Structural racism and pandemic stressors associated with postpartum depression and anxiety among Black individuals

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The combined effects of systemic and interpersonal racism layered on top of negative experiences within the COVID-19 pandemic were associated with depression and anxiety among Black people in the postpartum period, according to a new study by researchers in The Intergenerational Exposome Program (IGNITE) of Children's Hospital of Philadelphia (CHOP) and the Perelman School of Medicine at the University of Pennsylvania. The findings were published today in *JAMA Psychiatry*.

"The COVID-19 pandemic has had a disproportionate impact on the Black community, in large part due to structural racism and its impact on the social determinants of health, and our study shows this impact extended to the effects on the postpartum period," said study first author Wanjiku F.M. Njoroge, MD, Medical Director of the Young Child Clinic, Associate Chair of Diversity, Equity, and Inclusion in the Department of Child and Adolescent Psychiatry and Behavioral Sciences, and PolicyLab Faculty at Children's Hospital of Philadelphia. "Not only does this research point to an urgent need for policies that address the pandemic's mental health effects on Black pregnant people, but it also highlights the need to follow the babies and toddlers of these people through early childhood to understand any potential impacts on their development and intervene where necessary."

The researchers sought to examine how the joint effects of structural and interpersonal racism, two endemic conditions, and the COVID-19 pandemic, an epidemic condition, contributed to postpartum mental health outcomes in Black individuals before and after birth. To do so, they analyzed data from a large birthing cohort participating in a longitudinal study related to the pandemic and perinatal health. Participants delivered in one of two urban hospitals within the University of Pennsylvania Health System in Philadelphia. The researchers looked at data from a total of 151 Black patients to understand the impacts of multiple forms of racism on their postpartum mental health.

Participants answered a series of questions about their COVID-19 pandemic experiences, interpersonal racism, and mental health status. The researchers also used geocoding of zip codes based on census data as well as examinations of electronic medical record data to assess factors like income inequality, home ownership, education level and insurance type. Additionally, they mapped participants based on Home Owners’ Loan Corporation (HOLC) redlining boundaries and assigned participants a risk grade from A (minimal) to D (hazardous) based on their street address.

The researchers found that nearly all participants (91%) expressed at least one significant pregnancy-related COVID-19 worry, and a large majority
(81%) reported at least one moderate concern related to delivery and the postpartum period. A total of 44 participants (29%) screened positive for postpartum depression.

In their analysis, the researchers found that worse experiences during the COVID-19 pandemic, reports of interpersonal racism, and living in an area of greater historical redlining were all uniquely associated with postpartum depression. Additionally, the association between racism and poor postpartum mental health was magnified with worse COVID-19 experiences. Indeed, those with more negative COVID-19 experiences combined with higher interpersonal and systemic general racism scores were at the highest risk of meeting screening criteria for postpartum depression and anxiety.

"These findings underscore that the key to better serving Black patients is to appreciate the cascading effect structural racism has on all aspects of life, including pregnancy," said co-author Michal A. Elovitz, MD, co-Principal Investigator of the primary study and the Hilarie L. Morgan and Mitchell L Morgan President's Distinguished Professor in Women's Health in the Perelman School of Medicine at Penn. "Importantly, we, as a medical community, have failed to adequately address and attend to mental health issues among birthing individuals. This study emphasizes an even additional need to focus on the mental health among Black birthing people. We are hopeful that there will be increased efforts—both clinically and in research—to address the impact of structural racism on the mental and physical well-being of Black individuals."


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