Michael Byrd and Linda Clayton's *An American Health Dilemma*⁷—is two volumes and nearly 1,500 pages. There are additional books and many, many scholarly articles on the subject, as well. Thus, what we can provide here is, relatively speaking, a thumbnail overview and summary.

The roots of interpersonal and structural racism in the United States are buried in the earliest experiences of Native Americans and African Americans. Both groups suffered genocide, enslavement, and legalized racial oppression at the hands of those who colonized North America. This treatment in and of itself, however—as horrible as it was—is not what locked in subsequent centuries of race-based discrimination and segregation. Rather, this oppression set in motion in the U.S. an evolving and durable belief system that perpetuated the myth that people of color—black people, in particular—were inferior to white people.⁸ This had the long-term effects of legitimizing slavery and relegating blacks to a lower social, financial, and educational status relative to whites. This belief system has been resistant enough to survive the Civil War, passage and implementation of the Constitution's Thirteenth and Fourteenth Amendments, the Civil Rights Movement in the 1960s, and the election of the first black president.

The interpersonal and structural racism that permeated all facets of American life before and after the Civil War were, unsurprisingly, no less pronounced in the health care system. Just as there were separate schoolrooms for blacks and whites, there were health care facilities on plantations that only slave laborers were forced to use. Just as there were separate transportation systems, there were separate hospitals (hospitals run by the U.S. Department of Veterans Affairs, for example, were not desegregated until 1954). Just as there were separate bathrooms, there were separate medical, nursing, and dental schools—once blacks were permitted to attend these schools, of course; as of the mid-1930s, only two medical schools would admit blacks. Just as there were separate drinking fountains, there were separate physician practices. Just as there were racially segregated neighborhoods, there were separate professional medical societies (black people were effectively excluded from the American Medical Association right up until the Civil Rights Era).

Although these separate health systems existed through the better part of the twentieth century, the white majority's interest in the health of blacks underwent something of a shift around 1900. Recognizing that white health was affected by the health of the broader population—germs did not segregate on the basis of a host's race, after all—medical professionals decided that minority health was also important. However, this "care" was decidedly paternalistic. For example, forced sterilization

of black women was not uncommon after the American Civil War (when whites worried about a growing black population that sought enhanced legal rights and protections). The practice of forced sterilization continued until the 1960s.

In terms of undisguised health care racism, however, little compares with the Tuskegee syphilis experiment. Undertaken by the U.S. Public Health Service and the private Tuskegee Institute, the 40-year study aimed to understand the effects of untreated syphilis on black men in Alabama. Study subjects went untreated because researchers never informed them of the actual purpose of the study; rather, the men were told that they were being treated for "bad blood." As a result, the men were never given the chance to provide informed consent. The nontreatment continued even after penicillin became the drug of choice for syphilis in 1947 since, if the men being studied were actually cared for, researchers could no longer study the bodily effects of untreated syphilis. While the federal government eventually apologized for conducting the study and paid an out-of-court settlement to participants and their families, the Tuskegee study's legacy continues to resonate today. Minority distrust of government-sponsored health services and of participation in human subject research is relatively high, which limits minorities' willingness to participate in important therapeutic trials. In fact, a 1997 study of multiple black focus groups concerning their views on medical research and the Tuskegee study found that, among other things, distrust of medical researchers posed a substantial barrier to study recruitment.

Another notable event—notable because nothing else like it exists in twentieth century statutory law—was passage in 1946 of the federal Hospital Survey and Construction Act, also referred to as the Hill-Burton Act after the two senators who sponsored the legislation. The Hill-Burton Act authorized the use of federal funds for states to build new hospitals (and refurbish old ones) in the aftermath of World War II, provided that hospitals cared for a "reasonable volume" of patients who were unable to pay for services. As a matter of financing, Hill-Burton was a powerhouse: in the 30 years after passage, the law subsidized the construction of 40% of hospital beds across the country. However, Hill-Burton—passed only eight years before *Brown vs. Board of Education* was decided—is perhaps best known for a provision that explicitly permitted federal financing of discriminatory practices:

a hospital will be made available to all persons residing in [its] territorial area . . ., without discrimination on account of race, creed, or color, but an exception shall be made in cases where separate hospital facilities are provided for separate population groups, if the plan makes equitable provision on the basis of need for facilities and services of like quality for each such group.⁹

This racist federal law survived for 17 years before it was ruled unconstitutional in the case of *Simkins v. Moses H. Cone Memorial Hospital*,¹⁰ which has been referred to as the "Brown v. Board of Education" of health care.¹¹

Congress has never passed a comprehensive civil rights statute for health care comparable to, say, Title VII of the Civil Rights Act of 1964 (prohibiting employers from discriminating against employees on the basis of race and color, among other things), the Voting Rights Act of 1965, the Fair Housing Act (passed as Title VIII of the Civil Rights Act of 1968), and similar landmark laws whose intentions are to make certain aspects of society more equal. Combating discrimination in health

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care did get a boost in the 1960s, however, by way of Title VI of the 1964 Civil Rights Act. Title VI prohibits discrimination on the basis of race, color, or national origin by programs and activities that receive federal financial assistance.¹² The statute passed by Congress outlaws intentional discrimination, while the regulations implementing the statute go further, reaching conduct and practices that, even if unintentional, nonetheless have a discriminatory impact on members of minority groups. While Title VI remains deeply important to efforts to stamp out race-based discrimination in health care,¹³ the ability of individuals to enforce their rights under the law was deeply undercut by a controversial U.S. Supreme Court decision in 2001.¹⁴ (In the case of Alexander v. Sandoval, the Court ruled that the discriminatory impact regulation mentioned above may not be enforced by the very individuals suffering the discrimination; rather, according to the Court, only the federal government has enforcement authority.) In addition to Title VI, the Medicare and Medicaid programs are important pieces in the health justice puzzle, providing health insurance coverage to some of the nation's most vulnerable populations; the federal Emergency Medical Treatment and Active Labor Act effectively requires that everyoneregardless of race, health insurance status, or ability to pay-presenting at a hospital emergency room be screened and treated for an emergency medical condition; and the Affordable Care Act has made important strides in moving the nation closer to universal health insurance coverage.

Needless to say, it is of paramount importance that the health system is no longer actively segregated and that there are federal laws that aim to root out health care discrimination, reduce health and health care disparities, and promote health justice. Yet it is equally important to understand that racial discrimination in health care persists, that the health care system operates in a broader context of societal structural racism, and that institutional racism in one sector can reinforce it in others.¹⁵ Perhaps most important in the latter regard is racial residential segregation—i.e., the physical separation of groups into different geographic areas based on race, which can easily shape individual and familial living experiences as far down as the neighborhood level. (Residential segregation—among all the various forms of structural racism—is so profound in the context of health equity because it can easily lead to educational and occupational segregation, as well. Thus, marginalized groups are subjected not only to lower-quality neighborhoods, but to lower-quality schools and jobs, as well. As you will learn in the chapter on social and structural barriers to health, education and job quality are key predictors of overall health.)

Historically, race-based living patterns were shaped by two practices. First, the use of "restrictive covenants"—a clause in a property deed or lease that limits what the owner can do with the property—effectively prohibited blacks from owning, leasing, or living in certain homes or entire neighborhoods. These covenants were used with regularity until the U.S. Supreme Court ruled them unconstitutional in 1948.¹⁶ Second, the Federal Housing Administration, an agency that, among other things, insures mortgages, began "redlining" in the mid-1930s. The term derives from the agency's proclivity to mark maps with red lines to depict neighborhoods where mortgages should be denied to people of color, thus ensuring many all-white neighborhoods. Redlining have been outlawed, racial residential segregation is hardly a thing of the past: recent census data indicate that the average white person in metropolitan America lives in a neighborhood that is 35% white and as much as 45% black.¹⁸

If—as alluded to in the Introduction to this book and discussed further in the chapter on social and structural barriers to health—health is more a function of one's zip code than genetic code, then racial residential segregation matters enormously for purposes of health justice. Indeed:

the literature on racial residential segregation and poor health examines several direct and indirect pathways through which structural racism harms health, including the high concentration of dilapidated housing in neighborhoods that people of color reside in, the substandard quality of the social and built environment, exposure to pollutants and toxins, limited opportunities for high-quality education and decent employment, and restricted access to quality health care. Health outcomes associated with residential segregation documented among black Americans include adverse birth outcomes, increased exposure to air pollutants, decreased longevity, increased risk of chronic disease, and increased rates of homicide and other crime. Residential segregation is thus a foundation of structural racism and contributes to racialized health inequities.¹⁹

In case these claims are too broad to really resonate, consider a 2017 study in the Internal Medicine Journal of the American Medical Association. The study points to evidence that blacks living in racially segregated neighborhoods experience higher blood pressure than people living in relatively diverse areas.²⁰ Furthermore, the act of moving from segregated communities to integrated ones was associated with a decrease in blood pressure. Consider also a study that reviewed admission patterns for heart attack patients at some 2,400 U.S. hospitals. The study considered the relationship between skin color and admission to "high-mortality hospitals," defined as those hospitals with the top-third highest mortality rates. The researchers found that black patients were more likely to be admitted to high-mortality hospitals even when they lived closer to low-mortality hospitals. This finding indicates that blacks continue to be directed to lower-quality facilities contrary to medical protocol, which generally dictates that people suffering heart attacks be directed to the closest hospital.²¹ These are just two specific examples, among many. Why are there so many examples linking racialized housing patterns and health outcomes? A well-known 1980 study of the 171 largest cities in the U.S. sums it up rather succinctly: the worst urban context in which whites typically reside is considerably better than the average environments of black communities.22

Racial residential segregation is not the only type of structural racism that works across sectors to harm health. The Flint, Michigan, water crisis, in which the majority-black city was subjected to lead-contaminated drinking water by apathetic city and state health officials, is an example of environmental racism; targeted sales of cigarettes, alcohol, and high-fructose beverages to low-income communities of color is a form of structural racism; and state laws that purport to root out "voter fraud" at the expense of minority voting rights is a type of structural discrimination.²³ These and other structural pathways must be included when discussing health-harming discrimination, and we explore them more fully in the chapter on social and structural barriers to health.

Taking together everything you've read thus far, it should come as no surprise that blacks live sicker and die sooner than whites. In fact, every 7 minutes in the U.S. a black person dies prematurely from poor health.²⁴ Discrimination and the chronic stress that often results from it play a substantial role in this morbidity and mortality. (To see a series of resources measuring and depicting everyday discrimination, search for Professor David Williams' "Measuring Discrimination Resource.") While researchers are just beginning to understand the full range of physical, mental, and emotional responses that occur in response to ritualized structural and interpersonal race discrimination, what is apparent is that persistent stress can lead to increased rates of hypertension, diabetes, cancer, stroke, kidney disease, maternal death, and more. The next chapter, which covers health disparities, picks up on this thread and describes the ways in which certain population groups suffer disproportionately from poor health. For the time being, we leave the topic of overt discrimination to focus on its pernicious relative—implicit bias.

Implicit Bias and Its Connection to Health

Recall from the beginning of this chapter the discussion about the earliest instances of racial oppression against Native Americans and blacks, and how that oppression laid the groundwork for a cascading, multigenerational belief system premised on the idea of white superiority. While this type of overt racism is no longer the norm, it does have a distant relative that has been informed by history and infects everyone: implicit bias. "Bias" refers to an inclination toward a person or group compared with another person or group, and in this instance, "implicit" means that the inclination operates at a level below conscious awareness. Research shows that these "automatic beliefs" are deeply held and can guide behaviors in ways that contribute to persistent inequality,²⁵ and a federal court was blunt in its assessment that implicit bias is "no less corrosive of the achievement of equality" than explicit and overt discrimination.²⁶ What makes implicit biases so enduring is that generally speaking, individuals consciously hold nonprejudiced beliefs and do not realize that they are being motivated by implicit biases.

You can probably think of many ways that implicit biases could negatively influence health. To get you started, consider a few possibilities. Might clinicians act on the basis of implicit biases when recommending treatment options? (And would it even be reasonable to expect health care providers' biases *not* to seep into the snap decisions they often have to make in high-pressure environments such as hospital emergency departments?²⁷) Could officials charged with administering health programs make policy decisions based on unconscious views? Isn't it likely that instructors and mentors in the health professions will pass along their biases to the next generation of care providers, thereby perpetuating unequal treatment? Before discussing more fully the pathways between implicit biases and health, we pause to briefly describe how implicit bias is measured.

Measuring Implicit Bias

The Implicit Association Test (IAT), developed in 1998, is the most widely-used measure of implicit bias. The IAT is a computerized test that records the time it

takes for a participant to associate two categories of people (e.g., Black/White, Gay/Straight, Male/Female) with positive or negative adjectives (e.g., "wonderful," "horrible," "cooperative," "difficult"). The IAT is based on the theory that a quick association time reveals the participant's true feelings about the two categories of people, as it takes longer to respond if they are actually working to override their automatic association.²⁸ The racial attitudes IAT is available online and has been taken millions of times. Cumulative results of these tests reveal that white participants have a pro-white bias, to varying degrees.²⁹ Although the IAT has been criticized for being unreliable—participants frequently get different results in subsequent re-takings—it remains the foundation for much of the research around implicit bias.

One bias measurement tool popular in bioethics is called the "assumption method"³⁰ (it is given this name because there is an assumption from the outset that individuals being measured are explicitly motivated to disregard factors such as race). The assumption method adapts what's known in health care as the "clinical vignette"—a common teaching tool in health education that tests a student's knowledge of symptoms, diagnosis, and treatment options using a hypothetical patient fact pattern. In the assumption method, the only difference between two clinical vignettes is the characteristic that is the subject of the bias, such as the race of the patient. Differences in diagnoses or treatment between otherwise identical vignettes are attributed to bias.³¹

How Implicit Bias Affects the Provider-Patient Relationship

In one of the first studies of implicit bias in health care, a majority of physicians agreed that their own implicit race bias may affect their treatment decisions.³² This intuition is largely borne out by the evidence, as most studies find that health care providers possess some level of bias against black people, and that bias, rooted in stereotype, often animates diagnosis decisions or treatment recommendations.³³ Implicit bias can go so far as to cause providers to ignore the facts in front of them, such as in the following example:

At a well-known academic medical center, a child presented with difficulty breathing that baffled the care team. The team of physicians were [sic] agonizing over a light box, reviewing the patient's X-rays, puzzled because they couldn't determine a diagnosis. Another physician just passing through looked at the X-rays and immediately said, "cystic fibrosis." The team was tripped up by the patient's race, which was black, and that the patient had a "white disease."³⁴

On the subject of treatment recommendations, a study found that pediatricians' biases lead them to prescribe less pain medication to black children than white children. Another study demonstrated that physicians are less inclined to recommend blood-clot surgery for black patients based on the "perception" that they are not as cooperative about treatment recommendations as are white patients.³⁵ At the same time, another study of pediatricians treating Native American children found that,

despite IAT results showing physician bias against Native Americans, there was little difference in treatment recommendations for asthma and pain control based on race.³⁶

Implicit bias can also negatively affect the quality of the relationship between provider and patient, with race-biased providers receiving lower marks in communication and interpersonal treatment from black patients than white ones.³⁷ Patients who perceive that their providers are biased against them, even if that bias is not overt, may not trust their provider and thus may be less likely to adhere to treatment regimes.³⁸

Whether physicians' implicit biases result in adverse health outcomes for their patients is less clear. While a 2014 blood pressure study found implicit bias among health care providers, it also found that it had no impact on health outcomes for black and Latino patients.³⁹ But in a study of patients with a disabling spinal cord injury, pro-white, anti-black bias among physicians was associated—among black patients—with greater depression, lower levels of life satisfaction, and more difficulty integrating socially.⁴⁰

How Implicit Bias Can Shape Systems and Policy

When, for example, health care providers act upon their biases, it can affect their relationship with patients, influence treatment decisions, and ultimately contribute to health disparities. But when unconscious attitudes shape systems and policy, the effect is, naturally, felt on a much larger scale, and the results can undermine health equity. For example, implicit bias may explain why the amount of cash assistance available to low-income people depends more on the state in which a family lives, rather than the family's experience of poverty. (As you will read in the chapter on social and structural barriers to health, governmental cash assistance is a critical lifeline to health for many low-income individuals and families.) The Urban Institute—an economic and social policy research organization in Washington, DC—found that, under the Temporary Assistance to Needy Families (TANF) program, states with larger populations of white people provide more cash assistance, and have more generous access rules, than states that have larger black populations. Thus, low-income black families are more likely to live in states with more restrictive policies for obtaining or keeping TANF benefits.⁴¹

Systems and policies designed to spark the use of health information technology can also introduce bias into provider-patient relationships. In one electronic medical record system, an airplane icon is displayed for so-called "frequent flyers": patients with chronic physical, mental, or substance use conditions who frequently use emergency departments or psychiatric crisis centers. Usually used pejoratively in a health care context, "frequent flyers" are assumed to be problem patients. (A better term for patients who require relatively high levels of health care is "high need, high cost.") Rather than provide care based on the patient's medical problems, a health care provider using this particular electronic medical record system may instead react to the icon—perhaps without ever having even spoken to the patient and make assumptions based upon the "frequent flyer" designation. If providers begin encounters with patients with a "problem patient" stereotype in their mind, they may fail to diagnose genuine medical issues or fail to provide quality care.⁴²

Similarly, medical education may unwittingly reinforce or encourage implicit bias, thus indoctrinating new generations of health care providers into unconscious stereotyping. For example, clinical vignettes that rely upon racial or gender stereotypes may encourage students to draw conclusions based on these stereotypes rather than on the individual characteristics of patients.⁴³ Negative role modeling may also contribute to systemic bias in health care. During their formative training years, medical students witness physicians acting upon their implicit biases and may replicate this "hidden curriculum" in practice. For example, physicians may assume that patients with limited English proficiency are more difficult to treat because of the time required to engage an interpreter, and thus may provide less information to those patients in an effort to save time. Medical students, told in class to provide high-quality care to all patients, receive a different message when they see physicians cut corners as a result of their biases.⁴⁴

Efforts to Combat Implicit Bias in Health Care

Implicit bias can negatively affect individual health and ultimately increase health disparities across groups. Yet because it operates on an unconscious level and is often contrary to consciously held beliefs, what can be done to combat it? Rather than pretend that implicit bias does not exist—and, in fact, we all harbor these types of biases—experts encourage people to equate implicit bias with a bad habit that must be acknowledged, analyzed, and then overcome by a nonprejudiced response. Methods include consciously replacing stereotypes with counter-examples, or using role-playing games in which individuals imagine themselves in the position of the victim of bias.⁴⁵

As it turns out, implicit bias among health care providers has been reduced when providers are given more opportunities for meeting individual members of different groups in a positive, unpressured setting.⁴⁶ Individuation—where medical students are taught to consider a patient as an individual rather than as a member of a group— prioritizes the patient's individual characteristics over their membership. Making individuation a routine part of medical education and care delivery could decrease bias in high-pressure settings, like crowded emergency rooms, where providers must react quickly.⁴⁷ And innovations such as "implicit bias rounds," in which health care providers consider how implicit bias may have detrimentally affected their past care of a patient, can help providers understand the role of bias in their practice.⁴⁸

Although it may seem obvious, health care providers must be encouraged to follow clinical guidelines for care rather than making assumptions about, for example, whether a patient will adhere to a treatment regime based on prevalent stereo-types about a group's level of cooperation.⁴⁹ Because implicit bias has been shown to influence the interpersonal relationship between health care providers and patients, the reduction of behavior based on bias may serve as one step towards reducing health disparities and increasing health equity.

Conclusion

This chapter scratches the surface of two of the more unsavory social determinants of health: discrimination and bias against people based on an immutable trait or membership in a particular group. These health-related social factors, as you will see in the next two chapters, braid together with many others to result in a raft of various health disparities. (Make no mistake, these disparities are not limited to health care delivery or to race: as noted previously, research also points to disparities in health care access, diagnosis, and outcomes based on socioeconomic status, physical and mental disability, gender, sexual orientation, geographic location, and more.) But we singled out discrimination and bias to provide backdrop and context and to call them out for what they are: an enduring component of a society and health system that relegate far too many fellow human beings to the fringes of well-being. There is little question that as a whole, society is making progress: the causes of health disparities and health inequities are relatively new topics of study, and there is an effort afoot to mainstream the idea that implicit biases are both widespread and remediable. But more can, and should, be done to combat discrimination and prejudice.

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