Does work-related stress compromise cardiovascular health?

NOVEMBER 6, 2024 - In a large multi-ethnic group of adults in the United States without cardiovascular disease, those with work-related stress were more likely to have unfavorable measures of cardiovascular health. The findings are published in the Journal of the American Heart Association.

For the analysis, investigators assessed data collected between 2000 and 2002 for 3,579 community-based men and women aged 45–84 years enrolled in the Multi-Ethnic Study of Atherosclerosis. Cardiovascular health was determined based on seven metrics—smoking, physical activity, body mass index, diet, total cholesterol, blood pressure, and blood glucose—with each metric contributing zero points, one point, or two points if in the poor, intermediate, or ideal range, respectively, for a range of 0–14 points.

Work-related stress, which was assessed through a questionnaire, was reported by 20% of participants. After adjusting for potentially influencing factors, individuals with work-related stress, had 25% and 27% lower odds of having average (9–10 points) and optimal (11–14 points) cardiovascular health scores, respectively, compared with individuals without work-related stress.

"To address the public health issue of work-related stress and its detrimental effects on cardiovascular health, future research should prioritize the use of longitudinal studies to identify the mechanisms underlying this association," said first author Oluseye Ogunmoroti, MD, MPH, of Emory University and senior author Erin Michos, MD, MHS, of Johns Hopkins University. "Additionally, conducting thorough workplace intervention studies is essential for the development and implementation of effective stress management strategies that can enhance employee well-being and improve cardiovascular health."

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