Higher levels of perceived racism linked to increased risk of heart disease in Black women

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Self-reported interpersonal racism in employment, housing and interactions with the police was associated with a 26% higher risk of

coronary heart disease among Black women, according to preliminary research presented at the American Heart Association's Epidemiology, Prevention, Lifestyle & Cardiometabolic Health Scientific Sessions 2023. The meeting is being held in Boston, February 28-March 3, 2023, and offers the latest science on population-based health and wellness and implications for lifestyle and cardiometabolic health.

"Many Black adults in the U.S. are already at higher risk of developing heart disease due to high blood pressure or Type 2 diabetes," said Shanshan Sheehy, Sc.D., lead author of the study and an assistant professor at the Slone Epidemiology Center at Boston University and Boston University's Chobanian & Avedisian School of Medicine. "Current evidence shows that racism may act as a chronic stressor in the human body, and chronic stress may lead to high blood pressure, which increases the risk of heart attack and stroke."

Researchers evaluated data for approximately 48,000 individuals enrolled in the Black Women's Health Study, the largest follow-up study on the health of Black women in the U.S. They reviewed data gathered from 1997, two years after the Black Women's Health Study began, through 2019 to investigate whether self-perceived interpersonal racism was associated with an increased risk of coronary heart disease. In 1997, the age range of participants in the study was 22-72 years old and by 2019, the age range was 40-90 years old. All participants were free of cardiovascular disease and cancer in 1997; during the 22-year follow-up period, 1,947 women developed coronary heart disease.

In 1997, the participants answered five questions about their experiences related to interpersonal racism in their everyday activities, such as "How often do people act as if they think you are dishonest?" They also answered three questions (for a total of eight) that asked "Have you ever been treated unfairly due to your race in any of the following circumstances?"—employment (hiring, promotion, firing), housing

(renting, buying, mortgage) or in interactions with police (stopped, searched, threatened).

The researchers calculated a score for self-perceived interpersonal racism in everyday life by averaging participants' responses to the first set of five questions and divided the participants into quartiles of the score; this analysis found no association with reported experiences of racism in everyday life and increased risk of CHD.

The researchers also calculated a perceived interpersonal racism score for interactions that involved jobs, housing and police interactions by adding up the positive responses to those three additional questions. The self-perceived interpersonal racism scores ranged from 0 (no to all three questions) to 3 (yes to all three questions). The researchers' analysis of perceived interpersonal racism scores for interactions that involved jobs, housing and police found that women who reported experiencing racism in all three categories had an estimated 26% higher risk of heart disease relative to those who answered no to all three questions.

"Structural racism is real—on the job, in educational circumstances and in interactions with the criminal justice system," said Michelle A. Albert, M.D., M.P.H., FAHA. Albert is president of the American Heart Association, professor of medicine at the University of California at San Francisco (UCSF), Admissions Dean for UCSF Medical School and an author on the study. "Now we have hard data linking it to cardiovascular outcomes, which means that we as a society need to work on the things that create the barriers that perpetuate structural racism."

The study's limitations include that the investigation was limited to self-perceived interpersonal racism, which is subjective by definition and may reflect different perceptions of levels of actual racism for each individual, and this information was collected from study participants only once. Also, despite efforts to adjust the findings based on a

comprehensive list of additional factors—age, neighborhood socioeconomic status, education level, body mass index, geographic region, physical activity, smoking, history of diabetes and history of hypertension—the study is observational in nature and may still have some unmeasured factors or other elements that may influence the results that were not included, Sheehy said.

"Future research is needed to examine the impacts of structural racism on cardiovascular health," Sheehy said, "as well as to evaluate the joint impacts of perceived interpersonal racism and structural racism."

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