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Bias and Racism Teaching Rounds at an Academic Medical Center



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Racism and events of racial violence have dominated the US news in 2020 almost as much as the novel coronavirus pandemic. The resultant civil unrest and demands for racial justice have spawned a global call for change. As a subset of a society that struggles with racism and other explicit biases, it is inescapable that some physicians and health-care employees will have the same explicit biases as the general population. Patients who receive care at academic medical centers interact with multiple individuals, some of whom may have explicit and implicit biases that influence patient care. In fact, multiple reports have documented that some physicians, health-care workers, and health professional students have negative biases based on race, ethnicity, obesity, religion, and sexual identity, among others. These biases can influence decision-making and aggravate health-care disparities and patient-physician mistrust. We review four actual cases from academic medical centers that illustrate how well-intended physicians and health-care workers can be influenced by bias and how this can put patients at risk. Strategies to mitigate bias are discussed and recommended. We introduce what we believe can be a powerful teaching tool: periodic “bias and racism rounds” in teaching hospitals, in which real patient interactions are reviewed critically to identify opportunities to reduce bias and racism and to attenuate the impact of bias and racism on patient outcomes.

CHEST 2020; 158(6):2688-2694

KEY WORDS: bias; racism; strategy

This article reviews cases that occurred at academic medical centers where the primary author has worked; minor details have been changed to protect the identity of the patients and the institutions. Similar scenarios likely play out at hospitals across the nation and aggravate health-care disparities and patient-provider mistrust.

Case 1

A patient with new onset, severe congestive heart failure and a mildly elevated troponin level that indicated heart muscle injury was admitted overnight. After a brief oral presentation by the medical resident, the attending

physician and team (composed of resident, cardiology fellow, interns, and medical students) entered the room where the attending took additional history, performed a focused physical examination, and answered questions from the patient and his family. The patient was a 39-year-old black man with a medical history of hypertension that was relatively well-controlled with medications. He had been a varsity athlete in college and was employed as a school teacher and high school coach. He was a nonsmoker and had a long-time girlfriend who was at his bedside along with his mother. Plans were made for a coronary angiogram to rule out critical coronary artery disease, with further testing to be

ABBREVIATIONS: IAT = implicit association test

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DOI: <https://doi.org/10.1016/j.chest.2020.08.2073>

determined pending results of the angiogram. Back in the hallway the resident informed the team that the patient's urine drug screen and HIV test results were normal. "Why were those tests ordered?" the attending asked. After a pause, the medical resident stated "Isn't that a part of the work up for cardiomyopathy of undetermined cause?" The resident was informed that it is not, after which he reported that "the night team ordered the tests." The attending and the team reviewed the night resident's admitting note to see if there was any documentation that indicated the reason that he thought these tests were necessary. There was not. The attending physician reminded the team that last week they had admitted two such patients, one man and one woman, both white, with the same diagnosis of new onset heart failure of unknown cause and that, in neither of those cases, were drug screens or HIV tests ordered or discussed.

Case 2

A faculty member taking the annual online modules that are required to maintain her privileges at the academic medical center reviews a question on the self-assessment quiz at the end of the module on hospital safety and security. It is a "yes" or "no" question: "You are in an elevator with a person who seems nervous. He is wearing unusually heavy clothing for summer. He starts telling you all about why he is at the hospital without your prompting. You both exit the elevator on the same floor. Should you call security to report a suspicious person?" The faculty member chooses "No" and is surprised to find that this answer is incorrect. The faculty member is confused, because in her opinion the scenario described did not warrant notifying armed security guards. However, to pass the quiz and proceed to the next module and renew her privileges, when she retakes the test she answers "Yes."

Case 3

Mr R was middle-aged man of Puerto Rican descent who had been diagnosed with chronic myeloid leukemia 1 year prior to presenting to our center. Our hematology team prescribed an oral agent that is standard frontline treatment for chronic myeloid leukemia and coordinated his care with a local hematologist. Mr R initially responded very well to this drug; however, testing at our facility several months later indicated that his disease was recurring. His local hematologist cited probable noncompliance with his chemotherapy agent as the likely explanation for this loss of response. Several

months later Mr R presented to our institution severely ill and testing revealed that his chronic myeloid leukemia had transformed to an acute leukemia. He had several recurrent hospitalizations at his local hospital over several weeks and continued to deteriorate clinically. Genetic testing ultimately revealed the presence of a mutation that conveyed an acquired resistance to the initial drug that Mr R was still taking. The patient was switched to a newer agent right away, but ultimately the patient's outcome was poor. In a postmortality review of the case the patient's treatment team expressed surprise that Mr R, who in their opinion was extremely conscientious and participatory in his care, would have been noncompliant with his chemotherapy drug. A review of the outside hematologist's notes did not find any objective evidence on which to draw the conclusion that the patient's recurrence was due to nonadherence to therapy.

Case 4

Two patients with end-stage renal failure who were being evaluated for kidney transplantation were discussed in a weekly multidisciplinary meeting that involved physicians, social workers, pharmacists, financial coordinators, psychologists, and dieticians. The patient's photographs were reviewed. The first person was a 38-year-old black woman whose photo showed her wearing a T-shirt with a violent image. She is married with adequate social support, is employed as a waitress, and has a possible living donor. She had no history of substance use, except cigarette smoking. She had a history of a violent encounter with a customer 1 year ago for which she was placed in jail for 2 days. The evaluating social worker felt that the patient was "opinionated," and the transplant psychologist felt that she would benefit from behavioral therapy. The evaluating physician deemed her to be medically suitable. Another patient who presented during the same meeting was a 65-year-old white man who had been on dialysis for 10 years. When referred for transplant evaluation in the past, he declined because he did not want a kidney from a cadaver. He did not have a living donor. He smoked marijuana weekly for recreation, despite prior advice to stop smoking marijuana. His physician felt that he was medically suitable. The committee recommended that the white man be listed for transplantation and that the black woman be declined at this time; she would have the opportunity to be reevaluated in the future.

Debrief and Discussion

It is likely that both explicit and implicit biases played a role in each of these vignettes and, in cases 3 and 4, the ultimate clinical outcomes. Regarding implicit racial bias physicians taking the black-white race implicit association test (IAT) are as prone to displaying implicit white race preference as laypersons.¹ Although much attention has been given to the detection of implicit bias on the IAT, it may be underappreciated that the tests also measure self-reported explicit bias. White, Asian, and Hispanic physicians have self-reported having mild levels of explicit anti-black bias or racism.^{1,2} Medical students have also been shown to self-report explicit negative attitudes toward black patients.³

In case 1, it is possible that the admitting resident unknowingly associated the black patient with negative concepts, such as illegal substance abuse and its possible sequelae, such as contracting HIV. Interestingly, recent reports suggest that resident physicians who experience burnout are more likely to display implicit biases⁴ and that racial biases are more likely to be acted upon when an individual is sleep deprived.⁵ Thus, it is possible that physicians who work overnight shifts like this admitting resident are more prone to make decisions based on implicit associations. Although the bias displayed in this case did not cause physical harm to the patient, the potential psychological stress it could have imparted had he or his family found out about the tests and worried why they were ordered or if he could not answer his family's questions as to why they were ordered or even the increased hospital costs due to unnecessary tests could all have been avoided.

In case 2, the academic medical center's education team has crafted a question as a teaching tool and placed it in a quiz that must be passed to renew privileges. The teaching point of the question is that a person on a hospital elevator wearing "unusually heavy clothing" and starting a conversation without prompting should be seen as suspicious and that the correct action is to report the person to security. The problem with this teaching point is that perspectives may differ based on the test taker's expectation of how security or police officers are likely to engage someone reported as "suspicious." If the test taker's life experiences indicate that armed security or police officers approach suspicious people in a polite, courteous manner, devoid of anger or malice, then they may be more likely to report the person to security. If, on the other hand, the test taker's life experiences indicate that security or

police officers often approach suspicious people in an aggressive, intimidating manner, with a hand on their taser or firearm, then the test taker is likely to have a much higher threshold to summon security. Many young black persons wear oversized or baggy clothing or clothing that is "unusually heavy" following a fashion trend made popular by hip-hop musicians.⁶ It is likely that the author(s) of the question are either unfamiliar with that style, uncomfortable with that style, or associate wearers of that style with danger. This association may be explicit or implicit and is problematic if it leads to more young black people being reported to security.

In case 3, the local hematologist offered the opinion that the recurrence of disease after an initial favorable response was due to lack of medication adherence. Although we cannot rule out the fact that this assumption was based on solid evidence that was not documented, it is also possible that the doctor, like other physicians, associates minority patients with medical nonadherence or a lack of cooperation.⁷ This assumption may have contributed to a significant delay in investigating another potential cause of the disease recurrence; a genetic mutation conferring resistance to the agent originally prescribed.⁸ Because this was indeed the case, the bias in this case may have contributed to the ultimate outcome.

In case 4, an interdisciplinary committee decides that the black woman is not an ideal candidate for a kidney transplant. It is likely that this disposition was based on psychosocial and behavioral reasons: she had a history of incarceration for a violent altercation; she smokes cigarettes, and the trained transplant social worker deemed her to be too "opinionated." Given that the ultimate long-term success of a transplantation requires patient adherence to treatment regimens, healthy behaviors, and presumably a positive therapeutic relationship with the treatment team, the decision of the transplant team may not be unreasonable. The other patient who was evaluated by the same team was a white man who could be deemed to be "opinionated" (previously declined transplantation evaluation because he did not want a cadaver kidney) and to have a tendency towards noncompliance (smoking marijuana despite physician advice to stop.) Both patients participated in illegal activities (marijuana use vs a violent altercation), yet the committee had the ability to use its discretion and decided that the illegal activity and "opinionated" mindset of the white man should not

exclude him from proceeding to transplantation. This discretion had significant consequences for both patients.

Strategies to Mitigate Bias in the Hospital

1. Promote Wellness/Alleviate Physician “Burnout”

As stated previously, individuals may be more vulnerable to the influences of implicit bias in decision-making when they are sleep-deprived or experiencing symptoms of burnout. While we await findings that interventions to reduce symptoms of burnout have a mitigating effect on racial bias, we advocate implementing some of the programmatic strategies shown to reduce burnout, such as facilitated physician discussion groups.⁹ Beyond work-hour restrictions, few studies have analyzed sleep deprivation interventions, and it is unclear whether such interventions would attenuate physician implicit and explicit bias.¹⁰ We recommend that attempts to manage/attenuate sleep deprivation be given high priority as a strategy to reduce physician bias.

2. Remove Photos

Visual stimuli trigger explicit and implicit biases. In three of the four vignettes, the patient’s race, sex, size, weight, and skin tone were apparent to the doctors who were making decisions. Although obviously unavoidable in patient care scenarios, it is not clear why the transplant committee needed to review candidate photos as a part of their decision-making process. If the surgeons and dieticians need to gauge weight for clinical reasons, the patient’s measurements can be discussed along with other clinical metrics. We recommend that, in situations in which patient contact is not integral to decision-making, teams seriously reflect on the need for reviewing photos and delete this step unless there is strong justification.

3. Eliminate “Discretion”

In three of the four vignettes, after data collection and review, the decision makers had the ability to make a judgement based on their values. After completing the history and physical examination on the patient with heart failure, the admitting resident decided that a drug screen was appropriate; after learning that Mr R’s leukemia was proving refractory to therapy, the local hematologist decided that noncompliance was the reason; after reviewing the histories and photos of the patients with renal failure, the transplant committee decided that the white man, but not the black woman,

was an acceptable candidate. Although judgment is a critical part of being a physician, it is clearly influenced by biases. A variety of techniques that can be thought of as “discretion elimination”¹¹ seek to restrict the range of freedom in certain decisions by deciding on critical criteria prior to interacting with a person. Examples of discretion elimination that are found in clinical medicine protocols or algorithms have been shown to reduce disparities in the treatment of patients after heart attack.¹² We recommend that health-care teams consider using diagnosis-based clinical protocols as a bias mitigation strategy.

When committees gather to make decisions as critical to life and well-being as who will receive a transplant, every effort should be made to reduce bias by eliminating the ability to use personal judgment that could be influenced by a lifetime of bias-generating stimuli. For example, if enough members of this well-meaning transplant team had implicit anti-black bias like 70% of IAT test takers or an association of a white face with “good” or “comforting” characteristics or mild levels of explicit racism like some physicians self-report, then the discretion was tainted by bias. An example of discretion elimination is when a job search committee decides on the criteria for a position before reviewing resumes or interviewing candidates. If the transplant committee had decided prior to their meeting that illegal activity, noncompliance, and being “opinionated” would be considered red flags, then the ultimate dispositions might have been more equitable or perhaps both patients might have had an equal chance of being referred for transplantation.

4. Enhance Diversity on Decision-Making Bodies

Diversity on decision-making bodies should be considered standard. In our experience, when discussing patients with end-stage failure of the heart, kidneys, or liver, minority groups represent a significant proportion of the patients being evaluated, whereas the decision-making body is composed mostly of white professionals. Legal studies of mock trials show that white individuals on racially diverse juries are more lenient towards black defendants than when they are on all-white juries,¹³ which suggests that diverse bodies make just decisions. We recommend that bodies such as transplant committees (1) recruit for diversity, if necessary recruiting individuals from other departments who may have a different medical area of expertise but nonetheless can help provide a respected viewpoint, (2) undergo regular implicit bias mitigation training, and

(3) adopt a philosophy of discretion elimination when making decisions such as candidacy for organ transplantation (deciding on positive and negative characteristics prior to reviewing candidates).

5. “Workshop” Bias Mitigation Strategies

Several strategies have been shown to be successful at mitigating the impact of implicit bias in one-on-one interactions^{14,15} and are easily adaptable to the clinical scenario. One such example is the strategy of “consider the opposite,” where an initial review of data to make a disposition is followed by a second review looking for evidence supporting the opposite conclusion.¹⁶ A final decision is then made. In case 1, after an initial review seemingly pointed the admitting resident to the possibility of illicit drug use, he could have rereviewed the same findings specifically looking to disprove that possibility. This might have resulted in a different decision about the necessity of the drug screen. These techniques take practice and repetition to become our default way of thinking. We recommend that all physicians participate in implicit bias mitigation workshops on a regular recurring basis as a part of their professional development. We favor a case- or vignette-based workshop in which implicit bias mitigation strategies are rehearsed in “real time.”¹⁷

Mitigating explicit biases may prove more challenging, but there are some signs for optimism. Broockman and Kalla¹⁸ recently showed that a brief one-on-one, nonthreatening discussion could have durable results that would mitigate explicit bias against transgender individuals. Others have called for adopting a “stop the line” for racism protocol in which everyone on the wards from custodian to chief physician is empowered to call out racism and initiate a “time out” and debriefing session,¹⁹ much like the successful model used to enhance patient safety.²⁰ Clearly, more research is needed in this area, and we recommend that academic medical centers engage in research to develop and refine strategies to combat racism and other explicit biases in medicine. To successfully mitigate the impact of racism on patients and practitioners, health-care leaders should seek collaborations with colleagues in psychology, social work, law, and other departments to develop protocols and strategies.

A Proposal: “Bias and Racism Rounds”

We propose a novel educational exercise. Similar to departmental or sectional morbidity and mortality conferences to review untoward clinical outcomes, we

propose a regularly recurring gathering of inpatient teams that consist of the nurses, students, trainees, house staff, and attending physicians who are involved in the care of patients on a clinical unit. The purpose is to review incidents in which bias or racism is thought to have occurred during the patient’s hospital course. As incidents occur that raise the concern for implicit or explicit racial bias, a team member can alert the leader (charge nurse, chief resident, clinical case manager) who is tasked with the responsibility for collecting “cases” to be discussed at the next session. At the educational session, all care team members are present for the discussion of deidentified cases that is moderated by a facilitator. The facilitator leads the discussion of the patient’s course and the incident(s) of bias or racism, followed by a moderated group discussion in which bias mitigation techniques (items 1-6 cited earlier and others) are discussed. For each case, the following questions should be asked/explored with the participants: (1) Was this an example of bias? (2) Do you think it was explicit or implicit racial bias or some other bias (eg, sex, sexuality)? (3) Did this impact the patient’s outcome or cause harm? How? (4) What bias mitigation strategies might help avoid this in the future? The purpose is to educate and reduce incidents of bias and racism in the future for the benefit of patients. There should be nothing punitive about this exercise, and all should be encouraged to disclose cases and be praised for doing so. The number and types of incidents should be logged quarterly by a unit case manager or a member of the quality improvement team, with hopefully a reduction in the number of incidents as time goes by. The sessions should be recorded strictly for learning purposes; identities of the care givers and patients should be kept confidential. [Table 1](#) provides detail about the organization of the session. Optimal intervals for such sessions might be every other month to quarterly.

The following examples describe how the sessions could be conducted:

Example 1: A bedside nurse notices that a young intern, during rounds, repeatedly addresses an elderly Hispanic woman by her first name but has noted that this intern refers to other patients with their appropriate title, “Mr, Ms, or Mrs.”

Example 2: A middle-aged Somali woman dressed in a hijab is admitted for new-onset rapid atrial fibrillation, chest discomfort, and a moderately elevated troponin that indicates a moderate amount of heart muscle injury.

TABLE 1] Organization of “Bias and Racism Rounds” Teaching Session

Participant ^a	Role	Process	End Result
Care team members ^b	Provides care to patients, alerts designated quality improvement leader to incidents of which racism/bias is witnessed or suspected to have occurred.	Provides confidential reporting and deidentifies patient and caregiver information.	Purpose is for all members of team to learn, practice, and think about bias/racism mitigation strategies in the future.
Designated quality improvement leader ^c	Confidentially collects pertinent information about cases; deidentifies information.	Prepares cases to be discussed (eg, slides) with input of care team member, if necessary.	This person develops elevated awareness of bias and racism in the clinical setting; becomes a leader in helping teams spot bias/racism.
Facilitator ^d	Leads discussion of cases at bias and racism rounds.	Avoids punitive or overly critical tone of proceedings. (Opens with “We all have biases; this is an educational activity.”)	This person becomes skilled facilitator and teacher on topics of bias and racism in clinical settings.

^aInvolvement in patient care.

^bNurses, students, housestaff, attending physicians, case managers.

^cCharge nurse, chief resident, case manager, other.

^dSenior physician trainee and attending physician.

She has limited English proficiency. The cardiology fellow is concerned that the attending physician’s plan of care is medical therapy and that no cardiac catheterization is planned. When the fellow suggests a cardiac catheterization to rule out critical coronary artery disease, the attending responds “this is probably a type 2 myocardial infarction, secondary to supply-demand mismatch due to the rapid atrial fibrillation.” The fellow notes that many patients with similar presentations were evaluated with cardiac catheterization, unless there was a contraindication. He is aware that invasive cardiac procedures are underused in black women.

The nurse in example 1 and the fellow in example 2 should both notify the designated quality improvement professional that they have potential cases to discuss at the next bias and racism rounds. The details of the cases are collected minus the identities of the patients and caregivers.

Discussion

The national discussion on the destructive effects of bias and racism has ignited a global call for an end to racial discrimination and, indeed, all biases that oppress one group at the expense of another. All cases reviewed in this article, including the examples, are real and are likely playing out in hospitals across this nation as this article is being read. Periodic, recurring “bias and racism rounds” to review cases critically and look for opportunities to reduce the impact of bias and to

educate physicians and health-care workers can be a powerful teaching tool, analogous to a clinicopathologic or morbidity and mortality conferences. The time is now for the house of medicine to decry racism as a disease and a public health crisis worthy of study, research, and effective interventions.

Acknowledgments

Financial/nonfinancial disclosures: None declared.

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