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Ayla Feng, Erica Hahn, Nyla Wells, Cecilia Hanuch,
Abrahim Sawez, Joan Riley, PhD

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Ayla Feng[1], Erica Hahn[1], Nyla Wells[1], Cecilia Hanuch[1], Abrahim Sawez[1], Joan Riley[2]

[1] Department of Health Care Management and Policy, Georgetown University, Washington, D.C., United States
[2] Department of Human Science, Georgetown University, Washington, D.C., United States

Email: ahf62@georgetown.edu
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Abstract

The United States has the highest maternal mortality rate among high-income countries, with disparities prevalent in the District of Columbia, Maryland, and Virginia metropolitan area (DMV). Black women experience disproportionately high rates of severe morbidity and death, persisting across socioeconomic levels, suggesting the role of implicit bias in shaping care. These biases manifest through inequitable use of interventions, stigmatized medical documentation, and dismissive provider-patient interactions, contributing to preventable adverse outcomes. Addressing these issues requires examining the presence of bias in both clinical encounters and the broader organizational, cultural, and policy contexts that perpetuate disparities. Efforts to address implicit bias must extend beyond one-time training and instead prioritize standardized protocols, workforce diversity, and structural reforms in education that lead to meaningful improvements in outcomes. Integrating policy initiatives would be a step towards reducing preventable maternal mortality among marginalized populations across the DMV.

Keywords: implicit bias, maternal health, maternal health outcomes, racial disparities

1. Scope of the Community

The United States has the highest maternal mortality rate (MMR) among the countries in the Organization for Economic Co-operation and Development.[1] Data from the U.S. Centers for Disease Control and Prevention (CDC) reveal that this high rate disproportionately affects certain populations. In 2023, non-Hispanic Black mothers experienced a pregnancy-related mortality ratio of 49.4 deaths for every 100,000 live births, compared to 14.9 among their White counterparts, indicating a significant disparity that requires attention.[2] While there are many contributing factors, this paper explores implicit bias embedded in the healthcare system and its effect on maternal health outcomes.[3] Implicit bias is an unconscious, often negative, attitude that individuals have against a specific group. It is shaped by our lived experiences and the associations we create.[4] These biases permeate the healthcare system, impacting patient-provider relationships and institutional practices.[5]

The District of Columbia, Maryland, and Virginia metropolitan area (DMV) faces maternal and infant mortality rates that are higher than the

national average and reflect inequities in access to and outcomes of care.[6] From 2018 to 2020, the fetal mortality rate in D.C. was 5.05 deaths per 1,000 live births at 24 weeks gestation, far higher than the national average of 3.67 fetal deaths per 1,000 live births. The D.C. rates of preterm and low birthweight (<2500g) were 1.5 to 2 times higher for Black mother births compared to White mothers.[7] Evidence from the Maryland Maternal Mortality Review Committee shows that, among the 18 pregnancy-related deaths that were reviewed, 83% were deemed preventable.[8] These preventable, negative outcomes disproportionately affect marginalized populations, with Black women bearing the greatest burden.[9,10] Beyond maternal mortality, preventable outcomes also include low birth weight,[11] gestational diabetes,[12] and delays in care,[13] all of which contribute to poorer maternal and infant health. This underscores the need to center obstetric care on preventing maternal death and ensuring the best possible birth outcomes.

While systematic issues, such as social determinants of health (e.g., education, income, and access to resources) may influence disparities in maternal health outcomes, pregnancy-related mortalities have been found to be higher for Black women with a college-level education than for White women with less than a high school-level education. Thus, socioeconomic differences alone cannot account for racial disparities.[14] Coupled with the preventable nature of most maternal deaths, implicit bias may be a contributor to the gaps in maternal health. More specifically, maternal morbidity experienced by Black women may be a manifestation of implicit biases and may be correlated with delayed diagnoses, inadequate treatment, and the dismissal of patient concerns, all of which contribute to higher risks of adverse outcomes such as maternal morbidity and mortality.[9]

The effects of implicit bias are experienced throughout pregnancy and the postpartum period, shaped by clinical decisions, and ultimately influences maternal health outcomes.[10] It is important to note that these outcomes stem not only from bias but also from systemic racism and structural barriers that perpetuate unequal access to quality care. Systemic racism and implicit bias are deeply intertwined within healthcare systems, each reinforcing the other. Medical doctors (MDs) display a strong preference or implicit partiality for White Americans over Black Americans, with Black MDs being the only group that demonstrated no such preference.[15] Furthermore, almost 70% of providers display implicit bias against Black or Latino patients, highlighting the urgency of the problem and the importance of further research to address implicit bias.[16] Racial patient-provider concordance may mitigate these implicit biases, yet current systems fail to provide adequate support for equitable education and advancement of Black students pursuing healthcare professions.[17,18]

2. Overview of Stakeholder Perspectives

Systemic racism surfaces as implicit bias in interpersonal situations, such as patient-provider interactions. Implicit bias often invalidates or minimizes the concerns of marginalized patients. Greater biases among healthcare providers are correlated with disparities in treatment recommendations, expectations of therapeutic bonds, pain management, and empathy.[19] These experiences can erode trust and discourage self-advocacy, ultimately worsening health outcomes.[20]

2.1 Patient Perspectives of Implicit Bias

Patient stories of their pregnancy care report that providers rushed appointments, dismissed their questions, and operated under the assumption that they lacked the capacity to make informed decisions.[21] As a result, these women reported feeling safer avoiding hospitals, since they feared the discriminatory treatment that they experienced within the healthcare system. There is a strong correlation between lower quality of care in maternal

health and implicit bias, as racial stereotypes perpetuate false narratives, such as the belief that Black women are less sensitive to pain.[3] This may contribute to racial disparities by informing medical judgments, such as counseling and offering treatment options.[22]

The effects of implicit bias are also apparent in the communication between new mothers and Neonatal Intensive Care Unit doctors and nurses. Mothers from minority communities experienced both a lower power of voice (lower levels of confidence in sharing their concerns with healthcare providers) and a lower efficacy of voice (lower responsiveness from providers to their concerns).[23] Johnson and colleagues found that physicians were 23% more dominant in conversations with Black patients than White patients, used less patient-centered communication during appointments, and conveyed a less positive emotional tone overall.[24] Black patients were also more likely to experience testimonial injustice from physicians, ranging from judgmental words to the use of quotation marks in medical records that signaled disbelief.[25] Additionally, stigmatizing language in medical records—which further perpetuates provider biases—appeared more frequently in the records of non-Hispanic Black patients than in those of their White counterparts.[26] Although these behaviors may seem inconsequential, such hindrances in bedside manner, communication, and acknowledging patient concerns can contribute to significant and potentially fatal health outcomes.

Several tragic cases illustrate this reality. Shalon Irving, an African American mother who gave birth via cesarean section, sought medical attention six different times for severe headaches and weight gain after her delivery.[27] She later died due to complications from hypertension, which nurses had noticed during previous visits, but went unchecked when the patient was told the physician was too busy. Similarly, Rodneyse Hermelyn sought obstetric care when she went into preterm labor at 22 weeks. However, the doctors deemed that they were not required to intervene to save the fetus as labor had started before the 24 weeks gestation period.[27] Ms. Hermelyn refused to terminate and was distraught over the potential loss of the pregnancy, yet the doctors sent her home, citing that they had other patients to attend to.[27] Though she eventually found proper care elsewhere at a clinic primarily serving low-income patients, those who dismissed her case jeopardized her physical and emotional health.[27]

Pregnant Black women often feel devalued in health clinics and unwelcome in social services, burdened by racial assumptions and the need to prove themselves in order to be treated with respect.[28] Some Black women felt that such racialized stigmas contributed to psychological stress and reported that these experiences made it difficult for them to have a healthy pregnancy.[28] Emerging evidence has similarly indicated that prenatal maternal stress is a significant contributor to adverse birth outcomes.[29,30] Black mothers who experienced racial discrimination on three or more instances during pregnancy had a 3.1 times higher risk of preterm delivery and were 2.4 times more likely to give birth to infants with low birth weights than their White counterparts.[31] Even after adjusting for smoking, alcohol consumption, and depressive symptoms during pregnancy, this disparity was not reconciled.[31]

2.2 Provider Biases in Clinical Practice

Implicit bias can be apparent in clinical practices from the treatment plans recommended by providers to the screenings and tests that pregnant women undergo. Evidence suggests that cesarean delivery, particularly primary cesarean, significantly increases maternal mortality risk compared to unassisted vaginal delivery.[32] Black women are more likely to experience pressure to undergo cesarean delivery and less likely to have their preferences respected during childbirth.[33] In addition, pregnant

women with Black racial identity experienced more non-consented procedures during perinatal care and vaginal births than those identifying as White, and women who identified as other minoritized races and ethnicities experienced greater pressure to accept perinatal procedures compared to White women.[34]

Black patients have also been disproportionately subjected to urine toxicology testing during labor and delivery, regardless of their history of substance use.[35] Black patients did not have a higher probability of a positive test result than other racial groups. These procedural inequities operate within broader social structures that have historically assumed harmful, race-biased health behaviors among racial and ethnic minorities, thereby demonstrating the effects of implicit bias in clinical decision-making.

Many providers lack cultural competence and awareness of racial health disparities, and these deficiencies could allow implicit biases to persist unchallenged.[36] Black healthcare providers have often been marginalized and dismissed from careers in obstetrics, encouraging a cycle of negative narratives against Black mothers and underrepresentation of those who could offer more culturally responsive care.[21] Black mothers who developed supportive relationships with healthcare providers felt more comfortable sharing important health information and discussing their concerns.[28] Increasing minority representation and education in healthcare fields are therefore essential steps toward reducing implicit bias in healthcare and improving the postpartum care of Black women. However, these goals remain difficult to achieve in environments of systemic oppression and provider barriers.

3. Potential Solutions and Resources

These findings highlight the importance of training providers to recognize implicit bias and to address the structural barriers in healthcare that uphold these prejudices. There are many resources, successful practices, and policies in place to meet these needs in the DMV, yet these unequal practices persist.

3.1 Local Initiatives

Community-based organizations have stepped into action to mitigate some disparities involved with access to care, especially for D.C. residents in low-income and predominantly Black neighborhoods in Ward 8, who travel nearly three times the distance of other residents to reach hospitals offering labor and delivery services.[37] For example, the Community of Hope's Family Health and Birth Center and Mary's Center serve uninsured patients in D.C. Wards 7 and 8. These centers provide comprehensive, team-based prenatal care that integrates midwives, doulas, and social workers who share cultural and community connections with the patients.[38,39] This approach of integrating community partnerships could improve outcomes for Black mothers because it builds trust, continuity, and advocacy during labor by providing culturally appropriate care.[40,41] In addition, integrating social workers for transportation and incorporating Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) referrals helps address the health disparities rooted in structural racism and the systems that sustain it. Addressing these structural barriers is key to addressing the roots of implicit bias.[38,39]

3.2 Policies Addressing Implicit Bias

In Maryland, legislation on a Structural Racism Bill, HB 783, which would require an implicit bias training program approved by the State Health Occupations Board for all healthcare professionals in 2026, has been recently approved.[42] Virginia had a similar bill in 2023 that was vetoed, but an effort to revive the legislation is anticipated under the newly elected governor.[43] Mandated

training by State Occupational Boards for licensure is the first step to raise awareness of the problem.

The D.C. Maternal Mortality Review Committee recommended that the Department of Health require healthcare professionals to complete implicit bias and cultural bias training.[44] Building on these recommendations, the D.C. Perinatal Quality Collaborative implemented implicit bias training across major birthing hospitals, including Howard University Hospital, Medstar Washington Hospital Center, and Medstar Georgetown University Hospital.[44] These bills mandate that licensed healthcare providers must receive training on implicit bias, a first step to increasing knowledge and awareness of the problem. The D.C. Department of Health also offers resources for healthcare organizations to incorporate into their programs, such as the Implicit Association Test and a few debiasing strategies to help communities work toward more equitable practices.[45] In addition, the *D.C. Values in Action* initiative aims to build a culture where all D.C residents feel and are safe.[46] Health systems, such as MedStar in the DMV, have hotlines and opportunities to report experiences of bias or discrimination.[47,48]

4. Current Gaps and Future Outlooks

Despite these advances and the resources available, there remain gaps in evidence and implementation. The implicit bias trainings that many hospitals adopt are one-time workshops that aim to improve awareness. Ultimately, these trainings fail to address the deeper behavioral and structural aspects of implicit bias, and they lack tangible outcome measures for evaluation.

Mishkin and Flax found that one workshop had increased participant knowledge of bias from 62.5% to 83.8%.[49] This workshop also increased anecdotal observations by staff, where they were able to identify implicit bias in real time more readily than before the trainings.[50] However, these initiatives do not provide meaningful evidence of improved clinical decision-making and patient outcomes in target populations.

While the current implicit bias training increases basic knowledge and awareness, lasting behavioral and outcome change depend on integrating standardized decision protocols, race-stratified data analysis, and equity-focused quality improvement programming.[51] For example, Brazil's Abraço de Mãe program that integrates anti-racist practice into its pre-existing quality improvement training found a 34.2% decrease in maternal deaths within two years, from 83.7 to 55.0 deaths per 100,000 live births.[52] They fully engaged the staff through transparent data-sharing: stratifying hospital data by race and allowing them to observe patterns and identify any disparities to revise the care protocols accordingly.

Initiatives such as open note-taking and making physician notes visible to patients would encourage transparency, possibly mitigating implicit bias in care.[3] In addition, standardization of decision points through reliable algorithms instead of pure physician subjective discretion was seen to minimize biased judgment in care delivery.[36] Optimization of organizational practices is also an area of extreme importance in mitigating implicit bias in maternal healthcare. Implicit bias training evaluations frequently measure provider satisfaction or self-reported awareness rather than objective maternal health outcomes and indicators.[51,52] Having concrete, outcome-based metrics is critical, as it allows researchers and hospitals to develop and tailor more effective training that yields improvements in care quality and outcomes.

5. Conclusion

Successfully addressing implicit bias requires more than designing appropriate training methods; it needs structural reform to medical education and the healthcare system. Implicit bias is reinforced

through the curricula, faculty composition and attitudes, and institutional culture.[53] Evidence shows that faculty role models of color and diverse learning environments reduce racial bias among medical students.[54] There should be more efforts to change the foundation of professional formation by integrating antiracist pedagogy and representation. Beyond medical education, Green and colleagues highlight the importance of workforce diversity in healthcare, staff treatment and retention initiatives, and clinician psychological support in a healthy, equitable hospital environment.[50] Without these systemic changes, efforts to address implicit bias will remain limited, leaving the structural conditions that perpetuate inequitable maternal care largely unchanged.

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