Implicit bias in Health/Health Care

The presence and prevalence of racial disparities in health and health care across a wide array of ailments have been documented extensively (for example overviews, see Elster, Jarosik, VanGeest, & Fleming, 2003; Mead, et al., 2008; Smedley, Stith, & Nelson, 2003; Stevens & Shi, 2003). Various explanations for these disparities range from individuals’ lifestyle decisions, biomedical reasons, and social/environmental factors. The Kirwan Institute emphasizes this third category, noting that the social determinants of health such as where people are born, live, and work all affect health outcomes (for further information, see Daniels, Kennedy, & Kawachi, 1999; Social Determinants of Health,” 2012; World Health Organization, 2008).

As discussed in this chapter, studies have documented the presence of implicit bias in a variety of facets of the health / healthcare industry.

Physicians’ Implicit Biases

Like all other groups of people, health care professionals carry implicit biases that can influence their behaviors and judgments (Stone & Moskowitz, 2011). Some researchers have examined what role, if any, physicians’ implicit racial biases play in the formation and perpetuation of these disparities. For example, Sabin and colleagues measured the implicit and explicit racial biases of 2,535 medical doctors and accounted for the physicians’ own race and gender in their analysis. This research yielded three notable conclusions: 1) the doctors’ implicit and explicit attitudes about race align well with the patterns found in large heterogeneous samples of the general population, as most doctors implicitly preferred Whites to Blacks; 2) on average, African American doctors did not display any implicit racial preferences for Whites or Blacks; 3) physician gender matters, as female doctors tended to hold fewer implicit racial biases (Sabin, et al., 2009). Other researchers have examined this phenomenon at an earlier stage, finding an implicit preference for Whites among first-year medical students (Haider, et al., 2011).

Furthering this line of inquiry, Moskowitz et al. conducted two studies aimed at exploring whether unconscious stereotypes influence the thoughts and behaviors of physicians. They identified the stereotypes maladies that medical professionals associated with African American patients and, by utilizing a reaction time procedure
in which subject received implicit primes, found that doctors implicitly associated certain diseases with African Americans (Moskowitz, Stone, & Childs, 2012). The authors articulate two main dangers of this implicit stereotyping: “(1) inaccurate components of a stereotype may be used in diagnosis and treatment without conscious knowledge of this influence, [and] (2) even an accurate stereotype may unduly influence diagnosis and treatment” (Moskowitz, et al., 2012, p. 1000).

Finally, in the realm of psychotherapy, Abreu used an experimental design to determine that therapists who were unknowingly primed with terms and stereotypes about a fictional patient rated the patient more negatively than a control group who were primed with neutral words (Abreu, 1999). This is yet another example of how the biases medical professionals carry can affect their patients.

**Differential Treatment**

Alarmingly, implicit biases have been shown to affect the type(s) and quality of care that patients of various races receive.

Schulman et al. examined racial variations in medical treatment using videos of actors portraying patients reporting chest pain. The patients were similar across several characteristics (e.g., socioeconomic status, type of insurance plan); however, they varied by race and sex. Results indicated that women and Blacks were less likely to be referred for cardiac catherization compared to their respective sex and race counterparts (Schulman, et al., 1999). Further analyses indicated that patients’ race and sex independently influenced the doctors’ recommendations, which provides insights into the differential treatment of cardiovascular disease (Schulman, et al., 1999).

A similar study by Weisse and colleagues explored whether the race and gender of patients influence doctors’ decisions for treating patients who are reporting pain due to a kidney stone or back problems. Researchers presented doctors with vignettes depicting patients with these ailments. While patient race and gender varied across vignettes, the description and severity of his/her symptoms remained consistent across all cases. Researchers did not find any differences by race or gender with respect to the doctors’ decision to administer treatment; however, they found that
treatments prescribed varied by patients’ race and gender. With respect to race, male physicians prescribed higher doses of pain medication to White patients compared to Black patients, yet female doctors gave higher doses to Blacks (Weisse, Sorum, Sanders, & Syat, 2001). In terms of gender, male physicians prescribed higher doses of pain medicine to men, and female doctors gave higher doses of pain medication to female patients compared to males (Weisse, et al., 2001). These findings suggest that acknowledging a physicians’ gender is key to understanding differential treatment of patients by race and gender (Weisse, et al., 2001).

The first study to provide compelling evidence of implicit bias among physicians using the IAT was conducted by Green et al. They sought to determine whether physicians held implicit racial biases, and if so, did the amount of implicit bias predict whether the doctors would prescribe thrombolysis for Black and White patients displaying acute coronary symptoms. In terms of the results, the physicians reported not having any explicit preferences for Black or White patients; however, implicit measures recorded a preference for White patients and a belief that Black patients were less likely to cooperate with medical procedures (Green, et al., 2007). Most notably, the researchers found that increases in physicians’ pro-White biases coincided with an increased likelihood of treating White patients with thrombolysis but not Black patients (Green, et al., 2007). Thus, the dissociation of implicit and explicit biases in a medical context can lead to differential treatment by race, which has obvious and important implications for patients’ well-being.

Taking the study by Green et al., 2007 to a different context, Sabin and Greenwald used three different IAT tests to examine pediatricians’ implicit attitudes and how they affect treatment recommendations for four pediatric conditions (pain, urinary tract infection, attention deficit hyperactivity disorder, and asthma). While there were not any significant associations between implicit attitudes and three of the diagnoses, researchers did uncover an association between unconscious biases related to patient race and prescribing narcotics for surgery-related pain (Sabin & Greenwald, 2012). Specifically, as pediatricians’ pro-White implicit bias increased, so too did their inclination to prescribe pain-killing narcotics for White rather than Black patients (Sabin & Greenwald, 2012). Thus, implicit biases have been shown to influence patient treatment decisions even for youths.
Doctor - Patient Interactions

Another area affected by implicit bias in the healthcare realm is doctor-patient communication. Indeed, a study by Penner et al. concluded that White physicians’ implicit racial biases led to less positive interactions with Black patients, particularly for doctors who displayed the combination of low explicit bias but high implicit bias (Penner, et al., 2010). Relatedly, a sample of physicians in another study found that “physicians were 23% more verbally dominant and engaged in 33% less patient-centered communication with African American patients than with White patients” (Johnson, Roter, Powe, & Cooper, 2004, p. 2084).

Looking at primary care clinicians, Cooper et al. examined how the implicit attitudes of primary care clinicians related to clinician-patient communication and patient ratings of care. Using an IAT that measured clinicians’ race bias, the researchers found that higher implicit race bias scores generally were associated with more verbal dominance and lower patient positive affect for Black patients (Cooper, et al., 2012). From the perspective of Black patients, clinicians with higher IAT race bias were linked to Black patients feeling like they received less respect from the clinician, having less confidence in the clinician, and being less likely to recommend the clinician to other people (Cooper, et al., 2012). Conversely, White patients who interacted with clinicians who held higher levels of race bias felt that they were respected and liked (Cooper, et al., 2012).

Fostering Cultural Competency

Stone and Moskowitz define cultural competency in a medical environment as “the ability of systems to provide care to patients with diverse values, beliefs and behaviors, including their tailoring of delivery to meet patients’ social, cultural and linguistic needs” (Stone & Moskowitz, 2011, p. 771). Contributing to the perpetuation of implicit biases in health care is the fact that medical professionals are not necessarily formally trained or well-versed in cultural competency (Carillo, Green, & Betancourt, 1999; White III, 2011).

Begun in 1997 and formally published in 2001, the Office of Minority Health in the
U.S. Department of Health and Human Services created the National Standards for Culturally and Linguistically Appropriate Services in Health Care (National Standards for Culturally and Linguistically Appropriate Services in Health Care, 2001). These standards “respond to the need to ensure that all people entering the health care system receive equitable and effective treatment in a culturally and linguistically appropriate manner” (National Standards for Culturally and Linguistically Appropriate Services in Health Care, 2001, p. 3). Stone and Moskowitz, however, point out that while these standards are a step in the right direction, they leave the way in which this material should be taught open to interpretation, thus medical professionals are left to “walk the thin line between the activation of cultural knowledge and the use of stereotypes” (Stone & Moskowitz, 2011, p. 772).

Several scholars have called for more cross-cultural/cultural competency curricula to educate medical professionals (Geiger, 2001; Stone & Moskowitz, 2011; White III, 2011). While these materials and teachings can be an important steps toward dismantling implicit biases, scholars also warn against stereotyping or oversimplifying a culture, as assuming that members of a given racial or ethnic group behave in a uniform and predicable manner is also problematic (Betancourt, 2004; Carillo, et al., 1999).

Concluding Thoughts

The impact of implicit biases in healthcare should not be understated. Moskowitz and colleagues capture the far-reaching effects, writing that implicit stereotypes can unintentionally affect medical professionals’ “diagnoses, treatment recommendations, expectations about whether a patient will follow a prescribed treatment, and both verbal and nonverbal behavior toward patients during professional interactions, despite their intention to avoid such biases in conduct” (Moskowitz, et al., 2012). Anderson takes these concerns a step further by asserting that, “Of the four principles of bioethics, three—autonomy, non-maleficence, and justice—are most directly impacted by implicit bias” (Anderson, 2012). He stresses the need for medical providers “to increase the depth of their own understanding and to identify and utilize readily available resources to decrease both the occurrence and impact of implicit bias” (Anderson, 2012).