Depression, Anxiety, Hostility and Anger Increase Risk of Heart Disease

Frequent bouts of depression, anxiety, hostility and anger are known to increase a person's risk for developing coronary heart disease, but a combination of these "negative" personality traits may put people at especially serious risk, according to a study by researchers at Duke University Medical Center.

"The risk of developing coronary heart disease due to a combination of negative personality traits in people has never before been explored," said the study's senior investigator, Edward C. Suarez, Ph.D., an associate professor of psychiatry. "Although each of the negative traits significantly predicted heart disease, having the combination of these traits was the most powerful predictor of heart disease."

Similar patterns have been reported with three traditional risk factors of heart disease -- high blood pressure, elevated cholesterol levels and excessive weight -- where each factor independently increases risk but their presence together predicts a greater risk of future heart disease, Suarez said.

The findings appear in an early online edition of the November/December 2006 issue of the journal Psychosomatic Medicine.

The team analyzed data on 2,105 military veterans who served in the Vietnam War and took part in the U.S. Air Force Health Study, in which researchers tracked the health of participants for 20 years. None of the men enrolled had heart disease when the study began.

At the start of the study, participants took a personality inventory test, called the Minnesota Multiphasic Personality Inventory, in which they stated whether or not they thought of themselves as possessing various personality and behavioral traits. At six intervals during the study, the participants underwent physical examinations that recorded health information, including blood pressure rates, cholesterol levels and body mass index that can indicate whether or not someone is at risk for developing coronary heart disease.

Suarez said his team looked for a possible correlation between each individual negative personality trait and development of coronary heart disease, and then
for a possible correlation between a combination of the negative personality traits and the development of coronary heart disease.

The researchers found that each negative personality trait, by itself, was significantly associated with increased risk for heart disease. However, when they analyzed all of the traits in combination, they found statistical evidence that the clustering of traits was the best predictor of a person's risk for heart disease, Suarez said.

According to the researchers, the findings may prompt physicians to include an assessment of personality traits as well as physical health measurements in determining a patient's overall risk for heart disease.

"In the future, doctors may wish to explore the use of earlier interventions aimed at diminishing negative personality traits in people who may be most at risk for future heart disease," Suarez said.

Although the study's findings are suggestive, the study had several limitations, Suarez said. Among them, he said, the participants were all men, and most of them were white, and so the findings cannot be generalized with certainty to nonwhites and females.

His team currently is designing a comprehensive intervention program to help patients learn to cope with their feelings of hostility, anger, anxiety and depression as well as reduce their physical risk factors for heart disease.

"We want to help people at earlier points in their life by teaching them ways to cope with problems and how to make wiser choices that promote health," Suarez said. "By helping them before they ever show clinical signs of heart disease, we may be able to help them avoid the disease altogether."

http://medschool.duke.edu/