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# Systemic Racism in the US: Disproportionate African-American Maternal Mortality Rates

Connor Barry, Mackenzie Johnson, Jillian Karlicek

## Introduction

Black mothers in the United States have significantly higher mortality rates than all other American racial or ethnic groups, even when factors such as education, income, and overall health are controlled for. We considered whether life experiences of systemic racism contribute to poor maternal health for black women. Through literary analysis and an interview with a medical anthropologist, we found indications that higher incidences of maternal mortality are not due to genetic factors shared among African-American women. Rather, along with other cultural factors, continuous exposure to racism strains the body in ways that negatively impact maternal health. Our research highlights the often-misunderstood health outcomes of black mothers in the United States that results from a system of inequality.

### The Weathering Hypothesis

This theory first proposed by Arline Geronimus states that African American women age biologically faster than white women due to weathering of DNA. This result of a socioeconomic disadvantage leads to deteriorating health, such as damage to the cardiovascular or immune system.

### Why Are Babies Dying

This was a critical source of our research written by Dr. Sandra Lane. The book described several social factors including poverty, lack of traditional and medical education, inadequate housing, and the impact of incarceration all of which have an effect on maternal mortality, especially among the black population.

### Dr. Lane Interview

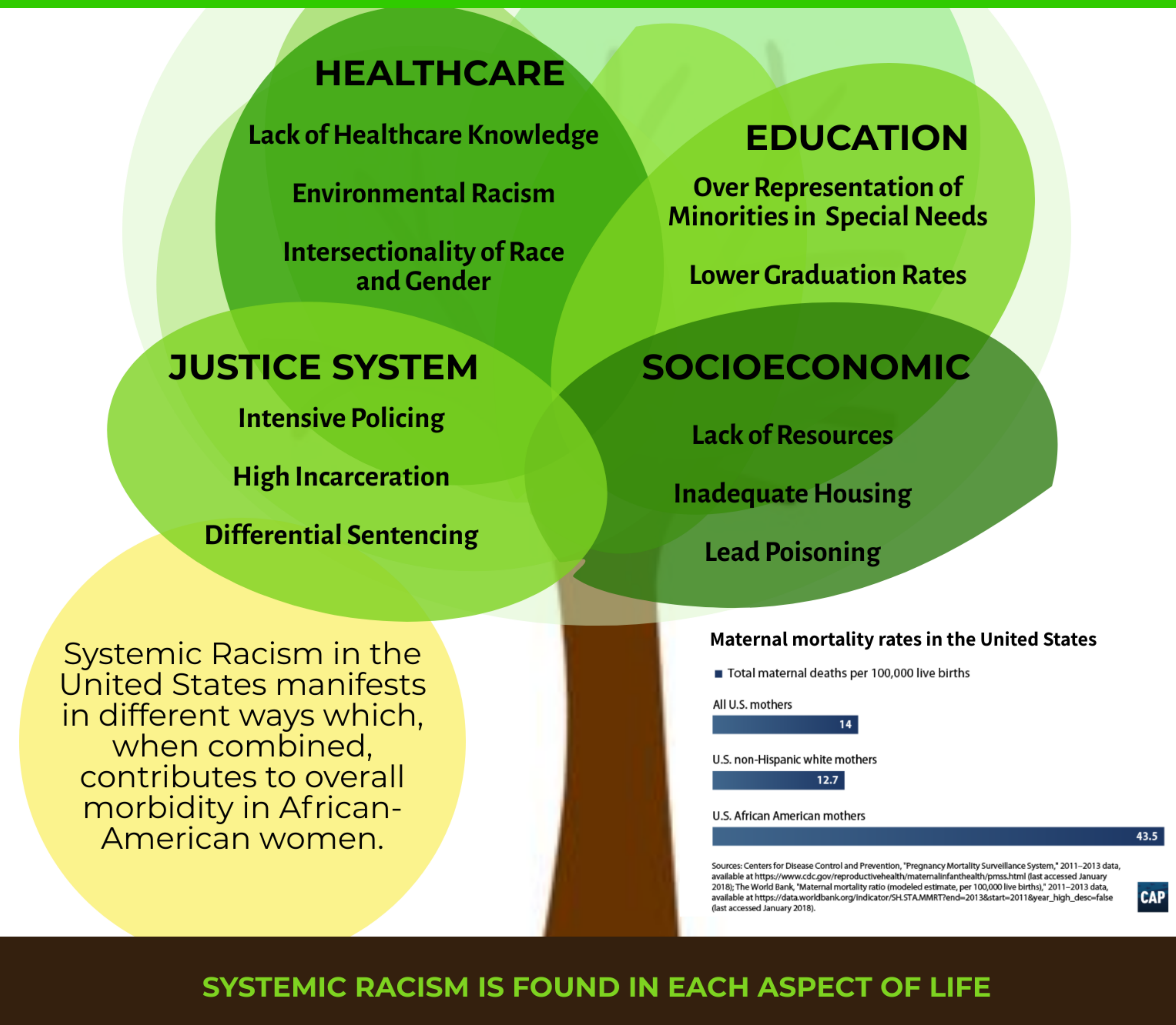
It was important to further our understanding of the complex, interconnected issue of maternal mortality due to biological and social factors in black women. To do this, we enlisted the help of an expert medical anthropologist at Syracuse University who expanded our scope of research to include the ACEs hypothesis and epigenetics.

### ACEs and Epigenetics

Although similar to the weathering hypothesis, both epigenetics and Adverse Childhood Experiences (ACEs), are more nuanced conditions. ACEs adds a new dimension as it examines how childhood trauma resulting from systemic racism can result in biological changes. In addition to being maladaptive to important body systems, the overexposure to stress can directly affect DNA, leading to the modification of gene expression, one example of epigenetic effects.

## Findings

- Due to chromosome weathering, African-American women show increased signs of aging compared to white women; ACEs in combination with epigenetics is the current explanation for this.
- Further developing the ACEs and epigenetic leads, the multifaceted nature of this question came to light as the social and cultural factors of systemic racism were analyzed. Even when controlling for social factors, however, there is still a disparity between the mortality of black women and their white counterparts.
- An example of the intersectionality of race and gender in the healthcare system is Serena Williams' childbirth when medical professionals ignored her complaints and previous medical history, which led to a near fatal complication during labor.



## Conclusion

- Even though it appears that overt racism has declined in recent decades, it's troubling that black health disadvantages persist, even worsening after the 1990s for African-American women. These health disparities, often overlooked or misunderstood, display how ingrained institutional racism is in our society.
- Regarding future research, it should aim to examine different aspects of systemic racism surrounding women's health, such as doctors' perceptions of African-American women and if epigenetic factors can be passed through ancestry. In order to expand our research, it would be necessary to conduct interviews with black mothers, doctors, and access medical records.

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