The Impact of Stress on Health Inequities in the Black Population



WHAT ARE DIFFERENT FORMS OF STRESS?

Stress is a common factor in everyone's life. The World Health Organization defines <u>stress</u> as a state of worry or mental tension caused by a difficult situation. While stress can be a normal coping response to daily events, <u>long-term stress</u> can devastate one's overall health and wellbeing. Because of this, it is important to understand some of the different forms of stress.

- <u>Acute stress</u>: It is the most common form of stress. This form of short-term stress occurs from simple demands or expectations of the near future such as running late for an appointment or meeting.
- <u>Chronic stress</u>: It is a long-term form of stress stemming from prolonged feelings of despair or hopelessness. <u>Chronic stress</u> can lead to aches, pains, insomnia and unfocused thinking. Discrimination, neighborhood stress and environmental stress are chronic stressors that are linked with health disparities.
- <u>Cumulative stress</u>: It is one's exposure to chronic stress across multiple domains or life situations.
 For example, financial hardship would be considered one domain of chronic stress, but having financial hardship and relationship problems would be the experience of chronic stress across multiple domains.
- Environmental stress: It occurs from a person's negative psychological response to an environmental stimulus such as air pollution, noise, violence or bad weather.
- Acculturative stress: It refers to stress that occurs when someone experiences conflicts or anxiety from trying to adapt to a new culture of the host society. This type of stress is strongly associated with substance dependence and anxiety disorders.



Did you know the workplace is the number 1 cause of stress, influencing roughly <u>120,000</u> <u>deaths</u> each year in the United States (U.S.)?

WHAT ARE SOME CAUSES OF STRESS?

Many things can cause stress, and one may experience stress from both positive and negative events.

Some common examples include:

- Moving to a new house or city
- Losing a loved one
- Having financial problems
- Getting married or divorced
- Facing racism or discrimination
- Having a baby
- Studying for a big test
- Losing a job
- Working in a toxic job environment
- Working under dangerous conditions
- Caring for a sick family member
- Experiencing health complications
- Living in a pandemic
- Being in a natural disaster

WHICH SOCIAL DETERMINANTS CAN BE LINKED TO STRESS?

Social determinants of health (SDoH) are environmental conditions where people are born, live, learn, work, play, worship and age that influence one's health and quality of health. SDOH cause stress in varying ways, resulting in poor health outcomes and behaviors among populations. Some of these determinants include:

- Food insecurity: It is defined by limited or uncertain access to sufficient, nutritious food for an active, healthy life. It is directly associated with depression, anxiety and stress, which are all getting worse in the U.S.
- Health insurance costs: The cost of health insurance is a stressor for two-thirds of Americans with uninsured Americans reporting more stress than insured Americans. People who are uninsured or underinsured are more than twice as likely to not seek needed care because of costs, increasing their chances of experiencing health complications.
- Housing insecurity: This involves several challenges such as having trouble paying rent, overcrowding, moving frequently or spending the majority of household income on housing. These stressors are burdensome on everyone, especially children who are more likely to have chronic illnesses and poor physical health when having to move frequently.
- <u>Poor environment</u>: Environmental conditions such as air pollution, violence and poor access to healthy foods are associated with childhood asthma, hypertension, substance abuse, diabetes and depression. Similarly, a person's <u>zip code</u> strongly determines their life span.

- Poverty: Living in poverty increases the likelihood of experiencing poor nutrition, worse physical health, trauma, violence, crime and lower social status, while longterm poverty and family stress are strongly linked with less physical mobility and cognitive functioning at older ages.
- **Racism** and/or discrimination: Considered a public health crisis, racism can affect one's physical, emotional and mental health, causing those affected to release stress hormones and biological responses that can cause premature aging, chronic diseases and poor mental health. This can occur from experiencing racism directly or witnessing it, even through the media. While experiencing racism may invoke stress and its consequences based on a person's race or ethnicity, experiencing discrimination (due to age, gender, sexual orientation and several other factors) can also cause the same stress responses and negative health outcomes in those experiencing this ill treatment.
- Unemployment: People who are unemployed have higher rates of poor health and excess mortality compared to those who are employed.
 Unemployment also damages the person's psychological health, but such damage is reversed upon reemployment in many cases. Moreover, unemployed people are more likely to describe their health as generally fair or poor.

Did you know that 83% of U.S. workers suffer from <u>work-related stress</u>, and more than half of them report that work stress impacts their home life?

WHICH HEALTH OUTCOMES AND BEHAVIORS CAN BE LINKED TO STRESS?

Stress influences the development or worsening of many health outcomes and/or behaviors and is a contributing factor to the <u>leading causes of death</u> in the U.S. including but not limited to — cancer, heart disease, diabetes, stroke, accidental injuries, respiratory diseases and cirrhosis of the liver. The relationships between stress and health outcomes/behaviors are detailed below:

POOR HEALTH OUTCOMES LINKED TO STRESS

- Adverse birth outcomes: Chronic stress is an underlying cause of <u>infant mortality</u> and pre-term births. Specifically, maternal prenatal stress is associated with <u>several birth outcomes</u> including preeclampsia, low birth weight, neonatal morbidity, premature rupture of membranes (PROM) and even long-term offspring psychiatric disease.
- <u>Cancer</u>: An association between stress and cancer is not clear. Several studies investigating prostate cancer, breast cancer and lung cancer did not find a direct link between stress and these cancers. Even when an association was found in such studies, the association may have been linked to unhealthy behaviors in the study participants such as smoking, eating unhealthy foods and consuming alcohol.
- <u>Diabetes</u>: Stress can directly raise the glucose levels of people with type 2 diabetes, while also making it more difficult to manage the illness. Stress can also increase the likelihood of unhealthy behaviors that can contribute to developing diabetes.
- Heart disease and stroke: Stress can influence hypertension and unhealthy behaviors that are linked to an increased risk for heart disease and stroke including smoking, overeating, eating unhealthy foods, being physically inactive, being overweight or obese and not taking prescribed medications.

- Hypertension: Experiencing stress often can cause hypertension or one's blood pressure to rise above normal through repeated blood pressure elevations.
 Psychosocial stress, which can be defined as a potential social threat or change in social situations, can also contribute to the development or worsening of hypertension.
- Mental health disorders: Stress can cause or exacerbate many mental health disorders including depression, anxiety, premature dementia, posttraumatic stress disorder and sleep disorders.
- Obesity: Stress can cause people to overindulge in foods that are high in calories, fat and sugar. Experiencing stress also triggers the body's release of dopamine that increases a person's desire to eat food. Stress can also decrease physical activity levels and shorten sleep cycles, influencing obesity.

UNHEALTHY BEHAVIORS LINKED TO STRESS

- <u>Cigarette smoking</u>: Experiencing high stress is a significant risk factor for cigarette smoking. Cigarette smoking increases a person's chances of developing <u>many chronic diseases</u> including heart disease, diabetes and many cancers.
- Physical inactivity: People who are stressed are less likely to be physically active. Stress is also associated with declining physical function and obesity. Conversely, those who engage in higher physical activity levels experience less stress and negative affect compared to those engaging in little to no exercise.

- Poor dietary habits: People are more likely to seek high-calorie, high fat foods when stressed, and a person's body is more likely to store more fat when stressed. High perceived stress is also linked to a worse diet, a lower consumption of fruit, a greater intake of snack foods and binge eating. Obviously, these poor dietary habits can cause many chronic conditions such as obesity, diabetes and cancer.
- Poor social and emotional behavior: People
 with chronic stress are more likely to be
 irritable, avoid other people, emotionally
 withdraw from people they know and
 experience insomnia or sleepiness.
- Substance abuse or misuse: Acute and chronic stressors increase a person's likelihood of abusing addictive substances such as alcohol, opiates and marijuana. Abusing such substances can also lead to additional stress and a range of health complications such as mental disorders and heart disease.



Learn effective ways to manage daily stress by visiting this <u>link</u>.

WHICH DISPARITIES AMONG BLACKS CAN BE LINKED TO STRESS?

Compared to most other racial and ethnic groups in the U.S.:

- Blacks experience <u>stressful events</u> more frequently.
- Except for American Indian/Alaska Natives, Blacks are most likely to live in poverty.
- Blacks have the <u>highest unemployment rates</u>.
- Blacks are more likely to <u>live in neighborhoods</u> with poor schools, limited access to quality health care, inadequate jobs and unhealthy social networks.
- Blacks are 2-3 times more likely to experience consistent <u>food insecurity</u>.
- Blacks experience <u>housing insecurity</u> and <u>homelessness</u> at higher rates.
- Blacks are most likely to prepare for insults during health care visits.
- Blacks have experienced racism across generations, and they are reported to experience the <u>most discrimination</u>.
- Blacks suffer the worst rates for many <u>chronic conditions</u> including heart disease, stroke, obesity, diabetes and <u>several cancers</u>.
- Blacks account for more than 90% of those living with <u>sickle cell disease</u>.
- Blacks are more likely to encounter <u>police brutality</u> and <u>worse sentencing</u> for the same crimes.

HOW RACISM CAUSES STRESS AND HEALTH COMPLICATIONS

Racism can be defined as the beliefs, attitudes, institutional arrangements and acts that tend to denigrate individuals or groups because of phenotypic characteristics or ethnic group affiliation. Blacks have experienced racism in the U.S. for centuries, causing health disparities, economic disadvantages, segregation and trauma across generations.

Blacks experience high levels of racism or racial discrimination and are more likely than whites to express chronic inflammation in their bodies. This results in higher levels of premature aging and chronic diseases from the repeated release of stress hormones over time.

Stress from racism can cause a <u>multitude of health</u> <u>complications and social challenges including</u> but not limited to:

- Anxiety
- Depression
- Eating disorders
- Heart disease
- High blood pressure
- Poor academic performance
- Poor social and spiritual well-being
- · Post traumatic stress disorder
- Psychological distress
- Substance abuse
- Violence

<u>Structural racism</u> can be defined as forms of racism that are deeply embedded within laws, systems, written and unwritten policies, practices and beliefs that produce and condone widespread unfair treatment and oppression towards people of color.

Examples of systemic racism include:

- Biased policing techniques
- Environmental injustices
- Residential segregation
- Unfair lending practices
- Unfair sentencing practices
- Voter suppression policies

The schematic below, taken from this <u>study</u>, illustrates how systematic racism causes health complications and racial disparities:

Systematic Racism



Lack of access to resources and opportunities such as economic disadvantages and disenfranchisement



Exposure to health harming conditions such as chronic stress and housing insecurity



Poor biological responses such as premature aging, inflammation and immune system dysfunction

BRIEF SUMMARY AND OVERVIEW

- Stress occurs in many forms including acute, chronic, cumulative, environmental and acculturative.
- Social determinants of health create stressful conditions and make people more prone to engaging in unhealthy behaviors, increasing their chances of experiencing chronic conditions.
- Nearly every chronic condition or illness is negatively impacted by stress.
- Stress is linked to unhealthy behaviors such as cigarette smoking, physical inactivity, substance abuse and social isolation.
- Blacks experience stressful events more frequently than any other racial and ethnic group in the U.S.
- * Blacks possess many health disparities that are associated with or worsened by stressful conditions such as poverty, unemployment, housing insecurity and stroke mortality.
- Blacks experience high levels of stress from racism and discrimination, resulting in chronic inflammation, premature aging and immune system dysfunction.

WHAT POLICIES AND STRATEGIES CAN BE IMPLEMENTED TO REDUCE STRESS AND HEALTH INEQUITIES IN THE BLACK POPULATION?

The Grand Rapids African American Health Institute (GRAAHI) is a nonprofit organization focused on eradicating health disparities for Blacks by influencing health policy and practice through community engagement, advocacy, research and education. To assist this mission, GRAAHI recommends policymakers to implement, support and/or enforce the following 20 policy recommendations to reduce stress and health inequities within six life domains: health care, housing, income, justice system, mental health and nutrition/physical activity.

Health Care Recommendations

- <u>Increase health insurance coverage</u> by making it more affordable by improving Medicaid outreach and enrollment strategies and expanding eligibility to more low-income adults, especially for Blacks who possess lower coverage rates than whites.
- Advocate for Congress to pass the Black Maternal Health Momnibus Act that proposes to achieve the following: improve maternity care for racial and ethnic groups, extend postpartum care, diversify the workforce and improve data collection.
- <u>Support the "Sickle Cell Disease Treatment Centers Act of 2022"</u> that would fund treatment centers for people with sickle cell disease, while also funding hospitals that provide specialized care for patients with this disease.
- Implement strategies from the National Action Plan to Improve Health Literacy from the
 U.S Department of Health and Human Services while also increasing support for local
 financial education programs to improve financial literacy. Improving health and financial
 literacy would benefit all populations and reduce racial and ethnic disparities.
- <u>Institute free preschool options or child care vouchers</u> to all low or moderate income families to address the soaring day care costs in the U.S. This financial support would benefit many Americans who are struggling to buy the necessities for their families.

Housing Recommendations

- <u>Increase access to down payment assistance and affordable credit</u> to assist Blacks with purchasing homes. With <u>only 44% of Blacks</u> owning homes in the U.S. compared to 73% of whites, this legislation could help close that racial gap.
- <u>Increase the number of affordable housing options</u> to influence more homeowners in the U.S., especially with the elevated house prices and interest rates. This could improve Black homeownership rates that declined in recent years.
- Improve access to home and community based services to prevent and/or reduce homelessness rates, especially among veterans, people with disabilities and marginalized populations. Even though Blacks account for roughly 13% of the U.S. population, they represent more than 50% of homeless families with children.

Income Recommendations

- <u>Support and expand the Earned Income Tax Credit (EITC)</u> to increase after-tax incomes and reduce poverty. Such legislation would support Blacks who experience high rates of poverty in the U.S.
- Encourage more states to increase their minimum wage above \$10. Currently, 22 states will increase their minimum wage above \$10 on January 1st of 2025. If more states follow suit, this could help reduce the income gap between Blacks and whites with Blacks being the highest share of minimum wage earners in the U.S.
- <u>Establish a national trust fund</u>, resourced through a small levy on large companies, to
 create or support <u>job training and pipeline programs</u> that are connected to high-quality
 jobs, benefiting Black workers who are usually trapped in low-earning occupations.

Justice System Recommendations

- <u>Provide federal protections for Blacks who experience hate crimes</u> by enforcing and/or
 establishing an anti-Black hate crime bill. Blacks continue to experience the <u>highest rates</u>
 of hate crimes and racism in the U.S.
- Reform reentry policies to ensure people have a chance to earn a livable wage upon reentering society from the criminal justice system. This would also involve the reformation of sentencing practices that work against Black citizens the most.
- <u>Enforce employment anti-discrimination laws</u> by increasing the Equal Employment Opportunity Commission's budget that was significantly cut since the 1980s. This will help combat systemic racism within corporate America that hinders many Blacks from progressing forward with their careers.

Mental Health Recommendations

- Encourage more states to pass parity laws to enforce the Mental Health Parity and Addiction Equity Act, increasing the scope and enforcement of this act that ensures health plans provide equity coverage of mental health and substance use disorder treatment. Currently, 14 states have passed parity laws to enforce this legislation.
- <u>Increase the diversity of mental health professionals to address mental health inequities</u> by diversifying the educational pipeline and implementing strategies to improve worker recruitment and retention in organizations, especially among Black mental health professionals who represent less than 5% of most mental health professions in the U.S.
- Increase funding and research focused on the mental health challenges facing Black youth including racism, while also providing effective solutions and resources to providers, teachers and others who interact with Black youth frequently. This is imperative with the <u>suicide rate among Black youth</u> ages 10-17 increasing by 144% from 2007 to 2020 in the U.S.

Nutrition and Physical Activity Recommendations

- Expand eligibility and administration of the Supplemental Nutrition Assistance Program (SNAP) to increase access to affordable, nutritious foods, especially for Black families who have high poverty rates and are more likely to live in food deserts than other racial and ethnic groups.
- <u>Increase access to healthy foods</u> in community settings and stores through stable
 availability, access, affordability and utilization practices while ensuring the foods align
 with cultural, social and dietary preferences, especially in Black communities that
 experience high levels of <u>food insecurity</u>.
- <u>Establish built environment policies</u> to promote physical activity behaviors, including a
 complete streets policy to support walking and biking infrastructure for any means of
 transportation. These policies would support Blacks who are more likely to live in
 neighborhoods with poor sidewalks and streets.

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