

# The Gazette

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## On Research: Depression Linked To Heart Attacks

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Not since French philosopher René Descartes centuries ago proposed the mind-body duality has there been such evidence that the duality is a fraud.

Researchers from the School of Public Health, finding a link between heart attack and depression, have put mind and body together again, reminding us that sadness, melancholy, does break hearts. A recent study, carried out as part of the Baltimore Epidemiologic Catchment Area Follow-up, revealed that those who have experienced severe depression are four times more likely to suffer a heart attack. Their findings, published in the Dec. 15 issue of the journal *Circulation*, may well affect how primary health care providers treat depression.

"It took 15 years and 2,000 people in East Baltimore opening their hearts and their homes to establish the link between depression and heart attack," said study principal investigator William Eaton, professor of mental hygiene at the School of Public Health. "But the link--essentially the results of our study--has been reflected in our language for centuries. We talk about extreme sadness, or about depression and melancholy, as 'heartbreak.' Or, we say we have 'a heavy heart,' that someone suffering emotional despair is 'broken-hearted.' This study shows a link between depression and heart attack that genuinely agrees with this idea."

The first study was conducted in East Baltimore in 1981, and it was followed up in 1994. Drawing on these efforts, researchers gathered information on participants' experience with heart-related problems and also looked at their experience with depression. Those reporting no heart-related illnesses in 1981 but who had suffered myocardial infarction, or heart attack, by 1994, were asked about depression. It was here that interviewers discovered the link.

"The results of this study should change the way primary care practitioners think about depression," said study lead author Laura Pratt, an epidemiology doctoral student, who coordinates The Heart Project at the school. "Now, when physicians are evaluating a patient's risk of MI, along with other risk factors--such as smoking, high cholesterol and high blood pressure--they'll know to take a history of depression into account. If there is a history of depression, physicians can help their patients seek treatment because treating the depression might not only be important in improving the patient's quality of life, but important for the health of the heart as well."

Past research that established a preliminary relationship between the medication that people often took for depression and their risk of heart attack was not found in this study. "Our data suggest that it is depression, not medications taken for depression, that can lead to heart attack," said Eaton.

In 1994, researchers found 64 MIs among 1,551 respondents who reported no heart trouble in 1981. After evaluation for depression using a standard clinical evaluative scale, DSM-III, the American Psychiatric Association's Diagnostic and Statistical Manual, third edition, their subsequent experience with major depressive episodes was calculated into a risk formula. Through DSM-III, MDE was described as 'a disorder characterized by sadness (dysphoria) or complete loss of interest in things usually enjoyed, occurring with symptoms from at least four of eight symptom groups and lasting for a period of at least two weeks.' The result was that those who had suffered through the characteristics of MDE were 4.54 times more likely to later suffer an MI.

"We used a history of two weeks of unremitting dysphoria as the broadest indicator of depression," said Pratt. "Those who had a history of MDE were different from those who had no history of MDE. They were more likely to be younger and female, less likely to be married or widowed and more likely to be separated or divorced."

Researchers noted that the study was strong because it crossed racial and gender lines. "The study had good representation of African Americans and whites, and both genders," said Pratt. "And, in all cases, the MDE preceded the MI. Our conclusion that dysphoria and MDE increases the risk of MI has public health implications. Primary care providers need to identify patients with depression and evaluate both their mental health profile along with their cardiovascular profile."

While the study does not show whether treatment for depression can lessen the risk of an associated MI, researchers are hopeful that future research will confirm that hypothesis. "Further research is needed to determine whether treatment of depression, either by medication or cognitive therapy, is an effective means of reducing the depression/MI associated risk," said Eaton.