

Exploring the Experiences of Black Mothers and Labor and Delivery Nurses in Hospital Settings

RESULTS OF A QUALITATIVE STUDY





INTRODUCTION

AWHONN is pleased to release the report of qualitative research conducted by the Black Women's Health Imperative as a key component of our organization's multi-year, multifaceted quality improvement project titled *Empowering Women to Obtain Needed Care Implementation and Evaluation Project*. This grant project was supported by Merck, through its Merck for Mothers initiative.

The original goals for the project were to:

- Reduce maternal morbidity through standardized and structured dissemination of the AWHONN Post Birth Warning Signs (PBWS) online education course in selected hospitals across the United States
- Incorporate AWHONN's PBWS education resources into discharge teaching for all women prior to hospital discharge using a standardized online education course, teaching guide, and the AWHONN PBWS Save Your Life Parent Handout
- Evaluate nurses' perceptions of the effectiveness of the PBWS parent education for postpartum patients before discharge from the hospital.

As AWHONN developed the grant proposal and design, we identified a need to address a gap in the PBWS online education content. Specifically, AWHONN recognized the need to highlight in the online course the crisis of racism and discrimination in maternal care as a significant contributor to maternal morbidity and mortality. We also identified the need to study more closely the lived experiences of Black mothers during pregnancy related to the consequences of racism, bias, discrimination, and disrespectful treatment. Consequently, AWHONN reached out to the Black Women's Health Imperative (BWHI) and the National Birth Equity Collaborative (NBEC) to help us expand the scope of the project, and to ultimately benefit from their expertise in our process of assessing and developing content specifically related to the negative impact of racism, discrimination, and disrespectful care on maternal outcomes.

In the Fall of 2019, AWHONN entered a partnership with BWHI. Through a sub-award grant contract provided by AWHONN, BWHI designed and conducted a compressive literature review and qualitative research study to further explore the lived pregnancy, childbirth, and postpartum experiences of Black mothers, and to engage with Black and White Labor and Delivery nurses to assess their perceptions and experiences interacting with colleague nurses and patients during the childbirth continuum. The comprehensive outcomes report presented herein is the culmination of that research. The report includes an executive summary and key recommendations for AWHONN's consideration and action. This important scholarly work significantly helped to clarify the extent and depth of the tragic consequences of racism, bias, and dismissive and disrespectful behavior toward Black mothers. BWHI's critical data analysis and recommendations have helped AWHONN meet our organization's strategic goals to address structural racism and systems of care that are barriers to promoting and improving maternal health and to correcting health inequities for all women and people seeking pregnancy and reproductive healthcare.

AWHONN recognizes and greatly appreciates the expert work of the BWHI, Dr. Kanika Harris, Ms. Whitney Hewlett Noel, MPH, Dr. Terri Wright, and the BWHI research team for their significant contribution to the body of knowledge about the devastating impact of bias, racism, and dismissive and disrespectful care on Black maternal health outcomes. This report will continue to inform AWHONN and other stakeholders about strategies that can change the perceptions and behaviors of nurses and other providers and create a call to action for transforming clinical practice, ensuring respectful care, and improving healthcare outcomes.

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responsibility of the authors and does not represent the official views of Merck. Merck for Mothers is known as MSD for Mothers outside the United States and Canada.

AWHONN also greatly appreciates and acknowledges the dedication and expert work of all our partners for this project. They are the Black Women's Health Imperative (BWHI), the National Birth Equity Collaborative (NBEC), and Premier Inc., LLC.

Anne Santa-Donato, MSN, RN Former AWHONN Director, Special Programs and Projects

Exploring the Experiences of Black Mothers and Labor and Delivery Nurses in Hospital Settings

"I also try my hardest to basically humanize myself.

I want them to see me."

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BLACK WOMEN'S HEALTH IMPERATIVE (BWHI) ACKNOWLEDGEMENTS

"Exploring the Experiences of Black Mothers and Labor and Delivery Nurses in Hospital Settings" is a product of the Black Women's Health Imperative in collaboration with the Association for Women's Health, Obstetric and Neonatal Nurses (AWHONN).

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EXECUTIVE SUMMARY

"The situation that time—I mean, definitely [was] racial and [I] definitely judged someone based on, they don't have as much money as you do. They're not as educated as you are. Thinking maybe they're not as smart as you are. Definitely those judgements."

-Labor and Delivery Nurse

This qualitative study explored the dual perspective of 13 Black mothers and 12 labor and delivery nurses to investigate the unique needs of Black mothers and implicit bias among nurses in the greater Atlanta and Washington Metropolitan area (DMV). A qualitative analytical methodology called "versus coding" was used to compare varied perspectives of mothers and nurses from the same phenomenon—childbirth.

This study supported previous research findings that race, insurance coverage, and age are critical variables that influence the treatment and care for Black mothers. Additionally, most of the Black mothers in the study across age and socioeconomic status mentioned experiences with postpartum mood disorders or depression related to their birth experience or outcome. However, most mothers did not receive the appropriate screening, treatment, or care.

Black and White nurses confirmed the experiences of Black mothers and disclosed instances of both implicit and explicit bias working with Black childbearing families. Nurses also reported power dynamics, poor communication among staff, lack of training, and race as key factors that impact their ability to care for Black mothers.

Key Recommendations include:

- 1. implicit bias training that includes evidence-based science on racism, stress, and birth outcomes;
- 2. a survey tool that employs the perspectives of Black women to assess quality of care measures as a pathway to improved care that accurately meets the needs of this population;
- 3. an assessment tool that better captures potential perinatal and postpartum mental distress for Black birthing people; and
- 4. workshops and trainings to increase health communications among hospital staff and simulation trainings for adverse maternal birth outcomes.

Overview/Context of Black Maternal Health in the United States

Each year, an estimated 700 women in the United States die due to pregnancy-related morbidities or complications (Petersen et al., 2019). In 2018, for every 100,000 live births, approximately 17 women died either during pregnancy or within 42 days of the end of pregnancy from pregnancy-related causes or complications from delivery (United States Department of Health and Human Services [HHS], 2020). About two-thirds of all pregnancy-related deaths that occur in the United States are considered preventable, and one-third are attributed to cardiovascular conditions (HHS, 2020). A deeper investigation into these grim statistics yields stark racial/ethnic disparities between White women and women of color.

A review of the literature reveals that Black women in particular bear a severely disproportionate burden of negative maternal and infant health outcomes. According to the U.S. Department of Health and Human Services, between 2007 and 2016, Black women had the highest pregnancy-related mortality ratio—40.8 per 100,000 live births—of all U.S. racial/ethnic groups, while American Indian and Alaska Native (AI/AN) women had the second-highest rate (29.7) (HHS, 2020). This pattern held across education levels: Black and AI/AN women experienced the highest maternal mortality rates of all racial/ethnic groups within every level of educational attainment (HHS, 2020; Petersen et al., 2019). Among the race/ethnicity-education subgroups, Black women who reported attaining no more than a high school education had the highest rate of pregnancy-related mortality (HHS, 2020).

According to the Centers for Disease Control and Prevention (CDC), between 2014 and 2017, the leading causes of pregnancy-related mortality were other cardiovascular conditions (15.5%), infection or sepsis (12.7%), cardiomyopathy (11.5%), hemorrhage (10.7%), and thrombotic pulmonary or other embolism (9.6%) (CDC, 2020). Data reported by 14 U.S. Maternal Mortality Review Committees between 2008 and 2017 showed that 24% of pregnancy-related deaths occurred during pregnancy, 34% on the day of delivery or within a week of the birth, 19% between 7 and 42 days postpartum, and 24% between 43 days and 1 year postpartum (Davis, Smoots, & Goodman, 2019). In this data set, non-Hispanic Black women accounted for 39.2% of the deaths (Davis et al., 2019).

There are also significant racial/ethnic disparities in severe maternal morbidity (SMM), which includes significant health complications such as sepsis and eclampsia. In 2017, non-Hispanic Black and AI/AN women experienced rates of SMM in hospital deliveries that were 1.5 times higher than those experienced by White, Hispanic, and Asian/Pacific Islander women and women of other races/ethnicities (HHS, 2020). The SMM rate for Black women in 2017 was 112.0 per 10,000 births, which was slightly lower than the rate for American Indian and Alaska Native women (115.4) (HHS, 2020).

The United States also has significant racial/ethnic disparities in infant mortality. In 2018, non-Hispanic Black women had the highest rates of infant mortality (10.75 deaths of children under one year of age per 1,000 live births) with Native Hawaiian or other Pacific Islander (9.39) and American Indian or Alaska Native women (8.15) following close behind (Ely & Driscoll, 2020). The 2018 infant mortality rate for non-Hispanic Black women was more than two times higher than the rates for non-Hispanic White (4.63), non-Hispanic Asian (3.63), and Hispanic women (4.86) (Ely & Driscoll, 2020).

The causes of Black maternal and infant health inequities are multifactorial and welldocumented in the literature (Chambers et al., 2020; Dyer, Hardeman, Vilda, Theall, & Wallace, 2019; Geronimus, 1986, 1991; Geronimus, Hicken, Keene, & Bound, 2006; Guerra-Reyes & Hamilton, 2016; Hardeman, Hardeman-Jones, & Medina, 2021; Hardeman & Karbeah, 2020; Hardeman, Karbeah, Almanza, & Kozhimannil, 2020; Hardeman, Karbeah, & Kozhimannil, 2019). Increasingly, researchers have pointed to structural-level factors—including racism and class-based oppression occurring across the life course and at multiple socio-ecological levels— as principal causes of racial disparities in maternal and infant health outcomes. Among several key measures of inequality associated with institutional and structural-level racism are: residential segregation, income, employment, access to healthy food, incarceration, neighborhood violence, and environmental pollution. All these factors, according to findings by Wallace and colleagues (2017), are correlated with adverse birth outcomes for Black women and increased rates of preterm birth.

The disparities in Black maternal health outcomes are informed by historical practices of dehumanization and devaluing of Black life; the persistence of these disparities is linked to what scholars have

called "the afterlife of slavery" (Davis et al., 2019). For example, these historical injustices are linked to present-day harms purported by health researchers and clinicians, and historical practices continue to inform the collective memories of Black people in the United States. Persistent mistreatment results in community mistrust of healthcare providers, which affects Black birthing people and Black women's engagement in healthcare services.

The underlying causes of Black maternal and infant health inequities cannot be understood without examining the factors that contribute to Black women's health across the lifespan. Behavioral scientist Arline Geronimus (1992) proposed the "weathering hypothesis" which provides a contextual lens to help elucidate health disparities among Black women and their racial counterparts. Her hypothesis asserts that Black Americans experience cumulative exposure to social, economic, and political marginalization across the life course, and this exposure is a fundamental cause (as opposed to a proximate risk factor) of disparate health outcomes between Black and White Americans (Hicken, 2016).

Marginalization is defined as exclusion from mainstream social, economic, and political systems. Hicken (2016) provides an example of marginalization as decreased access to quality education and employment opportunities among Black people due to residential segregation into low-income neighborhoods. Cumulative exposure to marginalization among Black people results in biological wear and tear on the body and diminished health due to chronic stress (Geronimus, 2006), which can be observed in measures of allostatic load (McEwan & Stellar, 1993). This translates into accelerated aging due to the physiological consequences of longterm exposure to fluctuating or heightened neuroendocrine response. Thus, when Black women who experience marginalization reach reproductive age, they are already undergoing a decline in health status from prolonged exposure to stress (Hicken, 2016). A study examining weathering, economic neighborhood environment, maternal age, and low birth weight found that the longer Black women had lived in low-income neighborhoods (as defined by U.S. Census tract data on median household income) the more likely they were to give birth to infants classified as low birth weight as their maternal age increased (Love, David, Rankin, & Collins, 2010).

BLACK WOMEN'S PERINATAL CARE EXPERIENCES

Across Black women's pregnancy and birthing narratives there is a theme of having to skillfully navigate healthcare and daily interactions by anticipating how others perceive them and utilizing available signifiers to garner respect and minimize racism and discrimination (Altman, Oseguera, McLemore, Kantrowitz-Gordon, Franck, & Lyndon, 2019; Davis et al., 2019; Mehra, Boyd, Magriples, Kershaw, Ickovics, Keene, 2020; Salm Ward, Mazul, Ngui, Bridgewater, & Harley, 2013). As explicated by the weathering hypothesis, Black women enter pregnancy having already endured a short lifetime of overt and subtle forms of racism, social and economic stressors, environmental hazards, and limited coping resources (Hicken, 2016). Qualitative studies have shown that because of these conditions, Black women have a keen understanding of the seeming permanency of racism, and they navigate their perinatal healthcare experiences accordingly (Altman et al., 2019; Davis et al., 2019; Salm Ward et al., 2013).

Stereotypes of Black women have a particular potency during the perinatal period. Instead of being celebrated for bringing life into the world, Black women often face mistreatment because of longstanding tropes around Black women's sexuality and perceived threats to the family structure. Historically, Black women have been stigmatized via caricatures including Jezebels, who are considered lascivious; mammies, who are known as domestic and subservient; matriarchs, who are painted as aggressive; and "welfare queens," whom President Ronald Reagan depicted as Black single mothers plotting to economically exploit the system (Covert, 2019; Mehra et al., 2020). Such stereotypes emerge when Black women are pregnant and healthcare providers make assumptions about their marital status, education level, preparedness and ability to care for the child, and involvement of the infant's father (Mehra et al., 2020; Salm Ward et al., 2013). Providers' assumptions then inadvertently serve as justification for mistreatment, disrespect, and dismissal when delivering perinatal care to Black women; further, they diminish Black women's satisfaction with their care experiences (Mehra et al., 2020; Salm Ward et al., 2013). These stereotypes are also part of the "mother blame narrative" focused on Black mothers, which attributes negative maternal and birth outcomes to patient behaviors and preferences and, from a provider

perspective, absolves healthcare providers of accountability for delivering poorer quality healthcare (Scott, Britton, & McLemore, 2019).

One way these stereotypes inform patient-provider interactions is in how information is communicated to Black patients. Studies have demonstrated that in perinatal care settings, Black women report that providers often do not listen to them and minimize or repeatedly dismiss their concerns (Hagiwara, Elston Lafata, Mezuk, Vrana, & Fetters, 2019; Hoffman, Trawalter, Axt, & Oliver, 2016; Nuru-Jeter et al., 2008; Wallace, Green, Richardson, Theall, & Crear-Perry, 2017). Black women also report being left out of decision-making processes focused on their care through the omission of information (Altman et al., 2019). Researchers have found that during Black women's perinatal care visits, information is shared via "packaging," which occurs when healthcare providers, either purposefully or not, use the communication or withholding of health information to steer or dictate patients' decisionmaking (Altman et al., 2019). Withholding or communicating health information in a highly judgmental, abrupt, discourteous, or frightening manner leaves Black women feeling disempowered regarding their care (Altman et al., 2019; Dahlem, Villarruel, & Ronis, 2015). Other findings by Altman and colleagues (2019) suggest that Black women interpret "packaging" to mean that providers do not value or respect Black women and that providers hold preconceived notions about Black women's decision-making abilities. With regard to perinatal care, Black women value being listened to, respected, and treated as a partner in their care as well as having care providers who are caring and relatable (Dahlem et al., 2015). Racial concordance is one aspect of the patient-provider relationship that contributes to trust-building and better care experiences for Black women (Wint, Elias, Mendez, Mendez, & Gary-Webb, 2019). For example, a 2020 study found that mortality rates for Black infants declined by 50% when they were under the care of a Black physician (Greenwood, Hardeman, Huang, & Sojourner, 2020), which speaks to the need for perinatal care that is culturally informed and culturally conscious.

The devaluation of Black motherhood and its impact on the perinatal care experience means that in order to receive adequate information and quality care, Black women must concern themselves with how they present themselves and their ability to relate to their care provider (Altman et al., 2019). Researchers have described the particular form of gendered racism that Black women encounter during pregnancy as racialized pregnancy stigma, which is a source of psychological stress that leads to feelings of hopelessness, diminishes patient satisfaction, affects healthcare-seeking behaviors, and contributes to pregnancy comorbidities (Mehra et al., 2020; Salm Ward et al., 2013).

Fragmented care is another experience that reflects structural inequities and negatively impacts patient-provider relationships, perinatal care experiences, and health outcomes for Black women. Fragmented care interferes with patients' ability to build lasting relationships with healthcare providers and cultivate trust. Perinatal care experiences that are disjointed due to the limited nature of health insurance coverage or frequent changing of providers create distance between patients and providers and inhibit trust-building (Altman et al., 2019). Further, these disjointed experiences require Black women to continually reshare their health information and navigate provider bias and lack of familiarity in an attempt to improve the quality of care they receive (Altman et al., 2019).

IMPLICIT BIAS

Each year since 2003, the Agency for Healthcare Research and Quality has released the National Healthcare Quality and Disparities Report, which has consistently found that Black patients receive lower-quality healthcare than White patients (Maina, Belton, Ginzberg, Singh, & Johnson, 2018; Narayan, 2019). Inequities in healthcare quality are one cause of racial/ethnic health disparities, and inequitable treatment is, in part, the result of clinician-held biases (both implicit and explicit) based on race, gender, and other identity categories that are the subject of marginalization. According to the Kirwan Institute, implicit bias includes the attitudes or stereotypes that unconsciously influence perceptions, decisions, and actions (Kirwan Institute, 2018). Biases refer to an evaluation or belief and can be negative, positive, or neutral; the term implicit means that the process for selecting a preference or bias is not within an individual's conscious awareness (Kirwan Institute, 2018). In a healthcare environment, implicit bias becomes detrimental when inaccurate stereotypes and tropes inform provider-held biases, which then influence providers' decision-making, communication, and care delivery.

There are numerous negative stereotypes and tropes about Black people that are reinforced through media representations and "dog-whistle" language, both of which permeate American culture. The specific ways in which culture creates implicit prejudices are not fully understood; however, social conditioning and enculturation help to embed race-based stereotypes and related concepts into the heuristics (mental shortcuts that enable quick responses) that inform implicit bias (FitzGerald & Hurst, 2017; Narayan, 2019). Research has demonstrated that although people may reject race-based stereotypes, embrace racial equity, and/or commit to anti-racist practices, it is still possible to have prejudicial views and unconsciously act on implicit bias (FitzGerald & Hurst, 2017; Joint Commission, 2016). This paradoxical relationship between explicit and implicit beliefs, attitudes, and actions is referred to as aversive racism (FitzGerald & Hurst, 2017).

Empirical studies have shown that healthcare providers harbor and act upon implicit bias at levels similar to those of the general population (FitzGerald & Hurst, 2017). A systematic review of 26 studies of implicit racial/ethnic bias among healthcare providers found that the majority of providers have pro-White/anti-Black bias falling somewhere on a spectrum from slight to strong (Maina et al., 2018). In healthcare settings, the combination of heavy cognitive load (which stresses the capacity of working memory), time constraints, and extreme tiredness impacts the likelihood of providers acting on implicit racial/ethnic bias in ways that negatively affect patient care experiences (Maina et al., 2018). The need to make quick judgments and decisions with limited time for reflection while under stressful circumstances means that healthcare providers defer to racialized stereotypes to formulate of their interactions with patients. Providers are also more likely to act on implicit bias in care situations that are more subjective such as assessment or management of pain (Maina et al., 2018).

Healthcare providers act on implicit racial/ethnic bias in several ways when delivering care. One reason implicit bias has a persistent influence on patient-provider interactions is related to providers' perceptions of the factors that contribute to racial health disparities. Like Americans in general, physicians and other healthcare providers do not consider their behavior with patients to be racially biased (Matthew, 2015). As a part of their professional oaths, healthcare providers commit to providing impartial care, doing no harm, and comporting themselves according to egalitarian values (Maina et al., 2018; Matthew, 2015). Providers may experience cognitive dissonance due to the gap between explicit beliefs and values and implicit beliefs and actions, previously referred to as aversive racism. A provider's inability to recognize both their individual racially biased behavior and how this behavior contributes to racial health disparities means that this behavior goes unchallenged and can continue to negatively impact patientprovider interactions.

Implicit Bias and Maternity Care

Providers exhibit racial bias toward Black patients in the form of dismissiveness, disrespect, not believing Black patients, or believing that Black patients are exaggerating their health concerns or conditions (Gollust et al., 2018). However, due to the unconscious nature of implicit bias, there is often a lack of acknowledgement on behalf of healthcare providers regarding their racially biased treatment of Black patients. Providers' actions in these cases are linked to racialized stereotypes and the historical lens of American society, which devalues and dehumanizes Black people in particular. The dehumanization of Black people is frequently neglected in discussions of implicit bias but could be a key reason that implicit racial/ethnic bias is so deeply entrenched.

Standpoint theory offers a useful framework for understanding how implicit bias operates in affecting Black women's perinatal care experiences including maternal and infant health outcomes. Standpoint theory refers to historically shared, group-based experiences (Altman et al., 2019). There is less emphasis on individual experiences with socially constructed groups than on the social and political conditions that construct such groups; therefore, the unit of analyses is the group. Furthermore, standpoint theory incorporates the shared social location in the context of hierarchical power relationships as is often the case in the provider-patient relationship. Finally, standpoint theory centers the life experiences of marginalized groups, and guides the researcher toward the social structures that collectively create the daily lived experiences of the group.

Given that Black women, prior to pregnancy, have experienced the structural impact of racism over the life course, they have a unique perspective on how implicit bias impacts their care and can offer insight into how such power structures operate at the interpersonal level. Black people understand that they will likely be mistreated in healthcare settings and thus brace themselves as they enter such settings, using signals to command respect and negotiate power dynamics. For Black women and birthing people seeking perinatal care, this can take the form of wearing formal or professional clothing to appointments, bringing a spouse or partner, referring to their educational attainment (college degree or higher), or mentioning their proximity to the healthcare profession (e.g., having a relative who is a nurse or physician) to demonstrate their "worthiness" of receiving quality care; importantly, individuals have varying levels of ability to leverage these factors (Altman et al., 2019). Although drawing on these privileges can offer a modicum of protection from implicit bias by changing how relatable healthcare providers find their patients, this signaling is not sufficient to protect Black women from poor treatment and outcomes. In addition, many Black women understand that racism in healthcare interactions will not be acknowledged as such, and therefore choose to maneuver around or ignore the bias as an inherent aspect of interacting with dominant power structures.

Standpoint theory also sheds light on the nature of the power dynamic from the provider's perspective. Nurses and other healthcare providers are regarded as experts in terms of knowledge, skills, and evidence-based treatment (Trego, 2020). Further, healthcare professionals abide by clinical practice guidelines, professional standards of care, and core values including providing patient-centered care, valuing diversity, respecting patients' bodily autonomy, and cultivating shared-decision making practices with patients (Trego, 2020). Providers also have an ethical and professional imperative to address maternal and infant health inequities through both their practice and research (Trego, 2020). Because nurses are held to professional standards informed by principles of diversity and inclusivity, it can be difficult for them to believe they are providing care that could be characterized as racially biased. In addition, those who have expertise and are in positions of authority are rarely questioned. Standpoint theory emphasizes that in a patient-provider setting, Black women's self-knowledge and expertise is not regarded or valued as highly as that of nurses. This hierarchy can translate into Black women lacking the power to exert bodily autonomy or play an active role in making decisions about their care.

Implicit Bias Research Gaps

Although implicit bias is an important contributor to racial health disparities, there is little research on the exact relationship between implicit bias and patient healthcare experiences and outcomes (FitzGerald & Hurst, 2017), possibly because there is no established methodology for examining the effects of implicit bias in the literature (FitzGerald & Hurst, 2017). Many extant studies of implicit bias in healthcare rely on clinical vignettes to assess provider-held biases; however, some researchers have raised concerns that this may not be the most accurate way to measure how frequently and in which ways implicit bias impacts delivery of care. Because clinical vignettes do not encompass the stressors that occur in the healthcare environment, it is unclear whether clinicians' responses represent their actual decisions in realworld situations (Maina et al., 2018). In contrast, simulated or actual patient-provider interactions include additional environmental factors that affect how providers express biases (Maina et al., 2018) and thus have the potential to "more accurately identify disparities in care and characterize the influence of bias in care" (Maina et al., 2018, p. 222).

Another limitation of the extant literature on implicit bias in healthcare is that nurses have been relatively overlooked. Much of the literature focuses specifically on physicians, while nurses are included in some studies on implicit bias among healthcare providers more broadly (Narayan, 2019). Given the frequency of nurse-patient interaction and the important (often intimate) role nurses play in healthcare, this limitation may significantly impact the body of findings on implicit bias.

Methods

This pilot study aims to understand the birth experiences of Black women from the dual perspectives of the mothers and of labor and delivery (L&D) and postpartum nurses. The study was conducted in the metro Atlanta area and the District, Maryland, and Virginia area (DMV) of Washington, DC, based on convenience and to increase the likelihood that clinicians would have experience assisting Black women in the birthing process. A sample of self-identified Black mothers answered questions about their lived experiences and a sample of nurses answered questions about clinically assisted births. For both groups, semi-structured interviews lasting 60-90 minutes were conducted via Zoom. The questions (see Appendix A) sought to deconstruct the birth experiences and perceptions of Black mothers and nurses' perceptions and experiences in clinical practice. Due to the COVID-19 pandemic, the researchers were unable to recruit in hospitals or clinical settings as planned. Therefore, both Black mothers and nurses were recruited through membership organizations. Black mothers were recruited through the Black Women's Health Imperative's social media platforms (Facebook, Twitter, and Instagram). Black Women's Health Imperative (BWHI) is a national organization dedicated to improving the health and wellness of Black women. The nurses were recruited through the Association of Women's Health Obstetrics and Neonatal Nurses (AWHONN) by posting information to the organization's social media platforms and forwarding information to their online community.

PARTICIPANTS

The study analyzed data from two participant groups: (1) Black mothers, and (2) obstetric/labor and delivery nurses and postpartum nurses.

Mothers

The sample of mothers (n=13) included self-identified Black women age 18-45 who had given birth in a hospital in the period two months to one year before the study and had experienced a healthy childbirth (defined as a mother and child being discharged together without nonroutine additional medical treatment needed for either party). The study excluded mothers who had adverse birth outcomes, defined as nonroutine additional medical treatment for mother and/or baby, because such experiences might complicate their assessment of their birth experience and would require a larger sample size. Participating mothers received a \$50 Amazon gift card.

Nurses

The nurse sample (n=12) included registered nurses who self-identified as Black or of African descent (n=6) or White (n=6) and had at least two years of experience in L&D or postpartum practice in Washington, D.C. and Atlanta, GA. Nurses received a \$25 Amazon gift card for their participation.

SEMI-STRUCTURED INTERVIEWS

Semi-structured interviews were conducted via a password-protected Zoom meeting at the participant's convenience after verbal consent was secured. If participants gave permission, interviews were recorded for transcription and data analysis purposes. All questions for mothers and nurses were asked to reflect on their experiences pre-COVID due to low sample size and the varying conditions of birth experiences pre and post COVID.

For both mothers and nurses, self-identified racial designation (White or Black/African descent) was used to ensure race-matching between interviewers and participants. Research has shown that both White and Black respondents are susceptible to race-of-interviewer effects such that during cross-racial interviewing, interviewees may avoid responding in a way that would offend the interviewer (Quimby, 2012). To avoid this bias and obtain the most authentic data possible, the researchers matched participants to an interviewer with a similar racial background.

CODING

Interviews were transcribed using Zoom software and a paid transcription service. The transcripts were uploaded into NVivo software. Mothers' interviews were analyzed via open coding, nurse interviews were analyzed via a priori coding, and the two sets of interviews were then compared using versus coding (See Figure 1.).

Figure 1. Coding Process



Open coding is a process by which qualitative data is closely examined and organized to assess trends within and across data sets (Saldaña, 2012). Based on the mothers' responses, the coders identified 15 open codes (see Appendix B). These codes served as the basis for 11 a priori codes used to analyze the nurse transcripts (see Appendix C). These a priori (preassigned) codes were selected based on how often the topic was discussed in the mothers' interviews. This procedure allowed for a comparison of perspectives on the same phenomenon (childbirth). Versus coding is an analytical method used to compare varied perspectives on the same phenomenon (Saldaña, 2012). Versus coding was the most appropriate final analytical step given the research purpose; the process yielded categories under which the original codes could be subsumed.

Results

DESCRIPTIVE STATISTICS

We received 57 responses from mothers to our social media postings advertising the study, and we selected 13 self-identified Black mothers between the ages of 18-42 who had given birth to singletons in a hospital setting in either the greater Atlanta area or DMV. The average age of the mothers in the study was 32. Among the sample mothers, 42% had Medicaid or public insurance, 46% had a doula at their birth, 75% were married or had a partner, 50% had an advanced degree, 16% had a high school diploma, 38% had a cesarean birth, and 50% delivered in the DMV area. Approximately 30% of the mothers had two or more dependents and a family income of \$50,000 per year or less. All mothers self-identified as female.

Of the 78 individuals who responded to the social media post asking for nurse participants, the researchers selected six self-identified Black nurses and six self-identified White nurses to participate in the study. The ages of sample nurses ranged from 28 to 67, with a mean age of 40. Among the nurse participants, 60% practiced in the DMV area and 82% were registered nurses; on average, the nurses had 9 years of practice. Sixteen percent (16%) of the nurses worked only in a postpartum unit while 25% floated between L&D and postpartum, and 59% only worked in L&D. All nurse participants self-identified as female.

The data set comparison produced three categories of codes: pain management and general treatment, racialized experiences, and health information and communication. Table 1 lists the codes in each category.

Table 1. Versus Coding Categories of Maternal and Nurse Interviews

Category	Codes
Pain Management and General Treatment	Pain Management Assessment of the Mother's Needs Labor Experience Perceived Treatment by Nurses Perceived Treatment by Physicians
Racialized Experiences	Racialized Experiences Insurance Coverage Individual Agency Physician and Nurse Relationship
Health Information Communication	Discharge Experience Discharge Protocol Information Given to Mothers Postpartum Support Postpartum Depression Occupational Challenges

CODE CATEGORIZATION

Pain Management and General Treatment

Pain management and general treatment was a cross-cutting theme that emerged in interviews with both mothers and nurses. This category includes communication and beliefs about levels of pain during labor and postpartum, pain management options offered during labor and postpartum, and perceptions of overall treatment while hospitalized. Racialized experiences were examples provided by participants detailing the perceived influence of maternal race on pain management and treatment.

During interviews, four mothers specifically expressed that the medical staff did not take the time to assess their level of pain. These mothers believed the physicians and nurses were constantly rushing, which led to inadequate care. One mother detailed her experience as follows:

You know, you don't have to rush. Make sure you take the time out to know people's names. Make sure if somebody says something hurts [that] you actually listen to them. You know, make sure that you're explaining things; sometimes people need clarification. ... My birth was unmedicated and that's not because I didn't want medication. I was just in so much pain that I couldn't speak up for myself.

The mothers explained that when they attempted to describe their level of pain on the standard scale of 0 to 10 (0=no pain, 3=mild pain, and 8 and above=severe pain), nurses often did not believe them, reacting as if they were not capable of rating their own pain. One Black nurse participant also reported that her White colleagues often did not believe their Black patients knew how to rate their own pain and made comments such as, "She said her pain level was an 8. She really doesn't know what an 8 out of 10 pain level really means or feels like."

Seven of the mothers said that their pain levels were not taken seriously at best or were purposefully ignored at worst. They also noted that the "demeanor" of nurses created an uncomfortable or even hostile environment. One mother believed that her inability to give birth at her desired location interfered with her birth experience. She explained:

Because I wanted to have, you know, a home birth... in the comfort of my own space. It didn't work that way. So, I had to have the hospital birth, but I felt like there were so many different challenges. My experience hindered my parenting, bonding, and maturing as a mother.

The data from the nurse interviews provided further insight into how pain is managed in the clinical setting during the delivery process. All of the nurses (Black and White) stated that their primary objective is to ensure the patient is as comfortable as possible and they manage the patient's pain to the best of their ability. All the Black nurses and two White nurses offered unsolicited (i.e., the interviewer did not ask for this information) descriptions of instances in which they believed race influenced the birth mother's experience. For example, one Black nurse described an emergency situation in which an expectant mother was forced to deliver her child early. The mother was in immense pain, but the physician ignored her pleas and requests to better manage the pain as he/she proceeded to remove a previously placed cerclage (stitches in the cervix to prevent preterm labor); the mother stated that the physician was "cutting at the cervix" in an attempt to start labor. The nurse described the mom being in excruciating pain.

The younger mothers in the study felt that their age and race played a role in their care and meant they had very little agency over their birth. They described being chastised or "ridiculed" for decisions they made during their pregnancy and labor. They also reported being constantly questioned as if they were children, with nurses asking question such as, "Are you sure this is what happened or what you want?" The three youngest mothers (age 18, 18, and 21) all used the words "traumatic" or "violating" to describe their birth experiences. Further, a 28-year-old mother who is often mistaken for a teenager believed that her youthful appearance had a major influence on her treatment. One young mother broke into tears as she described her birth experience:

They ignored or denied every request. When I said no to that drug [Cytotec or misoprostol, which can be inserted into the vagina to induce labor], they forced my legs open, held me down, and inserted it into my vagina. I know all the controversy around using this drug and my labor was progressing fine. I said, "No, please stop, no, stop." I said no over and over again. I was assaulted against my will.

The extent of her trauma was evident when she continued, exclaiming, "I will give birth at a Metro stop before I ever step foot back in that hospital."

Two Black nurses and one White nurse discussed the need for better trainings on communication between hospital teams as well as more simulations of emergency situations, especially trainings involving Black mothers. One Black nurse explained that new training methods emphasized reading charts and monitors rather than interacting with the patient to assess their physical discomfort and pain. She recalled a conversation she had with a nurse-intraining who was not tending to a mother who was "screaming and yelling in pain." Another Black nurse recounted multiple experiences with racial discrimination in the hospital, especially with new residents who override or do not value the opinions of nurses of color. She explained that this dynamic had resulted in babies dying when a resident relied solely on monitors and charts to make decisions rather than communicating with the mother. One of the White nurses discussed new training programs and initiatives created to address "racialized medicine." Although she highlighted positives aspects of some new initiatives to address bias in nursing, she concluded that "much of the content is lacking." She noted that she would like to see hospital leadership provide more resources for their staff:

From the manager level, from the leadership level, there's not a lot of product (practical training) that you can give to your staff. So it's a lot of, "You're gonna read the Medical Apartheid" and "You're going to read five articles about why this is important and how these health metrics are affected."

There was a racial divide among the nurses in their discussions of assessing and treating patients. The Black nurses and one White nurse described instances in which individuals of color were victims of prejudicial treatment. The other White nurses spoke about protocol, noting that, in theory, each patient is treated the same regardless of their race, sex, or gender. The examples provided by the mothers and the former group of nurses (the Black nurses and one White nurse) highlighted the ways in which race influenced pain management and general patient treatment. In contrast, the majority of White nurses did not mention race when discussing pain management and overall treatment of patients.

Racialized Experiences

All of the mothers, all six Blacks nurses, and two of the White nurses addressed race at some point during the interview. In several instances, mothers discussed the racialized treatment of Black women in healthcare in general, and listed steps they took to prepare themselves for potential racialized experiences prior to their delivery. Several mothers described researching the mortality rates of Black mothers so they could better advocate for themselves during their delivery experience. A majority of mothers wanted to give birth at home or at a birth center but ultimately delivered their children in a hospital for a variety of reasons including insurance coverage, medical concerns, and recommendations from physicians. A few mothers said they had read articles and taken notes to prepare for their hospital experience and improve their chances of receiving respectful medical care and treatment. Based on her research, one mother attempted to "humanize" herself to the medical staff. She explained:

I make sure that I code switch. I speak very clearly, you know, to make sure that I'm enunciating everything, so I'm not misunderstood. I asked questions, and I also try my hardest to basically humanize myself. I want them to see me; I always introduce myself.

One consistent priority among the mothers was having a health advocate to mitigate anticipated racialized treatment. They described consulting doulas for advice throughout their pregnancies. The doulas gave the mothers questions to ask during their hospital stay. For example, several mothers said doulas told them about wireless fetal monitors, which would allow them to labor without being restricted to the hospital bed once admitted. Other mothers noted that various family members were instrumental in both obtaining information and getting staff to pay attention to their needs. One mother relayed how her mother and two aunts acted as her advocates during her hospital stay, recalling:

My mother and her two sisters, they were at the hospital the whole time. They would be in your face, like, "What's going on? Why are you touching her? What, what is this? Where's the baby going?" But I also wanted to have a medical professional that I felt was on my team.

Several of the Black nurses recounted experiences with White colleagues, describing a prevailing culture among them that perpetuates derogatory narratives about Black women and the health disparities they experience such as diabetes and hypertension. One Black nurse said her colleagues discussed "what it's like to care for these Black women" and the "difficulty" of caring for them. The participant told her colleagues that race is a social construct, and these diseases are not purely based on the color of a patient's skin.

One of the White nurses stated that nursing staff often judge patients based on their race or cultural background. When the interviewer asked this nurse if she ever had trouble connecting with a patient, she answered:

It's been a long time since I saw this person. I'm totally embarrassed about my behavior, but like, I came into triage at shift change and the, you know, the nurses were giving us a report. They said, "Hey, this patient in this particular room—she's extremely aggressive." You know, I'm down in the South. They say, "She's real ugly with her behavior." ... So, I went into her room with an attitude, and not how I like to treat people and she, within like two minutes, she was like, "Get out of my room. You don't respect me." And she was totally true. I mean, and I just prejudged her based on what I was told from the prior checks.

When the interviewer asked the nurse if her judgement was based on the patient's race, she replied:

The situation that time—I mean, definitely [was] racial and definitely judging someone based on, they don't have as much money as you do. They're not as educated as you are. Thinking maybe they're not as smart as you are. Definitely those judgements.

The nurse concluded by saying that she had matured and now understood how prejudices based on race can affect the treatment Black women receive in medical settings.

Two White nurses and four Black nurses listed racial bias or implicit bias as a problem in hospital settings. All the nurses began by stating that their clinical protocol ethos is to care for every patient equally, regardless of race, class, or gender. One Black nurse discussed an instance in which her White colleague felt she had been "disrespected" by a Black patient and did not provide the proper care. After describing the encounter, the colleague said, "I'm not going to be yelled at by a 17-year-old angry Black woman," and left the nursing station. The mother was scheduled for an induction the following morning. When she received an ultrasound in preparation, the nurses discovered the baby had died. The Black nurse attempted to debrief with her White colleague; she recounted their exchange as follows:

I was able to talk with the nurse, who said, "You know what, I'm 58 years old. I'm tired [of] people yelling at me; I'm not going to be dealing with that. I'm just not gonna do it." So, my questions for her was, okay well she [the patient] was hungry. Did you offer her [a] sandwich? Did you offer her a meal? Did you offer to call her family? Did you call the physician? What did you do that would have made a difference? And she's like, "Look, I have been constantly yelled at and intimidated by Black women and I just decided that I'm not gonna do that with them that day."

Coded Language to Describe Experiences with Race. The interview questions intentionally did not mention race. Some nurses volunteered information about racialized experiences, other nurses did not mention race at all, and three nurses used coded language to talk about experiences with Black patients in labor and delivery. In general, Black patients were characterized as more difficult, sicker, less educated, and having more complications and less access to healthcare than White patients. For example, one nurse discussed the differences between her experience working in two different settings: Fayetteville, NC and Arlington, VA. When describing her experience working at hospitals in Fayetteville, NC, including the hospital population she served, she used phrases such as "very difficult," "mom is on drugs," "lots of complications and compliance issues." She referred to this time as a low point in her career. However, she described her time working in Fairfax, VA, at a very well-resourced hospital in a predominately White and affluent area of Virginia, much differently. She explained:

Where I am now is opposite ends of the spectrum. ...Patients follow policy and procedures, they are married families with planned pregnancies, less unmarried and undocumented patients. ...It's so much easier.

Insurance and Treatment. Several mothers discussed the importance of insurance as a trigger for differential treatment. Three mothers bought up the issue of insurance without being asked. Some of the mothers in the sample had public health insurance while others had employer-sponsored health insurance. Two mothers described differences in treatment across multiple births based on whether the delivery was financed through public or employer insurance. Mothers with public health insurance mentioned being denied the opportunity to give birth at home or at a birth center because insurance only covered hospital care. In addition, mothers struggled to find a Black female obstetrician (OB) in their network. One mother recalled "searching and searching" for a Black female OB that took Medicaid. Others described differences in care based on insurance coverage, explaining that insurance would not provide extra provisions such as monitors and would not cover additional sonograms, even if there was a medical need. One mother recounted:

Things were wrong with my son after I gave birth. When I sensed something was wrong, I wanted more sonograms but insurance would not cover it, and I wondered if I had more sonograms if that would have helped.

Four of the Black nurses and one White nurse also highlighted racial biases when discussing the role that insurance coverage plays in care. The Black L&D nurses stated that their White colleagues treated

patients differently when they discovered the patient had public health insurance. A Black nurse recalled an instance in which two patients needed to move to the high-risk unit. The nurse from the high-risk unit asked what type of insurance each patient had and stated, "I'm going to take the patient that had insurance," insinuating the patient with public health insurance was not a priority.

Health Information Communication

There was consensus among the mothers about the need for more information and transparency during the delivery experience and discharge process. Some mothers felt that the nurses and physicians did not provide sufficient information about what the labor experience would entail. Several stated that the vast majority of the resources they found useful were provided by their doulas rather than their physicians. Over half of the mothers said inadequate communication during the birth experience was a challenge. One mother described having a very long labor during which her doctors made the decision to do a cesarean just after she had eaten. She tried to articulate that she had just had some food and was extremely nauseous. During surgery, she repeatedly indicated that she felt nauseated but none of the providers attended to her until she vomited and it dripped down her mouth and neck. She recalled feeling like her pleas were lost in a vacuum. She said the anesthesiologist barely attended to her and she went to recovery with vomit on her face.

POSTPARTUM EXPERIENCE

Mothers from a wide range of demographic backgrounds wanted more information about what to expect physically and psychologically during the postpartum period. Three mothers who had public insurance said they did not receive adequate information during the discharge process about how to care for themselves or their child. One mother described the process as "rushed," as if the medical staff wanted to fill her bed as soon as possible. Several mothers with employer-sponsored health insurance participated in postpartum support groups, which alleviated the feeling that they were going through the process alone. Although the mothers had a range of postpartum experiences, they agreed that their physicians' role in preparing them for the postpartum period was lacking. The mothers felt their physicians did not sufficiently attend to their physical and mental well-being, particularly in the context of providing optimal care for their children.

All the nurses reported providing mothers with information and education about their newborns and the postpartum experience. Several nurses spoke about hospital protocols, which required them to talk to new mothers about postpartum experiences that could occur once mother and baby returned home. One White nurse described her approach to teaching mothers about the postpartum period. She said, "Let's sit down and talk about this because when we're a postpartum nurse, we try to check off boxes to make sure we've talked about everything." The nurse said she also provides tips that are not explicitly listed in the protocol. For example, she characterized her interactions with mothers who indicated they wanted to breastfeed their child as follows:

So, some of them come in and they want to breastfeed. And you'd have to feed them every two to three hours, even at night. To the point where, like, for the first few weeks until they gain back their birth weight, you can set an alarm to wake them up. If the baby sleeps for five hours, that's too long. So you use these little opportunities to sneak stuff in.

One of the Black nurses described her experience working in the postpartum unit, noting that she gave all new mothers a folder with information, and talked with them about the warning signs of postpartum depression. However, she criticized the hospital's limited resources for different racial/ethnic communities, specifically non-English speakers, stating:

Right, maybe if they could—I know they have it in English and Spanish—but if they could do it [translate it] because we also have a large Southeast Asian community here. And like I said, we have several different African communities that have patients here. If maybe there was a video or just to make

sure that they get it [the resources] printed out in all the languages, at least the top four, so that everyone has something to take home and read with them.

Mothers and nurses had different perspectives on the resources provided to new mothers during the discharge process. The mothers wanted more information from nurses and physicians about the postpartum period and how to properly care for their newborn. Most nurses, however, perceived that providing the information included in the discharge protocol was sufficient to educate mothers about the postpartum period. Several nurses mentioned language barriers between nurses and patients, which could lead to misunderstandings regarding postpartum expectations. A few nurses said their hospital had a sign language interpreter or videos available in sign language, so mothers with auditory disabilities could receive resources.

POSTPARTUM DEPRESSION

Surprisingly, over 60% of the mothers in the study said that they experienced symptoms of postpartum depression or mood disorder. However, mothers were either not given a chance to take the postpartum depression survey or the survey did not capture their experiences with depression. All mothers who discussed experiences with postpartum depression except one were connected to a negative or traumatic birth experience. Only three of the sample mothers reported that their postpartum depression was adequately addressed with therapy. In addition, those who reported receiving adequate support obtained this support outside the hospital setting—through either community non-profit organizations or school-based health centers. One mother reported getting support from the Mary Center in Washington, DC, which provides support and care for mothers and babies; one mother reported receiving support from the Mamatoto Village in Washington, DC; and the third mother, who delivered her baby while still in high school, received support from the school-based health center counselor.

POSITIVE BIRTH EXPERIENCES

Three of the mothers described caring nurses and physicians that tended to their needs appropriately, which contributed to a positive birth experience. All of these births occurred in hospitals that had midwifery practices the mothers could access. These mothers also said race did not factor into how they felt about their care. When describing her attending nurse during delivery, one mother commented, "the fact that she was White did not matter, she was just so supportive; [she] rubbed my back, was comforting, attentive, and helpful during my birth." Two mothers said that they were lucky that a nurse with a cultural background similar to their own just happened to attend their births, which made all the difference in their care and contributed to a successful birth experience.

Discussion

The purpose of this pilot study was to explore the birth experiences of Black mothers and labor and delivery nurses, the clinical professionals most likely to interact with mothers during birth, and to investigate implicit bias among nurses. Using a versus coding qualitative analysis methodology and focusing on the experiences of mothers and nurses, this study makes valuable contributions to the understanding of the gaps in maternal health and care that Black mothers experience. In addition, this study addresses a methodological gap: to date, no qualitative studies have provided guidance about capturing experiences of bias among health professionals. This study offers techniques to capture and understand experiences of bias in healthcare settings via qualitative analysis. Standpoint theory serves as a framework for analyzing the collective experiences of the mothers, Black nurses, and White nurses as distinct groups of participants.

The literature has shown that in the United States, historical experiences across generations inform the interpersonal and systemic interactions between the mothers and groups of nurses, yielding racialized birthing and postpartum experiences, some of which result in traumatizing outcomes. This study corroborates the prevailing findings that racial prejudice and bias against Black mothers can impact every stage of care from prenatal to antenatal to postpartum.

Two major themes emerged from the data: the role of race in the birth experience and the ways protocols can be used to mask potential bias. Although interviewers did not explicitly ask about race during interviews, respondents mentioned it frequently; the topic permeated all aspects of the mothers' experiences, and many nurses addressed it as well. Both mothers and Black nurses believed that race permeated responses to the triage experience, labor, childbirth, and postpartum.

Based on the focal definition of implicit bias (from the Kirwan Institute), implicit bias includes the attitudes or stereotypes that unconsciously influence perceptions, decisions, and actions (Kirwan Institute, 2018). This unconscious influence was evident in the experiences of the mothers in study; it was either explicitly described by nurses or very evident in their descriptions of their experiences in clinical practice. Some of the White nurses posited that medical care and treatment protected patients from racial bias and stereotypes because of their strict adherence to established protocols "that treated and cared for everyone equally."

These data support previous literature showing that Black mothers enter the childbirth experience keenly aware that they will be prejudged and will have to exert extra effort to successfully navigate a racialized birth environment (Alhusen, Bower, Epstein, & Sharps, 2016; Hardeman et al., 2020; Nuru-Jeter et al., 2008). Pre-established narratives about Black mothers dominate the Black mother-White nurse dyad, infiltrating the provision of care, including the communication of postpartum information at discharge. Indeed, the definition of implicit bias implies that it cannot be remedied via established clinical protocols, without accountability. The inevitable question of how the stress associated with racialized perinatal experiences affects the physiological response of Black women during labor and delivery is beyond the scope of the current study.

Limitations

In this small pilot study, sites were selected based on high rates of Black maternal mortality and morbidity as well as convenience and reach. Data from larger samples that capture the experiences of Black mothers in more cities would expand and validate the findings. In addition, the sample included Black women with a somewhat narrow range of demographic characteristics and, importantly, did not include LBGTQ+ Black women; future studies that capture the intersectional experiences of these mothers would be useful. Because of unusual dynamics and hospital practice limitations implemented during the COVID-19 pandemic, the researchers did not capture the experiences of mothers who birthed during COVID and nurses' experiences with assisting birthing women during COVID. These experiences warrant further exploration.

Recommendations

Although the findings are based on a small sample size, they align with the prevailing literature on Black maternal care. The literature is replete with evidence that unconscious clinician bias influences patient-clinician interactions, medical care, and outcomes. Taken together, these new results and the prior literature suggest several recommendations for clinicians, medical care leaders, and administrators. First, interventions should consider hospital-specific data and include opportunities for clinicians to identify and then become skilled in remediating biased behavior. For example, before launching professional trainings, hospitals should evaluate maternal birth and postpartum outcomes specific to their location and then identify the most relevant patient-facing professionals for training sessions.

Second, because addressing bias in a work environment can evoke defensiveness and employment insecurity, a case-based approach to professional development is recommended. This approach supports individuals in identifying bias in their practice in a less confrontational way and focuses on practical ways to identify and counteract bias in action.

Third, researchers, hospitals, and healthcare providers should take advantage of new and innovative tools for gathering data on the experiences of Black mothers. Hospitals, medical care leaders, payers,

and insurance plans rely on patient-satisfaction data and adverse event data to determine improvements in the quality of care expected, delivered, and compensated. However, the results of this study and others (Bingham, Jones, & Howell, 2019; Guerra-Reyes & Hamilton, 2016; Hardeman et al., 2020; Howell et al., 2018; Sidebottom, Vacquier, LaRusso, Erickson, & Hardeman, 2020) suggest that for Black birthing mothers, a different mechanism is needed to capture perinatal experiences for quality improvement purposes. One such mechanism is currently under development by medical and social scientists at the University of California San Francisco. The PREM-OB Scale (Patient-Reported Experience Measure of OBstetric racism scale) is a new survey tool that will gather data on the quality of perinatal care and services received by Black mothers. PREM-OB was designed for, by, and with Black mothers and birthing people in California. The PREM-OB Scale allows Black mothers and birthing people to share information about their unique patient experiences in hospital settings during labor, birth, and postpartum. The data and information gained from the PREM-OB Scale will help hospitals, health plans, scientists, funders, and the public better understand how obstetric racism and other forms of discrimination and neglect affect the way hospitals provide care, services, and support to Black mothers and birthing people during labor, birth, and the immediate postpartum period. The data gathered via this tool will uncover the full range of experiences of Black mothers, which can inform professional training and development, hospital protocols, and the purchasers and payers of medical care services as it pertains to value-based care (UCSF, 2021). PREM-OB offers a pathway to improved quality of care centered on the subjective group experience with much higher reliability and validity than traditional patient care satisfaction surveys and incident reports.

Fourth, given that all the mothers in the sample desired a different and more informed postpartum experience, we suggest site-specific reviews of discharge practices and materials vetted by Black mothers who can aid in the development and implementation of more culturally relevant postpartum support. Clinically, we suggest the use of postpartum evaluation scales that are more closely aligned with culturally relevant terminology as well as early intervention tools that best reflect perinatal mental health in Black and Indigenous communities and communities of color. The current scale used for postpartum depression is not normed and aligned with the lived experiences of Black mothers. Further, expansive and more appropriate postnatal care is warranted in areas beyond mental health. Because many U.S. healthcare plans restrict postpartum care to a single appointment six weeks after childbirth, postnatal care is limited, and gaps in care sometimes lead to deaths or postpartum psychosis. Health information and communication postpartum are rushed and more time is needed to spend with moms postpartum to address the unique needs and risks of mothers of color. We recommend that trainings and simulations for nurses incorporate these experiences, especially those that led to infant and maternal mortality and morbidity. Such focused trainings are critical to helping nurses understand how implicit bias can harm and even kill mothers and babies. Further, trauma therapy and support for nurses and medical staff is needed, given that they witness high rates of fetal demise and maternal and infant deaths.

Finally, we recommend that nurses receive training focused on the evidence-based science of racism, stress, and birth outcomes. It is imperative that medical professionals—especially nurses—understand that racial discrimination among healthcare providers affects the health and outcomes of Black mothers and babies. Understanding and teaching the evidence-based science of racism, stress, and birth outcomes is just as important as understanding how to control and manage gestational diabetes during pregnancy. It is quite literally a matter of life and death.

This study is only a first step in addressing the needs of Black birthing mothers. The results only scrape the surface of the science and research that can be conducted to facilitate the development of recommendations to: better capture the needs of Black mothers; support these mothers; expand patient care and communication; and build the capacity of nurses to equitably serve all hospital populations regardless of race, insurance, and other social factors. Implicit and explicit bias among nursing professionals is layered and multifaceted. This topic deserves further exploration and attention, the results of which will foster the development of interventions to eliminate maternal health disparities.

Conclusion

To address persistent maternal health disparities and improve maternal and infant health outcomes at the national level, the U.S. Surgeon General, Dr. Jerome M. Adams, released The Surgeon General's Call to Action to Improve Maternal Health in 2020. The report outlines a set of strategies and actions for stakeholders, including women and families, local communities, states, tribes, healthcare professionals, health systems, payors, employers, innovators, and researchers. These strategies focus on addressing the social determinants of health, strengthening the quality of improvement initiatives, paying more attention to early warning signs, creating environments that promote health and wellness and support breastfeeding, improving the quality of and access to healthcare services and patient-provider communication, increasing the range of perinatal services covered by health insurance, promoting the coordination of care, and advancing a research agenda to identify causes of maternal health disparities and evidence-based clinical practices and treatment (HHS, 2020).

To adequately heed this call-to-action, researchers who study implicit bias in healthcare settings must conduct additional research on nurses and their experiences and perspectives. Further research is also needed to clarify and show explicitly how implicit bias produces negative health outcomes more broadly and maternal and infant health outcomes specifically. There is an extensive body of research evidence documenting the perinatal care experiences of Black women and showing how racism and other structural inequalities affect their outcomes. However, there are few studies on the connection between implicit bias among nurses and Black women's care experiences. Future research on implicit bias should normalize the knowledge of Black women and birthing people in order to help disrupt the longstanding stereotypes and tropes about Black people.

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APPENDICES

Appendix A: Semi-Structured Interview Guides

Appendix B: Open Codes Identified in Mothers' Interview Responses

Appendix C: A Priori Codes Used to Analyze Nurse Transcripts

APPENDIX A

SEMI-STRUCTURED INTERVIEW GUIDES

Mothers Interview

After confirming verbal consent...

Demographic Info

Do you mind telling us your age? Highest education level completed: C-section or vaginal birth: (C or V) Did you have to be induced? (Y or N) Doula-assisted birth: (Y or N) Was your partner or family support present at birth?

What kind of medical insurance did you have during your birth?

Name of city and hospital where you delivered your baby:

SES family income:

 ,
under \$50,000
between \$50,001 - \$75,000
between \$75,001 - \$100,000
between \$100,000 - \$200,000
over \$200.000

Background

- 1. Can you tell me a little bit about yourself and your family?
- 2. Can you tell me a little bit about your pregnancy? [probe: memorable moments good or bad, any high-risk complications?]
 - a. What were your hopes and aspirations about your pregnancy?
 - b. What were your expectations and aspirations about your birthing (labor and delivery) experience that were formed during your pregnancy?
 - c. How was your experience overall with your care providers during your pregnancy? (Did you feel like all your questions were answered?)

Labor and Birth Experience

- 3. Can you tell me about your most recent labor and birthing experience? [probe: memorable moments that stuck with them (good or bad); details]
- 4. Would you please describe your labor support team?
 - a. What forms of support did you receive during childbirth, and how did that work out for you (positive, negative, mixed experiences of support)?
 - b. How did the hospital staff treat your partner or support team?
- 5. Will you recount in detail birth experiences other than the most current one?
- 6. Some women describe their actual birth experience as being much different than what they wanted or planned. How did this work out for you? [probe: for environment, comfort measures, support team, mode of delivery.]
- 7. Would you please describe your participation during your labor and delivery experience?
 - a. What decisions did you make during your labor and delivery experience?
 - b. Describe ways that you felt (1) in control and (2) not in control during your birth experience?
 - c. Overall, were your wishes and intentions honored?
- 8. What happened as soon as your baby was born?
 - a. What was your initial reaction after giving birth?

- 9. Reflecting on your childbirth experience, what were you happy with and what would you change?
 - a. What care did you not receive but wish you did or wanted more of?
 - b. What did you like best?
- 10. Do you have any final thoughts or comments you'd like to share regarding your pregnancy or birth experience?

Post-Partum/Post-Birth Experience

- 11. How was advice was given around birth control?
- 12. Please describe your discharge experience [probe: leaving the hospital]
 - a. Did you receive the information and instructions needed?
 - 1. If yes, was it helpful?
 - 2. If no, what would like to have received?
- 13. What were you told that you can expect physically?
- 14. What were told you can expect emotionally/mentally?
- 15. What were you told about post-birth warning signs (PBWS) with you? (prompts such as post-bleeding, when pain is concerning, etc.)
- 16. Do you feel like you knew what to expect after childbirth and when you went home?
- 17. How would you describe your experience with the nurses you encountered during your labor and delivery?
 - a. Can you share some demographic information about your nurse (age, race, gender)
 - b. Do you believe the race of the attending nurse(s) influenced your care? If yes, how. If no, example.
- 18. What was helpful to you?
- 19. What was less helpful to you?
- 20. When was your post-partum/post birth visit with your provider?
 - a. Was that a satisfactory visit?
 - 1. If yes, how so?
 - 2. If not, why not?
 - b. What did your provider tell you to expect physically?
 - c. What did your provider describe or discuss about how you may feel emotionally?
- 21. Can you describe your postpartum experience to date?
- 22. Did /do you have any concerns or questions about you or your baby?
 - a. If so, what were they?
- 23. How did you feel physically when you were discharged? Six weeks after birth? 6 months after birth?
- 24. How did you feel emotionally when you were discharged? Six weeks after birth? 6 months after birth?
- 25. Can you describe how you felt during the first several months after the birth of your baby?
- 26. How well were you prepared for this time after delivering your baby?
- 27. What were your concerns or questions about you or your baby or family?
- 28. Describe concerns or questions regarding you or your baby's physical well-being.
- 29. Describe concerns or questions regarding your emotional well-being.
- 30. Did you have to return to the hospital or your provider for any unroutine reason?
 - a. If no, read concluding statement/question.
 - b. If yes, why did you return to the hospital or your provider?
- 31. Can you describe your experience with your return visit? [Probe: reason, treatment, outcome]
- 32. Do you have any final thoughts or comments you'd like to share regarding your postpartum/birth experience?

OB/L&D Nurses Interview

After confirming verbal consent...

All of these questions should refer to their work/experiences before COVID-19.

Background

- 1. Can you tell me a little bit about yourself? [probe: age, racial/ethnic identity, age, gender identity, level of education, area of residence, place of employment and number of years]
- 2. Why did you decide to become an OB/L&D nurse?
- 3. Can you tell me a little bit about your role as an OB/L&D nurse?
 - Probe: What are some of the most important roles and responsibilities you have when supporting or assisting mothers during labor and delivery?
- 4. What are some of the joys and highs about your job?
- 5. What are some of the challenges and lows you face when fulfilling your role?

Probe: what are some of the challenges you face at the hospital you are working at now? Ex: Probe: is it well resourced? What about the hospital's population—can that be difficult? Do you feel good communication happens between your team, doctor, and charge nurse? Prob: Do you feel your concerns are heard?

Labor and Delivery Experience

- 6. How do you determine the needs of a birthing mother who is considered high-risk or for women experiencing difficult births? Probe: are there different protocols you need to follow? Probe: Describe how your support for a birthing mother may change based on a mother's unique needs (age, high risk, cultural differences/language barriers, lack of support)?
- 7. Can you tell me about the high-risk population you serve at the hospital? Probe about demographic information? What are some of the challenges you have meeting their needs?
- 8. Can you describe a situation where you felt you may have been misunderstood by a birthing mother or had a hard time supporting your patient? (Can you tell me about the mom and family a little bit?) Probe: were there any cultural differences that you think influenced that situation? a) What did you learn from that situation? b) In retrospect, what are some things you could have done differently?
- 9. What do you do when you have an issue with patient adherence or compliance? What about a patient with a difficult attitude? How do you navigate those situations?
- 10. How would you describe your experience in general working with mothers that have a doula at their birth?
- 11. Have you ever experienced any challenges working with a doula? Can you tell me about that?
- 12. Can you tell me about times when its been helpful working with a doula or has made your job easier?

Discharge and Post-Partum Experience

- 13. Would you please describe how you prepare mothers for their postpartum experience at home? Can you tell us about the information you share with them?
 - Probe: Do you think they listen to this information? Is it enough? Anything you would change about the discharge process?
- 14. How do you prepare mothers who have health issues like diabetes, high blood pressure, need support from social services, etc.? How do you support mothers that have had difficult or challenging births?
- 15. Are there things you wish you had more training in or exposure to, to better perform your job or help new mothers?
- 16. What can hospitals do differently (if anything) so that doctors and nurses can provide optimal support and care to birthing mothers?
- 17. What advice would you give a new RN working in your field?
- 18. Is there anything else you would like to share?

APPENDIX B

Open Codes Identified in Mothers' Interview Responses

Code Book for Mothers (n=13)						
Name	Description	Files	References			
1) Access to Information	How the mothers perceived their access to educational resources throughout the labor and delivery process.	13	22			
2) Delivery Location	How the mothers described their ideal birth location and if this location was used during the birth of the child.	13	19			
3) Discharge Experience	Experiences mothers mentioned regarding their discharge from the medical center.	13	25			
4) Individual Agency	How the mothers described their control throughout the labor and delivery process.	13	17			
5) Insurance Coverage	How the mothers described their insurance coverage and any complications that occurred.	13	32			
6) Labor Experience	How the mothers recalled their experiences while giving birth.	13	41			
7) Pain Management	How the mothers perceived their pain and how the medical professionals administered pain relievers.	13	33			
8) Perceived Treatment by Nurses	How the mothers interpreted the care received by nurses.	13	27			
9) Perceived Treatment by Physicians	How the mothers interpreted the care received by physicians.	13	36			
10) Postpartum Depression	The mothers' perceived experiences of postpartum depression.	13	23			
11) Prenatal Experience	Experiences the mothers mentioned regarding their prenatal care.	13	34			
12) Pre-existing Conditions	How the mothers described any prevailing illnesses.	5	9			
13) Racialized Experiences	How mothers described radicalized incidents throughout the labor and delivery process.	9	16			
14) Support Networks	How the mothers described their support systems throughout their delivery and postpartum experiences.	13	27			
15) Type of Delivery	Whether the mothers were able to have a natural birth or required a cesarean delivery.	13	23			

APPENDIX C

A Priori Codes Used to Analyze Nurse Transcripts

Code Book for Nurses (n=12)			
Name	Description	Files	References
1) Assessment of the Mother's Needs	How the nurses determine what services the mothers need during their hospital stay.	9	17
2) Complications During Delivery	How the L&D nurses assess and treat medical complications during the labor process.	7	13
3) Discharge Protocol	The policies and practices described by the L&D nurses which detail how mothers are properly discharged from the hospital.	10	16
4) Information Given to Mothers	The educational or informative resources L&D nurses provide to mothers.	10	21
5) Insurance Coverage	How the nurses describe the role of insurance throughout the birthing experience.	10	25
6) Occupational Challenges	Challenges, both physical and psychological, which impact L&D nurses.	8	15
7) Pain Management	How the nurses assess patient pain levels and subsequent treatment.	10	26
8) Physician & Nurse Relationship	How the nurses describe the relationship between the nursing staff and physicians.	8	17
9) Postpartum Support	Services the nurses provided to mothers during postpartum.	10	14
10) Racialized Experiences	How the L&D nurses describe the role of race when delivering care.	6	11
11) Type of Delivery	The type of delivery method used during the labor process.	10	13