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Avoiding Unintended Bias:

Strategies for Providing More Equitable Health Care

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Abstract

Research shows that unintentional bias on the part of physicians can influence the way they treat patients from certain racial and ethnic groups. Most physicians are unaware that they hold such biases, which can unknowingly contribute to inequalities in health care delivery. This article explains why a person's thoughts and behaviors may not align, and provides strategies for preventing implicit biases from interfering with patient care.

Over the past two decades, hundreds of studies have documented widespread inequalities in medical care. Although the reason for unequal care is multifaceted, physicians' behavior and decisions are known contributors.[1–8] Physicians' clinical decisions and the way they use guidelines and evidence-based practices have been shown to contribute to disparities in:

- Care for cardiovascular risk factors ranging from hypertension[9,10] to sleep disorders[11,12]
- Treatment of symptoms associated with coronary artery disease and severe cardiac events[6,13,14]
- Cancer screening, prevention, treatment and symptom management[15]
- Pediatric care, including asthma treatment[16,17]
- Assessment, treatment and referral for mental health services.[18]

Disparities also have been shown between patients of different ages, racial and ethic groups, and genders in receiving pain control.[19–22] The questions physicians ask during patient interviews and which tests they order can contribute to such disparities in care.[23–28]

Physicians often find it difficult to accept that unconscious biases may affect the care they provide because the notion is so inconsistent with their explicit (conscious) attitudes, motivations and intentions. Most physicians have genuinely egalitarian conscious beliefs and want to provide excellent care to all of their patients.[29] The apparent contradiction between what they consciously believe and what research shows they actually *do* can cause considerable cognitive dissonance—the uncomfortable feeling people get when holding two conflicting ideas simultaneously. Cognitive dissonance is so uncomfortable that we will go to great lengths to resolve it, often discounting or ignoring evidence that supports the lesser-preferred of our beliefs. When physicians reject evidence of unconscious bias, they miss an opportunity to improve the quality of care they provide, thus potentially perpetuating the delivery of unequal care. This article is intended to help physicians by 1) explaining why—

despite their best intentions—they might behave in ways inconsistent with their conscious beliefs and 2) providing strategies to prevent deep-seated biases from negatively affecting the care they provide.

Why Our Thoughts and Behaviors May Not Align

The reason physicians may be consciously well-intentioned yet behave in biased ways is rooted in the fact that we do not think the way we think we think. The vast majority of scientists studying the mind agree that humans have at least two separate information-processing systems that operate simultaneously. Daniel Kahneman, the Nobel Prize-winning author of *Thinking, Fast and Slow*, dubbed these simply as System 1 and System 2.[30] We are primarily aware of System 2, which involves deliberative, reasoned, conscious and effortful thought. In contrast, System 1 often operates outside of our awareness, helping us navigate the millions of bits of information to which we are exposed at any one time by providing an unconscious framework for interpreting incoming information. For example, most people in North America will automatically make the association between an apple and food. Furthermore, when we see an apple, we will automatically draw on stored information about apples, avoiding the need to dissect and study every apple we encounter. Although most of us believe System 2—conscious and reasoned thought—guides our behavior and understanding of the world, Kahneman points out that, “System 1 is really the one that is the more influential … it is steering System 2 to a very large extent.”[30]

System 1 also guides us through our social interactions—and can sometimes lead us astray. For example, if white and Asian doctors are repeatedly exposed to blacks portrayed as criminals, violent or in other negative ways on television or in film, they may automatically and unconsciously associate black patients with threat and undesirable behavior. These unconscious expectations and attitudes, referred to as implicit biases, represent the “thumbprint of the culture on our minds”[31] and, as such, they can be very different from our conscious attitudes and motives.

How Bias Manifests in the Clinic

Implicit biases have the potential to influence us in unintentional but powerful ways. Implicit racial bias has been shown to influence physicians’ clinical decision-making[3,32] in regard to patient referrals for thrombolysis[3] and post-operative pain control for children.[33] Furthermore, implicit biases have been shown to have complex and subtle effects on physician-patient interactions.[34] For example, physicians’ level of implicit racial bias against blacks, as assessed by the Implicit Associations Test, have been found to be inversely associated with patient-centered behavior,[8,35,36] visit length,[35] warmth,[4] and positively associated with rapidity of speech[35,37] and verbal dominance during the encounter.[38] Studies showed black patients reported less respect for, confidence in, and trust in the advice of medical professionals who scored higher in implicit bias.[34,35] This distrust predicted lower levels of adherence to the physician’s recommendations,[39] a finding consistent with other evidence that patients’ perceptions of being judged, negatively perceived, stigmatized or discriminated against predict adherence[40–44] and their likelihood of seeking follow-up or preventive care.[38,45–52]

It is important to bear in mind that implicit bias is not unique to physicians or the health care industry. Examples of the pernicious effects of implicit racial and other biases exist in every sector of our society. For example, fictitious job applicants with identical resumes responding to 1,300 want ads got 50% more call-backs when they used a “white-sounding” name versus a “black-sounding” name.[53] Another found female musicians were significantly less likely than male musicians to be hired for orchestras during open auditions, but as or more likely to be hired when they auditioned from behind a curtain.[54] In yet another study, faculty members (both male and female) reviewing applications for a student lab manager position that were identical except for gender viewed the male applicants as more competent than the female applicants. They also were more likely to hire and mentor a male student than a female student and offer him a higher starting salary.[55]

Strategies for Providing More Equitable Care

Although our implicit biases can cause us to behave in ways that are inconsistent with our explicit motives, values and beliefs, they do not have to. There are strategies that can increase our likelihood of seeing patients in terms of their unique individual characteristics, as opposed to those of a social or cultural group of which they are a member. In a recent issue of *Minnesota Medicine*, editor in chief Charles Meyer, MD, described the challenge: “Equity in the exam room means treating each patient as if they were your most important patient, regardless of gender, sexual orientation, race, ethnicity or personal appearance.”[56]

The massive body of evidence demonstrating the negative impact of implicit bias has prompted a number of additional studies identifying factors that can minimize it. The following are recommendations from those studies that have the strongest supporting evidence.

1. Put yourself in your patients’ shoes

Numerous studies have found that *perspective-taking* reduces bias and inhibits the activation of unconscious stereotypes and prejudices.[34,38,57,58] Perspective-taking refers to imagining yourself in the other person’s position; seeing things through his or her eyes. It is the cognitive component of empathy, and it can be learned and cultivated with practice. In addition to its documented benefits for reducing bias and stereotypes, provider empathy has been associated with increased patient satisfaction, adherence to physicians’ recommendations, self-efficacy and perceptions of control; less emotional distress; and better outcomes.[59,60] Some physicians have highly developed perspective-taking skills. But even those who do may not routinely apply them during clinical encounters. Through daily practice with family, friends and colleagues these skills can improve over time and their use will become more automatic.

Steps you can take:

- Imagine yourself in the other person’s shoes. Think of it as walking in their world or seeing the world through their eyes.
- Check in with your patient by saying something like: “I am wondering how I might see the situation if I were looking through your eyes…” or “I was

imagining being in your shoes, and it occurred to me that I might (feel/think/be) …. Am I close?"

- Read essays, narratives and fiction that provide the point of view of others who differ from you in terms of culture, race/ethnicity, socioeconomic status or another characteristic.

2. Build partnerships with your patients

Cultivate a sense that you and your patient (and perhaps his or her family) are on the same team, working toward shared goals. Being in partnership with patients creates a sense of a common in-group identity and reduces the likelihood of being "hijacked" by implicit biases.[61–64] Research has shown that we like, trust and are more motivated to help people in our "in group"—those we believe to be like us.[65–67] We tend to attribute the problematic behavior of members of our in-group to situational factors (eg, he was confused by the instructions), whereas we tend to attribute such behaviors among those who are not members of our in-group to an individual's intelligence or personality. For example, a white physician may describe an African-American patient who failed to take her medications as instructed as "nonadherent," yet that same physician might say a white patient who didn't follow her instructions for taking the medication "forgot the timing" or "needs additional instruction." Such attributions may cumulatively affect future encounters with those patients. Thus, the value of developing a partnership with patients and creating a sense of the patient being a member of ones' in-group can reduce categorization and associated implicit bias.[67–69] Partnership-building also promotes rapport and patient trust, potentially improving adherence and outcomes.

Steps you can take:

- Use the terms "we" and "us" instead of "I" and "you" to make it feel as if you're all members of the same team.[62] For example, instead of "*I* am going to order X test," try "*We* should probably use X test so we can find out…" or "*Let's* use X test." Instead of "*I* am going to prescribe Y" try "*Our* best course of action might be to try Y." Rather than say "If *you* have these side effects…" try "If *we* find that these side effects are a problem…"
- Focus on your common goals. It can help to articulate them by saying: "It seems as if our most important goal is to… (reduce symptoms, cure X, prevent Y, etc.)." This also helps prevent misunderstandings by allowing the patient to clarify or discuss them.
- Listen attentively and responsively, invite patients to participate in clinical decision-making, focus on the patient's strengths (and help that patient focus on their strengths), validate the patient's perspectives and concerns, and respect and honor their values.

3. Take care of yourself—protect your mental resources

Physicians and other health care providers are notorious for caring for others at the expense of their own well-being. However, converging lines of research suggest that self-care and

emotional regulation skills are crucial to providing high-quality, unbiased care. Studies have shown that when people have sufficient motivation, resources, information, time and awareness to be mindful, their judgement, behavior and decision-making are much less likely to be undermined by implicit biases.[69–73] However, when illness, fatigue, stress, anxiety or competing demands command more of their mental resources, their cognitive processing capacity may be compromised, allowing implicit biases and attitudes to hijack perceptions, expectations and evaluations of patients. Unfortunately, competing demands, distractions, heavy workloads and time pressure—all of which can increase stress and fatigue and decrease cognitive capacity— are all too common in clinical settings.[74]

Steps you can take:

- Assess your practice for unnecessary cognitive demands. This may mean addressing such things as scheduling, noise levels, inadequate training, poor supervision and clinic or facility overcrowding.[75]
- Allow adequate time per patient and between patients, establish routines and make sure your clinic has sufficient staffing.[74]
- Do things to protect your mental energy, such as getting sufficient sleep, finding ways to reduce stress and taking mental breaks throughout the day to refocus on being present with your patients.

4. Be positive

Research suggests that physicians who have positive emotions during the clinical encounter are more likely to see their patients as unique individuals and/or part of their in-group, and less likely to categorize them in terms of their race, ethnicity or culture.[67, 76]

Steps you can take:

- Strengthen or add practices associated with positive mental health such as mindfulness-based stress reduction, regular physical exercise, engagement in a pleasant hobby or sport, and time with friends and family. Scheduled solitude, if you are a person who benefits from time alone.
- Learn and use strategies for rapidly shifting negative emotions, especially those caused by stress or anxiety. Examples include abdominal breathing techniques, progressive muscle relaxation, mindfulness, and/or focusing for a moment on something you appreciate or for which you feel grateful.

5. Counter negative stereotypes by exposing yourself to positive images

Our implicit biases reflect ideas repeated in the larger society. One way to reduce our own biases is to expose ourselves to images that differ from what we commonly see. Studies have shown that exposure to admired African Americans and to images of African Americans in positive settings reduced negative implicit bias on the part of whites.[77, 78]

Steps you can take:

- Seek out entertainment that portrays racial and ethnic minorities in positive roles; women as likeable, competent leaders; obese people as active and intelligent; and elderly people as intellectually sharp and productive.
- Display artwork that portrays members of various groups in a positive light. Having artwork in waiting rooms, hallways and exam rooms that counters stereotypes may both reduce negative bias and make diverse patients feel valued. Even engaging in mental imagery that involves counter-stereotypical representations has shown benefit.[79]
- Bring groups of diverse people together to work toward a common goal. A meta-analysis of 515 studies concluded that intergroup contact typically reduces intergroup bias and anxiety.[80]

Conclusion

Many people, physicians included, believe that the problem of implicit bias only applies to other people, even though research suggests that almost all of us have negative implicit attitudes toward people from various groups. But these implicit biases do not have to control our behavior. By engaging in self-awareness, being mindful, regulating our emotions, routinely practicing perspective-taking, building relationships with people in other groups, practicing self-care and protecting our mental energy, we can go a long way toward ensuring that our behavior toward others reflects our true values, goals and motives.

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