

Maternal and Mental Health Disparities among the Underserved in the United States

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Abstract

Research shows that underrepresented women endure higher infant mortality and morbidity rates than white women. These women also have higher rates of physical and behavioral health problems compared to their counterparts. These rates affect their own health and the health of their children. However, sufficient discussion and action to reduce those racial and social disparities is still lacking.

This article discusses the individual and systemic barriers facing women of color and their infants. Some factors contributing to the barriers include maternal obesity, lack of social support and paternal involvement, substance use, and poor health behaviors which lead to chronic health conditions that, in turn, complicate pregnancies. Resulting from these conditions is an increase in preventable infant deaths. This paper analyzes the barriers faced by African American women in the United States (U.S.), and provide some suggestions on how to address these barriers in maternal health care. Additionally, we will highlight the need to further investigate these topics in order to help eliminate the disparities that still exist in our growing populations of racial and ethnic minorities from the standpoint of health care practitioners in their practices.

Introduction

In 2019, there were 40.6 million people in the United States who were non-Hispanic Black, representing 12.8 percent of the total population [1]. Blacks/African Americans are the second largest minority population in the United States, following the Hispanic/Latino population [1]. African American (AA) women have an increasing prevalence of morbid obesity, which leads to hypertension [2]. Also, AA women are disproportionately affected in obtaining prenatal care and suffer comparatively worse infant mortal rates than white women [3].

The CDC (2020) states that AAs have 2.3 times the infant mortality rate of whites, are four times more likely than white mothers to die from birth complications, and are twice as likely as whites to lose their children to sudden infant death syndrome. The CDC reported there were 21,498 infant deaths, from birth to age one in 2018 [3]. Ethnic groups contributed to this rate at widely divergent rates. Asian parents suffered infant deaths at the rate of 3.63 per 1000, white parents at the rate of 4.63 per 1000, and Hispanic parents at 4.86 per 1000. However, the rate for American Indian/Alaska Native was 8.15 per 1000, and 9.39 per 1000 for Native Hawaiian or other Pacific Islanders. At the top were AA parents, who lost infants at the rate of 10.75 per 1000 [3]. The aim of this paper is to analyze the barriers to health care faced by AAs in the U.S. and discuss on how to remove them in order to eliminate racial and ethnic disparities in maternal health care. Our focus is to bring perspectives on reducing health disparities and to highlight areas where BH can be improved in order to enhance maternal and their infant health outcomes.

The five most common causes of infant mortality are congenital malformations (21%), disorders related to short gestation and low birth weight (17%), maternal complications (6%), sudden infant death syndrome (6%) and unintentional injuries (5%) [3]. Another study found 86% of infant deaths were Black, and 14% were Hispanic. None was white [4]. AA women have higher rates of premature birth and of low birth weight than their white counterparts, contributing to their higher infant mortality rate [5]. Furthermore, environmental

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and behavioral health factors such as poverty, emotional stress, domestic abuse, and substance abuse contribute to 50% of the cases of infant mortality. Also, pre-existing maternal chronic medical conditions such as obesity were found in 55% of AA infant and fetal death [4].

In addition to morbid obesity and hypertension, AA women have a greater prevalence of other health disparities than other ethnicities. For example, fibroid tumors are more common in AA women than in other ethnicities. Fibroid tumors can have adverse effects on fertility, reproductive health, and birth rates. AA women have more surgeries for fibroids leading to more postoperative complications than other groups [6]. AA women in the U.S. are affected by the HIV/AIDS epidemic more than other ethnicities [7]. Similarly, AAs are more likely to contract COVID-19, develop complications, and die from the virus [8]. The AA death rate is also higher for heart disease, stroke, cancer, asthma, influenza, and homicide than it is for whites [1].

Differences exist in health insurance coverage, too. While 75% of non-Hispanic whites used private health insurance in 2019, just 56% of AAs used it. Meanwhile, 44% of AAs used Medicaid or public health insurance in 2019 while only 34% of white people used it that year [9]. Completing the picture, 10% of AAs had no insurance at all while only 6.3% of whites had no insurance [9]. Newborns whose parents were without health insurance had higher rates of mortality than the Medicaid, private insurance, and self-payment groups [10,11]. In a 2017 study, the rate of infant mortality per 1,000 live births was the lowest for mothers with private health insurance (4.25) versus self-

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payment (6.76) and Medicaid (7.41) [10]. Spong et al. found that infant mortality due to congenital malformations was 38% higher in AA mothers than in white mothers [5].

Important to these figures is the mental health disparity. Mental illnesses are more severe and persistent in AAs, possibly due to inadequate access and treatment. AAs are disproportionately affected by mental illness compared to their white counterparts due to barriers in mental health care access and use of services [12]. Some of these barriers to accessing treatment include cost of care and lack of transportation and childcare. Barriers to effective treatment consist of misdiagnosis by health professionals, lack of social support and specialty care, and disempowerment in treatment [13]. Stigma associated with mental illness and problems communicating with mental health service providers are also major obstacles to seeking mental health services among AAs [14]. AAs are more at risk for mental illnesses due to their overrepresentation in socially marginalized groups like homeless and impoverished communities, prisoners, foster care, and victims of violence [15].

Mental illness in pregnancy has an impact on both maternal and child health. Psychiatric disorders like depression and anxiety are common during pregnancy. Also common are psychological disturbances during pregnancy and postpartum, associated with insufficient antenatal care, preterm delivery and low birth weight, low emotional involvement, and aggression toward and neglect of the newborn [16]. Minority groups including Black and Hispanic mothers had a higher prevalence of depressive symptoms compared with non-Hispanic white mothers [16]. The effect of depression as a risk factor for poor infant growth typically occurred in mothers and infants of relatively deprived social groups and those living in socioeconomic deprivation [17]. This, too, contributes to poorer birth outcomes for AA women compared with non-Hispanic white women [18].

Furthermore, the impact of losing a child can have devastating effects on the mother. The loss of a child is associated with increased risk of maternal mortality, especially in the early weeks and months following the loss [19, 20]. Bereavement is associated with a decline in physical health, such as presence of illnesses and symptoms, a decrease in the use of medical services, and mental disorders associated with grieving [19, 20], especially with an only child [21, 22]. Bereaved parents also reported a lower sense of purpose in life and higher depressive scores [21]. Several research studies have indicated the psychological effects of losing a child but few have recognized the physical effects [23]. A study on "Shidu parents" - parents who cannot conceive or do not adopt another child after the passing of an only child, shows these parents have increased morbidity in coronary heart disease, tumors, and mental diseases, compared to parents who have not experienced the loss of an only child [23]. Additionally, women who have experienced loss are more likely to develop PTSD and depression than men. This may be explained by the difference in role expectations between mothers and fathers [22,23]. Possible protective factors for the mental health of bereaved parents' includes adequate social support, seeing the body of their lost child, having a subsequent baby, and psychological interventions [22].

Theoretical Framework

Our paper is based on the Fundamental Cause Theory by Link and Phelan [24,25]. The theory seeks to explain the persistence of health inequalities in different places and at different times based on socioeconomic status and racism as the foundational causes. The theory states that there is a system of relationships made up of risk

and protective factors, with many disease outcomes and the basis for the outcomes derived from the causal relationships of social economic status (SES) and racism [24,25]. This means that there are many health relevant components of daily life including knowledge, money, power, and social connections that are shaped by one's resources. In the case of AAs, resources are frequently lacking. Lack of resources and racism play key roles in health disparity [39,40].

Social Determinants of Health

On the systemic level, health insurance allows mothers and newborns to receive adequate healthcare and prenatal screenings. Currently, 12 states have not adopted Medicaid expansion, which would allow free health insurance for families under a certain income threshold [26]. In states with expanded Medicaid, the infant mortality rate (IMR) decreased from 5.9 to 5.6 per 1,000 live births from the years 2014-2016 whereas in non-Medicaid expansion states, IMR increased from 6.4 to 6.5 [11]. Additionally, where states have implemented the Maternal Infant Health Program (MIHP), which provides home visitation, care coordination, infant care and health information for lower socioeconomic and high-risk families with MIHP participation, there has been a decrease in infant mortality in every racial group [27]. Consistent with this, states participating in Women, Infants, and Children (WIC), a Special Supplemental Nutrition Program, have an infant mortality rate of 8.0 versus 10.6 in nonparticipating states [28].

Systemic barriers include provider mistrust and lack of access to behavioral health (BH) services. This is especially the case where there is a lack of ethnic or racial match between patient and provider, and for people with multiple chronic conditions and BH comorbidities. BH comorbidities include depression and anxiety, both of which lead to poor health outcomes [29]. AAs were shown to receive lesser care than their counterparts even when adjusting for insurance, disease, and care setting. Researchers hypothesized that physicians held persistent negative implicit racial biases and stereotypes, which affected their decision making when interacting with AAs [30]. AAs have been reported as having the highest mistrust of the healthcare system when compared to any other racial group [29] and were found to be 30% less likely to have physician office visits than their white counterparts [31]. The provider-patient interaction requires understanding in language, familiarity with the patient's cultural preferences, and that the provider speak to the patient in unbiased, understandable terms [32]. This implicates cultural factors. Understanding barriers such as racism, stereotypes, and ethnic identity predict a reduction in healthcare inequalities [32]. Help-seeking behaviors vary according to nativity, language proficiency, cultural conflict, and the degree to which people mistrust the healthcare system [33].

The importance of cultural factors was evident in a study in which AA men were matched with AA providers. Patients were more willing to agree to preventative measures such as vaccines and therapies to prevent cardiovascular death than when they had been cared for by white providers [34]. This highlights the need for more AA healthcare providers to reduce individual and systemic barriers for AA mothers [35]. Individualized care with sensitivity and responsiveness to cultural heterogeneity is necessary to address adequately the individual needs of each patient [34]. An example of where this may be helpful is Sudden Infant Death Syndrome (SIDS). AA infants bedshare with their mothers at twice the regular rate of their white counterparts and are also twice as likely to die from SIDS [36]. When patients are cared by physicians who resemble them, education to improve the health of both infant and mothers may be more effective.

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Mothers should have access to screening to ensure the health of their children during gestation. Maternal pre-pregnancy body mass index (BMI) has been associated with infant mortality [37]. A women have higher rates across every BMI category (underweight, normal weight, overweight, obese type 1, obese type 3) than their white counterparts [37]. Furthermore, adequate weight gain is associated with lower infant mortality rates. Women who had inadequate gestational weight gain were 2.23 times more likely to encounter infant death even when controlled for race, age, education, and low birth weight [37, 38].

AA women are also subjected to greater environmental stress stemming from poverty, institutionalized and individualized racism, and a lack of educational opportunities [39-41]. The U.S Census Bureau reported that AAs had the highest poverty rate (19.5 percent vs. 8.2 for non-Hispanic whites) of all ethnic groups [42,43]. Poverty is associated with infant death. Added to poverty is the impact of the community where impoverished people are bound to live. Locations, identified by zip codes, affect access to care. AAs residing in predominant black zip codes had fewer physician visits and fewer health professional visits overall [31].

Addressing Behavioral Health in Primary Care

AA patients' rates of mental illness are similar to their non-Hispanic white counterparts. However; disparities still exist for them as they receive lower quality of care and lack of access [44, 45]. It is reported that only one third of AA patients who need mental health care will receive it [46]. AA patients are also more likely to receive care in the emergency room or a primary care setting rather than seeking a mental health specialist [47].

Integrating primary care with prenatal/postnatal care allows patients to address their mental health and substance use issues in a single visit [48]. The most common mental illness for pregnant and postpartum women is depression [48]. Depression rates for women in their perinatal period were 19.2% and 18.4% during pregnancy [49]. O'Connor et al. analyzed six trials of peripartum and pregnant patients, and found a 18% to 59% reduction in risk of depression at follow-up with the use of a depression screening. By so doing, he demonstrated the effectiveness of incorporation of mental health into a primary care visit [48]. AA women are also more likely than their male counterparts to seek both formal and informal help, displaying a willingness to use the incorporation of mental health services in conjunction with maternal health [44].

Additionally, primary care provides continuity of care to patients for improved patient outcomes. Patients with mental health disorders

who had visited their psychiatrist at least twice over six months were found to have significantly lower rates of death than those with lower rates of continuity of care [50]. The higher rates of mortality were markedly higher for those with bipolar disorders, major depressive disorders, and schizophrenia. However, all psychiatric conditions were statistically significant [50]. Furthermore, patients who had high continuity of care with their PCP were significantly less likely to be hospitalized (16.1%) and health care costs were 14.1% lower [51]. These factors predict success for patients in reducing disparities and costs, and for relief for the strained healthcare system. Pourat et al.'s research showed patients who saw their PCP within the year had a decrease in two or more annual emergency department visits from 4.11% to 3.13% [52]. This trend was also the same for two or more annual hospitalizations with a decrease of 1.17% for the PCP adherence group versus 1.37% for the nonadherence group [52]. With the increasing role of PCPs treating those with BH concerns, primary care is poised to integrate BH services with primary care.

Discussion

The Fundamental Cause Theory explains the persistence of health inequalities in different places and at different times in terms of socioeconomic status and racism, which the theory identifies as foundational causes [24,25]. According to the theory, systemic racism contributes to health disparities in African American (AA) women and their children.

Research has shown that AAs' lack access to healthcare and that their behavioral health care needs are not being met. Those needs include access to mental health care during pregnancy, continuity of care, and providers who resemble them as patients and share their culture [16, 50]. The need for more AA physicians who share the culture of their patients, and the concurrent reduction of implicit biases, are critical and should be addressed in order to improve patient care. The life expectancy at birth for AA children is lower than that of non-Hispanic whites [42]. Ensuring that AA mothers have adequate maternal care would alleviate this decrease in life expectancy for them and their children. It is also suggested that expansion of the WIC and MIHP programs into additional states would increase the health of AA infants and mothers in those states.

Findings from several studies highlight the effects that physical and mental illness have on the health of pregnant women and their infants [4,6-8]. These studies underline the importance of addressing barriers to mental health care, especially among AA women, who are disproportionately affected by mental health disparities. It is important to tailor an all-inclusive agenda with the purpose of eliminating racial and ethnic disparities in AA women and reducing infant mortality in the U.S. This is achievable through collaboration of healthcare providers and community stakeholders.

Competing Interests

The authors declare that they have no competing interests.

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