



The Toll of Racism on African American Mothers and Their Infants

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The overpolicing of African American communities in the United States has led to massive incarceration of Black men and boys and to grave concerns regarding widespread police brutality. In 2019, Black males were imprisoned at a rate 6 times higher than White males. The disparity is even greater for Black men aged 18 to 19 years old, for whom the rate is 12 times higher than White men of the same age.¹ When stopped by the police, Black people are nearly 4 times as likely to experience force than White people.² Black men face a lifetime risk of being killed by the police of 1 in 1000.³ These stark facts underline the psychological stress that contacts with police may produce in members of Black communities.

Elsewhere in *JAMA Network Open*, Hardeman et al⁴ explore other potential damaging outcomes associated with higher levels of police contact, specifically how the level of police contact is associated with the rate of low-birth-weight infants among pregnant people. The authors analyzed the data from more than 1000 medical records of White, US-born Black, and non-US-born Black pregnant people who gave birth at a large health system in Minneapolis, Minnesota, in 2016. They also measured police contacts at the census tract level where those individuals lived and categorized the number of contacts as high or low. They found that the odds of preterm birth for both White and US-born Black pregnant people were approximately twice as high in high-police contact census tracts as in census tracts with low numbers of contacts. However, they also showed, through geospatial analysis, that the proportion of Black residents was positively correlated with the number of reported police incidents throughout Minneapolis, making it much more likely that Black pregnant people lived in high-police contact census tracts. Their conclusion was that "Black pregnant people are more likely to be exposed to police than White pregnant people" because "predominantly Black neighborhoods had greater police contact than predominantly White neighborhoods" and that the stress of these "racialized police patterns ... may contribute to the racial disparity in preterm birth."⁴ In contrast to US-born Black pregnant people, non-US-born Black pregnant people, while also living in neighborhoods with high police contact, had rates of preterm birth that were low, even lower than those of White pregnant people.

This study exposes a number of pathways from structural racism to poorer health outcomes in Black communities—in this particular case, Black pregnant people and children. One such pathway is chronic psychological stress. We know from other studies that exposure to racism may cause chronic stress. For example, since 2011 the National Survey of Children's Health (NSCH), funded and directed by the Health Resources and Services Administration Bureau of Maternal and Child Health, has measured exposure to racism as an adverse childhood experience (ACE). While 1% of White parents answered yes to their child's exposure to racism, more than 10% of Black parents answered yes. ACEs are highly associated with chronic toxic stress, which changes the function and structure of early brain development through epigenetic changes in the neuroendocrine system. When researchers looked at the NSCH data, they found that exposure to racism was associated with increased rates of depression and anxiety, which in turn mediated racism's association with poorer health outcomes.⁵

Hardeman and colleagues⁴ also point out that overpolicing is likely associated with other forms of structural racism that may affect maternal health and lead to preterm births. To explore the potential causes of this disparity in preterm births based on race, the March of Dimes convened a work group in 2017 to 2019. The work group concluded that racism was the most probable upstream cause of this disparity, working through multiple pathways.⁶ One such pathway described in the report is through chronic stress due to (1) pervasive discrimination, including biased policing; (2)

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redlining, unfair lending practices, and other historical and current reasons for financial stress; and (3) the resultant segregation in high-stress neighborhoods. The report emphasized that stress is produced not only by incidents of bias or mistreatment but also by the constant vigilance needed to guard oneself for potential future encounters with discrimination. Similar to the children in the NSCH study, Black pregnant people living with the toxic stress of racism are hypothesized to have similar neuroendocrine dysfunction and epigenetic changes (as well as immune and inflammatory changes) that are associated with the rate of preterm births. In addition to chronic stress, the March of Dimes work group found many other downstream effects of structural and systematic racism, including exposure to environmental toxins, inadequate medical care, and unhealthy food and exercise, all of which may be more proximal factors that are negatively associated with the health of Black mothers and make preterm births more likely.⁶

The lived experience of racism in US-born Black pregnant people may explain several patterns of preterm births among different groups of Black pregnant people. The low incidence of preterm births seen in non-US-born Black pregnant people in the study by Hardeman et al⁴ may be explained by their lack of exposure to racism earlier in life, when they would have been more sensitive to the long-lasting impacts of neuroendocrine, epigenetic, and immune dysregulation. Conversely, the high rates of preterm birth seen among higher-income US-born Black pregnant people may be because even middle-class Black individuals commonly live in segregated neighborhoods, where they are exposed to the same racism-related stresses and poor resources as poorer Black individuals. It also may be caused by the wear and tear of chronic stress over the life course, known as weathering, due to having to continuously fight for fair treatment in education, the job market, and daily life. Being among only a few Black individuals at a high level in their professions may add additional psychological stress to their lives on an ongoing basis.⁶

The disparity in preterm rates between Black and White pregnant people is itself a critically important upstream cause of the stubbornly persistent and shameful increased infant mortality rate in Black infants. According to the US Centers for Disease Control and Prevention (CDC), in 2018, Black infants had 2.3 times the infant mortality rate as White infants (10.8 per 1000 vs 4.6 per 1000).⁷ This is actually somewhat higher than the disparity measured in the 1960s, although overall rates of infant mortality for all racial and ethnic groups have significantly decreased. The major cause of infant mortality for Black infants listed by the CDC is low birth weight and/or preterm birth, which are 4 times more likely to occur in Black families. Thus, racism and exposure to racism lead to a disparity in preterm births, which in turn leads to the persistent Black-White disparity in infant mortality.

Another of the top 5 causes of the racial disparity in infant mortality is maternal complications during childbirth, which are 3.4 times more likely to occur in Black pregnant people.⁷ Maternal complications, based on the downstream effects of racism on the health of Black pregnant people, are therefore an additional pathway through which racism likely increases the mortality of Black infants.

Most efforts in the United States to decrease infant mortality rates have focused on improvements in health care in the perinatal period. While increasing access to high-quality prenatal and neonatal care has dramatically decreased infant mortality over the last 50 years, a substantial disparity between Black and White preterm births and infant mortality rates has persisted and even increased. The majority of evidence, according to the March of Dimes report, leads to the conclusion that differences in traditional prenatal care do not explain the racial disparities seen.⁶ Ultimately, we will need to address the root cause of racism, in all its forms and across the life course, if we are going to reach the goal of equivalent low rates of infant mortality in Black and White infants. We must do this intentionally, and urgently, if we hope to become an equitable and just society.

ARTICLE INFORMATION

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