# Health Equity Among Black Women in the United States

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# Abstract

Black women in the United States have experienced substantial improvements in health during the last century, yet health disparities persist. These health disparities are in large part a reflection of the inequalities experienced by Black women on a host of social and economic measures. In this paper, we examine the structural contributors to social and economic conditions that create the landscape for persistent health inequities among Black women. Demographic measures related to the health status and health (in)equity of Black women are reviewed. Current rates of specific physical and mental health outcomes are examined in more depth, including maternal mortality and chronic conditions associated with maternal morbidity. We conclude by highlighting the necessity of social and economic equity among Black women for health equity to be achieved.

Keywords: Black women, health equity, maternal mortality, race/ethnicity, social determinants of health

LACK WOMEN IN the United States experienced sub-B stantial improvements in health during the last century, yet health disparities persist. Black women continue to experience excess mortality relative to other U.S. women, including-despite overall improvements among Black women-shorter life expectancies<sup>1</sup> and higher rates of maternal mortality.<sup>2</sup> Moreover, Black women are disproportionately burdened by chronic conditions, such as anemia, cardiovascular disease (CVD), and obesity. Health outcomes do not occur independent of the social conditions in which they exist. The higher burden of these chronic conditions reflects the structural inequities within and outside the health system that Black women experience throughout the life course and contributes to the current crisis of maternal morbidity and mortality. The health inequities experienced by Black women are not merely a cross section of time or the result of a singular incident.

# Historical Context for the Current Health Experience of Black Women

Race and ethnicity are sociocultural constructs that reflect common geographic origins, cultures, and social histories of groups that are defined by societies in time-dependent contexts.<sup>3–6</sup> Given the social construction of race and ethnicity, racial groups and identity are fluid; they can, and do, change over time and vary across place.<sup>7</sup>

No discussion of health equity among Black women is complete unless it considers the impacts of institutional- and individual-level forms of racism and discrimination against Black people. Nor is a review of health equity among Black women complete without an understanding of the intersectionality of gender and race and the historical contexts that have accumulated to influence Black women's health in the United States.

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**Correction added** on February 19, 2021 after first online publication of November 25, 2020: The article reflects Open Access, with copyright transferring to the author(s), and a Creative Commons Attribution Noncommercial License (CC-BY-NC) added (http:// creativecommons.org/licenses/by-nc/4.0/).

 TABLE 1. DESCRIPTIVE DEMOGRAPHIC STATISTICS

 FOR BLACK WOMEN IN THE UNITED STATES, 2018

	Black women	All women
Percentage of population	7.0	51.5
Percentage of women	13.6	100.0
Mean age (years)	36.1	39.6
Percentage currently married	26.0	46.0
Percentage educational attainment		
Less than high school	13	11
High school	29	26
Greater than high school	58	63
Percentage poverty Percentage owner-occupied housing <sup>a</sup> Percentage head of household	24 41.4 27	14 63.9 12

Data are collected by sex (female).

Data source: https://blackdemographics.com/population/black-women-statistics10

<sup>a</sup>Data are from 2017 and are for both sexes.

Research consistently has documented the continued impacts of systematic oppression, bias, and unequal treatment of Black women, <sup>5,8,9</sup> Substantial evidence exists that racial differences in socioeconomic (*e.g.*, education and employment) and housing outcomes among women are the result of segregation, discrimination, and historical laws purposed to oppress Blacks and women in the United States.

Black women earn on average \$5,500 less per year and experience higher unemployment and poverty rates than the U.S. average for women (Table 1).<sup>10</sup> Moreover, Black women are more likely to be the head of household than their White counterparts, effectively supporting more dependents with fewer resources.<sup>10</sup> Black women live in neighborhoods that are more racially segregated and have lower property values than their White counterparts.<sup>10,11</sup> Mortgage lending discrimination ("redlining"), a legal practice in which lenders deny mortgage loans to communities and individuals based on race, resulted in community disinvestment residential segregation.<sup>11</sup> Residential segregation, as Williams and Collins argued,<sup>12</sup> is a fundamental cause of racial disparities in health, operating through many social institutions (including labor markets and education) to affect health.

The intersectionality of gender and race and its impact on the health of Black women also is important. This intersection of race and gender for Black women is more than the sum of being Black or being a woman: It is the synergy of the two. Black women are subjected to high levels of racism, sexism, and discrimination at levels not experienced by Black men or White women.<sup>13–15</sup>

In contrast to Black women, White women in the United States have benefited from living in a politically, culturally, and socioeconomically White-dominated society.<sup>1</sup> These benefits accumulate across generations, creating a cycle of overt and covert privileges<sup>16,17</sup> not afforded to Black women, such as wage gap differentials<sup>18</sup> and the invisibility of whiteness (*i.e.*, not having to think about one's race).<sup>19,20</sup> These privileges do not mean that all White women are similarly advantaged nor are all Black women similarly disadvantaged.

These social conditions create the environment for health disparities to exist and persist. They are the social determinants of health, the "conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-oflife outcomes and risks."<sup>21</sup> Disparities in Black women's health are particular types of health differences "that are closely linked with social, economic, and/or environmental disadvantage."<sup>21</sup>

The history of Black women's access to health care and treatment by the U.S. medical establishment, particularly in gynecology, contributes to the present-day health disadvantages of Black women. Health inequality among Black women is rooted in slavery. White slave holders viewed enslaved Black women as a means of economic gain, resulting in the abuse of Black women's bodies and a disregard for their reproductive health. Black women were forced to procreate, with little or no self-agency and limited access to medical care.<sup>22</sup> The development of gynecology as a medical specialty in the 1850s<sup>23</sup> ushered in a particularly dark period for the health of Black women. With no regulations for the protection of human subjects in research, Black women were subjected to unethical experimentation without consent.<sup>22–24</sup> Even in more contemporary times, these abuses continue.<sup>25,26</sup>

As a result of this history and the accumulation of disadvantages across generations, Black women are at the center of a public health emergency. Maternal mortality rates for non-Hispanic Black women are three to four times the maternal mortality rates of non-Hispanic White women.<sup>2</sup> In the next section of this article, we highlight some of the physical and mental health disparities that contribute to the current maternal mortality rates. Although discussed separately, physical health and mental health are inextricably linked.

### **Physical Health**

## Demographic characteristics

Black women are diverse in both nativity and ethnicity.<sup>27</sup> They are not a monolithic group; instead, they comprise multiple cultures and languages. For the purposes of this article, "Black women" refers to the collective identities of Black women, including women of different ethnicities. In the data cited here, "Black women" refers to the women included in the original study population.

Black women currently make up ~7.0% of the U.S. population and 13.6% of all U.S. women.<sup>10</sup> Although, on average, Black women are younger (36.1 years) than U.S. women overall (39.6 years) (Table 1),<sup>10</sup> they have a higher prevalence of many health conditions, including heart disease, stroke, cancers, diabetes, maternal morbidities, obesity, and stress. Life expectancy at birth is 3 years longer for non-Hispanic White females than for non-Hispanic Black females. Infant mortality rates for children born to non-Hispanic Black women are twice as high as those for children born to non-Hispanic White women<sup>1</sup> (Table 2).

# Weathering

As adults age, their health declines. Aging is affected not only by chronological age but also by biological, behavioral, sociocultural, and environmental factors.<sup>31</sup> Stress, an important factor in aging, is affected strongly by exposure to the built and social environments. Geronimus et al. posit the *weathering hypothesis*, that is differential exposures to stressful environments are a major factor in widening health disparities as individuals age. They suggest that Black–White

TABLE 2. DESCRIPTIVE HEALTH STATISTICS FOR WOMEN

	Non- Hispanic Black women	Non- Hispanic White women	All women
Life expectancy at birth (years) <sup>a</sup>	77.9	81.0	81.0
Infant mortality <sup>a</sup>	10.9	4.7	5.8
Maternal mortality <sup>b</sup>	37.1	14.7	17.4
Pregnancy-related mortality <sup>c</sup>	42.4	13.0	16.9
Physical health (prevalence	e %)		
Heart disease <sup>d<sup>4</sup></sup>	9.9	10.8	10.1
Hypertension <sup>e</sup>	39.9	25.6	27.7
Obesity <sup>b</sup>	34.7	21.6	23.5
Mental health (prevalence	%)		
Serious psychological distress <sup>a</sup>	4.7	4.8	4.8
Suicide (per 100,000 population) <sup>d</sup>	2.8	7.9	6.1

Maternal mortality and pregnancy-related mortality are per 100,000 live births.

Infant mortality rates are per 1,000 live births.

Data sources:

<sup>a</sup>Health, United States, 2017.<sup>28</sup> <sup>b</sup>National Center for Health Statistics, 2020.<sup>29</sup>

<sup>c</sup>Centers for Disease Control and Prevention, 2020.<sup>2</sup>

<sup>d</sup>Health, United States, 2018.<sup>1</sup>

<sup>e</sup>National Center for Health Statistics, 2017.<sup>30</sup>

disparities in health widen with age because of the accumulation of socioeconomic disadvantages and experiences with racism among Black women throughout the life course.<sup>31–35</sup> Evidence for the weathering hypothesis includes the finding that babies born to Black women in their teens are at lower risk of infant mortality than babies born to older non-Hispanic Black women, the reverse of what is observed for non-Hispanic White women.<sup>31</sup> More recently, Geronimus et al. found that among women aged 49–55 years, telomere length (a biomarker of aging) indicates that Black women are 7.5 years biologically "older" than White women. Perceived stress and poverty account for 27% of this difference.<sup>33</sup>

#### Obesity

The relatively high levels of morbidity and mortality among Black populations in the United States are, in large part, caused by obesity, which increases the risk of stroke and various CVDs.<sup>36-38</sup> Obesity is a major source of morbidity and mortality for all U.S. populations, but non-Hispanic Blacks have a higher age-adjusted prevalence of obesity than any other racial/ethnic group, with estimates ranging from 34% to 50%.<sup>39</sup> Patterns of obesity vary by many factors across and within races, including location, gender, and educational attainment.<sup>40</sup> Unlike other demographic groups, higher levels of income are not protective against obesity among non-Hispanic Black women.<sup>39</sup> This difference in the prevalence of obesity as reflected in national adiposity data on Black women is the result of the complex multilevel interplay of the measurable and difficult-to-measure social determinants that affect health disparities. Furthermore, Black women lose less weight than other subpopulations do in behavioral weight loss intervention research,<sup>41</sup> and they have a positive body self-image at higher weight levels, which may be psychologically healthy, but also diminishes their motivation to lose weight.<sup>42</sup> These findings support the need for interventions that integrate biological, sociocultural, and environmental factors that influence obesi-ty.<sup>41</sup> The high prevalence of obesity among Black women<sup>36,37</sup> impacts the prevalence rates of stroke and various CVDs.<sup>38</sup>

# Cardiovascular disease

After 50 years of declines in CVD mortality, declines stalled in 2011, with CVD mortality increasing starting in 2015.<sup>43-</sup> Despite changes in the overall CVD mortality rates, racial and sex disparities persist. Compared with White women, Black women have higher rates of CVD mortality, which have been attributed to poorer cardiovascular (CV) health and a higher burden of modifiable risk factors and clinical comorbidities.<sup>46,47</sup> Furthermore, the accumulation of both clinical and behavioral CV risk factors and the manifestation of CVD at younger ages for Black women compared with other racial and ethnic groups-that is, during young adulthood and middle adulthood-have significant implications for maternal and infant health.<sup>48</sup> Understanding the drivers of disparities in CVD among Black women requires examining the intersection of sex as a biological variable<sup>49</sup> and multi-omic influences (e.g., genetic ancestry<sup>50</sup> and epigenetic characterization) with multilevel<sup>51</sup> (e.g., biological ancestry characterization, individual, interpersonal, community, and society) social constructs (e.g., race, ethnicity, and gender).

Although differences in CVD incidence, prevalence, morbidity, and mortality by sex and race/ethnicity are well documented, research on the contributions of genetic factors is limited. People of African ancestry have been underrepresented in genomic research.<sup>52</sup> Furthermore, in genomic studies, analyses of sex chromosomes and the interaction between sex hormones and genetic characteristics are rarely included.<sup>53</sup> Therefore, significant concerns exist about the potential for precision medicine efforts, such as polygenic risk scores, to exacerbate CVD health disparities when using precision medicine research that relies on genetic studies that had inadequate participation from populations with African ancestry.<sup>54</sup>

Optimizing such behavioral factors as diet, physical activity, sleep, smoking, alcohol use, emotional health, and stress management is important to maintaining CV health (primordial prevention) and reducing CVD risk (primary and secondary prevention).<sup>55–59</sup> Compared with non-Hispanic White women, non-Hispanic Black women aged 20 years and older have a higher prevalence of several clinical risk factors for CVD, including obesity, high blood pressure, and diabetes.<sup>60</sup>

Sleep disparities may contribute to racial/ethnic disparities in CVD.<sup>61,62</sup> Blacks have a higher likelihood of short or prolonged sleep durations, obstructive sleep apnea, insomnia, and other measures of poor sleep quality. A study of women of childbearing age showed that, despite Black women having poorer self-reported sleep quality, they were less likely than other women to report their sleep disturbances to a physician.<sup>63</sup> Sleep disturbances may be a manifestation of altered stress reactivity resulting in activation of the chronic stress response and resultant elevations in cardiometabolic disease.<sup>64</sup>

## Bleeding and blood disorders

Diseases of the blood are as numerous and complex as the fields of hematological physiology and pathophysiology.

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Benign blood disease include anemia (iron deficiencies), sickle cell anemia (SCD), glucose-6-phosphate dehydrogenase disorders, and hemophilia, among others. Malignant blood diseases (cancers of the blood) include acute myeloid leukemia, acute lymphocytic leukemia, multiple myeloma, non-Hodgkin lymphoma, Hodgkin lymphoma, myeloproliferative neoplasms, and myelodysplastic syndrome. Well-documented differences exist in the prevalence, treatment experiences, and outcomes across races and ethnicities for most benign blood diseases,<sup>65,66</sup> and interest in observed disparities in malignancies of the blood is emerging.<sup>67,68</sup> Black women are disproportionately impacted by SCD and its complications, as well as by anemia (almost all forms), and they have poor outcomes associated with ancestrally linked disorders, such as G6PD.<sup>69,70</sup>

# Maternal morbidity and mortality

It is estimated that non-Hispanic Black women are three to almost four times more likely to die while pregnant or within 1 year postpartum than their non-Hispanic White and Latina counterparts.<sup>2</sup> The racial disparity in mortality persists at every education level<sup>2</sup> and has persisted or increased over time.<sup>71</sup> As detailed in the sections above, Black women have elevated prevalence rates of chronic conditions associated with higher risk of severe maternal morbidity and mortality.<sup>72</sup> Some of the leading causes of maternal morbidities resulting in pregnancy-associated death occur more in non-Hispanic Black women (e.g., hemorrhage, infection [sepsis], thrombotic pulmonary/other embolism, and pregnancy-associated hypertensive disorders).<sup>72</sup> However, changes in the prevalence of these risk factors do not fully account for the increasing trends in severe maternal morbidity<sup>73</sup> and subsequent mortality among non-Hispanic Black women over time.<sup>73</sup>

Examination of nonclinical factors, such as hospital quality<sup>74,75</sup> (the degree to which health services for individuals and populations increase the likelihood of desired health outcomes) and access to quality care, helps to explain some of the disparities in maternal mortality. Howell et al.<sup>74,75</sup> found that women from racial and ethnic minority groups give birth in lower quality hospitals and in hospitals with higher rates of severe maternal morbidity. Using a simulation model, they found that if non-Hispanic Black women gave birth at the same hospitals as non-Hispanic White women, the non-Hispanic Black severe maternal morbidity rate would decrease by 47.7%, from 4.2% to 2.9% (1.3 events per 100 deliveries per year).  $^{74,76-79}$  Qualitative research reveals that many non-Hispanic Black women giving birth in lowperforming hospitals experience poor patient-provider communication and difficulties in obtaining appropriate prenatal and postpartum care.74,75

Additionally, homicide is a leading cause of death during pregnancy and postpartum, yet it remains understudied. Typically, homicide is not captured in examinations of pregnancy-related deaths or maternal mortality. Wallace et al.<sup>80</sup> argue that failure to identify and address factors underlying pregnancy-associated homicide will perpetuate racial inequity in mortality during pregnancy and the postpartum period.

## **Mental Health**

National epidemiological surveillance systems that capture information on health risk behaviors and mental health care access—including suicide attempts/occurrence, depression, anxiety, and clinical encounters that record concerns associated with mental health and substance abuse—have notable limitations. Measurement of race and gender across mental health studies varies considerably, creating a dearth of longitudinal research on the nuances of the mental health status of Black women. Even if the experiences of Black women as a racial–gender subgroup are captured with sufficient statistical power to report stratified results of survey findings (Table 2), the results must be interpreted through the lens of the full scope of Black women's experiences in the United States.

Racial discrimination is a toxic "uncontrollable or unpredictable" stressor that is associated not only with poor physical health but also with psychological stress.<sup>76–78,81–85</sup> Chronic stressors reduce coping resources and increase vulnerability to mental health problems.<sup>76,85</sup> Non-Hispanic Blacks with higher levels of multiple stress measures are less likely to achieve intermediate or ideal levels of overall CV health.<sup>86</sup> Research suggests that chronic exposure to environmental stressors, such as racism, across the life span contributes to the weathering of the health of Black women, increasing their allostatic load and, consequently, compromising their reproductive health.<sup>76,77,81–85</sup> Allostatic load is a measure of the physiological dysregulation that results from cumulative chronic stress on the body.<sup>76,87</sup> It is a relevant measure for health disparities research because it can be utilized to assess racial/ethnic differences in biological responses to stressors and their relationship with adverse health outcomes.<sup>83</sup>

## Maternal mental health

Perceived stress from chronic experiences of discrimination has been found to be a significant predictor of poor birth outcomes.<sup>76</sup> Indeed, non-Hispanic Black women are twice as likely to have a low-birth weight infant than non-Hispanic White women.<sup>76</sup> Non-Hispanic Black women are at a disadvantage regarding the protective factor of the early initiation of prenatal care, with 67% participating in prenatal care in the first trimester compared with 77% of non-Hispanic White women and 81% of Asian women.<sup>76</sup> This is problematic, given that the delivery of perinatal mental health services is critical, particularly for non-Hispanic Black and Latina women because they experience higher rates of depression and anxiety during pregnancy and are at greater risk of poor pregnancy outcomes.<sup>76,77,81–84,88,89</sup> Perinatal depression has been linked to risks for adverse maternal and birth outcomes, including preeclampsia, gestational diabetes, preterm birth, and low birth weight.<sup>76,90–92</sup> Specifically, it is estimated that up to 28% of non-Hispanic Black women experience perinatal depression.<sup>89</sup>

#### Conclusions

The health of Black women is measured in their disproportionally poor health outcomes, but it is a result of a complex milieu of barriers to quality health care, racism, and stress associated with the distinct social experiences of Black womanhood in U.S. society. Black women are characterized by incredible resilience in the face of adversity and continue to experience improvements in health, even with the socioeconomic contexts that allow disparities to persist. Despite recent mandates by the National Institutes of Health (NIH) to enhance the inclusion of women and racial/ethnic groups that are underrepresented in biomedical research in all NIHfunded research projects,<sup>66</sup> Black women continue to be underrepresented,<sup>93–96</sup> and the resulting interventions may not reflect the unique needs of Black women. Moreover, there is a dearth of current and accessible data on Black women that examines the diversity of Black women (nativity, ethnicity, and country of ancestry). Demographic and health data at the intersection of race and gender are critical to understanding the trends and opportunities for intervention and prevention.

Racism and gender discrimination have profound impacts on the well-being of Black women. Evidence-based care models that are informed by equity and reproductive justice frameworks (reproductive rights as human rights)<sup>76,84</sup> need to be explored to address disparities throughout the life course, including the continuum of maternity care, and to ensure favorable outcomes for all women.<sup>79</sup> Interventions to enhance patient-health care provider interactions include raising awareness about the implicit biases that a provider may hold.<sup>97</sup> Black women have continued to make significant inroads in many disciplines yet remain one of few demographic groups that must advocate for themselves to receive consistent and high-quality care. We have outlined disparities in several health conditions and the dire mortality outcomes experienced by Black women. Health does not exist outside its social context. Without equity in social and economic conditions, health equity is unlikely to be achieved,<sup>98</sup> and one cost of health inequality has been the lives of Black women.

# Disclaimer

The views expressed in this article are those of the authors and do not necessarily represent the views of the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development; the National Heart, Lung, and Blood Institute; the National Institutes of Health; or the U.S. Department of Health and Human Services.

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