

Many factors can contribute to the onset of depression. Genetics, as well as a wide range of difficult life circumstances, have been shown to impact brain chemistry and cause depression. Depression can also arise along with – or because of – other medical conditions. This is called **co-occurrence**. Depression commonly occurs with conditions such as heart disease, cancer, and diabetes, as well as before or after surgery.

## **Depression and heart disease**

Depression can be both a cause of and a result of cardiovascular (heart) disease. Even mild depression is a common and significant risk factor for developing heart disease and can also raise the risk of future cardiovascular complications. It has also been shown that depression can make it harder to recover from heart disease. This is no surprise, since depression has been linked to many of the lifestyle factors that contribute to heart disease, including poor diet, inactivity, drug or alcohol abuse, and social isolation. Some of the most common symptoms of depression, such as low energy, sleep problems, and irritability, are also common in heart disease.

## **Depression and cancer**

Depressive disorders frequently arise in conjunction with cancer. Potential triggers for depression are present throughout the cancer journey, from the anxiety of diagnosis, to the physical and psychological toll of treatment, to the ongoing uncertainty and worry associated with the possibility of recurrence. It has also been shown that patients with a history of depression, anxiety, or substance abuse may find that those issues return when faced with a diagnosis of cancer.

During treatment, mood changes can result from high doses of steroids or drugs like interferon. In addition, depression shares many of the most common symptoms and side effects of cancer and its treatment, including poor appetite and fatigue. It can be difficult to determine whether symptoms like sadness, irritability, difficulty with concentration, memory, and decision-making or problems with sleep or appetite are brought on by depression or cancer treatment. But in either case, they need to be addressed promptly by a healthcare professional.

### **Depression before or after heart surgery**

Prior to surgery, immediately following a procedure, or even months after a surgical recovery, patients may develop symptoms of depression. These may arise as the result of hormone changes, the effects of anesthesia, feelings of loss or mortality, uncertainty about future health, a sense that others do not understand what a patient has endured, or the effects of new medicines given in conjunction with surgery.

### **Depression and diabetes**

Individuals with either type I or type II diabetes mellitus (diabetes) are at an increased risk of developing depression. The anxiety caused by a diagnosis of diabetes can trigger depression, as can the ongoing stress of following a treatment plan and worry about the possible long-term consequences of advanced diabetes. Research has also shown that diabetics with untreated depression are less likely to stick with their diet and oral medication requirements, and may also be less able to function physically and mentally.

Although diabetes and depression are two very different illnesses, when it comes to their treatment, they have much in common. Both are chronic conditions requiring ongoing management of symptoms over time. Both are

most successfully managed by a combination of professional care (including medication) and self-care, including diet, exercise, and stress management.

### **Recognizing the symptoms of co-occurring depression**

If you or someone you care about is struggling with a serious medical condition like those discussed here, it is important to look for symptoms that may point to a co-occurrence of depression, including:

- Low energy
- Sleep problems
- Anger or irritability
- Sadness
- Loss of interest in pleasurable activities
- Poor concentration
- Difficulty sleeping
- Loss of appetite
- Memory problems
- Difficulty making decisions
- Feelings of vulnerability, hopelessness, or worthlessness
- Over-focused on disease or death
- Family conflicts

If any of these symptoms are present, discuss with a doctor how to make managing depression part of a comprehensive treatment and wellness plan.

### **Self-care steps to counter depression symptoms**

The good news is that when depression is recognized to co-occur with another condition, many of the steps an individual can take to address one of the two illnesses may actually help them manage both. These include:

- Getting regular exercise
- Getting enough sleep
- Following a proper nutrition plan
- Reducing or stopping the use of alcohol or drugs
- Building a social support network

**For more information:**

- University of Michigan Depression Center
- 1-800-475-MICH or 734-936-4400
- <http://www.depressioncenter.org/toolkit>

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