

STRESS-RELATED BEHAVIOR AND CVD

Psychologically-distressed individuals are at increased risk of cardiovascular disease (CVD) according to a study by researchers at University College London, UK. This association is likely to be the result of behaviors related to stress, such as smoking and lack of exercise.

There is substantial evidence for a link between stress and CVD “although the intermediate mechanisms remain unclear, which prompted us to examine these issues further,” says Mark Hamer, who led the research. The investigators wanted to determine whether stress-related behavioral and pathophysiological changes contribute to CVD risk and if so, to what extent.

Data on 6,576 adults without evident CVD were drawn from the Scottish Health Survey. The fact that the sample is representative of the population is one of the main strengths of the study, says Dr Hamer, and “has the advantage of being able to generalize the findings to the wider community”. All participants completed the 12-item General Health Questionnaire (GHQ-12), and provided information about smoking, alcohol intake, and physical activity. Approximately 15% of participants were classified as having psychological distress.

The investigators found that not only was psychological distress associated with an increased relative risk of CVD events, but that the higher an individual's GHQ-12 score was, and therefore the more severe their stress level, the greater the risk. Analysis of variance revealed that behavioral factors were more likely to be causative of this increased risk than were pathophysiological variables.

This study emphasizes the need for widespread preventative strategies to control unhealthy behaviors associated with stress. Future trials examining the effects of smoking cessation and exercise in patients with stress will be fundamental to progress in this area of research.

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