

## **Smile:** It Really Is Good for Your Heart and Mind!

A negative attitude has long been shown to be detrimental to cardiovascular health, but new information is proving that a positive psychological well-being is a powerful player in reducing the risk of heart attacks, strokes and other cardiovascular events. And optimism may be particularly important for women who are at a higher risk of the severe impact cardiovascular disease (CVD) presents.

As heart disease continues to be the leading cause of death of women in the United States, studies are uncovering interesting links to why this disease threatens the female population and what can be done to reduce its risk. One of the more prevalent findings is showing that contentment can promote a happy heart.

In the first and largest systematic review on how positive psychological characteristics are related to heart health, Harvard School of Public Health (HSPH) researchers found that factors such as optimism, life satisfaction and happiness are associated with reduced risk of CVD regardless of a person's age, socioeconomic status, smoking status, or body weight. The study showed that the most optimistic individuals have an approximately 50-percent reduced risk of experiencing an initial cardiovascular event compared to their less optimistic peers.

But the reality is that depression and heart disease are very common and often coexist, and about twice as many women as men experience depression. If you have already been diagnosed with depression, this news may be disheartening, but Cleveland Clinic psychiatrists believe these findings may be the first step in increasing your heart health.

"There is still an unknown psychological mechanism as to why women are more predisposed to depression. Women with depression can frequently experience guilt, anxiety, disturbed appetite and sleep, as well as weight change," says psychiatrist Leo Pozuelo, MD. "This study shows that positive feelings augment a resiliency to prevent or reduce the risk of heart disease."

What the studies are showing

In the HSPH study published in **Psychological Bulletin** (April 16, 2012), 200 studies published in two major scientific databases were reviewed. Researchers found that there are psychological assets, like optimism and positive emotion that afford protection against cardiovascular disease. The study also shows that these factors slow the progression of the disease. The researchers found that individuals with a sense of well-being also engaged in healthier behaviors such as exercising, eating a balanced diet, and getting sufficient sleep. Greater well-being also was related to better biological function, such as lower blood pressure, healthier lipid profiles and normal body weight.

Researchers have also acknowledged that women may be more predisposed to depression and its impact on heart health due to grief over the death of a loved one. "Death by broken heart" was first studied in a 2005 report in *The New England Journal of Medicine* that described 19 patients, mostly older women, who developed classic heart attack symptoms after suffering severe emotional stress. Recently, research in *Circulation* (Jan. 9, 2012) showed that grief over the death of a significant person was associated with an acutely increased risk of a heart attack in days following the death—further validating the impact of grief on women who among people age 65 and over are three times more likely to become widowed.

“The Circulation study emphasizes how we need to be aware of the impact acute psychological stress has on the increased risk of cardiovascular events,” explains Dr. Pozuelo. “Most importantly, it showed that the incidence rate of acute myocardial infarction onset was elevated 21.1 fold within 24 hours of the death of a significant person and declined steadily on each subsequent day – clearly demonstrating that mental stress and depressive symptoms increased the risk of heart disease.”

### **Emphasizing the positive**

While the obstacles for gaining and maintaining a positive attitude may seem overwhelming due to the daily challenges women face, such as caregiver stress and hormonal changes, news from recent research should actually be seen as helpful guidance.

“By understanding why women are predisposed to depression and the detrimental impact it has on cardiovascular health we are able to proactively diagnose heart disease and depression,” stresses Dr. Pozuelo. “By incorporating treatment such as cognitive behavioral therapy and, in some cases, anti-depressant medications there can be a marked improvement in the coping with heart disease. And if you emotionally feel better, you will physically be better able to take care of your heart, adopting good wellness behaviors.”

While clinical trials have not clearly shown drug therapy or psychotherapy to clearly decrease the rate of cardiac death in depressed patient, the treatment combination improved depression, adherence to drug therapy and quality of life. Participating in a cardiac rehabilitation program also promotes healthy lifestyles through education and individually tailored exercise programs.

“Addressing the psychological as well as the physical needs presents a complete picture of treatment for heart disease. With a thorough review of how depression may be impacting a cardiac event, patients can be aided through problem-solving therapy and lifestyle changes to maximize the opportunity for a positive well-being,” Dr. Pozuelo says.