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Race, Ethnicity, and Culture in the Medical Record: Implicit Bias or Patient Advocacy?

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On morning rounds, before meeting newly admitted patients from overnight, an inpatient team listens to the medical students present the patients' histories:

Medical student 1: "A 32-year-old male presented to the emergency room by police escort for erratic behavior. Collateral from law enforcement reported that the patient was hostile and aggressive toward others in the facility at which he lives, and the patient reported experiencing auditory hallucinations to harm others."

Medical student 2: "A 25-year-old African American male presented to the emergency room for making homicidal threats toward others. He was brought in by emergency medical services, and overnight there was concern that he was experiencing auditory hallucinations and responding to internal stimuli."

The clinical vignettes reported from the medical students identify two patients with similar presentations: hostility, aggression, and homicidality in the context of psychosis. However, subtle differences occur between the medical students' presentations: one student identifies the patient's race as African American and the other chooses to omit an identifier of race or ethnicity altogether.

What are the implications of these presentations? Can racial or ethnic biases be introduced to providers before a patient is personally evaluated? Would the patient in the second vignette be perceived as more dangerous than the patient in the first vignette before the treatment team meets him? Perhaps this patient would be subject to higher doses of antipsychotics. If urine drug screens from both patients revealed recent stimulant use, would the team be more likely to assume the second patient's symptoms were substance-induced rather than the result of an underlying primary thought disorder? Would the team be more likely to assume medication non-adherence in an African-American patient? If so, would they inadvertently use the term *non-compliance* rather than non-adherence?

Words can be powerful, and the choices that providers make when describing patients may have unrecognized implications. The use of ethnic and racial identifiers in the medical record is a challenging and dividing topic for many: how can their use be taught? Should ethnic and racial identifiers be used at all in the medical record?

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The purpose of this article is to introduce the concept of cognitive bias, discuss implicit biases that racial and ethnic identifiers can create in the clinical setting, and provide educational strategies to mitigate the effects of implicit bias related to racial and ethnic identifiers. Medical education should empower students with a knowledge and appreciation of implicit bias and how descriptions of race or ethnicity in the medical record may inadvertently affect patient care if appropriate educational strategies are not implemented first.

Interprovider Communication and Cognitive Bias

When describing a patient's personal or historical narrative, medical students must learn to appreciate what information is relevant and necessary for effective interprovider communication. Students are typically taught that it is not necessary to describe an exhaustive list of medical or psychiatric conditions, but instead to choose certain aspects that are pertinent to the patient's current presentation in addition to a patient's age and gender.

The initial presentation of a patient, whether verbally presented or documented in the medical record, provides others with a foundation for the patient's care. However, the manner in which information is presented can potentiate cognitive biases, that is, systematic distortions of cognition which differ from objective reality, affecting decision-making and judgment [1]. Examples of cognitive biases that commonly occur in the clinical setting include the following [1–3]:

- Confirmation bias: selectively attending to or seeking out information that confirms an impression or opinion rather than seeking out information that disconfirms the opinion/impression or giving the information less clinical attention if it suggests the contrary.
- Framing effect: how information is presented, or how a question is framed, can impact future decision-making and judgments.
- Fundamental attribution error: the tendency to place greater emphasis on an individual's personal characteristics and less emphasis on social and situational forces when judging behavior.
- Anchoring bias: when an initial piece of information (e.g., psychiatric diagnosis, age, race, ethnicity) is used to make subsequent judgments and interpretations of behavior, leading one to respond more favorably to verbal and non-verbal information that reinforces initial beliefs. For example, a patient who initially has been given a diagnosis of malingering may be subject to negative interpretations of behaviors, and other clinicians involved in the patient's care may anchor onto verbal and non-verbal information that confirms the initial belief that the patient is exaggerating or feigning symptoms for secondary gain.

Patient Demographics: Explicit Versus Implicit Bias

Although biases have traditionally been thought to operate under conscious control, research has indicated that biases also operate implicitly, at an unconscious level [4]. Implicit biases

are particularly powerful determinants of behavior, attitudes, and judgments because those affected are not introspectively aware of their bias [4, 5]. For example, a student may consciously reject racism, prejudice, and stereotypes toward African Americans but still negatively evaluate and interpret the behaviors of an African American patient. Implicit bias is important to recognize early in medical training; studies have indicated that clinicians demonstrate the same levels of implicit bias as the wider population, which has negative implications for patients and outcomes [6–10].

Although in some circumstances, awareness of a patient's race, ethnicity, or culture can help predict disease risk and appropriate medication therapies [11, 12], implicit bias can be introduced when students or clinicians indicate a patient's race, ethnicity, or cultural background in their medical documentation or patient presentations because those involved in treatment may attribute negative characteristics to a patient before meeting them.

The influence of implicit bias can be particularly trouble-some in psychiatry, given the subjective nature of mental health diagnoses and the significant disparities in mental health treatment and outcomes among ethnic and racial minorities [13]. Psychiatric diagnoses are unique (and vulnerable to biases) in that behaviors and symptoms must be interpreted in order to arrive at a diagnosis, whereas other specialties often have specific confirmatory tests (blood tests, imaging, cultures, etc.), which are more protective against bias.

Medical Student Education

The utility of discussing patient identifiers in the medical record is controversial, and physicians have differing opinions on the importance of race when evaluating patients [14]. Minority physicians, in particular, are more likely to believe that race is important in order to understand a patient's values and judgments, predict disease risk, and choose appropriate medication therapies [11, 12, 15]. Identifying and recognizing the impact of a patient's race, ethnicity, or culture can be a powerful tool for advocacy, but only once appropriate educational opportunities have been implemented. The following recommendations are made to help mitigate the effects of implicit bias and to help students more responsibly use ethnic and racial identifiers in the medical record and patient presentations.

Educational Strategy 1: Curriculum Development in Implicit Bias, Cultural Competency, and Structural Competency

Education in cultural competency and structural competency for trainees can help improve outcomes and encourage advocacy for vulnerable patient populations. Medical schools should continue to develop curricula in cultural and structural competency that encourage a strong understanding of historical, environmental, and contextual factors which shape the values, attitudes, and symptomatology among patients of different backgrounds. Medical students often report feeling inadequately prepared and lacking the skills required for cross-cultural care [16–18] and receive considerable benefit from curricula that not only teach culturally and structurally competent communication but also challenge students to recognize their implicit biases [19–23].

For example, at the University of Pennsylvania [21], the course “Introduction to Medicine and Society” provided students an opportunity to discuss cultural competency in the context of individual and broad structural domains. Feedback from students for this small-group course indicated that it allowed them the opportunity to examine patient experiences critically and helped them structurally contextualize patient encounters for future interactions. Other educational strategies, as implemented at the University of Hawaii [22], utilize objective structured clinical exams that focus on culturally competent care.

Educational experiences such as these provide students with the background to recognize bias and cultural differences among patients and to use this knowledge as a tool for advocacy. For example, a student may describe the culture and family dynamics of a young Japanese woman if he feels that family and cultural factors have made it difficult for her to more readily accept mental health care [24]. Another student may feel comfortable discussing the race of a child’s African American parents if he felt that the descriptions of their child’s symptoms may have been more reflective of cultural differences, knowing that African American parents are more likely to emphasize disruptive behaviors [25].

Education in structural competency can help students more broadly conceptualize how institutional and systemic factors lead to health care disparities and biases [23]. For example, African American men are treated with higher doses of anti-psychotics that would not otherwise be explained by clinical severity [26], which in part could be accounted for by the facts that young African American men are often viewed as older and less innocent than their white peers and experience disparities in police arrest decisions and prosecutorial charges [27–29]. Students should be educated on how economic, political, and sociocultural forces shape patient experiences outside the clinical setting and how these experiences may influence psychiatric presentations.

Education in cognitive biases could help students understand the implications of how cognitive errors such as confirmation bias (e.g., selectively attending to information that confirms young African American men as less innocent and discrediting or giving less significance to information that suggests the contrary) and framing (e.g., referring to a patient as *non-compliant* rather than *non-adherent*) could perpetuate misperceptions of racial and ethnic minority patients.

Educational Strategy 2: Avoiding Assumptions of Race and Culture

Students and trainees would benefit from additional education and interview skills regarding assumptions of race or culture. Knowledge and understanding of race and culture have traditionally been grounded in social constructs and physical characteristics, particularly the color of an individual’s skin. However, patients of multiracial backgrounds are changing the demographic landscape and growing at a rate three times that of the population as a whole [30]. Given the increasing diversity of patient populations, students should be cautious about using a patient’s physical appearance to aid racial or cultural identification, guide clinical practice, or communicate with other providers.

Patients who appear to belong to a specific cohort on the basis of physical characteristics may not have had the same sociocultural experiences that are traditionally attributed to that specific race, ethnicity, or culture. For example, a student may identify a patient to be African American but that individual may identify as Haitian, Ethiopian, or Brazilian and likely has a unique cultural experience that should instead guide clinical practice.

When race is assumed, clinicians and students may overlook important elements of a patient's presentation, including environment, culture, and genetics, factors that, when considered, generally lead to improved patient care [14]. For example, a student who identifies and documents a patient as African American may infer a history of hypertension given the high prevalence rates of hypertension among African American patients [31]. However, the prevalence of hypertension differs greatly among certain African-origin populations: US African Americans are three times more likely to have hypertension than individuals from Nigeria and almost twice as more likely to have hypertension than individuals from Jamaica [32]. Although all of these individuals could be superficially identified as African American, social and historical factors affecting health outcomes and presentations may be overlooked if race is assumed. We therefore recommend that providers seeking to incorporate information about patient race or ethnicity into clinical care should base this information on patients' self-described ethnocultural identification rather than on their own assumptions (often inaccurate) based purely on appearance.

Educational Strategy 3: Appreciating Acculturation

Students should be encouraged to become familiar with the process of acculturation, that is, changes that occur in an individual or group as a result of contact with culturally dissimilar people, groups, and social influences [33]. Appreciation and understanding of how immigrants, refugees, or asylum seekers integrate into US culture will allow students to provide more culturally appropriate care.

For example, anorexia nervosa is a relatively common mental health condition in Western countries. However, in Africa, anorexia nervosa is hardly diagnosed; one study found that in a cumulative period of 320 years in practice, Nigerian psychiatrists had only seen 20 cases [34]. This cultural context is important to consider for families with intergenerational cultural values. For example, a mother raised in Africa may raise a daughter of her own in the United States and have significant difficulty accepting and understanding her daughter's diagnosis of anorexia nervosa. There may be little room for discussion regarding the daughter's refusal to eat because environmental and cultural experiences of growing up in Africa may have led the mother to view food as sacred [35]. In this clinical situation, a student without an appreciation of acculturation may misattribute that the patient's mother has a basic understanding and acceptance of eating disorders, making effective clinical interventions and therapeutic alliance difficult.

Educational Strategy 4: Encouraging Student Discussion and the Implicit Association Test

Students should be encouraged to discuss the challenging topic of implicit bias with each other. Students may consciously reject stereotypes or prejudice toward other cultures, races, or ethnicities but still demonstrate implicit biases that inherently operate in a way of which they are not personally aware. In order to better understand their unconscious biases, students can engage in online resources such as the Implicit Association Test [36]. Users of these programs engage in word association activities that can reveal implicit prejudices an individual may have toward sexual minorities, ethnic and racial minorities, and patients with mental health conditions. Results from the Implicit Association Test can be a catalyst for discussion of bias and its effects on patients and colleagues.

Studies have indicated that involving students in group-based reflection sessions provides a provocative trigger for engagement in discussing implicit bias, fostering a shift in student reflection and a willingness to discuss bias with peers [37]. Ongoing discussion about implicit bias and the results of the Implicit Association Test can be particularly helpful for students who may not identify as a racial or ethnic minority, because they often feel less comfortable than minority students in discussing issues of race or ethnicity in group settings [38].

For example, a challenging and thought-provoking conversation about why an African American patient may be prescribed higher doses of antipsychotics than other non-African Americans with similar symptomatology could open up discussion about the recognition of bias and the psychosocial constructs that create them. Students could engage in similar discussions about how a young Hispanic boy's behaviors may be misinterpreted by clinicians as a result of cognitive biases such as fundamental attribution error (e.g., placing a greater emphasis on his personal characteristics rather than social and situational forces when judging behavior) and challenge diagnoses such as oppositional defiant disorder and conduct disorder that are often overdiagnosed in ethnic and racial minority children [39]. Students could also be prompted to answer challenging questions such as the following:

“Would you be willing to describe a time where you felt your biases affected patient care?”

“Do you use ethnic or racial identifiers in the medical record? If so, how is it helpful for you?”

“Would you feel comfortable discussing a time when you felt that you were affected negatively by bias, whether explicit or implicit?”

Educational Strategy 5: Teaching Medical Students Responsible Use of Ethnic and Racial Identifiers

We recommend that medical students are taught to use racial or ethnic identifiers cautiously in patient documentation. Medical education is an evolving process, and if appropriate educational strategies are not implemented, identification of race or ethnicity in the medical

record may not be critically examined or subject to the thought-provoking discussions that this challenging topic deserves. Medical students should not be taught to avoid the use of ethnic or racial identifiers altogether but should instead be educated to use them as tools for advocacy and treatment. For example, a student should feel comfortable describing a patient as Jewish when deciding between pharmacotherapies because certain Jewish populations have an increased risk for agranulocytosis with the use of Clozaril [40].

Conclusion

Mental health conditions are particularly susceptible to biases given the subjective nature of diagnosis, and a provider's perception of a patient's race, ethnicity, or culture may reduce diagnostic clarity. Medical students should be trained to interview patients within a psychosocial context and more responsibly use racial, cultural, and ethnic identifiers to help mitigate the effects of implicit bias. Discussions of race, ethnicity, and culture should be introduced early in medical training through didactic lectures, small group discussions, and objective structured clinical exams in order to improve comfort and education among these challenging topics. Students should be educated that discussion of patient ethnicity, race, and cultural factors can be a strong tool for advocacy, but not without education and appreciation for the effects of implicit bias.

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