

### MENTAL HEALTH AWARENESS MONTH:

How Depression and Heart Disease Relate to Each Other



epression and heart disease are among the most disabling diseases we face. They are both very widespread among the general population and can often occur simultaneously in the same individual.

There is thought to be a two-way relationship between heart disease and depression:

A percentage of people with no history of depression become depressed after a heart attack or after developing heart failure. And people with depression but no previously detected heart disease, seem to develop heart disease at a higher rate than the general population.

It is somewhat hard to prove that heart disease directly leads to the development of a first-ever episode of depression. That is because some people who have had previous episodes of depression may not have it formally diagnosed until they see their doctor for heart problems.

"What we can say with certainty is that depression and heart disease often occur together," says Dr. Roy Ziegelstein, vice dean for education at the Johns Hopkins University School of Medicine. "About one in five who have a heart attack are found to have depression soon after the heart attack. And it's at least as prevalent in people who suffer heart failure."



### **Psychological Impact of a Heart Attack**

A heart attack can impact much more than a person's heart. It can affect many other aspects of a person's life, including:

- Attitude and mood
- Sense of certainty about the future
- Confidence about one's ability to fulfill the roles of a productive employee, mother, father, daughter, or son
- Feelings of guilt about previous habits that might have increased the person's heart attack risk
- Embarrassment and self-doubt over diminished physical capabilities

Most heart attack survivors are able to return to the roles and responsibilities they had before their heart attack. When uncertainty and anxiety become debilitating and interfere with the daily functions of life, then the process of rehabilitation and recovery after the heart attack may need to include psychological and psychiatric support, and perhaps medication for depression.

#### Heart Event Recovery and Depression: Types of Support

Individuals recovering from a heart attack or other serious cardiac event can find many types of support. These include cardiac rehabilitation, social groups, and more specialized evaluation and treatment by psychologists, psychiatrists, and psychiatric social workers.

- Cardiac rehabilitation You can find supervised forms of exercise in many clinical exercise centers around the country, including Johns Hopkins. Your closely monitored program may include an activity and nutrition plan specifically developed for heart attack recovery. Studies have shown that returning to normal activity and seeing the progress of other people recovering from a heart attack significantly improves mood and confidence.
- Social support It's natural to withdraw and lose social confidence after a heart attack. But according to some studies, making an extra effort to re-engage and socialize with friends can help you return to the person you were before, which can be vital to heart attack recovery.
- More formal forms of support Sometimes going back to a normal life after a heart attack requires the guidance of a psychiatric social worker, psychiatrist,

or psychologist. Many milder forms of depression can be successfully treated by behavioral or "talk" therapy, either one-to-one or in a group of heart attack recovery patients. For some, depression symptoms may require antidepressant medication.

## Relationship Between Mood, Heart Disease, and Heart Attack Recovery

People with depression or who are recovering from a heart attack have a lower chance of recovery and a higher risk of death than people without depression. The reasons range from how the individual behaves to how the body reacts:

- In heart attack patients, who are depressed, they might have decreased motivation to follow healthy daily routines which can result in skipping important heart medications, avoiding exercise and proper diets, and continuing or intensifying smoking and drinking habits.
- Individuals with depression can also experience changes in their nervous system and hormonal balance, which can make it more likely for a heart rhythm disturbance (called an "arrhythmia") to occur. The combination of depression and a damaged heart (from a heart attack), seems to make some people particularly susceptible to potentially fatal heart rhythm abnormalities.
- Individuals with depression may have uncommonly sticky platelets, these tiny cells can cause blood to clot.
  In patients with heart disease, this can accelerate atherosclerosis (hardening of the arteries) and increase the chance of heart attack. Some studies show that treating depression make platelets less sticky again.



### **Effect of a Positive Mental State on Heart Disease**

Maintaining a positive attitude about treatment and holding the belief that our actions can have a beneficial effect on our own health are very important. A person's attitude seems to have a powerfully favorable effect on their ability to make behavior and lifestyle changes that are often necessary to reduce the risk of having future heart problems. A person's attitude also influences the response to treatment. Two terms that are used when discussing the effect of a positive mental state on heart disease which include:

- Healthy adherer Several studies have examined how well or poorly people take their medicines. Those who take their medications as directed (also known as "good adherers") have a lower death rate than those who don't (poor adherers). Individuals with a positive attitude about taking medications may also diligently follow daily habits that are healthy for the heart, such as proper diet and exercise.
- Self-efficacy describes a person's beliefs about their ability to do certain things in order to reach a desired outcome, or to influence events in their life. The self-confidence that our actions can have a positive effect on our health (e.g. losing weight and exercising can lower our risk for heart disease) is very important in determining how motivated we are to engage in behaviors that are good for us.

# Challenges of Recognizing Depression Symptoms

Heart disease and depression often carry overlapping symptoms such as fatigue, low energy, and difficulty in sleeping and carrying on the daily rhythms of life. So it's not surprising that sometimes symptoms of depression are thought of by the patient, the patient's family, and the cardiologist as being due to heart disease.

Many members of the medical community have stressed the importance of having patients, families, and physicians gain a greater awareness of the prevalence of post-heart attack depression. Physicians need to understand the importance of treating depression, since it is treated differently from heart disease.

Meeting this challenge can result in a vital communication between patient and physician that can start with a conversation or something as simple as, "I wonder if what I'm feeling is from depression?"



#### **Heart Disease and Depression in Women**

Depression is generally more common in women than in men, so women with heart disease are more likely to develop depression. Heart disease tends to affect older individuals, and approximately one third of women recovering from a heart attack live alone, with no immediate family member or spouse to turn to for physical and emotional support.

"It's important for all of us as healthcare providers to recognize that while we can't necessarily change someone's living situation or stress level, we can recognize their unique circumstances," says Ziegelstein. "We can work with our patients on this individual level to help them cope with life in healthier ways."

### The Ten Characteristics of Perfectly Hidden Depression

- 1. You are a perfectionist and have a constant critical and shaming inner voice
- 2. You demonstrate a heightened or excessive sense of responsibility
- 3. You de ach from painful emotions by staying in your head and actively shutting them off
- 4. You worry and need to control yourself and your environment
- 5. Your focus is intense on your tasks and use your accomplishment to feel valuable
- 6. You focus on the well-being of others, but don't allow them into your inner world
- 7. You discount or dismiss hurt or sorrow and struggle with self-compassion
- 8. You may have an accompanying mental health issue, such as an eating disorder, an anxiety disorder, obsessive-compulsive disorder or addiction
- You believe strongly in "counting your blessings" as the foundation of well-being
- 10. You may enjoy success with a professional structure but struggle with emotional intimacy in relationships

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