



BACKGROUND FOR FACILITATORS

Table of Contents

• Overview	2	• How is depression detected and treated?	11
• Depression in Children and Adolescents	2	• Medication	12
• Depression in Women	3	• What are the side effects of antidepressants?	13
• Postpartum Depression	3	• FDA warning on antidepressants	13
• Depression in Men	4	• What about St. John's wort?	14
• Depression in Older Adults	4	• Psychotherapy	14
• Citations	5-7	• Electroconvulsive therapy	15
• Depression	7	• What efforts are under way to improve treatment?	15
• What is depression?	7	• How can I help a friend or relative who is depressed?	15
• Forms of depression	7	• How can I help myself if I am depressed?	16
• Symptoms of depression	8	• Where can I go for help?	16
• Illnesses that co-exist with depression	8	• What if I or someone I know is in crisis?	17
• What causes depression?	9	• For more information	17
• How do women experience depression?	9	• Citations	17-20
• How do men experience depression?	10		
• How do older adults experience depression?	10		
• How do children and adolescents experience depression?	11		

**BACKGROUND
FOR FACILITATORS**

Overview

Depression is a common mental disorder that is characterized by symptoms including sad mood, loss of interest or pleasure, low energy, poor concentration, disruptions in sleep and/or appetite, and feelings of low self-worth for at least two weeks (American Psychiatric Association, 2004; NIMH, 2008a). Symptoms generally cause impairment in an individual's ability to cope with daily life, including affecting performance at work and school and interfering with personal relationships (NIMH, 2008b). The most severe cases of depression can result in suicide. Depression occurs in people of all genders, ages, and socio-cultural backgrounds.

According to the World Health Organization (WHO, 2008), depression is the leading cause of disability worldwide, affecting approximately 121 million people worldwide. Although depression can be treated in primary care, estimates suggest less than one-fourth of people with depression have access to effective treatments (WHO, 2008). With treatment, however, 60–80 percent of those affected by depression experience relief (WHO, 2008).

Barriers to effective treatment for depression exist, especially in rural areas. Some of these barriers include lack of mental health resources (Rosenblatt, Casey, & Richardson, 2002), lack of trained providers (Badger, Robinson & Farley, 1999; McCabe & Macnee, 2002), lack of health insurance (Bailey, 2004), and the stigma associated with having depression (Arons, 2000). Additionally, high rates of poverty in rural areas exacerbate depression. People who earn

incomes near or below the poverty line have higher rates of mental health problems than people who earn higher incomes (Eaton et al. 2001).

Depression in Children and Adolescents

Depression during childhood and adolescence is a growing concern. Estimates show that depression affects one in 33 children and one in eight adolescents (NMHA, 2008). Further, 5 percent of adolescents experience a major depressive disorder (NIMH, 2008c) (Sarafolean, 2000). Depression can be difficult to discern from normal mood swings that children experience as they transition through various developmental milestones (NIMH, 2008c).

Symptoms of depression vary based on the age of the youth. Signs in preschool children include lack of energy, decreased interest in playing, and crying more easily or more often (Hoecker, 2006). When children reach school age, they may become more irritable, complain of boredom, be easily discouraged, become distant from friends and family, and have problems with school work (Hoecker, 2006). During adolescence, the youth may drop out of favorite activities, have more arguments with parents and teachers, refuse to do chores and/or homework, and engage in harmful behaviors, such as cutting him/herself or talking about suicide (Hoecker, 2006).

Treatment can include talk therapy with a therapist, psychologist, social worker, or marriage and family therapist, medication, or

a combination of both. There are medications that have been approved for use in children 8 years and older (NIMH, 2008c). However, there is some indication that there is increased risk of suicidal thoughts and suicidality among youth who use antidepressants. Consequently, the Food and Drug Administration (FDA) has adopted a “black box” label warning, which is the most serious warning in prescription drug labeling (FDA, 2008). The FDA suggests careful and close monitoring of youth taking antidepressants.

Depression in Women

Depression is a common mental health disorder experienced by women, and data show women are more likely than men to have clinical depression (NIMH, 2008d). Research shows approximately 12 percent of women in the United States have clinical depression in any given year (Kessler et al, 2006; NIMH, 2008d), and one in five women is expected to develop clinical depression in her lifetime (Nutrition Health Center, 2008).

The symptoms of depression in women include physical, emotional, and psychosocial effects. Physical symptoms include sleep disturbances, tiredness, weakness, back pain, headaches, digestive disorders, and chronic pain. Emotional symptoms include anger, frustration, irritability, restlessness, feeling sad, feeling worthless, crying spells, and trouble concentrating and making decisions. Psychosocial symptoms include loss of interest in normal activities, isolation from family and friends, loss of interest in sex, and drug and alcohol use. Compared to men, women will more often experience guilt, anxiety, sleep disturbances, and increased appetite/weight gain (Bhatia & Bhatia, 1999).

Treatment is available for women, and can include talk therapy with a therapist, psychologist, social worker, or marriage and family therapist, medication (antidepressants), or a combination of both.

Postpartum Depression

Postpartum depression (PPD) is depression that occurs within one year after delivery (HHS, 2005). It is different from the “baby blues,” which is a mild depression experienced by 70–80 percent of new mothers; that lasts from a few days to a few weeks after childbirth and resolves on its own (ACOG, 1999). Conversely, approximately 10 percent of women experience PPD, which is a more serious form of depression that includes feelings of sadness, anxiety, and/or despair that interfere with the mother’s ability to care for her baby and cope with daily activities (ACOG, 1999).

Causes of PPD include: hormonal changes during and after pregnancy, lack of rest, little support from family and friends, anxiety about motherhood, problems with the pregnancy or childbirth, stress from changes in home and work routines, feelings of loss of identity, and having less free time and less control over time (ACOG, 1999).

Symptoms include: feelings of restlessness, sadness, hopelessness, guilt, and worthlessness; irritability; crying a lot; having little energy; appetite changes (increase or decrease); sleep disturbances (too little or too much); withdrawal from friends and family; difficulties focusing, remembering, or making decisions; and unexplained physical symptoms including headaches, chest pains, heart palpitations, and breathing difficulties (HHS, 2005).

Treatment can include talk therapy with a therapist, psychologist, social worker or marriage and family therapist, medication (antidepressants), or both. There are medications that are safe to take while breastfeeding, but the risks and benefits should be weighed (ACOG, 1999; HHS, 2005). Untreated, PPD can affect the mother's ability to parent, and may contribute to delays in language development, behavioral problems, sleep problems, and difficulty emotionally bonding with others (HHS, 2005).

Depression in Men

Depression affects nearly 7 percent of men (NIMH, 2008e), although men account for only one in 10 diagnosed cases (Cleveland Clinic, 2008). Symptoms of depression in men are not commonly recognized, because men often deny having problems, and they are less likely to show the usual signs, such as crying, sadness, and verbally expressing thoughts of suicide (Cleveland Clinic, 2008). More often, men express anger, blame, and aggression. They also are more likely to overwork, abuse alcohol and drugs, increase risk-taking behaviors, and attempt suicide (Cleveland Clinic, 2008). In fact, in the U.S. men are four times as likely to commit suicide as women, and 80 percent of all people who commit suicide are male (CDC, 2008). Finally, men are more likely to experience physical symptoms that they do not recognize as depression (NIMH, 2008e). These symptoms can include ulcers and other digestive problems, headaches, and chronic pain.

Stigma is an additional barrier to diagnosis and treatment of depression in men. Many men fear their work lives will be negatively affected if their employer or coworkers learn they are being treated for depression (NIMH, 2008e).

However, treatment has been shown to be effective for men with depression. Talk therapy with a therapist, psychologist, social worker, or marriage and family therapist, medication, or a combination of both have been shown to improve depression in men.

Depression in Older Adults

Depression is a common problem among older adults. It is estimated that approximately 20 percent of older community members and as many as 50 percent of those living in nursing homes experience depression (American Psychological Association, 2003). Depressive illness often occurs conjointly with other illnesses, including heart disease, stroke, diabetes, and cancer (NIMH, 2008f). Many people assume that because older adults commonly experience these health conditions, depression is simply a "normal" part of aging; however, this is not true (NIMH, 2008f). Depression in older adults is commonly under-diagnosed and under-treated, which can prolong recovery and/or worsen common health conditions (NIMH, 2008f).

Symptoms of depression in older adults include those commonly seen in other age groups, such as sleep disturbances, fatigue, difficulty concentrating or making decisions, changes in appetite, weight gain/loss, unexplained physical problems, anger, frustration, irritability, feeling sad/down, low self-esteem, crying spells, loss of interest in normal activities, isolation from family and friends, substance use and abuse, and thoughts of death (Jeste, 2003) (Smith, Segal & Segal, 2007). However, older adults also may show signs such as worries about being a burden, memory problems, slowed movement, and lack of interest in personal care (Segal, Jaffe, Davies & Smith, 2007). As with depression

in men, suicidality is a serious concern among older adults. People aged 65 and older have the highest suicide rates of any age group (Surgeon General, 2008).

Treatment for depression in older people includes talk therapy with a therapist, psychologist, social worker, or marriage and family therapist, medication (antidepressants), or a combination of both.

Citations:

American College of Obstetrics and Gynecology (ACOG) (1999). *Postpartum depression*. Available online: http://www.acog.org/publications/patient_education/bp091.cfm.

American Psychiatric Association (2004). *The diagnostic and statistical manual of mental disorders: DSM IV-TR*. Arlington, VA: American Psychiatric Association.

American Psychological Association (2003). *Facts about depression in older adults*. Washington, DC: American Psychological Association. Available online: <http://www.apa.org/ppo/issues/olderdepressfact.html>.

Arons, B. (2000). Mental health services in rural America. *Vital Speeches of the Day*, LXIV, 12, 369, 371.

Badger, L., H. Robinson, & T. Farley, (1999). Management of mental disorders in rural primary care: A proposal for integrated psychosocial services. *Journal of Family Practice*, 48(10), 813-818.

Bailey, J. (2004). *Health care in rural America*. Lyons, NE: Center for Rural Affairs.

Bhatia, S.C. & S.K. Bhatia, (1999). Depression in women: Diagnostic and treatment considerations. *American Family Physician*, LX(I) 225-240. Available online: <http://www.healthyplace.com/communities/depression/women.asp>.

Centers for Disease Control (CDC) (2008). *Suicide: Facts at a glance*. Atlanta: CDC. Available online: <http://www.cdc.gov/ncipc/dvp/suicide/SuicideDataSheet.pdf>.

Cleveland Clinic (2008). *Depression in men*. Cleveland, OH: Cleveland Clinic. Available online: <http://www.clevelandclinic.org/health/health-info/docs/2200/2286.asp?index=9307>.

Department of Health and Human Services (HHS) (2005). *Depression during and after pregnancy*. Washington, DC: DHHS. Available online: <http://www.4woman.gov/FAQ/postpartum.htm>.

Eaton, W., C. Muntaner, G. Bovasso, & C. Smith, (2001). Socioeconomic status and depressive syndrome: The role of inter- and intra-generational mobility, government assistance and work environment. *Journal of Health and Social Behavior*, XLII, 277-294.

Food and Drug Administration (FDA) (2008). *Class suicidality labeling language for antidepressants*. Washington, DC: FDA. Available online: <http://www.fda.gov/cder/drug/antidepressants/labelTemplate.pdf>.

Hoecker, J. (2006). *Depression in children: How is it treated?* Minneapolis, MN: The Mayo Clinic. Available online: <http://www.mayoclinic.com/health/depression-treatment/AN00685>.

Jeste, D.V. (2003). Depression in older persons. Arlington, VA: NAMI/National Alliance on Mental Illness. Available online: http://www.nami.org/Template.cfm?Section=By_Illness&template=/ContentManagement/ContentDisplay.cfm&ContentID=17624.

Kessler, R., K. McGonagle, & S. Zhao, et al. (2006). Lifetime and 12 month prevalence of DSM-III-R psychiatric disorders in the United States: Results from the national comorbidity survey. *Archives of General Psychiatry*, 11, 8-19.

National Institute of Mental Health (NIMH) (2008a). *Depression*. Bethesda, MD: National Institutes of Health. Available online: <http://www.nimh.nih.gov/health/publications/depression/nimhdepression.pdf>.

National Institute of Mental Health (NIMH) (2008b). *What are the symptoms of depression?* Bethesda, MD: National Institutes of Health. Available online: <http://www.nimh.nih.gov/health/publications/depression/symptoms.shtml>.

National Institute of Mental Health (NIMH) (2008c). *How do children and adolescents experience depression?* Bethesda, MD: National Institutes of Health. Available online: <http://www.nimh.nih.gov/health/publications/depression/how-do-children-and-adolescents-experience-depression.shtml>.

National Institute of Mental Health (NIMH) (2008d). *How do women experience depression?* Bethesda, MD: National Institutes of Health. Available online: <http://www.nimh.nih.gov/health/publications/depression/how-do-women-experience-depression.shtml>.

National Institute of Mental Health (NIMH) (2008e). *Men and depression*. Bethesda, MD: National Institutes of Health. Available online: <http://www.nimh.nih.gov/health/publications/men-and-depression/depression.shtml>.

National Institute of Mental Health (NIMH) (2008f). *Depression in elderly men*. Bethesda, MD: National Institutes of Health. Available online: <http://www.nimh.nih.gov/health/publications/men-and-depression/depression-in-elderly-men.shtml>.

National Mental Health Association (2008). *Children's mental health statistics*. Arlington, VA: NHA. Available online: <http://www1.nmha.org/children/prevent/stats.cfm>.

Rosenblatt, R.A., S. Casey, & M. Richardson, (2002). Rural-urban differences in the public health workforce: Local health departments in the western United States. *American Journal of Public Health*, 92(VII), 1102-1105.

Sarafolean, M. H. (2000). *Depression in school-age children and adolescents: Characteristics, assessment and prevention*. In *A Pediatric Perspective*, July/August 2000 Vol. 9, No. 4. Available online: <http://www.healthyplace.com/communities/depression/children.asp>.

Segal, J., J. Jaffe, P. Davies, & M. Smith, (2007). *Depression in older adults and the elderly: Recognizing the signs and getting help*. Santa Monica, CA: Helpguide. Available online: http://www.helpguide.org/mental/depression_elderly.htm#signs.

Smith, M., R. Segal, & J. Segal, (2007) *Understanding depression: Spotting the signs and symptoms and getting help*.

Santa Monica, CA: Helpguide. Available online: http://www.helpguide.org/mental/depression_signs_types_diagnosis_treatment.htm#top

U.S. Surgeon General (2008). Older adults and mental health. In *Mental health: A report of the Surgeon General*. Washington, DC: U.S. Surgeon General. Available online: <http://www.surgeongeneral.gov/library/mentalhealth/chapter5/sec3.html#topper>.

World Health Organization (WHO) (2008). *Depression*. Geneva, Switzerland: WHO. Available online: http://www.who.int/mental_health/management/depression/definition/en/.

Depression

The following is background information from the National Institute of Mental Health on depression. Per the NIMH, this information is in the public domain and may be reproduced or copied without their permission. A PDF of the publication may be obtained at: <http://www.nimh.nih.gov/health/publications/depression/nimhdepression.pdf>.

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 and 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.

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 delusion.
- **Postpartum depression**, which is diagnosed when a new mother develops a major depressive episode within one month after delivery. An estimated 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). Visit the NIMH website for more information about bipolar disorder.

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 include:

- 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. 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.

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; 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 to 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, 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 have visited 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}

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.

How is depression detected and treated?

Depression, even the most severe case, 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.

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.

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 percent of those taking antidepressants thought about or attempted suicide (although no suicides occurred), compared to 2 percent 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 children, adolescents and young adults 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.

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.

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, 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 of 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 under way 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 located at, <http://www.nimh.nih.gov/index.shtml#visit>.

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.

To 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.

To 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 the suicidal person is not left alone.

For More Information

- Visit the National Library of Medicine’s web page at <http://www.nlm.nih.gov/medlineplus/> and <http://medlineplus.gov/spanish/>.
- For information on clinical trials for depression visit <http://medlineplus.gov/spanish/> or the National Library of Medicine Clinical Trials Database at <http://www.clinicaltrials.gov/>.

Information from NIMH is available in multiple formats. You can browse online, download documents in PDF, and order paper brochures through the mail. If you would like to have NIMH publications, you can order them online at www.nimh.nih.gov. If you do not have Internet access and wish to have information that supplements this publication, please contact the NIMH Information Center at the numbers listed below.

Please check the NIMH Web site at <http://www.nimh.nih.gov/index.shtml> for the most up-to-date information on this topic.

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TTY: 866-415-8051
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Web site: <http://www.nimh.nih.gov>

Citations:

1. Altshuler LL, Hendrich V, Cohen LS. Course of mood and anxiety disorders during pregnancy and the postpartum period. *Journal of Clinical Psychiatry*, 1998; 59: 29.
2. Rohan KJ, Lindsey KT, Roecklein KA, Lacy TJ. Cognitive-behavioral therapy, light therapy and their combination in treating seasonal affective disorder. *Journal of Affective Disorders*, 2004; 80: 273-283.

3. Regier DA, Rae DS, Narrow WE, Kaebler CT, Schatzberg AF. Prevalence of anxiety disorders and their comorbidity with mood and addictive disorders. *British Journal of Psychiatry*, 1998; 173 (Suppl. 34): 24-28.
4. Devane CL, Chiao E, Franklin M, Kruep EJ. Anxiety disorders in the 21st century: status, challenges, opportunities, and comorbidity with depression. *American Journal of Managed Care*, 2005 Oct; 11(Suppl. 12): S344-353.
5. Shalev AY, Freedman S, Perry T, Brandes D, Sahar T, Orr SP, Pitman RK. Prospective study of posttraumatic stress disorder and depression following trauma. *American Journal of Psychiatry*, 1998; 155(5): 630-637.
6. Conway KP, Compton W, Stinson FS, Grant BF. Lifetime comorbidity of DSM-IV mood and anxiety disorders and specific drug use disorders: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of Clinical Psychiatry*, 2006 Feb; 67(2): 247-257.
7. Cassano P, Fava M. Depression and public health, an overview. *Journal of Psychosomatic Research*, 2002; 53: 849-857.
8. Katon W, Ciechanowski P. Impact of major depression on chronic medical illness. *Journal of Psychosomatic Research*, 2002; 53: 859-863.
9. Tsuang MT, Faraone SV. The genetics of mood disorders. Baltimore, MD: *Johns Hopkins University Press*, 1990.
10. Tsuang MT, Bar JL, Stone WS, Faraone SV. Gene-environment interactions in mental disorders. *World Psychiatry*, 2004 June; 3(2): 73-83.
11. Rubinow DR, Schmidt PJ, Roca CA. Estrogen-serotonin interactions: implications for affective regulation. *Biological Psychiatry*, 1998; 44(9): 839-850.
12. Pollack W. Mourning, melancholia and masculinity: recognizing and treating depression in men. In: Pollack W, Levant R, eds. *New Psychotherapy for Men*. New York: Wiley, 1998; 147-166.
13. Cochran SV, Rabinowitz FE. *Men and Depression: clinical and empirical perspectives*. San Diego: Academic Press, 2000.
14. Kochanek KD, Murphy SL, Anderson RN, Scott C. Deaths: final data for 2002. National Vital Statistics Reports; 53(5). Hyattsville, MD: *National Center for Health Statistics*, 2004.
15. Gallo JJ, Rabins PV. Depression without sadness: alternative presentations of depression in late life. *American Family Physician*, 1999; 60(3): 820-826.
16. Krishnan KRR, Taylor WD, et al. Clinical characteristics of magnetic resonance imaging-defined subcortical ischemic depression. *Biological Psychiatry*, 2004; 55: 390-397.
17. Conwell Y. Suicide in later life: a review and recommendations for prevention. *Suicide and Life Threatening Behavior*, 2001; 31(Suppl.): 32-47.
18. Little JT, Reynolds CF III, Dew MA, Frank E, Begley AE, Miller MD, Cornes C, Mazumdar S, Perel JM, Kupfer DJ. How common is resistance to treatment in recurrent, nonpsychotic geriatric depression? *American Journal of Psychiatry*, 1998; 155(8): 1035-1038.

- 19.** Reynolds CF III, Frank E, Perel JM, Imber SD, Cornes C, Miller MD, Mazumdar S, Houck PR, Dew MA, Stack JA, Pollock BG, Kupfer DJ. Nortriptyline and interpersonal psychotherapy as maintenance therapies for recurrent major depression: a randomized controlled trial in patients older than 59 years. *Journal of the American Medical Association*, 1999; 281(1): 39-45.
- 20.** Lebowitz BD, Pearson JL, Schneider LS, Reynolds CF, Alexopoulos GS, Bruce MI, Conwell Y, Katz IR, Meyers BS, Morrison MF, Mossey J, Niederehe G, Parmelee P. Diagnosis and treatment of depression in late life: consensus statement update. *Journal of the American Medical Association*, 1997; 278(14): 1186-1190.
- 21.** Reynolds CF III, Dew MA, Pollock BG, Mulsant BH, Frank E, Miller MD, Houck PR, Mazumdar S, Butters MA, Stack JA, Schlernitzauer MA, Whyte EM, Gildengers A, Karp J, Lenze E, Szanto K, Bensasi S, Kupfer DJ. Maintenance treatment of major depression in old age. *New England Journal of Medicine*, 2006 Mar 16; 354(11): 1130-1138.
- 22.** Weissman MM, Wolk S, Goldstein RB, Moreau D, Adams P, Greenwald S, Klier CM, Ryan ND, Dahl RE, Wichramaratne P. Depressed adolescents grown up. *Journal of the American Medical Association*, 1999; 281(18): 1701-1713.
- 23.** Cyranowski JM, Frank E, Young E, Shear MK. Adolescent onset of the gender difference in lifetime rates of major depression. *Archives of General Psychiatry*, 2000; 57: 21-27.
- 24.** Shaffer D, Gould MS, Fisher P, Trautman P, Moreau D, Kleinman M, Flory M. Psychiatric diagnosis in child and adolescent suicide. *Archives of General Psychiatry*, 1996; 53(4): 339-348.
- 25.** March J, Silva S, Petrycki S, Curry J, Wells K, Fairbank J, Burns B, Domino M, McNulty S, Vitiello B, Severe J. Treatment for Adolescents with Depression Study (TADS) team. Fluoxetine, cognitive-behavioral therapy, and their combination for adolescents with depression: Treatment for Adolescents with Depression Study (TADS) randomized controlled trial. *Journal of the American Medical Association*, 2004; 292(7): 807-820.
- 26.** Rush JA, Trivedi MH, Wisniewski SR, Stewart JW, Nierenberg AA, Thase ME, Ritz L, Biggs MM, Warden D, Luther JF, Shores-Wilson K, Niederehe G, Fava M. Bupropion-SR, Sertraline, or Venlafaxine-XR after failure of SSRIs for depression. *New England Journal of Medicine*, 2006 Mar 23; 354(12): 1231-1242.
- 27.** Trivedi MH, Fava M, Wisniewski SR, Thase ME, Quitkin F, Warden D, Ritz L, Nierenberg AA, Lebowitz BD, Biggs MM, Luther JF, Shores-Wilson K, Rush JA. Medication augmentation after the failure of SSRIs for depression. *New England Journal of Medicine*, 2006 Mar 23; 354(12): 1243-1252.
- 28.** Bridge JA, Iyengar S, Salary CB, Barbe RP, Birmaher B, Pincus HA, Ren L, Brent DA. Clinical response and risk for reported suicidal ideation and suicide attempts in pediatric antidepressant treatment, a meta-analysis of randomized controlled trials. *Journal of the American Medical Association*, 2007; 297(15): 1683-1696.

-
- 29.** Hypericum Depression Trial Study Group. Effect of Hypericum perforatum (St. John's wort) in major depressive disorder: a randomized controlled trial. *Journal of the American Medical Association*, 2002; 287(14): 1807-1814.
- 30.** Rami L, Bernardo M, Boget T, Ferrer J, Portella M, Gil-Verona JA, Salamero M. Cognitive status of psychiatric patients under maintenance electroconvulsive therapy: a one-year longitudinal study. *The Journal of Neuropsychiatry and Clinical Neurosciences*, 2004; 16: 465-471.

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