

Rethinking Bias to Achieve Maternal Health Equity

Changing Organizations, Not Just Individuals

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In this article, we address the limitations of existing implicit bias interventions as a strategy for achieving maternal health equity. We then focus on how institutionally sanctioned racial stereotyping harms Black maternal health and marginalizes a key group in the fight for health equity—Black physicians. Finally, we provide strategies to address racial bias in perinatal health care and structural barriers impeding Black physicians' success.

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B lack women are more likely than White women to experience poor communication during perinatal health care encounters. Even controlling for clinical characteristics, Black women are less likely than White women to undergo labor induction or receive regular cervical examinations during labor and more likely to undergo cesarean delivery under general anesthesia. Disparities in patient-doctor communication and treatment may partially explain why Black women have a twofold higher risk of severe maternal morbidity and a threefold higher risk of pregnancy-related death than White women.

Significant attention has been paid recently to how implicit bias may contribute to these disparities. Implicit bias refers to negative attitudes towards and beliefs about a group (eg, racial–ethnic, disability, sexual orientation) and its members that are spontaneously and automatically activated.^{5,6} (Despite the common misconception that implicit bias is always unconscious, individuals can, indeed, be aware of it.)⁷ Implicit bias is distinct from but related to explicit bias, or deliberate negative attitudes toward and beliefs about members of a group.⁸

It is widely assumed that implicit bias is an important influence on how health care professionals communicate with and treat Black women and leads to subsequent disparities in maternal health. Because of this, decision makers have called for the implementation of implicit bias training in perinatal care settings. The Black Maternal Momnibus Act of 2021 would provide federal funding to introduce implicit bias training in medical and nursing schools. 10 California's Dignity in Pregnancy and Childbirth Act makes it the first state to mandate implicit bias training for all perinatal health care workers.11 Groups such as the National Partnership for Maternal Safety have called for implicit bias training as part of a strategy to tackle racial-ethnic health disparities.⁹ Importantly, the American College of Obstetrics and Gynecology's Policy Statement on Racial Bias emphasizes that obstetrician–gynecologists (ob-gyns) be aware of our own biases when caring for patients, but does not encourage implicit bias training specifically. ¹²

Although well-intentioned, legislative and professional efforts mandating implicit bias training are premature for three main reasons. First, with few exceptions, 13 most implicit bias trainings focus primarily on prejudice and neglect stereotyping (ie, negative feelings about a group vs false beliefs about a group's inherent characteristics).⁵ However, whereas scientific evidence supports the association between health care professionals' implicit prejudice and communication with patients, there is currently no evithat implicit prejudice affects clinical treatment decisions.^{5,14} Thus, implementing implicit bias training that focuses on reducing implicit prejudice is unlikely to produce the intended outcomereductions in Black-White treatment decision gaps among health care professionals.

Second, we lack robust evidence that existing implicit bias trainings have long-term effects on health care professionals' bias or behaviors. Two recent pilot interventions for medical students reduced implicit negative stereotypes about Hispanic Americans in the short-term. However, researchers have yet to demonstrate substantial long-term effects on stereotyping and discriminatory behaviors. Further, these interventions are not universally effective, as evidenced by the finding in one study that an intervention was more successful in reducing ethnic stereotyping among White than Asian medical students. 13

Finally, treating implicit bias as an individual-level problem decouples bias from social context and ignores the ways in which medical training and health care institutions embed prejudice and stereotyping into medical practice. ^{15,17} Consistent with this argument, Black–White gaps in preterm birth are larger when mothers deliver in counties with higher levels of implicit and explicit pro-White–anti-Black prejudice. ¹⁸ These findings underscore the importance of situating implicit and explicit bias within historical and contemporary structural and institutional racism. ^{15,19}

STEREOTYPING IN MEDICAL EDUCATION AND PRACTICE

Unscientific beliefs that incorrectly attribute racial disparities in health to biological and genetic differences rather than racism are pervasive in medical training and practice.^{17,20} As these ideas are rarely challenged at the institutional level, treatment decisions based on racial stereotypes become embedded

in medical practice and can adversely affect patient-level outcomes. For example, medical students and residents who held an explicit stereotype that Black people were biologically different provided less accurate pain treatment recommendations for Black patients. H

Unfortunately, we in obstetrics and gynecology have played a crucial role in creating and perpetuating these stereotypes. The brutal experiments that pioneers of gynecology J. Marion Sims and François Marie Prevost carried out on Anarcha, Lucy, Betsy, and other enslaved women whose names are lost to history resulted in advances such as vesicovaginal fistula repair and cesarean delivery that have saved many women and their children.²¹ However, their unconsenting sacrifices fueled the emergence of stereotypes of Black women naturally possessing high pain tolerance.²¹ This stereotyping may explain why Black women are less likely to receive epidural analgesia in labor²² or receive inpatient opioids postpartum, even controlling for pain levels.²³

Similar scientifically inaccurate stereotypes are perpetuated in tools currently used in obstetric clinical decision making. Although race and ethnicity are sociocultural rather than biological or genetic constructs, race (Black) and ethnicity (Hispanic) are included in the calculator used to assess a patient's probability of successful vaginal birth after cesarean (VBAC) during a trial of labor after cesarean. Their inclusion is based on observational evidence that women who identified as non-Hispanic White were more likely than those who identified as non-Hispanic Black or Hispanic to achieve VBAC.²⁴ The inclusion of race in the calculator means that a well-meaning obstetrician, attempting to practice evidence-based medicine, will counsel White and Black patients differently. For example, according to the calculator, a 30-year-old woman, G2P1, 5'6" tall, 200 pounds, with a prior cesarean delivery for breech presentation has a predicted chance of VBAC of 66.1% if White, but only 49.9% if Black. This "evidence-based" counseling about likelihood of successful VBAC may drive two patients, identical except for skin color, to make different choices: the White woman opting for trial of labor after cesarean and the Black woman opting for a cesarean delivery. Performance of cesarean deliveries based solely on race contributes to unnecessary maternal morbidity and will ultimately exacerbate racial disparities in health.²⁴

MARGINALIZATION OF BLACK PHYSICIANS

These racial stereotypes largely persist because medicine has not significantly improved the recruitment

and retention of Black physicians over time. To be sure, the work of eradicating racial stereotyping in medicine should not rest on the shoulders of Black physicians. However, for decades, Black physicians have led the resistance against scientific racism and have advocated for the fair treatment of Black patients.²⁵ Black physicians are more likely to treat Black patients²⁶ and are more knowledgeable about health disparities that affect Black and other underserved populations.²⁷ Their efforts played a seminal role in desegregating hospitals, resulting in significant declines in infant mortality among Black mothers in the U.S. South.²⁵ Having a Black rather than White physician may also reduce mortality among Black infants.²⁸ Thus greater numbers of Black physicians in training, education, and practice can result in more "learning opportunities" for non-Black students and colleagues to correct their false beliefs-but only if Black physicians are able to voice concerns about racial stereotypes and other inappropriate norms.

Despite the demonstrated importance of Black physicians, pipeline issues persist. Black people comprise 12.7% of the U.S. population²⁹ but only 7% of medical school students, 4% of full-time medical school faculty, and 5% of practicing physicians.^{30,31} Although obstetrics and gynecology is the only medical subspecialty in which Black women's representation is nearly on par with their representation in the general population,³² Black women and men comprise only 3.2% and 4.5% of ob-gyn department chairs, respectively.³⁰

Here, too, racial prejudice and stereotyping play a role in pipeline obstruction. Controlling for demographics and test scores, Black medical students are more likely than White students to receive poor grades and clerkship evaluations.^{33,34} These findings are consistent with evidence that prejudice and stereotyping affect teachers' expectations of and grades assigned to Black students and that grades and test scores themselves underestimate the intellectual ability and potential of negatively stereotyped students.35,36 physicians Black have become increasingly vocal about the factors that cause them to leave academic medicine, including being overburdened with service and less likely to receive promotions, receiving limited mentorship and sponsorship, and experiencing racial hostility from colleagues and patients.37,38

Taken together, when health care organizations and academic departments fail to prioritize training, recruitment, and retention of Black physicians, it sends a clear signal to colleagues and patients about what and whom the organization values (or does

not).³⁹ Failing to integrate the perspectives of Black students and physicians in teaching and research means that racial stereotyping in medical training remains unchallenged. Underrepresentation of Black physicians in leadership means that organizations lack their novel perspectives on how to restructure health care to improve racial—ethnic disparities in maternal health.

POTENTIAL SOLUTIONS

Reforming Medical Training and Practice

First, medicine must implement overarching reforms of medical school curricula and training to eliminate unscientific racial stereotypes. Specifically, there must be a shift from talking about race as a biological risk factor (eg, teaching that patients with Black skin rather than African ancestry have an increased risk of sickle cell trait) to teaching about the ways in which historical and contemporary racism affects Black patients' health.¹⁷ For example, medical students at Brown University audited lecture slides and identified instances where race was presented as a biological risk factor without context. They then advocated for curriculum changes, including helping students to understand the effects of structural racism in medicine.⁴⁰ It is critical to evaluate the effects of these and similar reforms on patient outcomes moving forward.

Others are directly challenging racialized clinical algorithms used in obstetrics. Canadian and Swedish research groups have successfully validated VBAC algorithms without race corrections and the Society for Maternal-Fetal Medicine is developing a new calculator that excludes race and ethnicity. ^{24,41–43} Implementing such reforms remains essential to eliminating racial stereotyping from perinatal health care.

Changes in Care Processes

Implementation of standardized protocols can improve outcomes and reduce disparities. California hospitals implemented a large-scale hemorrhage quality improvement collaborative that reduced Black-White disparities in severe maternal morbidity.⁴⁴ Similarly, a standardized labor induction protocol narrowed racial disparities in cesarean deliveries and neonatal morbidity. 45 However, standardized protocols have the potential to exacerbate disparities. For example, when a California hospital's labor and delivery unit adopted a standardized prenatal substance use reporting protocol to child protective services, almost five times more Black than White mothers were reported during the study period-the opposite intention of the policy.⁴⁶ Further, when deployed across care settings, standardized quality improvement protocols can worsen disparities because the health systems where the most vulnerable patients receive care often also have the fewest resources to implement such initiatives.⁴⁷

It is thus critical to intentionally invest in initiatives that aim to reduce Black–White maternal health disparities and to pilot test them before widespread implementation to ensure that they do not unintentionally worsen inequalities. The American College of Obstetricians and Gynecologists' endorsement of the Black Maternal Health Momnibus Act of 2021 provides an example of how medical professionals can direct funding to under-resourced health care systems that disproportionately serve Black women, and ensure that they have adequate resources to properly implement and monitor quality improvements. ¹⁰

It is also imperative that patients of all backgrounds receive guideline-based care based on robust data. Guideline-based care can significantly reduce and even eliminate racial disparities in some health outcomes, as is the case with ovarian cancer survival rates. However, Black women must be adequately represented in clinical studies to ensure that guideline-based care improves their health outcomes. The Research Working Group of the Black Mamas Matter Alliance recently created an essential rubric for equitable, community-engaged maternal research where Black women are well-represented among research teams and study participants to guide such efforts. However, and the patients of the patients.

Accountability Through Public Policy

Well-crafted policies that balance patients' rights with physicians' autonomy are an important tool for addressing bias in medical care and increasing racial diversity in the perinatal workforce. The Black Maternal Momnibus Act of 2021 would provide funding for the National Academy of Medicine to make recommendations for "incorporating bias recognition in clinical skills testing"-addressing critical components of medical training where stereotypes become institutionalized.¹⁰ California's Dignity in Pregnancy and Childbirth Act requires hospitals and birth centers to provide patients with information on how to file discrimination complaints with the appropriate state agencies.¹¹ However, the federal government also plays an important role in addressing discrimination in medical care. The Department of Health and Human Services' Office of Civil Rights is responsible for conducting Title VI (of the Civil Rights Act of 1964) investigations into allegations of discrimination in health care entities that receive federal funding. Legal and health care scholars have proposed reforms to Title VI to extend these investigations to cover all physicianprovided services. 25,50 It has been proposed that doing

so could increase "minority patients" trust in the health care system and increase physician diligence,⁵¹ which might in turn improve disparities in treatment.

Removing Obstructions in the Physician Pipeline

To address limited racial diversity in the physician workforce, institutions must proactively create programs and support systems for aspiring Black physi-Xavier University, a Southern HBCU (historically Black college and university) has sent more Black students to medical school than any other U.S. institution, using strategies such as outreach to middle school students, intensive noncompetitive peer tutoring and collaborative teaching tailored to students' needs.⁵² Holistic medical school admissions policies that consider applicants' backgrounds and experiences with discrimination and poverty have improved racial diversity.⁵³ Medical school and residency program admissions committees should also weigh applicants' understanding of how racism (not race) leads to health disparities, and the importance of listening to and centering the communities physicians serve. Importantly, these practices may lead to not just an increase in Black students and residents, but more racially and socioeconomically diverse trainees who approach medicine with humility, empathy, and health equity as core values.¹⁷

Similarly, institutions must make explicit commitments to recruiting Black faculty and avoid "discrimination by inclusion"54 by removing structural barriers to promotion and retention. 39,55 The Medical University of South Carolina nearly doubled the number of historically excluded faculty between 2003 and 2011 by implementing a strategic plan that prioritized recruitment and, importantly, provided concrete financial resources to achieve these goals.⁵⁶ Black physician-scientists must be proactively connected with mentorship-sponsorship and resources to conduct research.⁵⁵ Further, given the well-documented racial disparities in National Institutes of Health funding, institutions must also value nonfederal grant sources in tenure and promotion decisions^{57,58} and create pipelines to senior leadership for Black faculty. Finally, senior leadership must adopt zero tolerance policies for racial discrimination. This includes responding decisively to reports of discrimination, including addressing systemic issues and holding individual perpetrators accountable.

CONCLUSION

In this article, we have called attention to the limitations of existing implicit bias training as a policy solution for addressing racial disparities in maternal health. This is not to say that implicit bias training is without value. Evidence-based implicit bias training could play a critical role in improving the quality of patient-doctor communication and promote greater support for major systemic changes in medicine. Yet, as researchers continue to develop effective implicit bias trainings, we urge medical professionals and health care organizations to focus on the systemic forms of bias that persist in medical training and practice. Such an approach acknowledges the complex ways that racist practices extend far beyond individual actors and are embedded in organizational processes and our legal and social systems-all of which ultimately affect Black-White disparities in maternal health.

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