

Exploring the Synergistic Impact of Racism and COVID-19 Related Stress on Hypertensive Outcomes in Young African Americans



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Abstract

Hypertension is recognized among public health researchers as a critical concern for the African American community. While many studies and interventions have been initiated to address hypertension in this population, only a few focus on young African Americans. An increasing number of young African Americans are experiencing adverse cardiovascular health outcomes, making it a critical need to address this research gap. The COVID-19 pandemic presents enormous social stressors that have disproportionately impacted young African Americans because of existing systemic oppression and structural racism. In this article, we explore a potentially emerging pathway that may link the synergistic consequences of racism and the COVID-19 pandemic to severe stress and thus the early onset of hypertension among young African Americans.

Racism, Stress, and Hypertension: An Established Causal Pathway

Researchers across a broad scope of disciplines widely recognize that racism impacts social determinants of health. The dark history of structural racism and systemic inequality in the United States has negatively impacted the lives of people of color for centuries. For African Americans, racism has manifested in uniquely traumatic ways through slavery, the Jim Crow era, mass incarceration, police brutality, microaggressions, implicit bias, race-fueled violence, and much more [1,2]. The consequences of structural racism have led to many African Americans with limited access to goods, services, healthcare, and more when compared to other Americans, as generations of African Americans have been marginalized and disenfranchised at the hands of White supremacy [3,4]. This pervasive inequality has caused limited occupational opportunity, educational growth, and socioeconomic mobility for many African Americans. Racism affects more than just stress levels; it is a predictor of diminished life quality for African Americans in the United States [5]. The way race-related stress impacts the health status of African Americans is noted in research, public health practice, and justice work.

Cardiovascular disease is a leading cause of premature death among African Americans, causing over 90,000 African American deaths annually [6]. African Americans have historically faced the greatest burden of myocardial infarction, heart failure, stroke, and other cardiovascular

morbidity and mortality events in the United States [7]. Nearly 50% of African Americans have reported having cardiovascular disease [6]; specifically, hypertension is one of the most common cardiovascular conditions among African Americans, impacting more than 40% of non-Hispanic African American men and women [8]. The pathway between racism-related stress and hypertension has been established [9]. Incidences of hypertension are widely accepted to be medically linked to stress, as stress leads to repeated blood pressure elevations paired with stimulation of the nervous system, which produces large amounts of hormones that increase blood pressure [10,11]. For many African Americans, stress arising from perceived discrimination and acts of racism is experienced in everyday life [12,13]. Nearly 75% of African Americans report experiencing daily racial discrimination [14], and many report that these daily discriminatory experiences lead to mental health conditions such as anxiety and mood disorders [15,16]. This concerning statistic confirms the serious need for continued work to dismantle the relationship between racism, stress, and heart health complications such as hypertension for African Americans across generations.

“Young People Problems”: Hypertension a Growing Concern for Young African Americans

While there is an abundance of literature that confirms the pathway between racism, stress, and hypertension, adolescents and adults younger than 30 are typically not the target population of this research. The typical onset for

hypertension is loosely defined as around 55 years old; however, the onset of hypertension is younger among African Americans, with a third of African Americans ages 18-44 reporting a hypertension diagnosis [17,18]. Additionally, studies have shown that African American youth have a higher prevalence of cardiovascular disease risk factors leading to an accelerated rate of disease progression compared to other groups [19]. Risk-perception studies indicate that many young African Americans are unaware of the role that family history and stress play in their risk of developing heart-related issues in the future [20]. Given the unprecedented levels of sociopolitical chaos that have defined the past two years in the United States, levels of stress, depression, and anxiety may be at an all-time high for young African Americans. For example, the violent, emotional climax of the Black Lives Matter movement that occurred in the wake of the killing of George Floyd has been reported to have had cross-cutting mental health impacts on young people of color [21]. COVID-19 has been particularly devastating in African American communities, as African Americans were three times more likely to be hospitalized and two times more likely to die from COVID-19 related complications when compared to their White counterparts [21]. The widespread impact of COVID-19 on African Americans justifies a potential increase in stress and thus an increased incidence of heart health issues among young African Americans. This underscores the need for more in-depth research that focuses on stress as a hypertensive risk factor for young African Americans.

How Racial Trauma Manifests in Young African Americans in the Age of COVID-19

Racism may manifest differently for younger generations compared to older generations, who have historically been the focus of racism-related stress studies. National efforts to foster racial equality have been developed within the lifetime of older African Americans, who may have endured the horrific racial trauma that defined the 20th century more than the younger African American generation. For example, many violent, overtly racist practices such as lynching, Jim Crow laws, and segregation have all been outlawed within the past century. However, as evidenced by the COVID-19 pandemic, the consequences of the oppression of people of color are “alive and well” and deeply impact African Americans cross-generationally. Even in childhood, racism is a core determinant of stress in African Americans; a recent study found that racism is a major source of childhood trauma for African Americans in the 21st century [22].

Experiences of racism while navigating critical life environments such as K-12 education, university, and early career workplaces are significant sources of anxiety, self-esteem issues, imposter syndrome, and other mental health conditions for African American adolescents and young adults.

The degree to which COVID-19-related stress has impacted the health of young African Americans is under-researched. A multitude of inequality-related adversities has affected young African Americans throughout the pandemic. For example, young African Americans are more likely to have faced the grief of losing a loved one, such as a parent or a grandparent, to COVID-19 complications when compared to their counterparts. Moreover, adolescent African Americans are more likely to have become orphans because of losing their primary guardian or caregiver to COVID-19 [23]. Young African American adults are more likely to work occupations on the front lines of the pandemic, leading to an inability to work from home and thus increased exposure to COVID-19 compared to other groups [24]. Socioeconomic inequities may have led to adolescent African Americans facing greater amounts of isolation from peers due to poor internet access or lack of digital resources necessary to stay in touch with friends. These inequities also reveal that young African Americans are less likely to have access to mental health care to help cope with race or pandemic-related stressors [25, 26]. As discussed previously, stress is a major determinant of cardiovascular disease. The unique trauma experienced by young African Americans during the COVID-19 pandemic emphasizes the plausibility of a connection between these incredible stressors and the onset of hypertension.

Improving the Outlook for Hypertension in the Next Generation of African Americans

Action to prevent increasing stress-linked heart diseases is critical for improving health outcomes and reducing disparities. Implementing widely accessible, comprehensive programs aimed at African Americans younger than thirty to provide skills for risk perception, health literacy, resiliency, coping, and stress management are essential preliminary interventions [27-30]. Collaborating with non-profit organizations, local health departments, hospital systems, schools, and other community partners increases potential impact and ensures young African Americans have resources to protect their health from the synergistic stress of racism and the COVID-19 pandemic [31]. To inform these programs, younger African Americans must be prioritized as a study

population in large research studies on cardiovascular health and stress. Finally, sweeping policy reform that addresses and dismantles structural racism and systemic inequality is critical to improving lives and restoring justice to African Americans [32]. These reforms may be delivered as education system improvement, affordable housing, job opportunities, financial reparations, cultural competence training for medical providers, and other justice initiatives [33,34]. The COVID-19 pandemic has brought significant distress to communities nationwide and should be used as a call to action for public health professionals to focus on the long-term health needs of young African Americans. May we use this moment as an opportunity to stop the impact of racism in its tracks and break generational chains of health inequity for all African Americans.

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