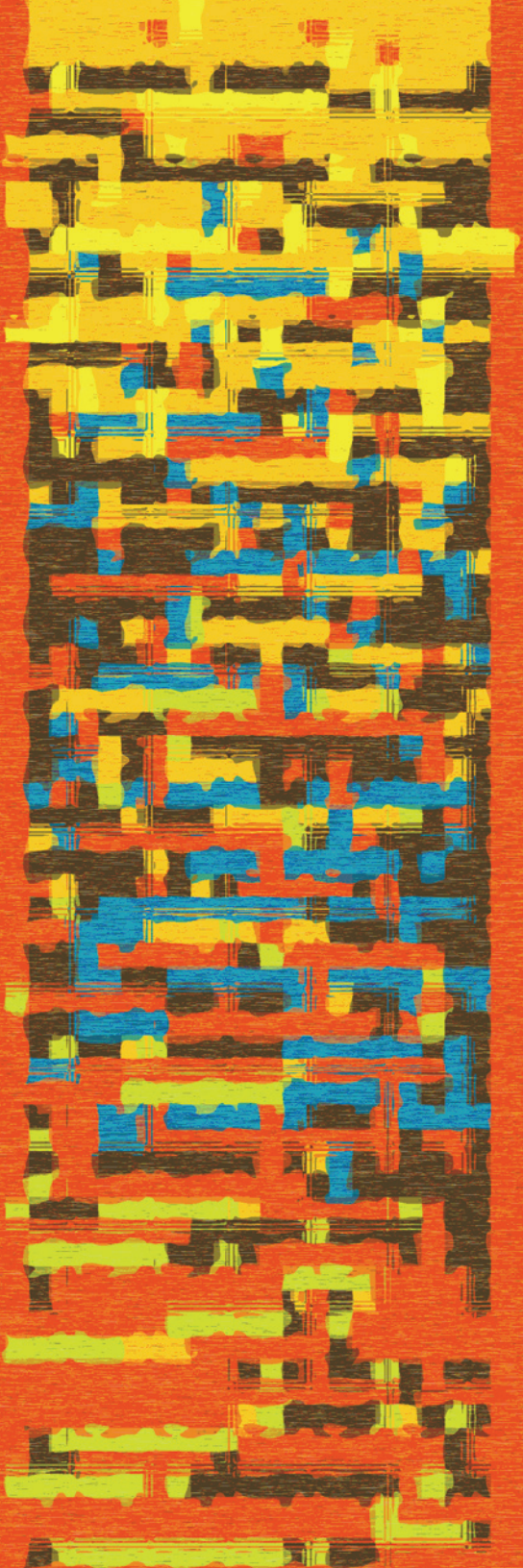
National Institute
of Mental Health

depression



Contents

What Is Depression?

Everyone occasionally feels blue or sad, but these feelings are usually fleeting and pass within a couple of days. When a person has a depressive disorder, it interferes with daily life, normal functioning, and causes pain for both the person with the disorder and those who care about him or her. Depression is a common but serious illness, and most who experience it need treatment to get better.

Many people with a depressive illness never seek treatment. But the vast majority, even those with the most severe depression, can get better with treatment. Intensive research into the illness has resulted in the development of medications, psychotherapies, and other methods to treat people with this disabling disorder.

Depression is a common but serious illness.

Most who experience depression need treatment to get better.

What are the different forms of depression?

There are several forms of depressive disorders. The most common are major depressive disorder and dysthymic disorder.

Major depressive disorder, also called major depression, is characterized by a combination of symptoms that interfere with a person's ability to work, sleep, study, eat, and enjoy once-pleasurable activities. Major depression is disabling and prevents a person from functioning normally. An episode of major depression may occur only once in a person's lifetime, but more often, it recurs throughout a person's life.

Dysthymic disorder, also called dysthymia, is characterized by long-term (two years or longer) but less severe symptoms that may not disable a person but can prevent one from functioning normally or feeling well. People with dysthymia may also experience one or more episodes of major depression during their lifetimes.

Some forms of depressive disorder exhibit slightly different characteristics than those described above, or they may develop under unique circumstances. However, not all scientists agree on how to characterize and define these forms of depression. They include:

Psychotic depression, which occurs when a severe depressive illness is accompanied by some form of psychosis, such as a break with reality, hallucinations, and delusions.

Postpartum depression, which is diagnosed if a new mother develops a major depressive episode within one month after delivery. It is estimated that 10 to 15 percent of women experience postpartum depression after giving birth.[1]

Seasonal affective disorder (SAD), which is characterized by the onset of a depressive illness during the winter months, when there is less natural sunlight. The depression generally lifts during spring and summer. SAD may be effectively treated with light therapy, but nearly half of those with SAD do not respond to light therapy alone. Antidepressant medication and psychotherapy can reduce SAD symptoms, either alone or in combination with light therapy.[2]

Bipolar disorder, also called manic-depressive illness, is not as common as major depression or dysthymia. Bipolar disorder is characterized by cycling mood changes—from extreme highs (e.g., mania) to extreme lows (e.g., depression). More information about bipolar disorder is available at http://www.nimh.nih.gov/healthinformation/bipolarmenu.cfm.

What are the symptoms of depression?

People with depressive illnesses do not all experience the same symptoms. The severity, frequency and duration of symptoms will vary depending on the individual and his or her particular illness.

SYMPTOMS

Persistent sad, anxious or "empty" feelings

Feelings of hopelessness and/or pessimism

Feelings of guilt, worthlessness and/or helplessness

Irritability, restlessness

Loss of interest in activities or hobbies once pleasurable, including sex

Fatigue and decreased energy

Difficulty concentrating, remembering details and making decisions

Insomnia, early-morning wakefulness, or excessive sleeping

Overeating, or appetite loss

Thoughts of suicide, suicide attempts

Persistent aches or pains, headaches, cramps or digestive problems that do not ease even with treatment

What illnesses often co-exist with depression?

Depression often co-exists with other illnesses. Such illnesses may precede the depression, cause it, and/or be a consequence of it. It is likely that the mechanics behind the intersection of depression and other illnesses differ for every person and situation. Regardless, these other co-occurring illnesses need to be diagnosed and treated.

Anxiety disorders, such as post-traumatic stress disorder (PTSD), obsessive-compulsive disorder, panic disorder, social phobia and generalized anxiety disorder, often accompany depression.[3,4] People experiencing PTSD are especially prone to having co-occurring depression. PTSD is a debilitating condition that can result after a person experiences a terrifying event or ordeal, such as a violent assault, a natural disaster, an accident, terrorism or military combat.

People with PTSD often re-live the traumatic event in flashbacks, memories or nightmares. Other symptoms include irritability, anger outbursts, intense guilt, and avoidance of thinking or talking about the traumatic ordeal. In a National Institute of Mental Health (NIMH)-funded study, researchers found that more than 40 percent of people with PTSD also had depression at one-month and four-month intervals after the traumatic event.[5]

Alcohol and other substance abuse or dependence may also co-occur with depression. In fact, research has indicated that the co-existence of mood disorders and substance abuse is pervasive among the U.S. population.[6]

Depression also often co-exists with other serious medical illnesses such as heart disease, stroke, cancer, HIV/AIDS, diabetes, and Parkinson's disease. Studies have shown that people who have depression in addition to another serious medical illness tend to have more severe symptoms of both depression and the medical illness, more difficulty adapting to their medical condition, and more medical costs than those who do not have co-existing depression.[7] Research has yielded increasing evidence that treating the depression can also help improve the outcome of treating the co-occurring illness.[8]

What causes depression?

There is no single known cause of depression. Rather, it likely results from a combination of genetic, biochemical, environmental, and psychological factors.

Research indicates that depressive illnesses are disorders of the brain. Brain-imaging technologies, such as magnetic resonance imaging (MRI), have shown that the brains of people who have depression look different than those of people without depression. The parts of the brain responsible for regulating mood, thinking, sleep, appetite and behavior appear to function abnormally. In addition, important neurotransmitters—chemicals that brain cells use to communicate—appear to be out of balance. But these images do not reveal **why** the depression has occurred.

Some types of depression tend to run in families, suggesting a genetic link. However, depression can occur in people without family histories of depression as well.[9] Genetics research indicates that risk for depression results from the influence of multiple genes acting together with environmental or other factors.[10]

In addition, trauma, loss of a loved one, a difficult relationship, or any stressful situation may trigger a depressive episode. Subsequent depressive episodes may occur with or without an obvious trigger.

Research indicates that depressive illnesses are disorders of the brain.

How do women experience depression?

Depression is more common among women than among men. Biological, life cycle, hormonal and psychosocial factors unique to women may be linked to women's higher depression rate. Researchers have shown that hormones directly affect brain chemistry that controls emotions and mood. For example, women are particularly vulnerable to depression after giving birth, when hormonal and physical changes, along with the new responsibility of caring for a newborn, can be overwhelming. Many new mothers experience a brief episode of the "baby blues," but some will develop postpartum depression, a much more serious condition that requires active treatment and emotional support for the new mother. Some studies suggest that women who experience postpartum depression often have had prior depressive episodes.

Some women may also be susceptible to a severe form of premenstrual syndrome (PMS), sometimes called premenstrual dysphoric disorder (PMDD), a condition resulting from the hormonal changes that typically occur around ovulation and before menstruation begins. During the transition into menopause, some women experience an increased risk for depression. Scientists are exploring how the cyclical rise and fall of estrogen and other hormones may affect the brain chemistry that is associated with depressive illness.[11]

Finally, many women face the additional stresses of work and home responsibilities, caring for children and aging parents, abuse, poverty, and relationship strains. It remains unclear why some women faced with enormous challenges develop depression, while others with similar challenges do not.

How do men experience depression?

Men often experience depression differently than women and may have different ways of coping with the symptoms. Men are more likely to acknowledge having fatigue, irritability, loss of interest in once-pleasurable activities, and sleep disturbances, whereas women are more likely to admit to feelings of sadness, worthlessness and/or excessive guilt.[12,13]

Men are more likely than women to turn to alcohol or drugs when they are depressed, or become frustrated, discouraged, irritable, angry and sometimes abusive. Some men throw themselves into their work to avoid talking about their depression with family or friends, or engage in reckless, risky behavior. And even though more women attempt suicide, many more men die by suicide in the United States.[14]

How do older adults experience depression?

Depression is not a normal part of aging, and studies show that most seniors feel satisfied with their lives, despite increased physical ailments. However, when older adults do have depression, it may be overlooked because seniors may show different, less obvious symptoms, and may be less inclined to experience or acknowledge feelings of sadness or grief.[15]

In addition, older adults may have more medical conditions such as heart disease, stroke or cancer, which may cause depressive symptoms, or they may be taking medications with side effects that contribute to depression. Some older adults may experience what some doctors call vascular depression, also called arteriosclerotic depression or subcortical ischemic depression. Vascular depression may result when blood vessels become less flexible and harden over time, becoming constricted. Such hardening of vessels prevents normal blood flow to the body's organs, including the brain. Those with vascular depression may have, or be at risk for, a co-existing cardiovascular illness or stroke.[16]

Although many people assume that the highest rates of suicide are among the young, older white males age 85 and older actually have the highest suicide rate. Many have a depressive illness that their doctors may not detect, despite the fact that these suicide victims often visit their doctors within one month of their deaths.[17]

The majority of older adults with depression improve when they receive treatment with an antidepressant, psychotherapy, or a combination of both.[18] Research has shown that medication alone and combination treatment are both effective in reducing the rate of depressive recurrences in older adults.[19] Psychotherapy alone also can be effective in prolonging periods free of depression, especially for older adults with minor depression, and it is particularly useful for those who are unable or unwilling to take antidepressant medication.[20, 21]

Depression is not a normal part of aging.

How do children and adolescents experience depression?

Scientists and doctors have begun to take seriously the risk of depression in children. Research has shown that childhood depression often persists, recurs and continues into adulthood, especially if it goes untreated. The presence of childhood depression also tends to be a predictor of more severe illnesses in adulthood.[22]

A child with depression may pretend to be sick, refuse to go to school, cling to a parent, or worry that a parent may die. Older children may sulk, get into trouble at school, be negative and irritable, and feel misunderstood. Because these signs may be viewed as normal mood swings typical of children as they move through developmental stages, it may be difficult to accurately diagnose a young person with depression.

Before puberty, boys and girls are equally likely to develop depressive disorders. By age 15, however, girls are twice as likely as boys to have experienced a major depressive episode.[23]

Depression in adolescence comes at a time of great personal change—when boys and girls are forming an identity distinct from their parents, grappling with gender issues and emerging sexuality, and making decisions for the first time in their lives. Depression in adolescence frequently co-occurs with other disorders such as anxiety, disruptive behavior, eating disorders or substance abuse. It can also lead to increased risk for suicide.[22,24]

An NIMH-funded clinical trial of 439 adolescents with major depression found that a combination of medication and psychotherapy was the most effective treatment option.[25] Other NIMH-funded researchers are developing and testing ways to prevent suicide in children and adolescents, including early diagnosis and treatment, and a better understanding of suicidal thinking.

Childhood depression often persists, recurs, and continues into adulthood, especially if left untreated.

How is depression detected and treated?

Depression, even the most severe cases, is a highly treatable disorder. As with many illnesses, the earlier that treatment can begin, the more effective it is and the greater the likelihood that recurrence can be prevented.

The first step to getting appropriate treatment is to visit a doctor. Certain medications, and some medical conditions such as viruses or a thyroid disorder, can cause the same symptoms as depression. A doctor can rule out these possibilities by conducting a physical examination, interview and lab tests. If the doctor can eliminate a medical condition as a cause, he or she should conduct a psychological evaluation or refer the patient to a mental health professional.

The doctor or mental health professional will conduct a complete diagnostic evaluation. He or she should discuss any family history of depression, and get a complete history of symptoms, e.g., when they started, how long they have lasted, their severity, and whether they have occurred before and if so, how they were treated. He or she should also ask if the patient is using alcohol or drugs, and whether the patient is thinking about death or suicide.

Once diagnosed, a person with depression can be treated with a number of methods. The most common treatments are medication and psychotherapy.

Medication

Antidepressants work to normalize naturally occurring brain chemicals called neurotransmitters, notably serotonin and norepinephrine. Other antidepressants work on the neurotransmitter dopamine. Scientists studying depression have found that these particular chemicals are involved in regulating mood, but they are unsure of the exact ways in which they work.

The newest and most popular types of antidepressant medications are called selective serotonin reuptake inhibitors (SSRIs). SSRIs include fluoxetine (Prozac), citalopram (Celexa), sertraline (Zoloft) and several others. Serotonin and norepinephrine reuptake inhibitors (SNRIs) are similar to SSRIs and include venlafaxine (Effexor) and duloxetine (Cymbalta). SSRIs and SNRIs are more popular than the older classes of antidepressants, such as tricyclics—named for their chemical structure—and monoamine oxidase inhibitors (MAOIs) because they tend to have fewer side effects. However, medications affect everyone differently—no one-size-fits-all approach to medication exists. Therefore, for some people, tricyclics or MAOIs may be the best choice.

People taking MAOIs must adhere to significant food and medicinal restrictions to avoid potentially serious interactions. They must avoid certain foods that contain high levels of the chemical tyramine, which is found in many cheeses, wines and pickles, and some medications including decongestants. MAOIs interact with tyramine in such a way that may cause a sharp increase in blood pressure, which could lead to a stroke. A doctor should give a patient taking an MAOI a complete list of prohibited foods, medicines and substances.

For all classes of antidepressants, patients must take regular doses for at least three to four weeks before they are likely to experience a full therapeutic effect. They should continue taking the medication for the time specified by their doctor, even if they are feeling better, in order to prevent a relapse of the depression. Medication should be stopped only under a doctor's supervision. Some medications need to be gradually stopped to give the body time to adjust. Although antidepressants are not habit-forming or addictive, abruptly ending an antidepressant can cause withdrawal symptoms or lead to a relapse. Some individuals, such as those with chronic or recurrent depression, may need to stay on the medication indefinitely.

In addition, if one medication does not work, patients should be open to trying another. NIMH-funded research has shown that patients who did not get well after taking a first medication increased their chances of becoming symptom-free after they switched to a different medication or added another medication to their existing one.[26,27]

Sometimes stimulants, anti-anxiety medications, or other medications are used in conjunction with an antidepressant, especially if the patient has a co-existing mental or physical disorder. However, neither anti-anxiety medications nor stimulants are effective against depression when taken alone, and both should be taken only under a doctor's close supervision.

What are the side effects of antidepressants?

Antidepressants may cause mild and often temporary side effects in some people, but they are usually not long-term. **However, any unusual reactions or side effects that interfere with normal functioning should be reported to a doctor immediately.**

SIDE EFFECTS

The most common side effects associated with SSRIs and SNRIs include:

***Headache**—usually temporary and will subside.*

***Nausea**—temporary and usually short-lived.*

***Insomnia and nervousness (trouble falling asleep or waking often during the night)**—may occur during the first few weeks but often subside over time or if the dose is reduced.*

Agitation (feeling jittery).

***Sexual problems**—both men and women can experience sexual problems including reduced sex drive, erectile dysfunction, delayed ejaculation, or inability to have an orgasm.*

Tricyclic antidepressants also can cause side effects including:

***Dry mouth**—it is helpful to drink plenty of water, chew gum, and clean teeth daily.*

***Constipation**—it is helpful to eat more bran cereals, prunes, fruits, and vegetables.*

***Bladder problems**—emptying the bladder may be difficult, and the urine stream may not be as strong as usual. Older men with enlarged prostate conditions may be more affected. The doctor should be notified if it is painful to urinate.*

***Sexual problems**—sexual functioning may change, and side effects are similar to those from SSRIs.*

***Blurred vision**—often passes soon and usually will not require a new corrective lenses prescription.*

***Drowsiness during the day**—usually passes soon, but driving or operating heavy machinery should be avoided while drowsiness occurs. The more sedating antidepressants are generally taken at bedtime to help sleep and minimize daytime drowsiness.*

Report any unusual side effects to a doctor immediately.

FDA Warning on Antidepressants

Despite the relative safety and popularity of SSRIs and other antidepressants, some studies have suggested that they may have unintentional effects on some people, especially adolescents and young adults. In 2004, the Food and Drug Administration (FDA) conducted a thorough review of published and unpublished controlled clinical trials of antidepressants that involved nearly 4,400 children and adolescents. The review revealed that 4% of those taking antidepressants thought about or attempted suicide (although no suicides occurred), compared to 2% of those receiving placebos.

This information prompted the FDA, in 2005, to adopt a "black box" warning label on all antidepressant medications to alert the public about the potential increased risk of suicidal thinking or attempts in children and adolescents taking antidepressants. In 2007, the FDA proposed that makers of all antidepressant medications extend the warning to include young adults up through age 24. A "black box" warning is the most serious type of warning on prescription drug labeling.

The warning emphasizes that patients of all ages taking antidepressants should be closely monitored, especially during the initial weeks of treatment. Possible side effects to look for are worsening depression, suicidal thinking or behavior, or any unusual changes in behavior such as sleeplessness, agitation, or withdrawal from normal social situations. The warning adds that families and caregivers should also be told of the need for close monitoring and report any changes to the physician. The latest information from the FDA can be found on their Web site at www.fda.gov.

Children, adolescents and young adults taking antidepressants should be closely monitored.

Results of a comprehensive review of pediatric trials conducted between 1988 and 2006 suggested that the benefits of antidepressant medications likely outweigh their risks to children and adolescents with major depression and anxiety disorders.28 The study was funded in part by the National Institute of Mental Health.

Also, the FDA issued a warning that combining an SSRI or SNRI antidepressant with one of the commonly-used "triptan" medications for migraine headache could cause a life-threatening "serotonin syndrome," marked by agitation, hallucinations, elevated body temperature, and rapid changes in blood pressure. Although most dramatic in the case of the MAOIs, newer antidepressants may also be associated with potentially dangerous interactions with other medications.

What about St. John's wort?

The extract from St. John's wort (Hypericum perforatum), a bushy, wild-growing plant with yellow flowers, has been used for centuries in many folk and herbal remedies. Today in Europe, it is used extensively to treat mild to moderate depression. In the United States, it is one of the top-selling botanical products.

To address increasing American interests in St. John's wort, the National Institutes of Health conducted a clinical trial to determine the effectiveness of the herb in treating adults who have major depression. Involving 340 patients diagnosed with major depression, the eight-week trial randomly assigned one-third of them to a uniform dose of St. John's wort, one-third to a commonly prescribed SSRI, and one-third to a placebo. The trial found that St. John's wort was no more effective than the placebo in treating major depression.[29] Another study is looking at the effectiveness of St. John's wort for treating mild or minor depression.

Other research has shown that St. John's wort can interact unfavorably with other medications, including those used to control HIV infection. On February 10, 2000, the FDA issued a Public Health Advisory letter stating that the herb appears to interfere with certain medications used to treat heart disease, depression, seizures, certain cancers, and organ transplant rejection. The herb also may interfere with the effectiveness of oral contraceptives. Because of these potential interactions, patients should always consult with their doctors before taking any herbal supplement.

Psychotherapy

Several types of psychotherapy—or "talk therapy"—can help people with depression.

Some regimens are short-term (10 to 20 weeks) and other regimens are longer-term, depending on the needs of the individual. Two main types of psychotherapies—cognitive-behavioral therapy (CBT) and interpersonal therapy (IPT)—have been shown to be effective in treating depression. By teaching new ways of thinking and behaving, CBT helps people change negative styles of thinking and behaving that may contribute to their depression. IPT helps people understand and work through troubled personal relationships that may cause their depression or make it worse.

For mild to moderate depression, psychotherapy may be the best treatment option. However, for major depression or for certain people, psychotherapy may not be enough. Studies have indicated that for adolescents, a combination of medication and psychotherapy may be the most effective approach to treating major depression and reducing the likelihood for recurrence.[25] Similarly, a study examining depression treatment among older adults found that patients who responded to initial treatment of medication and IPT were less likely to have recurring depression if they continued their combination treatment for at least two years.[21]

Electroconvulsive Therapy

For cases in which medication and/or psychotherapy does not help alleviate a person's treatment-resistant depression, electroconvulsive therapy (ECT) may be useful. ECT, formerly known as "shock therapy," once had a bad reputation. But in recent years, it has greatly improved and can provide relief for people with severe depression who have not been able to feel better with other treatments.

Before ECT is administered, a patient takes a muscle relaxant and is put under brief anesthesia. He or she does not consciously feel the electrical impulse administered in ECT. A patient typically will undergo ECT several times a week, and often will need to take an antidepressant or mood stabilizing medication to supplement the ECT treatments and prevent relapse. Although some patients will need only a few courses of ECT, others may need maintenance ECT, usually once a week at first, then gradually decreasing to monthly treatments for up to one year.

ECT may cause some short-term side effects, including confusion, disorientation and memory loss. But these side effects typically clear soon after treatment. Research has indicated that after one year of ECT treatments, patients showed no adverse cognitive effects.[30]

What efforts are underway to improve treatment?

Researchers are looking for ways to better understand, diagnose and treat depression among all groups of people. New potential treatments are being tested that give hope to those who live with depression that is particularly difficult to treat, and researchers are studying the risk factors for depression and how it affects the brain. NIMH continues to fund cutting-edge research into this debilitating disorder.

For more information on NIMH-funded research on depression, visit **http://www.nimh.nih.gov.**

The National Institute of Mental Health funds cutting-edge research into this debilitating disorder.

How can I help a friend or relative who is depressed?

If you know someone who is depressed, it affects you too. The first and most important thing you can do to help a friend or relative who has depression is to help him or her get an appropriate diagnosis and treatment. You may need to make an appointment on behalf of your friend or relative and go with him or her to see the doctor. Encourage him or her to stay in treatment, or to seek different treatment if no improvement occurs after six to eight weeks.

HELP A FRIEND OR RELATIVE

Offer emotional support, understanding, patience and encouragement.

Engage your friend or relative in conversation, and listen carefully.

Never disparage feelings your friend or relative expresses, but point out realities and offer hope.

Never ignore comments about suicide, and report them to your friend's or relative's therapist or doctor.

Invite your friend or relative out for walks, outings and other activities. Keep trying if he or she declines, but don't push him or her to take on too much too soon. Although diversions and company are needed, too many demands may increase feelings of failure.

Remind your friend or relative that with time and treatment, the depression will lift.

How can I help myself if I am depressed?

If you have depression, you may feel exhausted, helpless and hopeless. It may be extremely difficult to take any action to help yourself. But it is important to realize that these feelings are part of the depression and do not accurately reflect actual circumstances. As you begin to recognize your depression and begin treatment, negative thinking will fade.

HELP YOURSELF

Engage in mild activity or exercise. Go to a movie, a ballgame, or another event or activity that you once enjoyed. Participate in religious, social or other activities.

Set realistic goals for yourself.

Break up large tasks into small ones, set some priorities and do what you can as you can.

Try to spend time with other people and confide in a trusted friend or relative. Try not to isolate yourself, and let others help you.

Expect your mood to improve gradually, not immediately. Do not expect to suddenly "snap out of" your depression. Often during treatment for depression, sleep and appetite will begin to improve before your depressed mood lifts.

Postpone important decisions, such as getting married or divorced or changing jobs, until you feel better. Discuss decisions with others who know you well and have a more objective view of your situation.

Remember that positive thinking will replace negative thoughts as your depression responds to treatment.

Where can I go for help?

If you are unsure where to go for help, ask your family doctor. Others who can help are listed below.

MENTAL HEALTH RESOURCES

Mental health specialists, such as psychiatrists, psychologists, social workers, or mental health counselors

Health maintenance organizations

Community mental health centers

Hospital psychiatry departments and outpatient clinics

Mental health programs at universities or medical schools

State hospital outpatient clinics

Family services, social agencies or clergy

Peer support groups

Private clinics and facilities

Employee assistance programs

Local medical and/or psychiatric societies

You can also check the phone book under "mental health," "health," "social services," "hotlines," or "physicians" for phone numbers and addresses. An emergency room doctor also can provide temporary help and can tell you where and how to get further help.

What if I or someone I know is in crisis?

If you are thinking about harming yourself, or know someone who is, tell someone who can help immediately.

Call your doctor.

Call 911 or go to a hospital emergency room to get immediate help or ask a friend or family member to help you do these things.

Call the toll-free, 24-hour hotline of the National Suicide Prevention Lifeline at 1 800-273-TALK (1 800-273-8255); TTY: 1 800 799 4TTY (4889) to talk to a trained counselor.

Make sure you or the suicidal person is not left alone.

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