Reshaping African American Women's Birthing Experience

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Biomedical Science

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Faculty Adviser: Dr. Stevens

Essay completed in partial fulfillment of the requirements for graduation with Global Honors, University of Washington, Tacoma

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Although much of the literature points to socio-economic status as the determinant of adverse maternal health outcomes, Serena Williams sheds light on the disparate treatment in maternal health felt by African American (AA) women despite differences in social standing. Her afflicting story began after giving birth to her daughter by emergency cesarean section when she began to feel warning signs of a pulmonary embolism. Having had a history of pulmonary embolisms, she promptly alerted her health care providers about her symptoms and requested a CT scan (Salam, 2018). Pulmonary embolisms are often caused by blood clots traveling to the lungs, and cesarean sections increase the risk of developing blood clots (Mayo Clinic, 2020; Weill Cornell Medicine, 2017). So, it was the health care provider's responsibility to prepare for potential clotting issues. Not only did they not prepare, but they initially ignored her requests for a CT scan despite her medical history. As a result, Serena Williams experienced severe complications that were avoidable if the healthcare providers had taken the time to listen to her concerns and adequately prepared for known risk factors. While Serena Williams lived to tell her truth, many AA women do not. In the United States (U.S.), AA women are two to three times more likely to die from pregnancy-related complications than any other racial or ethnic group. This paper addresses the following questions: (1) in what ways does structural racism perpetuate a higher MMR for AA women? (2) how can we design a health system which addresses these structures and provides an equitable birthing experience for AA women? I look for solutions within the U.S., particularly because of its distinctive historical context of enslaving black women and assimilating oppressive structures within its systems. I look at specific barriers placed on AA women that perpetuate a high MMR. Next, I look at distinct historical trauma that black women have undergone in the last 402 years to explain the current oppressive climate

within maternal medicine. Lastly, I explore a successful approach to delivering improved antenatal care (ANC) to AA women at the individual, public health system, and policy levels.

Maternal Mortality

Maternal mortality (MM) is a sentinel public health indicator of maternal health success used globally. The maternal mortality ratio (MMR) is the number of female pregnancy-related deaths during a given period per 100,000 live births (Chou, n.d.). MMR is considered the leading indicator of a country's quality of maternal health and progress toward international development goals. However, the burden of MMR is only a small portion of the burden of maternal morbidity. Maternal morbidity often referred to as severe maternal morbidity (SMM), is defined as health conditions attributed to or aggravated by pregnancy that harm the woman's wellbeing, extending to the postpartum period (Division of Reproductive Health [DRH] & National Center for Chronic Disease Prevention and Health Promotion [NCCDPHP], 2014). Pregnancy involves enormous physiological changes in bodily systems, which, in many cases, make for a medically vulnerable period in a woman's life. These adverse outcomes can extend to over a year after delivery and are a highly neglected element of maternity care, one that the U.S. is currently addressing at the legislative level (World Health Organization [WHO] et al., 2019).

The SMM data shows an increasing trend in the U.S., affecting more than 50,000 women in the U.S. in 2014 (DRH & NCCDPHP, 2014). The prevalence of SMM is attributed to increasing maternal age, pre-existing conditions, and cesarean deliveries. SMMs vary in duration and severity, covering a wide range of diagnoses. By establishing appropriate SMM interventions, MM can be reduced. According to the Centers for Disease Control and Prevention (CDC, 2019), significant complications during delivery, which lead can to MM are severe bleeding, pre-eclampsia and eclampsia (high blood pressure), and other delivery complications,

like amniotic fluid embolism (when amniotic blood enters the bloodstream). Most complications which result in MM are preventable and, with better health interventions at the individual, institutional, and policy levels, could be avoided. Many contributing factors require partnerships across various sectors to close gaps in inequitable maternal health. Hemorrhages, cardiomyopathy, and infections, which are the leading causes of death in the postpartum period, are largely avoidable through effective communication between providers and patients and access to high-quality care throughout the entire pregnancy and postpartum period (McGowan, 2016; WHO et al., 2019).

There are wide-ranging differences in the MMR across the country and around the world, with high-income countries having much lower rates than lower-income countries. For example, the average MMR in the European Union is eight deaths per 100,000 live births, while in low-income countries, such as Sierra Leone, the rate is much higher: 1,360 deaths per 100,000 live births (Roser & Ritchie, 2013, para. 13, 14). MMR showed a 44% drop reduction globally from 1990 to 2015, except for the U.S., which increased 16.7% within that time frame (WHO, 2015, p. xi, 76). The global population-level indicators of high MMR are low socioeconomic status, access to quality care, and lack of information and services (CDC, 2019; Roser & Ritchie, 2013). These markers are barriers experienced due to inequitable global health care systems which result in women dying. Barriers in maternal health are multidimensional, and interventions need to be incorporated into strategic programs because no single approach will be sufficient in all regions. This paper will use the U.S. as a starting point in provoking strategies addressing 'othered' populations, which statistically experience MM at the greatest numbers.

Measurement of Maternal Mortality

Proper data collection is essential to developing effective MM interventions. The first international classification edition – International List of Causes of Death— was implemented by the International Statistical Institute in 1893 (WHO, 2020). Since then, WHO has adopted the International Classification of Diseases (ICD) and created several revisions to provide a more accurate identification of global health trends. The International Classification of Diseases- 10th Revision (ICD-10) codes are a standardized tool for the International Classification of Diseases Maternal Mortality (ICD-MM). The ICD-10 provides a standardized diagnostic classification under the definition of MM as the annual number of female deaths during pregnancy, childbirth, or within 42 days of termination of pregnancy (Fortney, 1990). It is intended to promote the collection, analysis, and interpretation of maternal deaths across different national health data systems (WHO, 2020). In 1999, it was adopted in the U.S. and is used now by more than 150 countries (Brouch, 2000; WHO, 2020).

The ICD-MM is critically essential in measuring progress toward public health goals by shedding light on the causes of maternal deaths (Ameh et al., 2014). Despite WHO's efforts to further revise ICD's to specify maternal complications, several discrepancies remain in the national collection of MM data. For example, inadequately coding deaths and under-reporting or over-reporting in national Civil Registration and Vital Statistics (CRVS) are widely seen (Ameh et al., 2014; CRVS Knowledge Gateway, 2018; MacDorman et al., 2020). Over 100 countries lack an accurate CRVS system, approximately 55 million deaths are not registered globally, which suggests that the severity of MMR is not fully known (CRVS Knowledge Gateway, 2018). On the other hand, the revision of ICD coding has improved accuracy in MMR estimates.

Despite barriers in obtaining high-quality cause-of-death data, the numbers still reflect MM as a global pandemic.

Global Connection

High MMR is attributed mainly to improper implementation of interventions and little to no access to quality ANC (WHO, 2019). The 1990 plan set out to reduce the MMR by three-quarters of the global estimated MMR of 400 deaths per 100,000 live births by 2015; it was endorsed by 189 countries (United Nations [UN], n.d.). In 2000, the United Nations General Assembly (UNGA) recognized the high MMR rates as a necessary inclusion to their eight Millennium Development Goals (MDG) (Maternal Health Task Force [MHTF], 2017; UN, 2013). Countries that focused on improving access to quality ANC exhibited substantial progress in reducing MMR. Despite the overall global improvement, only nine countries achieved the MDG 5 target. The U.S., among several countries, remains above the worldwide average MMR (WHO, 2015). Ongoing high rates of MMRs across the globe led to another worldwide strategy launched in 2015 by the UN Secretary-General. The Sustainable Development Goals (SDGs); the SDG 3 target aimed to reduce global MMR to less than 70 per 100,000 live births by 2030 (WHO et al., 2015). However, the world will fall short of its MMR target by more than 1 million lives with the current pace of progress (WHO, 2019).

At the same time, different models of ANC—the care received from health professions during pregnancy—have drawn attention since WHO's 2016 recommendations that ANC is imperative to improving the experience of pregnancy and decreasing maternal mortality (WHO, 2018). The ANC model aimed to address improving women's autonomy and increasing the number of visits to eight during pregnancy. Current ANC models that include midwifery and doula care have been well documented as a way to bolster low-quality maternal care (Callister &

Edwards, 2017). Of the 73 countries that account for most maternal deaths in the world, only four have a sufficient midwifery workforce (United Nations Population Fund [UNFPA], n.d.). According to UNFPA (n.d.), trained midwives can help prevent nearly two-thirds of all maternal deaths and improve the fragmented maternal care received by minorities.

Around the world, more than 140 million women give birth each year (WHO, 2018), including immigrants and refugees who are at higher risk for pregnancy-related complications (Callister & Edwards, 2017). This situation makes it imperative that a design be implemented that addresses the additional barriers these populations of child-bearing mothers experience. As of 2017, the risk of maternal death over a lifetime is 1 in 5,400 in high-income countries and 1 in 45 in low-income, suggesting larger health disparities amongst low-income countries. Even though other countries do not all have the exact historical context of slavery as the U.S., Black women are more likely to die from childbirth across many nations. Sub-Saharan Africa suffers from the highest MMR – 533 deaths per 100,000 live births, and in the U.S. and U.K., Black women are at 3-5 times greater risk during pregnancy than White women (Hackett et al., 2020; Reuters, 2020; Roser & Ritchie, 2013; WHO et al., 2015). While deeply embedded in the dismantling of racist structures, the U.S. solution to maternal health can still be translated to other nations as building an infrastructure within maternal health that promotes birth equity for all. Maternal health must foster treating patients without concern for their station in life or their race to reduce barriers in establishing equity in maternal health.

The Disproportionate Maternal Mortality Rate for African American Women

The implementation of ICD-10 coding in the U.S. allowed health officials to see that AA women are more likely to die from pregnancy-related complications than any other race or ethnic group. AA women experience 37.3 deaths per 100,000, while Hispanics' death rate is 11.8, with

14.9 for White individuals (CDC, 2019, 2020). It is essential to recognize that racial disparities in MM have been present since the beginning of data collection in 1915, where AA women experienced death rates 1.8 times that of White women (DeClercq & Zephyrin, 2020, para. 3). Presently, among deliveries insured by Medicaid, AA women are 1.7 times more likely to experience maternal morbidity—a risk of maternal mortality—than White women under the same insurance (DRH & NCCDPHP, 2014). Both SMM and MM affect AA in the greatest numbers. Despite interventions, the U.S. has continued to have the highest MMR amongst other high-income countries. In 2018, the MMR in the U.S. was 17.4 deaths per 100,000 live births which translates to approximately 700 women in the U.S. dying annually due to complications during childbirth or pregnancy (Declerq & Zephyrin, 2020, para. 3). Of these 700 deaths, AA women make up the majority.

The U.S. made efforts to reduce the MMR by implementing the Affordable Care Act (ACA) in 2010, which included Medicaid expansion to ensure coverage to low-income pregnant women if their family income was $42,000 or below for a family of three (Kaiser Family Foundation [KFF], 2019). Before implementing the ACA, many insurance plans did not include maternity coverage, but now all policies are required to (Norris, 2020). In this way, by 2017, 89.4% of AA had attained health care coverage, close to the 93.7% of insured White Americans (Carratala & Maxwell, 2020, para. 2). Nevertheless, AA women have continued to be three to four times more likely to experience pregnancy-related deaths than White women (Norris, 2020). Racial disparities persist despite interventions that address socioeconomic disadvantages. What these interventions have yet to include is the dismantling of the structural racism that exists within health care. Structural racism will be discussed in greater detail in a subsequent section.

Studies have shown that socioeconomic status (SES) has no positive correlation to the disproportionate experience of MM amongst AA women (Alexander et al., 1999; Colen et al., 2018; Giscombe & Lobel, 2005; Rosenthal & Lobel, 2011). Growing evidence suggests that the association of SES and health depends on race. These inequalities remain nonlinear concerning SES in AA populations, where upward mobility does not bring stark improvements as it does for other populations (Williams & Sternthal, 2010). For example, a comparative study examined the relationship between SES and pregnancy outcomes for White and AA women. White women scored a worse psychosocial score, yet AA women experienced worse pregnancy outcomes (Goldenberg et al., 1996). Another survey showed that college-educated AA experience higher impacts of racial discrimination than those who were less educated (Anderson, 2019). Furthermore, the 2007-2016 national data on MMR illustrates that AA women with at least a college degree were at 5.2 times greater risk than White women (CDC, 2019, para. 6). Because of these findings, an innovative approach to decreasing MM must consider race as a high risk factor.

Additionally, AA women have described many other barriers to receiving prenatal care (PNC), primarily health insurance and transportation (Edwards et al., 2015). Research shows that only 75% of AA mothers receive first-trimester PNC while nearly 90% of white women do (Green, 2019, para. 5). A study related delayed PNC and AA women's avoidance of care for fear of racial discrimination and only 45% AA women felt their essential needs were met during PNC (Slaughter-Acey et al., 2013, p. e384). In an online survey conducted across the 50 United States, rates of mistreatment for AA women were significantly higher among Hispanic, Asian, and White races (Vedam et al., 2019). Mistreatment was categorized as verbal and physical abuse by providers, lack of autonomy for patients, discrimination, failure to meet perceived standard of

care, and poor interactions with providers. Thirty percent of women of color (Indigenous, AA, Hispanic, and Asian) who delivered in hospitals in the same SES categorization with White women, voluntarily reported more significant mistreatment and pregnancy risks. Of the different mistreatment markers, AA women were twice as likely as White women to report healthcare providers actively ignoring, refusing, or responding insufficiently to their requests. Despite the slight increase in PNC for AA women from 2018 to 2019, there was no decrease in MM, suggesting that health institutions are not supporting AA women's birthing experience in an equitable way (Martin et al., 2020).

At the same time, racial bias is also seen in geographical segregation in the United States. Surveys on zip codes with a shortage of primary care physicians (PCPs) show a higher percentage of AA residents than other minorities (Gaskin et al., 2012; Williams et al., 2019). AA residents were also found in greater numbers in zip codes with no local PCPs. The study, which examined a data set of almost 16 thousand zip codes, concluded that AA were 67% more likely to be in a PCP shortage area, which constitutes the geographic locations of 82.7% of the U.S. population (Gaskin et al., 2012, pp. 2353, 2358). This geographic shortage of PCPs also affects PNC for AA women. PNC presents an opportunity for healthcare providers to identify or monitor potential medical conditions and pregnancy complications. PNC is well documented as a successful approach to reducing MMR yet has not been addressed in AA communities (Hossain et al., 2020; Pandit, 1992; Slaughter-Acey et al., 2019). Since PNC is a common preventative in adverse maternal outcomes, it is advantageous and necessary that these shortages are addressed in order to save AA women's lives.

Theoretical Framework

Critical Race Theory

In order to examine maternal racial disparities existing in the U.S., it is pertinent that a framework is used that is amenable to structural racism's contemporary influence on health and health outcomes (Williams & Cooper, 2019). Racial hierarchy remains intact even in the postcolonial present, which AA women's aforementioned adverse health outcomes demonstrate. A solution cannot be gained by merely treating at the micro-level or solely addressing SES but must acknowledge AA women's lived experiences to elucidate the ways they experience living in an inequitable society. It must recognize concepts of race for their unconscious nature along with intentional practices. Health disparities demand a deeper understanding of micro-macro linkages that shape and promote discriminatory health systems congenital to the slavery era (Williams & Cooper, 2019; Williams & Mohammed, 2013). Therefore, applying a race theory, which provides comparative and historical capabilities, is crucial to this research.

Critical race theory (CRT) provides a theoretical framework for identifying socio-cultural forces through which race and racism can be examined for their adverse effects on AA women (Kolivoski et al., 2018). The CRT movement involves challenging and transforming the associations between race, racism, and power (Stefancic & Delgado, 2012). It is an organized framework of legal analysis, founded in 1989 on the premise that race is not a biologically grounded feature of human beings but rather a socially constructed one (Stefancic & Delgado, 2012). Furthermore, it provides an explanation for the differences in maternal health driven by differential exposure to stressors, socioeconomic disadvantages, and the psychological factors of prejudice and stereotyping. CRT aids in confronting the constraints placed upon AA women and construct a solution that addresses structural racism, a root cause of racial inequity, which AA

women are dying from. For the scope of this paper, CRT will be used to examine the historical roots of slavery and the accompanying trauma on AA women as it relates to maternal health.

US Legacy of Medical Racism and Mistrust

Macrolevel forces that reinforce current misconceptions of race take many forms, but this paper will acknowledge only a few –early science, slavery, and legislation (Stefancic & Delgado, 2020). Anti-Blackness emerged after European colonial domination, which promoted and upheld white supremacy. The historical narrative is, at its heart, an American paradox. A democracy declared equality for all, while also using the oppression of people of color to provide benefit for white people. In the mid-sixteenth century, racism manifested violently in the European capitalist development when large numbers of Africans were shipped to America and bodies of Black women were commodified (Holmes, 2016). Not only were AA women's bodies used for economic gain through sexual exploitation, but the slave culture gave rise to racialized fictions of AA women as hypersexual, immodest, intellectually inferior, and immune to pain (Holmes, 2016). In 1735, C. Linnaeus proposed a scientific racial categorization that gave racial groups distinct personality traits, skills, and abilities, with AA people placed beneath White people (Harawa & Ford, 2009). Many others subsequently advanced Linnaeus's hierarchal concept of race, and the U.S. based many of its racial policies on it (Hawawa & Ford, 2009).

White men's domination over AA women's wombs was the earliest model for reproductive control to sustain a system of slavery. AA women were protected by slaveowners so long as they were pregnant (Owens, 2017). For example, during conviction trials of AA women, they would delay executions and convictions of pregnant women until they gave birth (Owens, 2017). Slaveowners' trajectory was to increase the number of slaves while also avoiding the cost of purchase by breeding those they already owned. For the sake of economic gain, AA

women's pregnant bodies were highly sought after, often at the cost of rape and excessive breeding. Systemic breeding had two purposes: to increase female fertility and raise the number of enslaved people for the purpose of sale, treating them to the equivalent of livestock. Enslaved women were expected to be pregnant as often as every eighteen months (Johnson & Smith, 1999). Sexual exploitation also played a crucial role in their hegemonizing, and AA women were repeatedly raped as a method of punishment.

In the progress of medicine, many contradictions involved AA women. In the 1840s, enslaved women were not only experimented on for the progression of gynecology but also worked as surgical assistants (Owens, 2017). Medical professionals were deemed highly competent people, yet AA women forced into these medical roles were not recognized or valued for their contributions. Their bodies were exploited and objectified for the sole benefit of White women's reproductive health (Owens, 2017). Diverging messages arose from the medical publications that racialized AA women's bodies: as healthy, but also sick; and strong, but also weak—despite the trauma their bodies were pushed to endure. Slaveowners looked to these medical validations as a reason to continually overburden AA women (Owens, 2017). These women were represented as agentless objects for the sake of White medicine.

American medical practice has been entangled in the institution of slavery from its beginnings. John Marion Sims' work, which later named him 'the father of American gynecology,' would not have been successful if it were not for the repetitive failed surgeries he performed on AA women (Owens, 2017). Fictionalized beliefs of AA women's physical superiority to pain arose from the forced agricultural work which afforded them strong bodies—placing them as a frequent target for medical experimentation. Not only were these surgeries taxing for their repetition—sometimes not having fully healed from the last surgery-- but they

were also performed without any use of anesthesia. Both sick and healthy AA bodies did more than aid in the progression of obstetrics and gynecology— they laid the foundation from which these medical branches were built (Owens, 2017).

Abolishing slavery brought a new violent era to AA women's bodies through the eugenics movement (Holmes, 2016). Forced breeding, sterilization, and racial purification were legally implemented in 1907 (Owens, 2017). In the mobility of genetics biology, on the basis of accomplished scientist Charles Darwin—who rationalized scientific racism through social Darwinism—promoted improving the human race by getting rid of the 'undesirable' through the selective breeding and sterilization of AA women (Kevles, 1999). AA were categorized as a distinct species. Doctors reinforced this by stating that AA had mental, moral, and physical deterioration now that they are free from slavery. Eugenic racism contributed significantly to the segregation and sterilization laws and policies to which maintained racial hierarchy. Eugenic and research facilities which aimed to promote AA as inheritably susceptible to diseases promoted differential treatments to AA individuals, which became a basis in medical school teachings (Reynolds, 2020).

Present Day Intersections of Medical Racism

Anti-black structural racism and colorism infiltrate policies and procedures rooted in American institutions and cultural representations that reinforce beliefs, attitudes, stereotyping, and discrimination towards AA people (University of California San Francisco [UCSF], n.d.). Structural racism creates a system of oppression and is also a social determinant of health and the source of inequity. As long as these racialized ideologies persist, health for all cannot be achieved. It has been deeply entrenched in American institutions and policies, normalized over centuries, and subtly producing antiblackness. Racism impedes on AA women like an

inescapable force, pervading their lives every day in a way that White people will never fully comprehend. As a White person who experiences the privilege and advantage of whiteness, it is more often denied by these individuals and the institutions that serve them. Aversive racism, commonly seen in healthcare, is white people's aversion to being seen as prejudiced, which only exacerbates the problem further. Brown (2013) claimed to empathize with someone's experience fully, we must first be willing to believe it as they see it, not how we imagine their experience. So often, AA women's experience or response to an experience is categorized as non-compliant in the medical sphere due to aversive racism.

Racism and colorism are social constructs, hierarchical and laden with racial bias and stereotyping (Adams et al., 2016). Racial prejudice types often seen in healthcare but not consciously recognized by providers are microaggression and implicit bias (Cruz et al., 2019). Implicit bias is dangerous because it inevitably seeps into the person's behavior, decision-making, and ability to understand certain situations—but is outside the person's awareness (Tyner, 2019). Despite their pervasive characteristics, they are not static and can be worked on through intention and proper debiasing training to change the societal racial narrative. Racial microaggressions can be both intentional and unintentional and are a result of cultural conditioning. Microaggressions are interactions that negatively target people of color (Sue et al., 2007). They can take several forms— verbal, behavioral, or environmental. Despite the name, microaggression and microinvalidations can have outsized impacts. They can have profound consequences on patient care by creating barriers to effective communication and mistrust in health institutions.

When an AA woman walks into a health institution it can be disheartening when faced with a provider that dismisses her concerns or uses stigmatizing language or behaviors. The felt

stigma from these interactions makes communication less productive, informative, and positive for the patient. Unfortunately, these discriminatory encounters go beyond prenatal visits. Maternal stress associated with racism, socioeconomic disadvantage, poor access to quality nutrition and healthcare, and living in segregated and under-resourced neighborhoods have all been documented as risk factors that lead to preterm birth and other adverse birth outcomes for AA women (Braveman et al., 2015; Collins et al., 2014; Ross et al., 2019; Williams et al., 2019). AA mothers are not just carrying a child, but also the burden of structural racism, over which she has no control, whether through its effects on her health or her baby's health. She does not get a break from the oppressive weight of structural racism while pregnant, whether encountering medical attention and regardless of their socioeconomic status.

Health professionals take an oath to maintain equitable standards of care; however, acts of discrimination occur every day towards AA women (Hajar, 2017). It has been documented that providers spend less time with AA patients, are more likely to ignore their complaints, and less likely to follow up with them during the postpartum period (Vedam et al., 2019). AA mothers continually report having procedures done to them without their permission during pregnancy (Hostetter & Klein, 2021). Consequently, AA women have higher rates of unplanned cesarean sections than any other racial group (Getahun et al., 2009; Huesch & Doctor, 2015). The failure to honor AA women's birthing preference overrides their right to body autonomy and employs control over their reproductive labor. Cesarean deliveries place a higher risk on the baby and mother, and current research implicates rising cesarean sections as a leading source of increased maternal mortality (WHO, 2019). Racial discrimination shows up in the perception of pain, where the belief that AA people have thicker skin or that their blood coagulates more quickly than that of White people, can lead to mismanagement of AA patients' pain (Hoffman et

al., 2016; Meghani et al., 2012). These misconceptions suggest that AA women's increasing rates of cesarean sections, which are not consistent with clinical necessity, result from racial bias.

Medical Implications

Pregnancy outcomes worsen with increasing education and socioeconomic status among AA women, suggesting that historical and current racism has substantial health implications on MM (Colen et al., 2018). Mounting evidence indicates stress during pregnancy is a significant risk factor for adverse birth outcomes. Poor and nonpoor AA women have shown higher scores of allostatic loads—the physiological burden imposed on bodies from repeated stressors over a life course, than Whites and AA men (Geronimus et al., 2006). According to the allostatic load model, omnipresent stress of suffering racial discrimination contributes to metabolic conditions that exacerbate SMM and place AA women at greater risk of MM. Physiological responses to stress increase the hypothalamic-pituitary-adrenal (HPA) axis, blood pressure, and alter immune system activity, all of which are pregnancy risk factors (Peppers, 2018). HPA axis releases the hormone cortisol into the bloodstream and is vital for regulating many body processes. In other words, under chronic stress, normal bodily systems remain perpetually activated and not adequately regulated, which creates vulnerability and susceptibility towards illness. Experienced microaggression has been linked to significant increases in cortisol levels. Pregnant women who experience higher levels of cortisol productivity have a reduced ability to control inflammation, which is associated with adverse pregnancy outcomes, such as preeclampsia, a leading cause of MM (Robertson, 2013). In addition, an elevated allostatic load has been associated with an increased risk of low birth weight and preterm births (Slaughter et al., 2016).

Approaching a Solution

We cannot even begin to move towards a solution until, as a society, we begin to fully empathize with the violence that comes with AA women's birthing experiences. When we can cultivate the experience of humility and empathy, there will then be room for the beginning of AA women's healing. There are various solutions to changing the birthing narrative; however, this paper focuses on three levels: the individual, public health system, and policy. The individual level will address problems felt by the individual through the collaboration of midwives, doulas, and other healthcare professionals to provide advocacy and autonomy to AA women. The second level, the public health system, will focus on a solution at the community level, which provides a system that actively includes AA women in their birthing experience by implementing a birthing center model similar to Roots Community Birth Center. Lastly, the policy level serves to protect and reinforce institutional conditions which uproot old systems that were never for AA women in the first place by providing ample opportunities and spaces for AA women to be involved in the maternal health care system.

Individual level

One solution to addressing oppressive health care felt by the individual is to provide access to high-quality patient-centered care through community doulas and midwives in AA women's communities. As frontline workers emersed in these communities, midwives, and doulas epitomize context-specific interventions at the individual level. Birthing practices corresponding with African cultural lineages include the support and guidance of doula and midwife birth workers. Until the late 1700's when obstetrics was introduced, AA midwives were the primary source of care (Morrison & Fee, 2010). Despite the expansion of obstetric physicians, granny midwives remained central birth workers that provided care to rural areas.

Most midwives, including enslaved women, practiced traditional healing and practices passed down through generations of granny midwives. They served as counsel, postpartum doulas, advocates, and nutritionist, for both mother and baby. Their contributions signify the importance of providing guidance during and after pregnancy. It was not until the 1800s, when new legislation made efforts to eliminate AA midwives altogether, that the abolition of midwifery began to take root. Dr. Joseph DeLee-- an important author of obstetrics at that time, described childbirth as a destructive pathology in an attempt to irradicate midwifery (Rooks, 2014). However, removing midwives from the bedside of pregnant women did not improve health outcomes and had an immensely harmful effect on AA women. AA women who lost their advocates were faced with highly discriminatory and violent birthing experiences.

Today, midwives are represented as trained birth workers who provide prenatal, labor and delivery, and postpartum care for both mother and infant. Midwives can provide maternal care without the presence of a physician in low-risk pregnancies and complications that do not require major surgical interventions. On the other hand, community doulas are trained to provide physical, emotional, and informative support throughout pregnancy and postpartum (Ellmann, 2020). Even though they are nonclinical birth workers, they serve as an essential part of the birthing team in that they serve as the patients' advocates. They can help navigate trying times of delivery by providing low-risk effective interventions such as breathwork and massage to ease mothers' pain or different labor techniques that help labor be more efficient. They also encourage the mother's involvement in pregnancy, helping the mother see that her efforts are just as significant in the birthing experience as the health care providers. Both doulas and midwives are instrumental in providing patient-centered care and improving maternal health outcomes.

Midwifery is said to avert a total of 83% of maternal and infant mortality when combined with family planning and proper implementation of interventions (Homer et al., 2014, p. 1151). Midwifery and doula care has been shown to reduce the need for interventions during labor. Whereas health professionals may suggest high risk interventions for mother and baby to eliminate discomfort and pain, doulas can help navigate those painful moments with breathing techniques, counsel, and support. As a result, mothers are reported far less likely to require an epidural, cesarean birth, or report dissatisfaction in their birthing experience when accompanied by a doula or midwife (Campbell et al., 2006). Mothers are also four times less likely to have a low birth-weight baby (Gruber et al., 2013). Additionally, successful breastfeeding has shown a positive correlation to midwifery and doula support, which is advantageous for both, mother, and baby (Henderson & Redshaw, 2010). Mothers have been shown to recover from childbirth more quickly due to the hormone oxytocin that is released during breastfeeding, which helps return the uterus back to pre-birth size and reduces postpartum bleeding (American Academy of Pediatrics, 2016).

Sweden's current MMR is 4 deaths per 100,000 live births, which has remained constant since 2014 (World Bank, 2021). Sweden's national health strategy of implementing alliance and collaboration between midwifes and physicians served as a catalyst to their decline in MM in the 19th century. Nearing the end of the 19th century, 78% of deliveries were attended by licensed community midwives and only 2.8% of deliveries were in extended stay hospitals (Hogberg, 2004, p. 1317). At this time, Sweden experienced an exponential decline in MM. With only 10% of the Swedish population living in urban areas during this time, community midwives were central to the birthing experience and provided safer deliveries. The implementation of community doulas has helped establish continuity of care and prolonged support during birth that

midwives are unable to provide. Community doulas help reframe birth as more than a medical procedure, but a time for women to step into their power. While the midwife's primary responsibility is to ensure medical well-being, the doula fosters body sovereignty and culturally congruent care, which together, cultivate a calm and reassuring environment for the birthing mother.

In Sweden, community-based bilingual doulas have also served to improve the birthing experience of migrant women who do not speak Swedish by serving as translators and establishing agency over their pregnancies (Byrskog et al., 2020). With Sweden's shift in demographics in 2015, by admitting more asylum seekers than any other European country, it became imperative to tackle the disparities in health outcomes. Community bilingual doula's role is to provide support to immigrants and minorities who are most likely to experience racial discrimination and language barriers (Akhavan & Lundgren, 2011). Currently, the doula organization Doula and Kultutolk Halland provides doula certification once a month to women who speak different languages and come from diverse backgrounds. Community doulas remain a critical component to building and maintaining cultural bridges between migrant women and maternal care services that provide equitable care.

Public Healthcare level

Ob-gyns have the highest proportion of underrepresented minorities in the U.S., with only 11.1% AA in the field (Rayburn et al., 2016, p. 148, 150). Research has continually shown that AA patients feel more satisfaction in care when provided by people with whom they share a racial identity (Allers et al., 2021 Amutah-Onukagha et al., 2021; Karbeah et al., 2019). Therefore, a community-based model must be better integrated into the public healthcare system to enhance the capacity of AA individuals and communities to participate in the maternal

medical sphere actively. Birth centers are defined by the American Association of Birth Centers (2016) as a home-like setting where care is typically provided by midwives and centered on providing agency, prevention, and culturally sensitive care. A variety of health care professionals can be a part of the birthing center team, including on-call obstetric consultants for when there is a complication. Birth center workers are immersed in the community, making them adaptable to the changes within the community and able to provide care that is mindful of the barriers felt by the community. In addition, communal birthing center workers offer a space that brings diversity and inclusivity to expectant mothers. Its implementation builds a pipeline to future career paths in midwifery and doula work for AAs (Allers et al., 2021; Amutah-Onukagha et al., 2021).

Research indicates birthing centers as a successful model in substantially decreasing high risk interventions such as cesarean section and preterm deliveries. For instance, a study of 84,000 women laboring in midwifery-led birth centers reported no maternal deaths and nearly no obstetric intervention (Alliman & Phillippi, 2016). Also, oxytocin and epidural analgesia use were significantly lower in birthing center models compared to hospital births. Women also reported greater satisfaction with the environment, services, providers, and the self-confidence they felt in the birthing center model. From 2004-2017 birth center births have more than doubled in the U.S., and home births increased by 77% (MacDorman & Declercq, 2018, pp. 279-280). Even so, not all women desire a birthing center birth, and the model is intended for low-risk pregnancies only. However, the addition of birthing center model characteristics could be advantageous to reducing interventions and providing high-quality care to marginalized birthing women in a hospital setting. It is essential that AA feel welcome in medical spaces because their bodies shut down when they feel underrepresented or white supremacy threats show up, as they often do, in hospital settings (Allers et al., 2021). For example, providing culturally sensitive and

community-oriented births in medical institutions can reduce stress for laboring mothers, which has been proven successful in better birthing outcomes in birthing center models (Pewitt, 2008).

Roots Community Birth Center is an African American-owned and midwife-led birth center that centralizes culturally sensitive care. The birth center is located in a neighborhood in North Minneapolis where 61% of the residents are AA. Preterm birth and infant mortality are much higher there than in other areas of Minneapolis (Karbeah et al., 2019). Roots is a model where AA clinicians are serving AA populations. Prenatal visits last up to an hour, whereas in an OB-GYN office, they are typically 15 minutes. During visits, midwives focus on psychosocial factors and family support in addition to standard prenatal and postpartum care. Midwives also provide home care when needed. For example, they will go to patients' homes and provide cooking lessons on how to eat healthily and emphasize providing access to knowledge and tools to flourish during pregnancy while also meeting women where they are. Additionally, they have a well-established continuity of care during the post-partum period. Root's providers also commit to racial justice by acknowledging the histories of racism and discrimination that affect their patients daily and working to provide birth equity by presenting solutions to mitigate oppressive stressors (Karbeah et al., 2019). They center care on letting go of the professional hierarchy and making room for cultural humility so that the patient has control over their birthing experience. Roots Community Birth Center not only signifies high-quality care but also highlights the need to increase access to people of color, both as practicing clinicians and receivers of high-quality care.

Policy level

In 2012, 92% of U.S. births were attended by physicians, illustrating a gap in maternal health that demonstrates a continuation of high MMR (Rooks, 2014, para. 1). The U.S. continues

to spend the highest percentage of its gross domestic product (GDP) on healthcare yet has several barriers to receiving high quality maternal care (Melillo, 2020). Despite widespread data eliciting a commonality of low MMR and the adoption of midwife-directed care, the U.S. has remained resistant. While ACA requires state Medicaid programs to cover midwifery care, several factors limit the supply of midwives, such as barriers in state licensure laws and restrictive scope-of-practice laws. Beneficiaries also have lower Medicaid reimbursement rates which limit their access to midwifery and birthing centers. Likewise, many private insurers refuse to cover midwifery care, and as a result, AA women do not get autonomy over their birthing experience (Allers et al., 2021). However, it is the lack of autonomy that got us to this crisis. Giving AA women the choice of where they want to give birth allows them to reclaim their bodies and reclaim their births. Hence, midwives and doulas must be better implemented in the U.S. to provide AA women with increased access to providers who come from their community and believe and honor their birthing experience to heal from the trauma inflicted upon them in the maternal healthcare system.

Although midwife and doula care help promote a better birthing experience than the current prevalent medical institutions in the U.S., it is critical that policies also reflect the inclusion of AA women within legislation and medical spheres (Diwakar, 2020). California is leading the way in policy reform through the Black Maternal Health Momnibus Act, which provides AA women opportunities that decrease the barriers that legislation and health institutions have consistently placed on them (California State Senate, 2021). The Act consists of nine bills committed to supplying funding to community-based organizations, removing barriers in accessing high quality care to marginalized families, growing and diversifying the maternal health workforce, and investing in further support towards culturally congruent maternity

support. Furthermore, while the U.S. MMR has worsened in the country overall, California has cut its MMR by more than half (Catalyst, 2019, para. 1; Main et al., 2018) but remains persistent in uplifting AA birthing mothers and improving their birthing experience because there is still much work to be done.

Similarly, the California Maternal Quality Care Collaborative (CMQCC) and California Health Care Foundation (CHCF) have partnered to address birth equity for AA. The CMQCC aims to expand doula and midwifery care and its workforce, including allocating funds to reduce barriers to receiving training (California State Senate, 2021). Likewise, free doula programs are centering on the recruitment of AA and Pacific Islander women by awarding specified grants and initiatives (Kritz, 2018). Additionally, in response to the higher cesarean section rate amongst AA women, Covered California (the health insurance exchange) has implemented strong initiatives for hospitals to decrease their cesarean section rate to 23.9% or less by excluding them from health plans if they do not achieve this target (Catalyst, 2019, para. 5). Furthermore, CHCF has partnered with multiple projects, such as the Black Women for Wellness (BWW) which promotes the inclusion of AA members in the development of measures that promote health equity within these communities (CHCF, 2021). CHCF is also helping fund the Irth app (birth without the bias) national platform, which provides AA a safe platform to share their lived experiences of prejudice and discrimination in maternity care, calling out specific institutions. The Irth app informs AA women where to receive the best care and commands accountability among medical institutions. Although these are just a few of the many initiatives, they all reflect a direct response to the AA maternal crisis in the U.S. by providing a platform for AA to speak their truth, promote inclusivity, and change the violent narrative experienced by AA birthing bodies.

Conclusion

As James Baldwin (1962) once said, "Not everything that is faced can be changed, but nothing can be changed until it is faced." The disproportional MMR experienced by AA women is a call to action that involves everyone. We cannot continue to turn a blind eye to the harmful nature of racial discrimination within maternal health systems. It is not fair that AA women have to coexist within a society built to oppress and keep them separate from the privilege that White individuals experience. Likewise, it is not fair that AA women are denied an equitable birthing experience or given humility towards the historical trauma they underwent for the sake of Obstetrics. Since the beginning, Obstetrics has been for White women, and it is time that we change the narrative. To properly honor the birthing experience of AA women, it requires medical institutions to provide them a system which promotes inclusivity, healing, and liberation. Systems must be voided of the plantation mentality and held accountable through policies that reflect accountability so that AA birthing bodies can flourish. Furthermore, it requires a community-based approach, as aforementioned and where the voices of AA women are centralized.

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