Medical Xpress

Depression, anxiety spur poor health habits, damaging heart and blood vessels

December 15 2008

Anyone will tell you that stress is bad for the heart. Many people also know about the toxic effects of anxiety and depression. But how exactly do these negative emotions cripple the cardiovascular system -- and what can be done about it?

New research published in the December 16/23, 2008, issue of the *Journal of the American College of Cardiology* (JACC) offers some answers. It shows that many people who experience psychological distress also slip into poor health habits, particularly smoking and physical inactivity. Over several years, these two factors alone may account for nearly two-thirds of the risk of heart attack and other cardiovascular illnesses in people with depression and anxiety.

"Psychological distress is a growing problem," said Mark Hamer, Ph.D., a senior research fellow at University College London, UK. "It's very important that physicians try to identify psychological distress, but it's also important to look at the behaviors and the risk factors that are associated with it."

Previous studies have established the link between psychological distress and heart disease, but so far there is insufficient evidence to show that treating depression and anxiety can reduce the risk of heart attack and death. The new research findings suggest a broader approach may be necessary.

"Treating psychological factors on their own might not be the best way,"

Dr. Hamer said. "We're suggesting that you might have to intervene in the more intermediate pathways, which is the behavior, in addition to trying to treat the psychological problems."

For the new study, researchers recruited 6,576 men and women who were participating in the Scottish Health Survey, a population-based study involving a typical group of people living in Scotland. At the beginning of the study, participants completed a 12-item standardized questionnaire designed to measure their general happiness, symptoms of depression or anxiety, and any recent sleep disturbances. Those with a score of 4 or more—approximately 15 percent of those participating in the study—were considered to be suffering from psychological distress.

At the same time a nurse took a blood sample that was later tested for common physical risk factors for heart disease, such as cholesterol and C-reactive protein (CRP), a marker of arterial inflammation. Researchers also collected information on height, weight, physical activity, alcohol intake and smoking, and had access to each participant's medical history, including information on blood pressure.

Researchers followed-up study participants for an average of more than 7 years, using hospital records to document death from heart disease, as well as the rate of heart attack, stroke, cardiac bypass surgery and coronary interventions (e.g., angioplasty). Over that time, there were a total of 223 such cardiovascular "events," including 63 deaths.

Researchers found a significant and direct link between increasing psychological distress and increasing risk of cardiovascular illness and death. In fact, after age and sex were taken into account, people with depression and anxiety faced more than a 50 percent increased risk when compared to happier people.

However, when the researchers included unhealthy behaviors in the

analysis, they found that smoking and physical inactivity alone explained approximately 63 percent of the increased cardiovascular risk. (Smoking had the greatest impact, accounting for nearly 41 percent of the risk.) Alcohol intake explained less than 2 percent of the risk, while high blood pressure explained 13 percent and CRP explained just under 6 percent.

"This study helps us to better understand the relative contributions of stress-related changes in behavior and physiology leading to heart disease," said Roland von Känel, M.D., a professor of medicine and psychiatry, and head of the psychocardiology unit of the Swiss Cardiovascular Center at the University Hospital of Bern, Switzerland. Dr. von Känel did not participate in the study but was invited to write an editorial comment in the same issue of JACC.

"From a public health perspective, the findings encourage us to emphasize broad preventive strategies to target the behavioral and physiological pathways leading from stress to cardiovascular disease," he said. "These may span from behavioral interventions targeting smoking cessation and increasing physical activity, to stress management and relaxation techniques previously shown to restore cardiovascular function and to reduce inflammation. Whether such interventions ultimately decrease the cardiovascular risk associated with psychological distress needs further study."

Source: American College of Cardiology

Citation: Depression, anxiety spur poor health habits, damaging heart and blood vessels (2008, December 15) retrieved 25 April 2024 from https://medicalxpress.com/news/2008-12-depression-anxiety-spur-poor-health.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.