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The Myth of Wellness: Deconstructing High, Contemporary Black Maternal Mortality Rates in the United States

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Introduction

Maternal mortality is widely acknowledged as one of many general indicators of overall health of a population, of status of women in society, and of functioning of the health system (World Health Organization [WHO], 2001). The United States, among one of the most high-income countries, ranks near the top in maternal mortality and the trend is increasingly exacerbating (Association of American Medical Colleges [AAMC], 2022). There are stark racial disparities within the United States' maternal mortality rates; Black women in the United States are three to four times more likely to die from a pregnancy-related death than their White counterparts (Howell, 2018). To address the barriers and root causes of maternal health inequities, it is critical to understand both clinical and nonclinical factors that impact the maternal health experience, as both have produced and reproduced the commodification of Black women's childbearing. This literature review provides an overview of the trajectory of maternal mortality within the United States throughout its history, up to its current state. Thus, it is important to learn the racialized history of Black maternal experiences, not only to assess how the U.S.' healthcare system does not adequately hear and act on the preferences and concerns of Black women and birthing people during their pregnancies, births, and postpartum periods, but also to equitably bridge the gap of disproportionate maternal death among Black women, while implementing anti-racist public health initiatives that remedy entrenched health disparities (AAMC, 2022; Owens & Fett, 2019). This review focuses more on the breadth of how the historical treatment of Black bodies, along with the United States' particular construction of wellness, has contributed to the high, contemporary Black maternal mortality rates in the United States.

Definition of Maternal Mortality

WHO defines maternal mortality as the number of female deaths related or aggravated by pregnancy during pregnancy, childbirth, or within 42 days of termination of pregnancy. Complications of pregnancy or childbirth can also lead to death beyond the 6-week (42-day) postpartum period (WHO, 2022). The Centers for Disease Control and Prevention [CDC] (2022) defines a pregnancy-related death as the death of a woman during pregnancy or within 1 year of the end of pregnancy that was initiated by a chain of events by or during pregnancy. Despite slight variability within the timeframe of definitions, this review examines said definitions of maternal mortality, interchangeably.

Measurements of Maternal Mortality

Maternal mortality is difficult to measure, accurately. Methods of maternal mortality measurement in both low-income and high-income countries lack in accuracy as many health information systems fall short through misclassification and underreporting of maternal deaths (WHO, 2022). From a global standpoint, data on maternal mortality and related variables are obtained through databases from WHO, United Nations Procurement Division [UNPD], United Nations International Children's Emergency Fund [UNICEF], and the World Bank [WB] (WHO, 2022). Only about ⅓ of all countries have reliable maternal mortality data, all while a statistical model is used to produce hypothetical predictions of maternal mortality levels for the remainder of the countries (WHO, 2022). Calculated estimates in order to investigate and compare maternal mortality ratios are advised to be taken with caution when interpreting results.

Within the United States, the CDC conducts a national pregnancy-related mortality surveillance system [PMSS] which is used to calculate the estimated pregnancy-related deaths for every 100,000 live births obtained from the National Vital Statistics System (NVSS) (CDC,

2022). The United States also uses state maternal mortality review committees [MMRCs] to assess causes of deaths and opportunities for prevention by linking prenatal and hospital records, autopsy reports, social services, and other related records (Lu, 2018). Currently, only 33 states have existing MMRCs (Lu, 2018). It is necessary to consider that as health information systems improve, they still reflect only estimates of actual maternal mortality rates (WHO, 2022).

Another common limitation throughout health information systems is the predominant focus on clinical features associated with mortality at the expense of social determinants of health. To date, limited attention has been directed towards a multitude of nonclinical factors and social determinants of health that also impact maternal mortality risk (AAMC, 2022). An individual's housing, employment, financial security, and accessibility to healthcare are factors that are not typically assessed by health information systems, yet they can all impact a patient's ability to receive optimal health care that is needed for a healthy pregnancy and delivery (AAMC, 2022). Clearly, much work remains to develop a precise understanding of both global and domestic maternal mortality ratios. In the meantime this review uses maternal mortality data extracted from a range of databases compiled by both international and domestic organizations, with the majority stemming from the CDC, WHO, Organization for Economic Co-operation and Development [OECD], Centers for Disease Control and Prevention [CAP], and Our World in Data.

Interdisciplinary Approach to Health

There is a critical need for an interdisciplinary approach to health. The tendency to approach conversations surrounding wellness and health outcomes solely through a biological lens when determining disparities in health limits the holistic aptitude that better serves to explain health outcomes. The holistic model of health is based on the view of the unity of

physical, mental, spiritual, cultural, and environmental essences of a person. The organism and its environment are whole having mutual influences on each other. The level of health should be estimated both qualitatively and quantitatively when determining the reserve possibilities of people during adaptation to the physical, mental, and environmental loads (Roman, 2018).

Engel (1977) proposed the biopsychosocial [BPS] model to explain outcomes not adequately accounted for by biological factors alone. The BPS model of health was the first modern model to address the physiological, psychological, and social determinants of health. Some challenges have arisen against the biopsychosocial model, criticizing how the model is still biological at its core, along with its lack of discourse to spiritual, environmental, and cultural influences. However, this literature review will still stress the need for the BPS model of health when deducing high Black maternal mortality rates in the United States today, until well-serving, published models exist to appropriately replace Engel's. The examination of disparities within maternal mortality ratios will surround Engel's BPS model, generating relationships between biological, psychological, and social influences that attempt to holistically explain Black maternal health outcomes.

Domestic Maternal Mortality Rates

Among high-income countries, the United States has one of the highest rates of maternal mortality (AAMC, 2022). Every year, more than 700 women in the United States die of complications related to pregnancy and childbirth while more than 50,000 women experience a life-threatening complication (severe maternal morbidity) (Lu, 2018). Since the PMSS was implemented, the number of reported pregnancy-related deaths in the United States in 2018 increased from 7.2 deaths per 100,000 live births in 1987 to 17.3 deaths per 100,000 live births (CDC, 2022) (Figure 1). While these increased rates seem alarming, it is unclear whether this

increase in maternal mortality reflects true increased incidence or more reliable estimates of maternal mortality as a consequence of technological advances. It seems plausible that as health

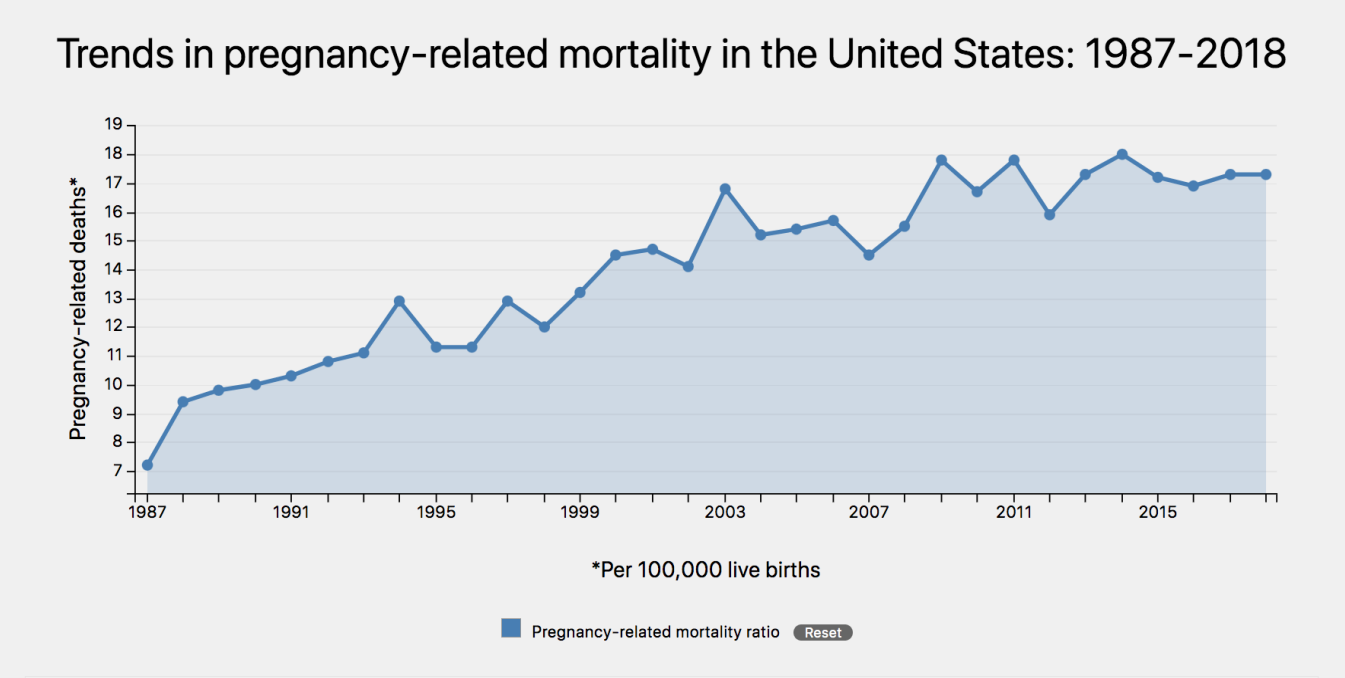

Figure 1. Centers For Disease Control and Prevention table indicating trends in pregnancy - related mortality in the United States from 1987-2018.

informations continue to develop in terms of both implementation and accuracy, identification of maternal mortality has improved over time due to the use of computerized data linkages between death, birth, and fetal death records by states, changes in the way causes of death are coded, and the addition of a pregnancy checkbox to death records (CDC, 2022). Thus, it can be surmised that technological development has produced greater detection of maternal mortality and can be one of the determinants of why there is an overall increase in pregnancy-related mortality, observed domestically.

Global maternal mortality has decreased; there are, however, a few countries where a young woman or birthing person today is more likely to die in childbirth than their mother, or

parent, a generation ago - one of the countries being the United States, (Gapminder, 2010; WHO, 2019; OECD, 2022, Our World in Data, 2022) (Figure 2). Maternal mortality in the United States more than doubled between 2000 and 2014, from 9.8 to 21.5 maternal deaths per 100,000 live births (Lu, 2018) (Figure 3).

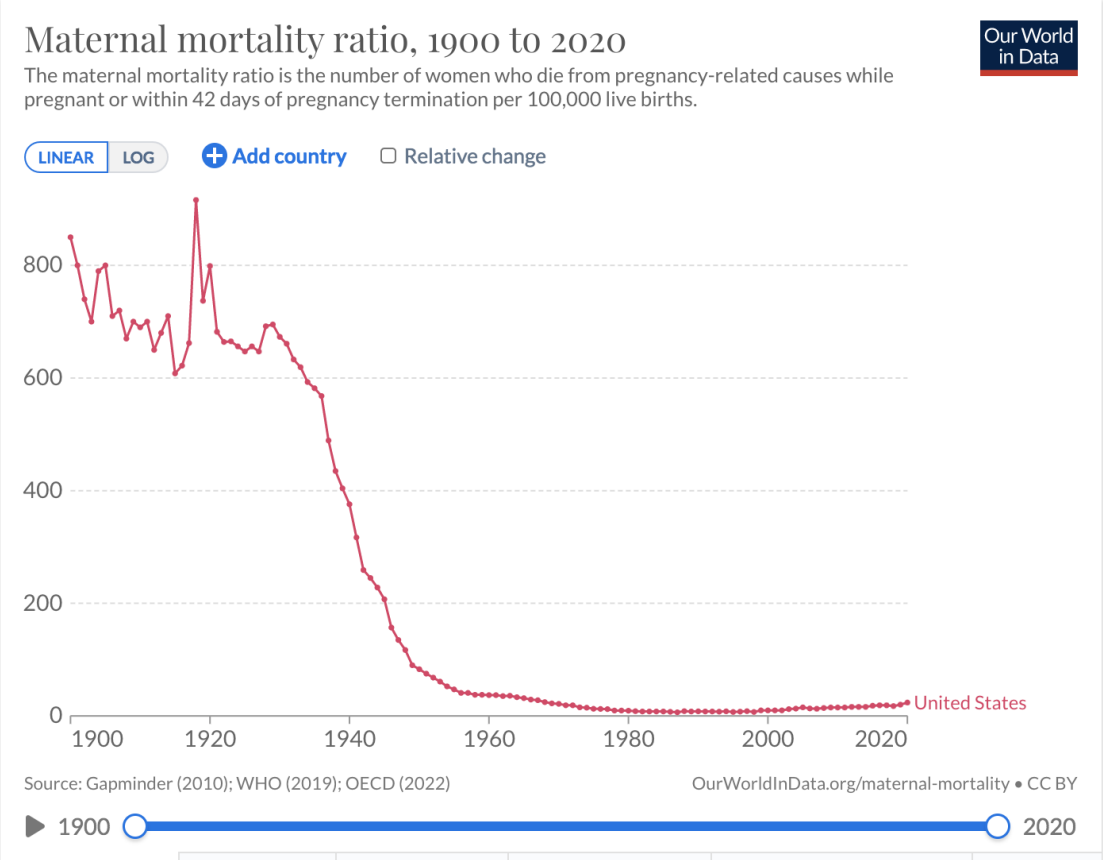

Figure 2. Our World in Data table indicating maternal mortality ratios in the United States from 1900-2020.

There are stark racial disparities in the United States' maternal mortality rates. For example, African American women are nearly three times as likely to die of complications related to pregnancy and childbirth compared with White women (Lu, 2018). Within the years of 2016-2018, the pregnancy-related mortality ratios for non-Hispanic Black persons were 41.4 deaths per 100,000 live births in comparison to 13.7 deaths per 100,000 live births for non-Hispanic White persons (CDC, 2022) (Figure 4).

Figure 3. Our World in Data table indicating maternal mortality ratios in the United States from 2000-2020.

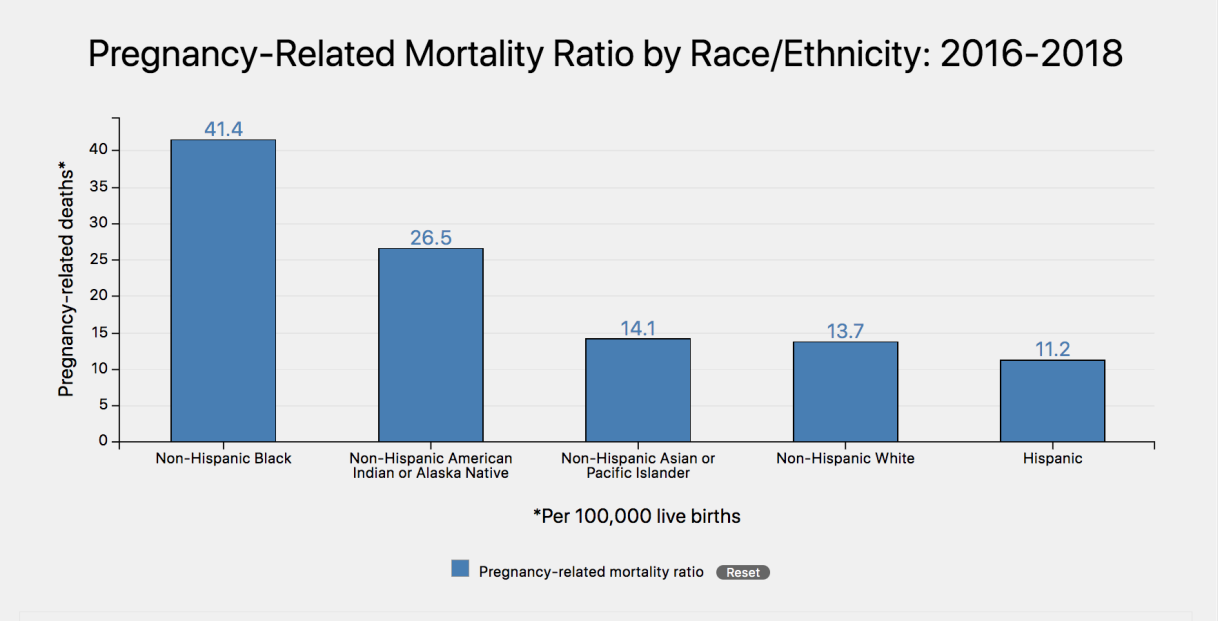

Figure 4. Centers For Disease Control and Prevention table indicating pregnancy-related mortality ratio by Race/Ethnicity in the United States from 2016-2018.

Origins of the Myth of Wellness

Racial disparities in American maternal mortality rates stem from a multitude of factors, including structural racism. The legacies of slavery have resulted in the structural racism Black women face today, observed by the disproportionate maternal death among African Americans (Owens & Fett, 2019). This literature review examines how the origins surrounding the myth of wellness, exacerbated by the historical treatment of Black bodies, have contributed to the high, contemporary Black maternal mortality rates in the United States.

Dismantling origins of structural racism and how it has generationally impacted Black bodies is crucial when examining the health consequences many Black people disproportionately face today. In *American Detox,* Kerri Kelly (2022) deconstructs the politics of wellness; the United States has a culture rooted in perfectionism, White supremacy, and individualism, perpetrating a well-being gap that produces unequal conditions, determining who gets to be well and who does not. When modern medicine emerged in the 1800s, so did the concept of "normal." Theories of genetic inferiority, such as eugenics, emerged as distinctions between bodies considered worthy of wellness were widely generated in comparison to bodies that were deemed to exist as commodities. "Normal" was intentionally applied to White people. Whiteness, a power system centering White customs, cultures, and beliefs, painted the entirety of Eurocentric colonialism as it reinforced the idea that White westerners are the most qualified to remove any body that is socially considered "abnormal," to ensure the promotion of well-being and reproduction of the "superior race." This *intervention* was known as Eugenics, originally developed by Francis Galton to establish the improvement of select human populations, more specifically through the weaponization of health sciences, such as selective breeding, to promote the hierarchy of White humans. The reproduction of Black people, as they were deemed

undesirable and abnormal, were violently discouraged from reproduction through underpinnings of state-sponsered discrimination, forced sterilization, and massacre (Kelly, 2022; Nuriddin, 2020).

Desires for racial perfection were influenced from the myth that social inequalities stem from biological differences, a pseudoscience that thus led to the social and legal construction of race and caste, justifying the dominance of people identified as White while inferiorizing those who were Black and Brown. Caste is an artificial, yet deeply entrenched, divisive structure of categorizing people through the metric of race, ranking human value that would then become ingrained in laws, science, religion, education, and culture. Isabel Wilkerson, author of *Caste: The Origins of Our Discontents* (2020), explains how the caste system instantly relegates those who were brought in to be enslaved - Black people - to the very bottom of the caste system, while elevating people that looked like those who created the caste system - White people - at the very top. When White dominant culture assigns value to race, it attributes significant assumptions, values, and rank to particular groups of people. Kelly (2022) asserts how the constructions of the caste system influence White people, consciously and unconsciously, to internalize messages of superiority, of being normal, qualified, entitled, and innocent. The inverse is a narrative of inferiority among non-White people to then internalize conceptions of powerlessness, of being unworthy of care, in need of interventions, and burdens to the greater society. Through White dominant culture, White supremacist ideologies continue to perpetuate the myth of White racial superiority.

The pseudoscience of the caste system, reinforced by the myth of genetic inferiority, was consequently used to justify the continuous exploitation and conquerment of Black bodies, all deemed unhealthy. Racial order, instead of public well-being, was proactively enforced in the

United States through White power, all in the name of health. Power determines one's ability to define reality for themselves, manifesting as influence, access to resources, control over bodies and choices (Kelly, 2022). Those pre-determinedly established with power have agency over their rights and well-being. The United States' construction of wellness was intended for Black people to never be able to have the rights to their own body and choices, as their placement in the ladder of racial hierarchy was always on the bottom.

Kelly (2022) argues, "wellness isn't a victim of White supremacy, it's a perpetrator." Thus, it is important to assess the racialized history, along with associating the current landscape of maternal care, to appropriately address the disparities entrenched within maternal mortality rates in the United States. While unfolding the dynamics of racism is complex, the brief historical and contemporary examples in this review will expose structural violence in the history of health care, specifically maternal health care, that crisscrosses biological, psychological, and social determinants of health in order to understand how they are complexly linked and manifested in the present.

Historical Treatment of Black Women

The deep roots of Black maternal mortality disparities lie with the commodification of enslaved Black women's childbearing (Owens & Fett, 2019). White enslavers' dominance in the transatlantic slave trade depended upon the exploitation of Black women's reproductive abilities (Webster, 2021). Slave owners practiced forced breeding to ensure the production of a laboring population; enslaved Black women were forced to reproduce and raise children in unhealthy, hazardous conditions of pregnancy, childbirth, malnutrition, and over exhaustion (Webster, 2021). Such inequalities persist into the present. The way Black mothers were treated in terms of reproduction have an impact into the current public health crisis of infant mortality in the United

States. Suarez (2020) identifies data from 2016 showing that Black infant mortality is 11.4 per 1000 births which is similar to rates in 1915; infant mortality rates for American-Indian /Alaskan Natives are 9.4 and 7.4 for Native Hawaiians/Pacific Islanders. Latinx, non-Hispanic White, and Asian American infant mortality rates by comparison are all significantly lower at under 5 per 1000 (Goode & Rothman, 2017; Murphy, 2018). Infant mortality rates in the United States have been proposed as one possible cause of 2016 racial disparities. One interpretation of 2016 infant mortality rates in the United States can possibly be attributed to the White villainization of enslaved women's reproduction. As far back as 1662, legislators from colonial Virginia made Black women's childbearing a centerpiece of chattel slavery, impacting generations of Black maternal health as Black women were forced to bear children who would build capital for slave owners, compromising a Black woman's ability to mother (Owens & Fett, 2019). It could be logically assumed that the same factors that contribute to poor maternal health outcomes also contribute to poor outcomes among infants. Through the implementations of White supremacy, structural inequity for Black people begins at the womb.

Beyond legislative attacks against Black women and Black women's childbearing, antebellum U. S. physicians also began to use their access to Black women's enslaved bodies to expand their scientific knowledge and professional reputations (Owens & Fett, 2019). White doctors also participated in the maintenance of plantation regime and enslaved labor by overseeing and interfering in the births of enslaved children through violent experimentations (Webster, 2021). For example, Francois Marie Prevost, a slaveholding surgeon, conducted cesarean section surgeries on American enslaved women's bodies through repeated experimentations (Owens & Fett, 2019). Medical schools relied on enslaved Black bodies as anatomical material as the American medical education relied on the theft, dissection, and

display of bodies, many of whom were Black (Nuriddin, 2020). Nuriddin's (2020) research shows that experimentation on Black bodies were practices that were widespread in the 19th and early 20th centuries. Together, such studies suggest that the history of the treatment of Black women, and Black people overall, was driven by the notion that Black bodies were considered disposable and unworthy of proper health care.

The dehumanizing market value placed on Black women in order to control enslaved women's childbearing and reproduction resonates with inequitable attitudes embedded in the political and social organizations within the history of the United States. Inequitable attitudes towards Black women's reproduction has a direct, an indirect, impact on the adverse birth outcomes of Black women not only during the antebellum period, but also today. Kelly (2022) defines the medical industrial complex, a system prioritizing profit over health, well-being, and care - all through the purpose of defining a particular moral code of health. Through influences stemming from eugenics, capitalism, and the caste system, the medical industrial complex designates and reinforces White superiority, as it controls Black women's reproduction through actions rooted in anti-Blackness, maintaining the unique position Black people were assigned at the bottom of the hierarchy of bodies. Medical professionals, too, sustain the oppression of Black people while upholding Whiteness. The exploitation of Black bodies was so common and widely accepted, both socially and legislatively, that it even forms the backbone of the American College of Obstetricians and Gynecologists [ACOG], the one division of medicine that should be the most concerned with maternal mortality.

History of Medical Racism in the Creation of ACOG

Until the late eighteenth century, birth was an exclusively female affair, managed by midwives and attended by friends and family. By the 1920s, the medical model of childbirth

emerged as the medical profession integrated its control of birth management, pushing midwifery away from being predominantly practiced (Dye, 1980). Although most White physicians had little to no experience with birth, they emerged a new definition of childbirth as dangerous and in need of technological intervention, thus medicalizing childbirth (Rothman, 2007). Dr. Marion Sims, referred to as the "father of gynecology," routinely performed vaginal surgeries without anesthesia on enslaved women for experimentation during the 19th century (Hill, 2016; Suarez, 2020). The practice of involuntary medical experimentation remained dependent on the medical community's relationship with Black Americans (Nuriddin, 2020). Dorothy Roberts (1997) author of *Killing the Black Body*, identified that Black women were sterilized without their knowledge nor consent into the 1970s and 1980s. In short, the bulk of evidence supports that the disciplines of ACOG were developed through the exploitation of Black women's bodies. In order for the expansion of scientific knowledge to better care and promote better wellness for White people, all along with inhibiting the reproduction of non-White people to maintain White hierarchy, Black Americans were subjected to dehumanizing, experimentation. Legal and medical attention to enslaved women's bodies played an important role in the entrenchment of American racism, as it has manifested into a current public health crisis for Black women.

Today, Black women report the legacy of non-consensual medical procedures in perinatal care. A study conducted by Giving Voice to Mothers recorded pregnancy and birth experiences of 2,700 people in the United States between 2010 and 2016 (UBC News, 2022). Researchers examined survey responses from 2,490 participants who reported experiencing pressures or unconsented procedures during perinatal care; respondents who were Black reported experiencing unconsented procedures during perinatal care 89 percent more frequently during vaginal births and 87 percent more frequently than White respondents (UBC News, 2022). This

study highlights provider pressure and lack of consent processes as playing a significant role in driving Black maternal inequities today, (mal)practices similar to White physicians when creating ACOG.

Scott (2021) articulates how woven into the practices of gynecological and obstetric services are the historical ways that Black women and Black bodies have been valued solely for their experimental and capitalist potential. Historicizing Black women's reproductive health can provide a framework in analyzing the disparities within the contemporary Black maternal mortality rates in the United States, reflecting that the United States' original construction of wellness was not made to be applicable for Black people. The cost of not being White in the United States has caused catastrophic maternal mortality inequities for Black women. The rift between who is deserving of a healthy life and who is inferiorized before they are born stems from the White-supremacist, pseudoscience of racial hierarchies, created to promote the power and well-being of White people. As a result of this history along with the accumulation of disadvantages across generations, Black women are still at the center of a public health emergency (Chinn, 2021).

Contemporary Legacies of Slavery

There is a tendency to think of today as the aftermath of violence in United States' history, specifically towards the Black community. By historicizing the trajectory of the treatment towards Black bodies, Black women and birthing people in particular, it is evident that today is not the aftermath, but it is the continuity of similar submissive behavior towards Black people from all structural institutions. The stark racial disparities within maternal mortality rates in the U.S. is one of the countless examples of structural violence contemporarily faced by Black women, stripping away their equitable access to a healthy pregnancy and a quality of life.

Whiteness has been the accepted normality since the conquests of Eurocentric colonialism. Resistance against non-White dominant culture has been generationally present by those that benefit from a system of White privilege and power in order to maintain the hierarchical status. This resistence bleeds into disparities within health outcomes for all people of color - for all those considered non-White, abnormal, and unhealthy. Definitions of health and wellness, constructed by Whiteness, were generated to be solely applicable for White bodies, even in modern culture. For White supremacy to thrive, there must always be a subordinate group to oppress. Anyone with a marginalized identity in the United States, at any time, can be castigated from the White dominant group and be subject to exclusion, exploitation, and oppression (Kelly, 2022). Through the teachings and implications of White supremacy, the negative, "unhealthy" attributions overtly, and covertly, applied to Black bodies are rarely addressed as a severe, ongoing issue.

Healthism (Robert Crawford, 1980; Kelly, 2022) describes the ideology which believes that health is the sole responsibility of the individual. It is the idea that anyone who is not "healthy" and "normal" is not trying hard enough. The United States prides itself on individuality, that everything is a result of an individual's personal choices. Healthism thus leads to victim blaming, all of which avoids recognition of holistic determinants of health that influence well-being far more than individual behaviors. Healthism targets the most vulnerable; Black people, Black women, and Black birthing people are continuously subjected and individually blamed for their health outcomes, with complete disregard for systemic oppression that has generationally inferiorized Black communities.

The examination of the root causes of inequity requires an interdisciplinary approach. Kelly (2022) asserts that we must also acknowledge the systemic mechanisms that deliberately

organize and distribute resources across lines of race, gender, class, sexual orientation, and other dimensions surrounding individual and group identities. The foundation of the term structural violence goes beyond the structures that are designed for maintenance of inequities; structural violence in the United States viciously determines who gets to be well and who does not (Kelly, 2022).

Dismantling the racial disparities within United States' maternal mortality rates using Engel's BPS model can prevent the individual blame placed on Black women and birthing people that subjects them to be responsible for their own health conditions. Insufficient care in the perinatal period is associated with poorer maternal health, poorer perinatal outcomes, infant mortality, and health inequities. Identifying the sources of and reducing the rates of insufficient care is therefore a major clinical and public health objective (Duberstein et.al, 2021). Through the BPS model, this review will address select physiological, psychological, and social dimensions of health that attempt to holistically explain contemporary Black maternal outcomes in the United States, today.

BPS: Biological Dimensions

Chronic Health Conditions

When deconstructing the contemporary maternal mortality rates in the United States, it is important to see how the conditions and qualities of the multitude of determinants surrounding health influence maternal access, delivery, and outcomes. Black women, in comparison to their White counterparts, are increasingly entering pregnancy while managing chronic health conditions, such as hypertension, diabetes, heart disease, and obesity, factors that can increase their risk for complications during pregnancy or during postpartum (Lu, 2018) (Figure 5). Biological conditions are oftentimes used as an excuse to blame Black mothers and birthing

people's health conditions as the outcomes of their individual choices. The misconception that health is the sole responsibility of the individual creates the environment for health disparities to exist and persist.

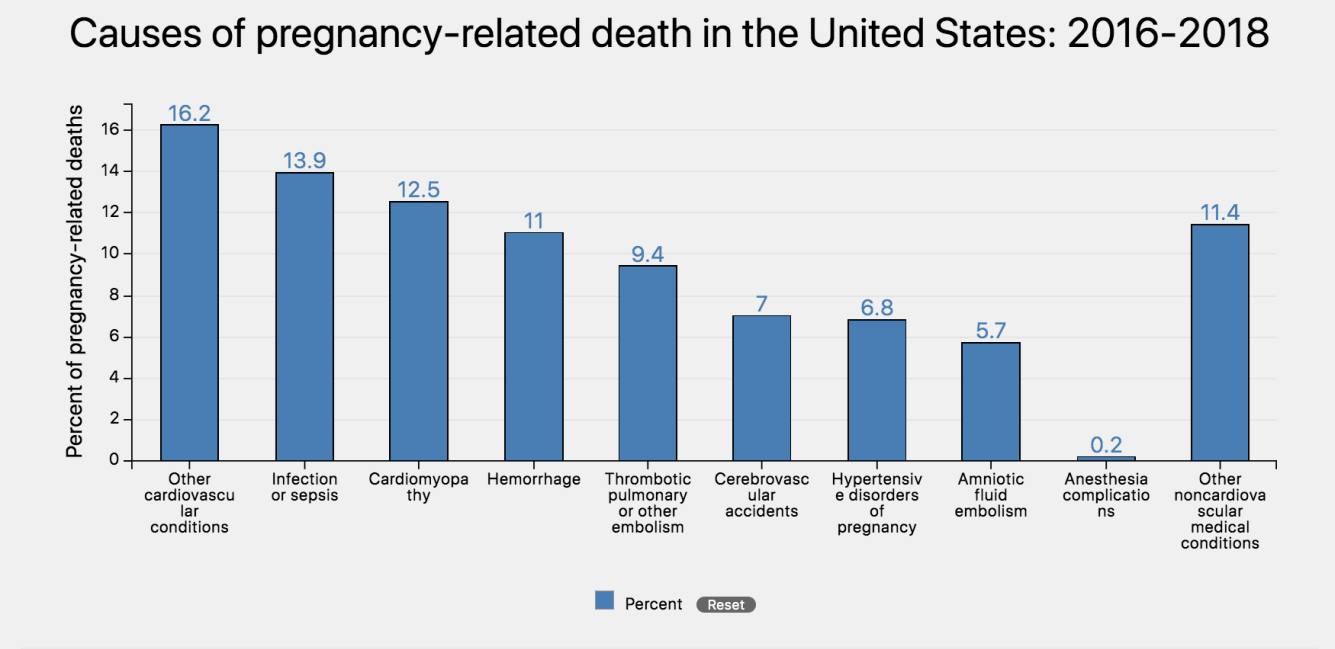

Figure 5. Centers For Disease Control and Prevention table indicating causes of pregnancy-related death in the United States from 2016-2018.

Contemporary maternal mortality ratios in the United States are striking; historicizing the treatment of Black bodies allows the understanding of who has generationally been granted agency over the course of their own quality of life in comparison to those who have historically been actively inferiorized. The medical industrial complex oftentimes attributes preexisting conditions among Black women as the reason for the disproportionate maternal mortality rates along with other health disparities (Kelly, 2022). Myths about differences within the genetics of Black people, specifically theories of genetic inferiority applied to Black bodies, are still observable through the systemic institutions that contribute to racial disparities within contemporary maternal mortality ratios in the U.S. The historical treatment of Black bodies

might not be explicitly played out now through exact mannerisms of decades ago, but echoes of such treatment can be argued as currently visible.

Kelly (2022) argues, "pre-existing conditions are not the comorbidity. Structural racism is." The maintenance of White supremacy ensures structural inequity for Black people to begin at the womb. It is important to stress that more than biological factors are at play in health. Although a multitude of factors exist and contribute to the racial variation in maternal age patterns of births and birth outcomes, this review will only offer a brief scope on select social, psychological, and environmental conditions that impact the biological health of all Black people, and Black birthing people.

BPS: Biological Dimensions

Myth of Black Resistance to Pain

The continuous exploitation of Black bodies was enhanced by misconceptions regarding theories of genetic inferiority; the false belief that "Black people's skin is thicker than White people's skin" directly reflects how Black Americans today are systematically undertreated for pain relative to their White counterparts (Hoffman, 2016). A 2015 study assessing racial bias in pain assessment and treatment, targeting the perception that Black people feel less pain than White people, following with inadequate treatment recommendations for Black patients' pain. For example, Hoffamn (2016) identified that Black patients were significantly less likely than White patients to receive analgesics for extremity fractures in the emergency room (57% vs. 74%), despite having similar self-reports of pain. This disparity in pain treatment is true even among young children. An additional 2015 study of nearly 1 million children diagnosed with appendicitis revealed that, relative to White patients, Black patients were less likely to receive any pain medication for moderate pain and were less likely to receive opioids, deemed the

appropriate treatment for severe pain (Goyal, 2015; Hoffman, 2016). These results corroborate with the prevalent, continuous myth of Black people having a higher pain threshold, similar to 19th century relics (AAMC, 2022).

Taken together, these studies, along with historical examples, reveal that a substantial number of White medical professionals and medical students hold false beliefs about biological differences between Black and White people, demonstrating that these beliefs predict racial bias in pain perception and treatment recommendation accuracy (Hoffman, 2016). Admittedly, these disparities in pain treatment highlighted in this study can also reflect an alternative issue of overprescription of medicine, yet the underprescription of pain medication for Black patients has been an ongoing, documented phenomenon. In essence, the association with racial disparities and pain assessment reflect the continuous, generational notion that Black people are undeserving of optimal care, emphasized by the dismissal of Black women's self-reported pain. Both previous and current health care systems do not adequately hear and act on the concerns of Black women and mothers during their pregnancies, births, and postpartum journeys (AAMC, 2022).

Racism, not race, drives health inequities, as substantial evidence exists confirming how structural and interpersonal racism, implicit bias, and discrimination contribute to the country's maternal health crisis (AAMC, 2022). Overall, ensuring access to quality care, including specialist providers, during preconception, pregnancy, and postpartum is crucial for all women, and specifically Black women and birthing people, to manage chronic medical conditions. Persistent systemic factors, such as intended gaps in health care coverage and preventive care, lack of social services, employment and housing variables, have also been identified as contributors to pregnancy-related deaths while managing chronic health conditions (CDC, 2019).

BPS: Social Dimensions

Systemic Racism: Socioeconomic Status and Housing

Research consistently has documented the continued impacts of systematic oppression, bias, and unequal treatment of Black women throughout generations. Social conditions are circumstances embedded within environments in which people are born, live, work, worship, interact, and age that affect a wide range of functioning, health, along with quality of life outcomes and risks (Chinn, 2021). Such nonclinical factors impact patients' access to care, ability to maintain secure and safe housing, a balanced nutrition, mental health, presence of a support system, affordability, and several other categories that shape an individual's lifespan and more specifically, the trajectory of a pregnancy (AAMC, 2022). Substantial evidence exists that racial differences in socioeconomic and housing outcomes among women are the result of segregation, discrimination, and historical laws purposed to oppress Black people and women in the United States (Chinn, 2021). Factors such as economic stability, quality education access, accessible and equitable health care, surrounding environments, social and community contexts all impact health throughout one's lifespan (AAMC, 2022).

At the family level, factors such as social support, safety, violence, religion, and income impact maternal health outcomes. At the community and institutional level, additional concerns such as the built environment, policies, sanitation, and transportation are also in play and drive maternal health outcomes (AAMC, 2022). For instance, a large number of Black women in the U.S. live in neighborhoods that are more racially segregated and have lower property values than their White counterparts (Massey and Denton, 2001). Discrimination within mortgage lending, also referred to as *redlining*, was a legal practice in which lenders denied mortgage loans to communities and individuals based on race (Chinn, 2021). Although redlining is no longer a

legal practice, the patterns of neighborhood segregation still persists; racial residential segregation is one of the many fundamental causes of racial disparities in health that Black women still suffer today, as it prevents access to maternal and overall healthcare that can impact the trajectory of a pregnancy. Consistent with this notion, as of 2020, Black women earn on average $5,500 less per year and experience higher unemployment and poverty rates than the U.S. average for women (Chinn, 2021). Together, the disparities in these statistics place recognizable importance on how disparities within social dimensions of health all impact a patient's ability to access and optimize the health care that is needed for a healthy pregnancy and delivery (AAMC, 2022).

BPS: Social Dimensions

Policies and Accessibility to Care

AAMC (2022) addresses how stark economic and geographic differences within access to maternal health services in areas of the South, Northern Plains, and Alaska have been classified as maternity care deserts. The current structure of insurance coverage and reimbursement policies can also pose significant threats during the trajectory of a pregnancy. More than 50 percent of US counties have limited or no access to maternal health care while 7 million people with the capacity for pregnancy live in these counties (AAMC, 2021).

Over the past 4 decades, states have increased Medicaid eligibility for pregnant women, in an attempt to make health care during pregnancy significantly more accessible for low-income women. However, the Supreme Court decided to make Medicaid expansion optional for states, resulting in significant differences nationwide in terms of health coverage for women and birthing people of childbearing age (Searing and Ross, 2019). The uninsured rate among nonelderly African Americans is 14 percent in non-expanded Medicaid states in comparison to 8

percent in expansion states. In Southern states, which make up the majority of states that have not expanded Medicaid, African Americans are disproportionately experiencing higher uninsured rates, largely due to the fact that the states that have not expanded Medicaid have larger shares of Black residents (Searing and Ross, 2019). For states that have expanded Medicaid, the coverage does not include the utilization of doulas, midwives, and community health workers, non-medicalized birth supporters and pregnancy care-givers, proven to promote a healthier pregnancy (AAMC, 2022).

BPS: Psychological Dimensions

Mental Health

The absence of an acknowledgement and analysis of the intersecting clinical and non-clinical factors that structure how institutions differentially treat people before, during, and after birth invalidates and erases the experiences of Black communities who carry the greatest burden of pregnancy-related mortality (Scott, 2022). Another limitation of health information systems when identifying maternal mortality rates is the lack of attention to mental health information, a sect of health that is influenced by both clinical and non-clinical circumstances that directly impact the course of a birthing person's maternal journey.

The first year after birth is especially critical since more than half of pregnancy-related deaths occur in the postpartum period. Research estimates that more than 55 percent of all infants in families with incomes below the poverty level are being raised by mothers with some form of depression (Searing & Ross, 2019). Postpartum depression [PPD] refers to depressive episodes that are prevalent following childbirth, a disabling disorder that can become problematic for the new mother or birthing person who is carrying for a young infant in addition to managing normal responsibilities and life stressors (O'Hara & McCabe, 2013). ACOG recommends women have

access to continuous health coverage in order to increase preventative care, reduce adverse obstetric health outcomes, increase early diagnosis of disease, and reduce maternal mortality rates (Searing & Ross, 2019). ACOG also recommends that all women have contact with their obstetrician-gynecologist within the first 3 weeks postpartum (Scott, 2022).

However, US postpartum service provisions have identified that there are lower postpartum visit attendance among populations with limited resources. Additionally, 25 percent of women do not receive a phone number for a healthcare provider to contact for any concerns about themselves or their infants (Scott, 2022). In addition, the United States is the only OECD country without a national-level guarantee of paid maternal leave, another important element impacting maternal health and attendance during postpartum and postpartum clinical visits (AAMC, 2022). Inadequate attention to postpartum care, along with a lack of recognition to prevent and further eliminate rates of PPD, results in a number of consequences of mothers, specifically Black mothers and birthing people as they predominantly reside in low-income communities. Such consequences negatively impact maternal impairment and parenting for the mother along with hazardous child complications that affect behavior, cognitive development, and physical health (Scott, 2022). Likewise, the completion of the single postpartum visit, as ACOG recommends, is insufficient for a true postpartum assessment. Ultimately, postpartum justice is necessary to address and eliminate the historical, institutional, and interpersonal barriers that continue to subjugate and silence the experiences of Black women and birthing people (Scott, 2022; AAMC, 2022).

BPS: Psychological Dimensions

Bias and Stigma

In contrast to Black people, White people in the U.S have benefitted from living in a society that has prioritized them politically, culturally, and socioeconomically, specifically through the metric of race and the continuous implementations of White supremacy. These benefits accumulate across generations, creating a cycle of overt and covert privileges, revealing the reasons why there are stark racial disparities in pregnancy-related mortality today (Chinn, 2019). One example of privilege White people have is evidently the lack of anti-Black bias from healthcare professionals when seeking treatment. The presence of implicit biases among healthcare professionals and its effect on the quality of clinical care is a cause for concern; racial bias is another cause for racial disparities within healthcare in the United States. Implicit bias involves associations outside conscious awareness that lead to a negative evaluation of a person on the basis of their socio-demographic characteristics (FitzGerald & Hurst, 2017). The implicit biases of concern to healthcare professionals are those that operate to the disadvantage of those who are already vulnerable.

In a systematic review, peer-reviewed articles, published between March of 2003 and March of 2013, were examined to investigate if healthcare professionals displayed implicit biases towards certain types of patients (FitzGerald & Hurst, 2017). The final number of articles examined, after the elimination of those with a multitude of limitations, along with stark differences within implicit bias measurements, was 360. 27 of those articles examined racial/ethnic biases; 10 other biases were investigated including gender, age, and weight. 29 of the studies were data extracted from articles set in the United States; the articles based within the U.S all determined racial/ethnic biases among other biases, as well. The major findings of this study is that 35 articles found evidence of implicit bias in healthcare professionals and all investigated articles found a significant positive relationship between level of implicit bias and

lower quality of care. Ultimately, almost all studies found evidence for implicit biases among physicians and nurses, with the characteristic of race/ethnicity at issue for articles based in the U.S.

3 studies found a significant correlation between high levels of physicians' implicit bias against Black people on Implicit Association Test [IAT] scores and interaction that was negatively rated by Black patients. 4 studies examining the correlation between IAT scores and responses to clinical vignettes found a significant correlation between high levels of pro-White implicit bias and treatment responses that favored patients who identify as White. Black patients in the U.S were also significantly more likely to be questioned about smoking than White patients. And finally, in another study, international medical graduates rated the African-American male patient in the vignette as having significantly lower socioeconomic than did US graduates (FitzGerald & Hurst, 2017).

A limitation of implicit bias studies is that there is no clear consensus on the meaning of the term "implicit." Implicit biases are also challenging to measure, accurately. This review selected articles that included priming task, the Implicit Association Test, and Simon task in order to reveal and measure implicit attitudes. Nevertheless, implicit bias unfavorably affects clinical judgment and behavior. While this may not always translate into the behaviors of all medical professionals, nor will it consistently render negative treatment outcomes, the relationship between a healthcare professional and a patient is essential to providing *good* treatment. However, in this study, researchers concluded that the more negative the clinical interaction, the worse the potential treatment outcome.

Impartial treatment of patients by healthcare professionals is an uncontroversial aspect of healthcare (FitzGerald & Hurst, 2017). The cycle of unfavorable psychological, social and

cultural determinants of health in Black and minority populations continues, bleeding into the alarming, contemporary maternal mortality ratios in the United States. As mentioned, only a brief scope on select dimensions was discussed, yet a number of persisting non-clinical factors stem from the history of Black women's, and all Black people's, inequitable access to health care and treatment, that biological factors alone cannot sufficiently explain.

Discussion

Kelly (2022) concludes, "White supremacy is a toxin in the American body that is making us all sick." Through the practices and maintenance of White supremacy, along with the generational pathologization of Black people, structural racism has become severely entrenched within the institutions that influence a person's life. Most maternal deaths in the United States are preventable. A 2018 CDC report based on MMRC reviews of 237 maternal deaths in 9 states concluded that 63 percent of the deaths were preventable (Lu, 2018). The root causes of health inequities Black women and birthing people are multifactorial as they date as far back as slavery, yet they all have the common denominator of structural racism.

Structural racism refers to the totality of ways in which institutions foster racial discrimination through mutually reinforcing systems of housing, education, employment, media, health care, and criminal justice. These patterns and practices in turn reinforce discriminatory beliefs, values and distribution of resources (American Medical Association, 2021). Dr. Veronica Maria Pimentel, an obstetrician gynecologist who began a petition for the recognition of the "Mothers of Gynecology," stated, "there's so much that people don't know about. The history of the United States is told from the point of view of those in power and those who were in power were men and those who were in power were also white. And we're talking about women, we're talking specifically about Black women, and we're talking about enslaved Black women. So it is

important for us to go back and look at this history because the history informs what we're doing today when we talk about inequalities in health care" (Guerra, 2022). In sum, racism has not just been incidental to the history of the United States, and with the history of American medicine, but deeply entrenched in it with evident manifestations in present day.

In *The Philadelphia Negro* (1899), W.E.B. Du Bois reframes the conversation of racial difference from the perspectives of those subjected to racism by introducing structural explanations for racial inequalities in health outcomes. Structural explanations to examine racial disparities in maternal mortality rates within the United States point to discourses not rooted in false beliefs about the biological inferiority of Black people but to environmental, political, and socioeconomic circumstances that lead to poor health (Du Bois, 1899; Nuriddin, 2020). The dismissal of racial inferiority myths must actively take place when examining health outcomes, not only to assess how the U.S.' healthcare system does not adequately hear and act on the preferences and concerns of Black women and birthing people during their pregnancies, births, and postpartum periods, but also to equitably bridge the gap of disproportionate maternal death among Black women. Public initiatives when dismantling racial disparities with maternal mortality rates must promptly take place through anti-racist mannerisms.

Individual behavior is not a strong predictor of health outcomes. If the United States continues to construct narratives on individualism when dismantling disparities within maternal mortality rates, the entrenched inequities that contribute to the racial/ethnic differences in health outcomes will never be remedied. The lack of recognition of the White supremacist history of the U.S., that solely intended to promote the superiority of Whiteness, has led to the further inferiorization of Black bodies, Black women, and Black birthing people. There must be further acknowledgement and active removal of structural racism embedded within the institutions that

determine the trajectory of an individual's life, in order to not repeat the historical ways Black people have been pathologized. The historical and contemporary examples in this review stress the importance of improved frameworks to implement system-wide, anti-racist interventions, in hopes to remedy the effects of structural racism on Black lives and to prevent further discrimination and preventable death.

Black people have every right to be suspicious of an institution that has historically victimized Black communities for centuries. Owens and Fett (2019) pose, how does a community learn to trust the medical institutions when its forefathers were interested in restoring Black Women's reproductive health so that slavery can be perpetuated? How does the medical profession unlearn the pattern of dismissing Black women's pain when that pattern is rooted in history? The U.S. current maternal mortality rates strikingly expose how this country's health care system does not adequately hear and act on the preferences and concerns of Black people, and particularly Black women.

This review recognizes the challenges of the maternal health crisis in the United States. Black feminist writer and activist Audre Lorde (1982) declared, "there is no single-issue struggle because we do not live single-issue lives." The complexities of maternal mortality calls for a multi-dimensional approach, recognizing the interconnectedness of all aspects that influence a human's life. Racism, racial capitalism, misogynoir, and structural racism in service provision must be identified, measured, monitored, and modified in order to achieve and sustain Black maternal equity and justice (Scott, 2022). The United States' construction of wellness must be redefined in order to eliminate the well-being gap between White people and people of color. Reducing maternal mortality and achieving no maternal deaths in the United States will require learning from every maternal death through holistic aptitudes, ensuring quality and safety of

maternity care for all women, and improving women's health across their life course (Lu, 2018). However, ensuring quality and safety of maternity care for women in the United States will not eliminate maternal mortality rates for Black women unless the complexities of structural racism is acknowledged and actively worked against. The decolonization of public health institutions must adhere to comprehensive, anti-racist policies towards the prevention of Black people's deaths, and in hopes to initiate and sustain the remedies of racial disparities within maternal mortality rates in the United States, today.

Limitations

This review acknowledges the complexities of contemporary maternal mortality rates in the United States. Therefore, this literature review has several limitations. First, as mentioned, only about ⅓ of all countries have reliable maternal mortality data. This review used maternal mortality data extracted from a range of databases compiled by both international and domestic organizations that may differ in methods of data collection, which can be one of the determinants of why there is an overall increase in pregnancy-related mortality, observed domestically. Second, this review recognizes its focus on the Black/White paradigm; although other non-White, racial and ethnic groups are also vulnerable populations in the United States and suffer inequitable maternal mortality rates, this review chooses to focus specifically on the Black population in the United States. Racial discrimination in the United States are disproportionately affected by all those who are non-White; future research should appropriately dedicate to the deconstruction of maternal mortality rates within the U.S. of all those vulnerable. Third, the use of Engel's (1977) biopsychosocial model may not be the most ideal when deducing high Black maternal mortality rates in the United States today, as it avoids attention to environmental, cultural, and spiritual dimensions - additional factors that can also contribute to the root causes of

maternal mortality inequities. There is still a critical need for a holistic, interdisciplinary approach to health; the BPS model of health is used in this review until well-serving, published models exist to appropriately replace Engel's. Fourth, this study was able to examine only select biological, psychological, and social determinants of health, thus limiting the holistic aptitude in the examination of the historical and contemporary treatment of Black people in the United States. In terms of future research, it would be useful to extend the current findings by critically identifying all dimensions of interdisciplinary models of health, in depth rather than the breadth, to suitably examine all substantial evidence of the contemporary legacies of slavery. Fifth, this review fails to incorporate historical and contemporary methods of Black resistance towards White supremacist ideologies and practices. Future research should aim to center Black experiences and Black voices to further eliminate entrenched disparities within the Black community in the United States.

Conclusion

This literature review finds that the historical treatment of Black bodies, along with the United States' particular construction of wellness, has contributed to the high, contemporary Black maternal mortality rates in the United States. The root causes of health inequities within Black women and birthing people are multifactorial. They include the impact of myths of Black resistance to pain, driven by structural and interpersonal racism, implicit bias, and discrimination in health care systems. They also result from the impact of unfavorable social determinants of health such as lack of accessibility to care, financial insecurity, and substandard housing. Deconstructing the historical treatment of Black bodies allows for the necessary dismantlement of institutional barriers and of maternal health inequities. The examination of the root causes of inequity requires an interdisciplinary approach. Interpreting the racial disparities within the

United States' maternal mortality rates using Engel's BPS model can prevent the individual blame placed on Black women and birthing people that subjects them to be responsible for their own health conditions. Racism, not race, drives health inequities, as substantial evidence exists confirming how structural and interpersonal racism, implicit bias, and discrimination contribute to the United States' contemporary maternal health crisis (AAMC, 2022).

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