



Men and Depression



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If you are wondering whether you,
or someone you care about,
may have depression,
this booklet can help.

Depression is a serious medical condition that affects the body, mood, and thoughts. It affects the way one eats and sleeps, one's

self-concept, and the way one thinks about things. A depressive disorder is not the same as a passing blue mood. It is not a sign of personal weakness or a condition that can be willed or wished away. People with a depressive illness cannot merely "pull themselves together" and get better. Without treatment, symptoms can last for weeks, months, or years. Appropriate treatment, however, often involving medication and/or short-term psychotherapy, can help most people who suffer from depression.

"I can remember it started with a loss of interest in basically everything that I like doing. I just didn't feel like doing anything. I just felt like giving up. Sometimes I didn't even want to get out of bed."

-Rene Ruballo, Police Officer

Depression can strike anyone regardless of age, ethnic background, socioeconomic status, or gender; however, large-scale research studies have found that depression is about twice as common in women as in men.^{1,2} In the United States, researchers estimate that in any given one-year period, depressive illnesses affect 12 percent of women (more than 12 million women) and nearly seven percent of men (more than six million men).³ But important questions remain to be answered about the causes underlying this gender difference. For example, is depression truly less common among men, or are men just less likely than women to recognize, acknowledge, and seek help for depression?

In focus groups conducted by the National Institute of Mental Health (NIMH) to assess depression awareness, men described their own symptoms of depression without realizing that they were depressed. Notably, many were unaware that "physical" symptoms, such as headaches, digestive disorders, and chronic pain, can be associated with depression. In addition, they expressed concern about seeing a mental health professional or going to a mental health clinic, thinking that people would find out and that this might have a negative impact on their job security, promotion potential, or health insurance benefits. They feared that being labeled with a diagnosis of mental illness would cost them the respect of their family and friends, or their standing in the community.

Over the past 20 years, biomedical research including genetics and neuroimaging has helped to shed light on depression and other mental disorders—increasing our understanding of the brain, how its biochemistry can go awry, and how to alleviate the suffering that mental illnesses can cause. Brain imaging technologies are now allowing

scientists to see how effective treatment with medication or psychotherapy is reflected in changes in brain activity.⁴ As research continues to reveal that depressive disorders are real and treatable, and are no more a sign of weakness than cancer or any other serious illness, more and more men with depression may feel empowered to seek treatment and find improved quality of life.

Types of Depression

Depression comes in different forms, just as is the case with other illnesses such as heart disease. This booklet briefly describes three of the most common types of depressive disorders. However, within these types there are variations in the number of symptoms, their severity, and persistence.

Major depression (or *major depressive disorder*) is manifested by a combination of symptoms (see symptom list below) that interferes with the ability to work, study, sleep, eat, and enjoy once pleasurable activities. A major depressive episode may occur only once; but more commonly, several episodes may occur in a lifetime. Chronic major depression may require a person to continue treatment indefinitely.

A less severe type of depression, **dysthymia** (or *dysthymic disorder*), involves long-lasting symptoms that do not seriously disable, but keep one from functioning well or feeling good. Many people with dysthymia also experience major depressive episodes at some time in their lives.

Another type of depressive illness is **bipolar disorder** (or *manic-depressive illness*). Bipolar disorder is characterized by cycling mood changes: severe highs (mania) and lows (depression), often with periods of normal mood in between. Sometimes the mood switches are dramatic and rapid, but usually they are gradual. When in the depressed cycle, an individual can have any or all of the symptoms of depression. When in the manic cycle, the individual may be overactive, over-talkative, and have a great deal of energy. Mania often affects thinking, judgment, and

social behavior in ways that cause serious problems and embarrassment. For example, the individual in a manic phase may feel elated, full of grand schemes that might range from unwise business decisions to romantic sprees and unsafe sex. Mania, left untreated, may worsen to a psychotic state.

Symptoms of Depression and Mania

Not everyone who is depressed or manic experiences every symptom. Some people experience a few symptoms; some people suffer many. The severity of symptoms varies among individuals and also over time.

Depression

- Persistent sad, anxious, or "empty" mood
- Feelings of hopelessness, pessimism
- Feelings of guilt, worthlessness, helplessness
- Loss of interest or pleasure in hobbies and activities that were once enjoyed, including sex
- Decreased energy, fatigue, being "slowed down"
- Difficulty concentrating, remembering, making decisions
- Trouble sleeping, early-morning awakening, or oversleeping
- Appetite and/or weight changes
- Thoughts of death or suicide, or suicide attempts
- Restlessness, irritability
- Persistent physical symptoms, such as headaches, digestive disorders, and chronic pain, which do not respond to routine treatment

"You don't have any interest in thinking about the future, because you don't feel that there is going to be any future."

-Shawn Colten, National Diving Champion

"I wouldn't feel rested at all. I'd always feel tired. I could get from an hour's sleep to eight hours sleep and I would always feel tired."

-Rene Ruballo, Police Officer

Mania

- Abnormal or excessive elation
- Unusual irritability
- Decreased need for sleep
- Grandiose notions
- Increased talking
- Racing thoughts
- Increased sexual desire
- Markedly increased energy
- Poor judgment
- Inappropriate social behavior

Co-Occurrence of Depression with Other Illnesses

Depression can coexist with other illnesses. In such cases, it is important that the depression and each co-occurring illness be appropriately diagnosed and treated.

Research has shown that anxiety disorders, which include post-traumatic stress disorder (PTSD), obsessive-compulsive disorder, panic disorder, social phobia, and generalized anxiety disorder, commonly accompany depression.^{5,6} Depression is especially prevalent among people with PTSD, a debilitating condition that can occur after exposure to a terrifying event or ordeal in which grave physical harm occurred or was threatened. Traumatic events that can trigger PTSD include violent personal assaults such as rape or mugging, natural disasters, accidents, terrorism, and military combat. PTSD symptoms include: re-experiencing the traumatic event in the form of flashback

episodes, memories, or nightmares; emotional numbness; sleep disturbances; irritability; outbursts of anger; intense guilt; and avoidance of any reminders or thoughts of the ordeal. In one NIMH—supported study, more than 40 percent of people with PTSD also had depression when evaluated at one month and four months following the traumatic event.⁷

Substance use disorders (abuse or dependence) also frequently co-occur with depressive disorders.^{5,6} Research has revealed that people with alcoholism are almost twice as likely as those without alcoholism to also suffer from major depression.⁶ In addition, more than half of people with bipolar disorder type I (with severe mania) have a co-occurring substance use disorder.⁸

Depression has been found to occur at a higher rate among people who have other serious illnesses such as heart disease, stroke, cancer, HIV, diabetes, and Parkinson's.^{6,9} Symptoms of depression are sometimes mistaken for inevitable accompaniments to these other illnesses. However, research has shown that the co-occurring depression can and should be treated, and that in many cases treating the depression can also improve the outcome of the other illnesses.

Causes of Depression

Substantial evidence from neuroscience, genetics, and clinical investigation shows that depressive illnesses are disorders of the brain. However, the precise causes of these illnesses continue to be a matter of intense research.

Modern brain-imaging technologies are revealing that in depression, neural circuits responsible for the regulation of moods, thinking, sleep, appetite, and behavior fail to function properly, and that critical neurotransmitters—chemicals used by nerve cells to communicate—are out of balance. Genetics research indicates that risk for depression results from the influence of multiple genes acting together with

environmental or other nongenetic factors. Studies of brain chemistry and the mechanisms of action of antidepressant medications continue to inform our understanding of the biochemical processes involved in depression.

Very often, a combination of genetic, cognitive, and environmental factors is involved in the onset of a depressive disorder.¹⁰ Trauma, loss of a loved one, a difficult relationship, a financial problem, or any stressful change in life patterns, whether the change is unwelcome or desired, can trigger a depressive episode in vulnerable individuals. Later episodes of depression may occur without an obvious cause.

In some families, depressive disorders seem to occur generation after generation; however, they can also occur in people who have no family history of these illnesses.¹¹ Whether inherited or not, depressive disorders are associated with changes in brain structures or brain function, which can be seen using modern brain imaging technologies.^{12,13}

Men and Depression

Researchers estimate that at least six million men in the United States suffer from a depressive disorder every year.³ Research and clinical evidence reveal that while both women and men can develop the standard symptoms of depression, they often experience depression differently and may have different ways of coping with the symptoms. Men may be more willing to acknowledge fatigue, irritability, loss of interest in work or hobbies, and sleep disturbances rather than feelings of sadness, worthlessness, and excessive guilt.^{14,15} Some researchers question whether the standard definition of depression and the diagnostic tests based upon it adequately capture the condition as it occurs in men.¹⁵

"I'd drink and I'd just get numb. I'd get numb to try to numb my head. I mean, we're talking many, many beers

to get to that state where you could shut your head off, but then you wake up the next day and it's still there. Because you have to deal with it, it doesn't just go away. It isn't a two-hour movie and then at the end it goes 'The End' and you press off. I mean it's a twenty-four hour a day movie and you're thinking there is no end. It's horrible."

-Patrick McCathern, First Sergeant, U.S. Air Force, Retired

Men are more likely than women to report alcohol and drug abuse or dependence in their lifetime;¹⁶ however, there is debate among researchers as to whether substance use is a "symptom" of underlying depression in men, or a co-occurring condition that more commonly develops in men. Nevertheless, substance use can mask depression, making it harder to recognize depression as a separate illness that needs treatment.

Instead of acknowledging their feelings, asking for help, or seeking appropriate treatment, men may turn to alcohol or drugs when they are depressed, or become frustrated, discouraged, angry, irritable and, sometimes, violently abusive. Some men deal with depression by throwing themselves compulsively into their work, attempting to hide their depression from themselves, family, and friends; other men may respond to depression by engaging in reckless behavior, taking risks, and putting themselves in harm's way.¹⁵

"When I was feeling depressed I was very reckless with my life. I didn't care about how I drove, I didn't care about walking across the street carefully, I didn't care about dangerous parts of the city. I wouldn't be affected by any kinds of warnings on travel or places to go. I didn't care. I didn't care whether I lived or died and so I was going to do whatever I wanted whenever I wanted."

And when you take those kinds of chances, you have a greater likelihood of dying."

-Bill Maruyama, Lawyer

Four times as many men as women die by suicide in the United States, even though women make more suicide attempts during their lives.^{17,18} In addition to the fact that the methods men use to attempt suicide are generally more lethal than those methods used by women, there may be other issues that protect women against suicide death. In light of research indicating that suicide is often associated with depression,¹⁹ the alarming suicide rate among men may reflect the fact that men are less likely to seek treatment for depression. Many men with depression do not obtain adequate diagnosis and treatment, which may be life saving.

More research is needed to understand all aspects of depression in men, including how men respond to stress and feelings associated with depression, how to make them more comfortable acknowledging these feelings and getting the help they need, and how to train physicians to better recognize and treat depression in men. Family members, friends, and employee assistance professionals in the workplace also can play important roles in recognizing depressive symptoms in men and helping them get treatment.

Depression in Elderly Men

Men must cope with several kinds of stress as they age. If they have been the primary wage earners for their families and have identified heavily with their jobs, they may feel stress upon retirement-loss of an important role, loss of self-esteem-that can lead to depression. Similarly, the loss of friends and family and the onset of other health problems can trigger depression. Nevertheless, most elderly people feel satisfied with their lives, and it is not "normal" for older adults to feel depressed.²⁰ Depression is an illness that can be

effectively treated, thereby decreasing unnecessary suffering, improving the chances for recovery from other illnesses, and prolonging productive life.

However, health care professionals may miss depressive symptoms in older patients, who are often reluctant to discuss feelings of hopelessness, sadness, loss of interest in normally pleasurable activities, or extremely prolonged grief after a loss, and who may complain primarily of physical symptoms.²¹ Also, it may be difficult to discern a co-occurring depressive disorder in patients who present with other illnesses, such as heart disease, stroke, or cancer, which in themselves may cause depressive symptoms, or which may be treated with medications that have side effects resembling depression. If a depressive illness is diagnosed, treatment with appropriate medication and/or brief psychotherapy can help older adults manage both diseases, thus enhancing survival and quality of life.

"As you get sick, as you become drawn in more and more by depression, you lose that perspective. Events become more irritating, you get more frustrated about getting things done. You feel angrier, you feel sadder. Everything's magnified in an abnormal way."

-Paul Gottlieb, Publisher

The importance of identifying and treating depression in older adults is stressed by the statistics on suicide among the elderly. There is a common perception that suicide rates are highest among the young; however, it is the elderly, particularly older white males that have the highest rates. Over 70 percent of older suicide victims have been to their primary care physician within the month of their death, many with a depressive illness that was not detected.²² This has led to research efforts to determine how to best improve physicians' abilities to detect and treat depression in older adults.²³

Approximately 80 percent of older adults with depression improve when they receive treatment with antidepressant medication, psychotherapy, or a combination of both.²⁴ In addition, research has shown that a combination of psychotherapy and antidepressant medication is highly effective for reducing recurrences of depression among older adults.²⁵ Psychotherapy alone has been shown to prolong periods of good health free from depression, and is particularly useful for older patients who cannot or will not take medication.²⁰ Improved recognition and treatment of depression in late life will make those years more enjoyable and fulfilling for the depressed elderly person, the family, and caregivers.

Depression in Boys and Adolescent Males

Only in the past two decades has depression in children been taken very seriously. An NIMH-sponsored study of 9- to 17-year-olds estimates that the prevalence of any depressive disorder is more than 6 percent in a 6-month period, with 4.9 percent having major depression.²⁶ Before puberty, boys and girls are equally likely to develop depressive disorders. After age 14, however, females are twice as likely as males to have major depression or dysthymia.²⁷ The risk of developing bipolar disorder remains approximately equal for males and females throughout adolescence and adulthood.

Research has revealed that depression is occurring earlier in life today than in past decades.²⁸ In addition, research has shown that early-onset depression often persists, recurs, and continues into adulthood, and that depression in youth may also predict more severe illness in adult life.²⁹ Depression in young people frequently co-occurs with other mental disorders, most commonly anxiety, disruptive behavior, or substance abuse disorders, as well as with other serious illnesses such as diabetes.^{30,31} The depressed younger child may say he is sick, refuse to go to

school, cling to a parent, or worry that the parent may die. The depressed older child may sulk, get into trouble at school, be negative, grouchy, and feel misunderstood.

Among both children and adolescents, depressive disorders confer an increased risk for illness and interpersonal and psychosocial difficulties that persist long after the depressive episode is resolved; in adolescents there is also an increased risk for substance abuse and suicidal behavior.^{29,32,33} Unfortunately, these disorders often go unrecognized by families and physicians alike. Signs of depressive disorders in young people are often viewed as normal mood swings typical of a particular developmental stage. In addition, health care professionals may be reluctant to prematurely "label" a young person with a mental illness diagnosis. However, early diagnosis and treatment of depressive disorders are critical to healthy emotional, social, and behavioral development.

Although the scientific literature on treatment of children and adolescents with depression is far less extensive than that for adults, a number of recent studies have confirmed the short-term efficacy and safety of treatments for depression in youth. Larger research studies on treatments are underway to determine which ones work best for which youngsters. Additional research is needed on how to best incorporate these treatments into primary care practice.

Bipolar disorder, although rare in young children, can appear in both children and adolescents.³⁴ The unusual shifts in mood, energy and functioning that are characteristic of bipolar disorder may begin with manic, depressive, or mixed manic and depressive symptoms. It is more likely to affect the children of parents who have the illness. Twenty to 40 percent of adolescents with major depression go on to reveal bipolar disorder within five years after the onset of depression.³⁵

Depression in children and adolescents is associated with an increased risk of suicidal behaviors.^{29,36} This risk may rise, particularly among adolescent males, if the depression is accompanied by conduct disorder and alcohol or other substance abuse.³⁷ In 2000, suicide was the third leading

cause of death among young males, age 10 to 24.³⁸ NIMH-supported researchers found that among adolescents who develop major depressive disorder, as many as seven percent may die by suicide in the young adult years.²⁹ Therefore, it is important for doctors and parents to take seriously any remarks about suicide.

NIMH researchers are developing and testing various interventions to prevent suicide in children and adolescents. Early diagnosis and treatment, accurate evaluation of suicidal thinking, and limiting young people's access to lethal agents—including firearms and medications—may hold the greatest suicide prevention value.

Suicide

"You are pushed to the point of considering suicide, because living becomes very painful. You are looking for a way out, you're looking for a way to eliminate this terrible psychic pain. And I remember, I never really tried to commit suicide, but I came awful close, because I used to play matador with buses. You know, I would walk out into the traffic of New York City, with no reference to traffic lights, red or green, almost hoping that I would get knocked down."

-Paul Gottlieb, Publisher

Sometimes depression can cause people to feel like putting themselves in harm's way, or killing themselves. Although the majority of people with depression do not die by suicide, having depression does increase suicide risk compared to people without depression.

If you are thinking about suicide, get help immediately:

- Call your doctor's office.
- Call 911 for emergency services.
- Go to the emergency room of the nearest hospital

- Ask a family member or friend to take you to the hospital or call your doctor.
- Call 1-800-SUICIDE (1-800-784-2433), the toll-free, 24-hour hotline of the National Hopeline Network sponsored by the Kristin Brooks Hope Center, to be connected to a trained counselor at a suicide crisis center nearest you.

Diagnostic Evaluation and Treatment

"Your tendency is just to wait it out, you know, let it get better. You don't want to go to the doctor. You don't want to admit to how bad you're really feeling."

-Paul Gottlieb, Publisher

The first step to getting appropriate treatment for depression is a physical examination by a physician. Certain medications as well as some medical conditions such as a viral infection, thyroid disorder, or low testosterone level can cause the same symptoms as depression, and the physician should rule out these possibilities through examination, interview, and lab tests. If no such cause of the depressive symptoms is found, a psychological evaluation for depression should be done by the physician or by referral to a mental health professional.

A good diagnostic evaluation will include a complete history of symptoms, i.e., when they started, how long they have lasted, how severe they are, whether the patient had them before and, if so, whether the symptoms were treated and what treatment was given. The doctor should ask about alcohol and drug use, and if the patient has thoughts about death or suicide. Further, a history should include questions about whether other family members have had a depressive illness and, if treated, what treatments they may have received and if they were effective. Last, a diagnostic evaluation should include a mental status examination to determine if speech, thought patterns, or memory has been affected, as sometimes happens with depressive disorders.

Treatment choice will depend on the patient's diagnosis, severity of symptoms, and preference. There are a variety of treatments, including medications and short-term psychotherapies (i.e., "talking" therapies), which have proven effective for depressive disorders. In general, severe depressive illnesses, particularly those that are recurrent, will require a combination of treatments for the best outcome.

Medications

There are several types of medications used to treat depression. These include newer antidepressant medications—chiefly the selective serotonin reuptake inhibitors (SSRIs)—and older ones—the tricyclics and the monoamine oxidase inhibitors (MAOIs). The SSRIs, and other newer medications that affect neurotransmitters such as dopamine or norepinephrine, generally have fewer side effects than tricyclics. Sometimes the doctor will try a variety of antidepressants before finding the most effective medication or combination of medications for the patient. Sometimes the dosage must be increased to be effective. Although some improvements may be seen in the first couple of weeks, antidepressant medications must be taken regularly for three to four weeks (in some cases, as many as eight weeks) before the full therapeutic effect occurs.

Patients often are tempted to stop medication too soon. They may feel better and think they no longer need the medication, or they may think it isn't helping at all. It is important to keep taking medication until it has a chance to work, though side effects (see section on Side Effects) may appear before antidepressant activity does. Once the person is feeling better, it is important to continue the medication for at least four to nine months to prevent a relapse into depression. Some medications must be stopped gradually to give the body time to adjust, and many can produce withdrawal symptoms if discontinued abruptly. Therefore, ***medication should never be discontinued without talking to your doctor about it.*** For individuals with bipolar disorder and those with chronic or recurrent major depression, medication may have to be maintained indefinitely.

Research has shown that people with bipolar disorder are at risk of switching into mania, or of developing rapid cycling episodes, during treatment with antidepressant medication.³⁹ Therefore, "mood-stabilizing" medications generally are required, alone or in combination with antidepressants, to protect people with bipolar disorder from this switch. Lithium and valproate (Depakote®) are the most commonly used mood-stabilizing drugs today. However, the potential mood-stabilizing effects of newer medications continue to be evaluated through research.

Medications for depressive disorders are not habit-forming. Nevertheless, as is the case with any type of medication prescribed for more than a few days, these treatments have to be carefully monitored to see if the most effective dosage is being given. The doctor will check the dosage of each medicine and its effectiveness regularly.

For the small number of people for whom MAO inhibitors are the best treatment, it is necessary to avoid certain foods that contain high levels of *tyramine*, including many cheeses, wines, and pickles, as well as medications such as decongestants. The interaction of tyramine with MAOIs can bring on a hypertensive crisis, a sharp increase in blood pressure that can lead to a stroke. The doctor should furnish a complete list of prohibited foods that the patient should carry at all times. Other forms of antidepressants require no food restrictions. Efforts are underway to develop a "skin patch" system for one of the newer MAOIs, selegiline; if successful, this may be a more convenient and safer medication option than the older MAOI tablets.

Medications of any kind—prescribed, over-the-counter, or borrowed—should never be mixed without consulting a doctor. Other health professionals, such as a dentist or other medical specialist, who may prescribe a drug should be told of the medications the patient is taking. Some medications, although safe when taken alone can, if taken with others, cause severe and dangerous side effects.

Alcohol, including wine, beer, and hard liquor, or street drugs may reduce the effectiveness of antidepressants and

should be avoided. However, some people who have not had a problem with alcohol abuse or dependence may be permitted by their doctor to use a modest amount of alcohol while taking one of the newer antidepressants.

Antianxiety drugs or sedatives are not antidepressants. They are sometimes prescribed along with antidepressants, but they are not effective when taken alone for a depressive disorder. Stimulants, such as amphetamines, are also not effective antidepressants, but they are used occasionally under close supervision in medically ill depressed patients.

Lithium has for many years been the treatment of choice for bipolar disorder, as it can be effective in smoothing out the mood swings common to this illness. Its use must be carefully monitored, as the range between an effective dose and a toxic one is small. If a person has preexisting thyroid, kidney, or heart disorders or epilepsy, lithium may not be recommended. Fortunately, other medications have been found to be of benefit in controlling mood swings. Among these are two mood-stabilizing anticonvulsants, valproate (Depakote[®]) and carbamazepine (Tegretol[®]). Both of these medications have gained wide acceptance in clinical practice, and valproate has been approved by the Food and Drug Administration for first-line treatment of acute mania. Other anticonvulsants that are being used now include lamotrigine (Lamictal[®]), topiramate (Topamax[®]), and gabapentin (Neurontin[®]); however, their role in the treatment of bipolar disorder is not yet proven and remains under study.

Most people who have bipolar disorder take more than one medication including, along with lithium and/or an anticonvulsant, a medication for accompanying agitation, anxiety, depression, or insomnia. Finding the best possible combination of these medications is of utmost importance to the patient and requires close monitoring by the physician.

Questions about any medication prescribed, or problems that may be related to it, should be discussed with your doctor.

Side Effects

Before starting a new medication, ask the doctor to tell you about any side effects you may experience. Antidepressants may cause mild and, usually, temporary side effects (sometimes referred to as adverse effects) in some people. Typically these are annoying, but not serious. However, any unusual reactions or side effects, or those that interfere with functioning, should be reported to the doctor immediately.

The most common side effects of the **newer antidepressants** (SSRIs and others) are:

- *Headache* - this will usually go away.
- *Nausea* - this is also temporary, but even when it occurs, it is transient after each dose.
- *Nervousness and insomnia* (trouble falling asleep or waking often during the night) - these may occur during the first few weeks; dosage reductions or time will usually resolve them.
- *Agitation (feeling jittery)* - if this happens for the first time after the drug is taken and is more than transient, the doctor should be notified.
- *Sexual problems* - the doctor should be consulted if the problem is persistent or worrisome. Although depression itself can lower libido and impair sexual performance, it has been clearly established that SSRIs and other strongly serotonergic antidepressants (e.g., the tricyclic antidepressant clomipramine) provoke new, dose-dependent sexual dysfunction independent of their therapeutic activity in both men and women. These side effects can affect more than half of adults taking SSRIs. In men, common problems include reduced sexual drive, erectile dysfunction, and delayed ejaculation.

In some cases of sexual dysfunction, the symptoms improve with the development of tolerance or lowering of the dose of medication; drug "holidays" in anticipation of sexual activity have proved to be successful for some patients taking shorter-acting SSRIs but are not feasible in the case of fluoxetine (Prozac®). Data describing differences among the SSRIs are limited, and there are no data showing a

clinical benefit with respect to sexual dysfunction as a result of switching medications within this class. If an antidepressant must be changed, one from a different class should be substituted; bupropion (Wellbutrin[®]), mirtazapine (Remeron[®]), nefazodone (Serzone[®]), and venlafaxine (Effexor[®]) appear to be good choices on the basis of these side effects. Guided by a limited number of studies, some clinicians treating men with antidepressant-associated sexual dysfunction report improvement with the addition of bupropion (Wellbutrin[®]), buspirone (BuSpar[®]), or sildenafil (Viagra[®])⁴⁰ to ongoing treatment. Be sure to discuss the various options with your doctor, as there may be other interventions that can help.

Tricyclic antidepressants have different types of side effects:

- *Dry mouth* - it is helpful to drink sips of water; chew sugarless gum; clean teeth daily.
- *Constipation* - bran cereals, prunes, fruit, and vegetables should be in the diet.
- *Bladder problems* - emptying the bladder may be troublesome, and the urine stream may not be as strong as usual; the doctor should be notified if there is marked difficulty or pain; may be particularly problematic in older men with enlarged prostate conditions.
- *Sexual problems* - sexual functioning may change; men may experience some loss of interest in sex, difficulty in maintaining an erection or achieving orgasm. If worrisome, these side effects should be discussed with the doctor.
- *Blurred vision* - this will pass soon and will not usually necessitate new glasses.
- *Dizziness* - rising from the bed or chair slowly is helpful.
- *Drowsiness as a daytime problem* - this usually passes soon. A person feeling drowsy or sedated should not drive or operate heavy equipment. The more sedating antidepressants are generally taken at bedtime to help sleep and minimize daytime drowsiness.

Psychotherapies

Several forms of psychotherapy, including some short-term (10-20 weeks) therapies, can help people with depressive disorders. Two of the short-term psychotherapies that research has shown to be effective for depression are cognitive-behavioral therapy (CBT) and interpersonal therapy (IPT). Cognitive-behavioral therapists help patients change the negative thinking and behavior patterns that contribute to or result from depression. Through verbal exchange with the therapist, as well as "homework" assignments between therapy sessions, CBT helps patients gain insight into and resolve problems related to their depression. Interpersonal therapists help patients work through disturbed personal relationships that may be contributing to or worsening their depression. Psychotherapy is offered by a variety of licensed mental health providers, including psychiatrists, psychologists, social workers, and mental health counselors.

For many depressed patients, especially those with moderate to severe depression, a combination of antidepressant medication and psychotherapy is the preferred approach to treatment. Some psychiatrists offer both types of intervention. Alternatively, in many cases two mental health professionals collaborate in the treatment of a person with depression; for example, a psychiatrist or other physician, such as a family doctor, may prescribe medication while a nonmedical therapist provides ongoing psychotherapy.

"You start to have these little thoughts, 'Wait, maybe I can get through this. Maybe these things that are happening to me aren't so bad.' And you start thinking to yourself, 'Maybe I can deal with things for now.' And it's just little tiny thoughts until you realize that it's gone and then you go, 'Oh my God, thank you, I don't feel sad anymore.' And then when it was finally gone, when I felt happy, I was back to the usual things that I was doing in my life. You get so happy because you think to yourself,

'I never thought it would leave.' "

-Shawn Colten, National Diving Champion

Electroconvulsive Therapy

Electroconvulsive therapy (ECT) is another treatment option that may be particularly useful for individuals whose depression is severe or life threatening, or who cannot take antidepressant medication. ECT often is effective in cases where antidepressant medications do not provide sufficient relief of symptoms. The exact mechanisms by which ECT exerts its therapeutic effect are not yet known.⁴¹

In recent years, ECT has been much improved. A muscle relaxant is given before treatment, which is done under brief anesthesia. Electrodes are placed at precise locations on the head to deliver electrical impulses. The stimulation causes a brief (about 30 seconds) generalized seizure within the brain, which is necessary for therapeutic efficacy. The person receiving ECT does not consciously experience the electrical stimulus.

A typical course of ECT entails 6 to 12 treatments, administered at a rate of three times per week, on either an inpatient or outpatient basis. To sustain the response to ECT, continuation treatment, often in the form of antidepressant and/or mood stabilizer medication, must be instituted. Some individuals may require maintenance ECT, which is delivered on an outpatient basis at a rate of one treatment weekly to as infrequently as monthly. The most common side effects of ECT are confusion and memory loss for events surrounding the period of ECT treatment. The confusion and disorientation experienced upon awakening after ECT typically clear within an hour. More persistent memory problems are variable and can be minimized with the use of modern treatment techniques, such as application of both stimulus electrodes to the right side of the head (unilateral ECT).^{41,42}

Herbal Therapy

In the past several years, there has been an increase in

public interest in the use of herbs for the treatment of both depression and anxiety. The extract from St. John's wort (*Hypericum perforatum*), a wild-growing plant with yellow flowers, has been used extensively in Europe as a treatment for mild to moderate depression, and it now ranks among the top-selling botanical products in the United States. Because of the increase in Americans' use of St. John's wort and the need to answer important remaining questions about the herb's efficacy and long-term use for depression, the National Institutes of Health (NIH) conducted a four-year, \$6 million clinical trial to determine whether a well-standardized extract of St. John's wort is effective in the treatment of adults suffering from major depression of moderate severity. The trial found that St. John's wort was no more effective for treating major depression of moderate severity than placebo.⁴³ More research is needed to confirm the role of the herb in managing less severe forms of depression.

The Food and Drug Administration issued a Public Health Advisory on February 10, 2000 about the use of St. John's wort. It stated that the herb appears to affect an important metabolic pathway that is used by many drugs prescribed to treat conditions such as heart disease, depression, seizures, certain cancers, and rejection of organ transplants. Also, St. John's wort reduces blood levels of some HIV medications. If taken together, the combination could allow the AIDS virus to rebound, perhaps in a drug-resistant form. (See the alert on the NIMH Web site: <http://www.nimh.nih.gov/events/stjohnwort.cfm>). Health care providers should alert their patients about these potential drug interactions, and patients should always consult their health care provider before taking any herbal supplement.

How to Help Yourself if You Are Depressed

"It affects the way you think. It affects the way you feel. It just simply invades every pore of your skin. It's a blanket

that covers everything. The act of pretending to be well was so exhausting. All I could do was shut down. At times you just say 'It's enough already. ' "

-Steve Lappen, Writer

Depressive disorders make one feel exhausted, worthless, helpless, and hopeless. Such negative thoughts and feelings make some people feel like giving up. It is important to realize that these negative views are part of the depression and typically do not accurately reflect the actual circumstances. Negative thinking fades as treatment begins to take effect. In the meantime:

- Mild exercise, going to a movie, a ballgame, or participating in religious, social, or other activities may help.
- Set realistic goals in light of the depression and assume a reasonable amount of responsibility.
- Break large tasks into small ones, set some priorities, and do what you can as you can
- Try to be with other people and to confide in someone; it is usually better than being alone and secretive.
- Participate in activities that may make you feel better.
- Expect your mood to improve gradually, not immediately. Feeling better takes time. Often during treatment of depression, sleep and appetite will begin to improve before depressed mood lifts.
- It is advisable to postpone important decisions until the depression has lifted. Before deciding to make a significant transition—change jobs, get married or divorced—discuss it with others who know you well and have a more objective view of your situation.
- People rarely "snap out of" a depression. But they can feel a little better day-by-day.
- Remember, positive thinking will replace the negative thinking that is part of the depression and will disappear as your depression responds to treatment.
- Let your family and friends help you.

How Family and Friends Can Help

The most important thing anyone can do for a man who may have depression is to help him get to a doctor for a diagnostic evaluation and treatment. First, try to talk to him about depression — help him understand that depression is a common illness among men and is nothing to be ashamed about. Perhaps share this booklet with him. Then encourage him to see a doctor to determine the cause of his symptoms and obtain appropriate treatment.

Occasionally, you may need to make an appointment for the depressed person and accompany him to the doctor. Once he is in treatment, you may continue to help by encouraging him to stay with treatment until symptoms begin to lift (several weeks), or to seek different treatment if no improvement occurs. This may also mean monitoring whether he is taking prescribed medication and/or attending therapy sessions. Encourage him to be honest with the doctor about his use of alcohol and prescription or recreational drugs, and to follow the doctor's orders about the use of these substances while on antidepressant medication.

The second most important thing is to offer emotional support to the depressed person. This involves understanding, patience, affection, and encouragement. Engage him in conversation and listen carefully. Do not disparage the feelings he may express, but point out realities and offer hope. ***Do not ignore remarks about suicide. Report them to the depressed person's doctor. In an emergency, call 911.*** Invite him for walks, outings, to the movies, and other activities. Be gently insistent if your invitation is refused. Encourage participation in some activities that once gave pleasure, such as hobbies, sports, religious or cultural activities, but do not push him to undertake too much too soon. The depressed person needs diversion and company, but too many demands can increase feelings of failure.

Do not accuse the depressed person of faking illness or of laziness, or expect him "to snap out of it." Eventually, with treatment, most people do get better. Keep that in mind, and keep reassuring him that, with time and help, he will feel better.

Where to Get Help

If unsure where to go for help, talk to someone you trust who has experience in mental health—for example, a doctor, nurse, social worker, or religious counselor. Ask their advice on where to seek treatment. If there is a university nearby, its departments of psychiatry or psychology may offer private and/or sliding-scale fee clinic treatment options. Otherwise, check the Yellow Pages under "mental health," "health," "social services," "suicide prevention," "crisis intervention services," "hotlines," "hospitals," or "physicians" for phone numbers and addresses. In times of crisis, the emergency room doctor at a hospital may be able to provide temporary help for a mental health problem, and will be able to tell you where and how to get further help.

Listed below are the types of people and places that will make a referral to, or provide, diagnostic and treatment services.

- Family doctors
- Mental health specialists, such as psychiatrists, psychologists, social workers, or mental health counselors
- Religious leaders/counselors
- Health maintenance organizations
- Community mental health centers
- Hospital psychiatry departments and outpatient clinics
- University- or medical school-affiliated programs
- State hospital outpatient clinics
- Social service agencies
- Private clinics and facilities
- Employee assistance programs
- Local medical and/or psychiatric societies

Within the Federal government, the Substance Abuse and Mental Health Services Administration (SAMHSA) offers a "Services Locator" for mental health and substance abuse treatment programs and resources nationwide. Visit their Web site at <http://www.mentalhealth.samhsa.gov/databases/> or call toll-free, 1-800-789-2647.

Conclusion

Have you known a man who is grumpy, irritable, and has no sense of humor? Maybe he drinks too much or abuses drugs. Maybe he physically or verbally abuses his wife and his kids. Maybe he works all the time, or compulsively seeks thrills in high-risk behavior. Or maybe he seems isolated, withdrawn, and no longer interested in the people or activities he used to enjoy.

Perhaps this man is you. If so, it is important to understand that there is a disease of the brain called depression that may be underlying these feelings and behaviors. It's real: scientists have developed sensitive imaging devices that enable us to see it in the brain. And it's treatable: more than 80 percent of those suffering from depression respond to existing treatments,⁴⁴ and new ones are continually becoming available and helping more people. Talk to a healthcare provider about how you are feeling, and ask for help.

Or perhaps this man is someone you care about. Try to talk to him, or to someone who has a chance of getting through to him. Help him to understand that depression is a common illness among men and is nothing to be ashamed about. Encourage him to see a doctor and get an evaluation for depression.

For most men with depression, life doesn't have to be so dark and hopeless. Life is hard enough as it is; and treating depression can free up vital resources to cope with life's challenges effectively. When a man is depressed, he's not the only one who suffers. His depression also darkens the lives of his family, his friends, virtually everyone close to him.

Getting him into treatment can send ripples of healing and hope into all of those lives.

Depression is a real illness; it is treatable; and men can have it. It takes courage to ask for help, but help can make all the difference.

"And pretty soon you start having good thoughts about yourself and that you're not worthless and you kind of turn your head over your shoulder and look back at that, that rutted, muddy, dirt road that you just traveled and now you're on some smooth asphalt and go, 'Wow, what a trip. Still got a ways to go, but I wouldn't want to go down that road again.' "

-Patrick McCathern, First Sergeant, U.S. Air Force, Retired

For More Information

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Office of Communications

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Bethesda, MD 20892-9663

Toll-Free: 1-866-227-NIMH (-6464)

Phone: 1-301-443-4513

FAX: 1-301-443-4279

TTY: 1-301-443-8431

FAX4U: 1-301-443-5158

Web site: <http://www.nimh.nih.gov>

E-mail: nimhinfo@nih.gov

The Federal government agency whose mission is to reduce the burden of mental illness and behavioral disorders through research on mind, brain, and behavior. NIMH is a part of the National Institutes of Health, U.S. Department of Health and Human Services.

Substance Abuse and Mental Health Services Administration

National Mental Health Information Center
P.O. Box 42557
Washington, DC 20015
Toll-Free: 1-800-789-2647
FAX: 1-301-984-8796
TDD: 1-866-889-2647

Web site: <http://www.mentalhealth.org>

E-mail: info@mentalhealth.org

SAMHSA's National Mental Health Information Center provides the public information on mental health services and referrals to Federal, State, or local resources for more information and help. SAMHSA is an agency of the U.S. Department of Health and Human Services.

Depression and Bipolar Support Alliance (formerly the National Depressive and Manic-Depressive Association)

730 N. Franklin Street, Suite 501
Chicago, IL 60601-7224
Toll-Free: 1-800-826-3632
Phone: 1-312-642-0049
FAX: 1-312-642-7243

Web site: <http://www.dbsalliance.org>

A patient-directed organization whose mission is to improve the lives of people living with mood disorders.

National Alliance for the Mentally Ill

Colonial Place Three
2107 Wilson Boulevard, Suite 300
Arlington, VA 22201
Toll-Free: 1-800-950-NAMI (-6264)
Phone: 1-703-524-7600
FAX: 1-703-524-9094
TDD: 1-888-344-6264

Web site: <http://www.nami.org>

A support and advocacy organization of consumers, families, and friends of people with severe mental illness-over 1,200

state and local affiliates. Local affiliates often give guidance in finding treatment.

National Foundation for Depressive Illness, Inc.

PO Box 2257

New York, NY 10116

Toll-Free: 1-800-239-1265

Phone: 1-212-268-4260

Web site: <http://www.depression.org>

A foundation that informs the public about depressive illness and its treatability and promotes programs of research, education, and treatment.

National Mental Health Association

2001 N. Beauregard Street, 12th Floor

Alexandria, VA 22311

Toll-Free: 1-800-969-NMHA (-6642)

Phone: 1-703-684-7722

FAX: 1-703-684-5968

TTY: 1-800-433-5959

Web site: <http://www.nmha.org>

An association that works with more than 340 affiliates nationwide to promote mental health through advocacy, education, research, and services.

References

¹ Blehar MD, Oren DA. Gender differences in depression. *Medscape Women's Health*, 1997; 2(2):3. Revised from: Women's increased vulnerability to mood disorders: integrating psychobiology and epidemiology. *Depression*, 1995; 3:3-12.

² Weissman MM, Bland RC, Canino GJ, Faravelli C, Greenwald S, Hwu HG, Joyce PR, Karam EG, Lee CK, Lellouch J, Lepine JP, Newman SC, Rubin-Stiper M, Wells JE, Wickramaratne PJ, Wittchen H, Yeh EK. Cross-national

epidemiology of major depression and bipolar disorder. *Journal of the American Medical Association*, 1996; 276: 293-9.

³ Narrow WE. One-year prevalence of depressive disorders among adults 18 and over in the U.S.: NIMH ECA prospective data. Population estimates based on U.S. Census estimated residential population age 18 and over on July 1, 1998. Unpublished table.

⁴ Sackeim HA. Commentary: Functional brain circuits in major depression and remission. *Archives of General Psychiatry*, 2001; 58(7): 649-50.

⁵ Regier DA, Rae DS, Narrow WE, Kaelber CT, Schatzberg AF. Prevalence of anxiety disorders and their comorbidity with mood and addictive disorders. *British Journal of Psychiatry*, 1998; 173(Suppl. 34): 24-8.

⁶ Depression Guideline Panel. Clinical practice guideline, number 5. Depression in primary care: volume 1. *Detection and diagnosis*. AHCPR Pub. No. 93-0551. Rockville: U.S. Department of Health and Human Services, Agency for Health Care Policy and Research, 1993.

⁷ 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): 630-7.

⁸ Strakowski SM, DelBello MP. The co-occurrence of bipolar and substance use disorders. *Clinical Psychology Review*, 2000; 20(2): 191-206.

⁹ NIMH Fact Sheets on Depression and Other Illnesses. June 2002. <http://www.nimh.nih.gov/publicat/cooccurmenu.cfm>

¹⁰ Lewinsohn PM, Hoberman HH, Rosenbaum M. A prospective study of risk factors for unipolar depression.

Journal of Abnormal Psychology, 1988; 97(3): 251-64.

¹¹ Tsuang MT, Faraone SV. *The genetics of mood disorders*. Baltimore, MD: Johns Hopkins University Press, 1990.

¹² Soares JC, Mann JJ. The anatomy of mood disorders- review of structural neuroimaging studies. *Biological Psychiatry*, 1997; 41: 86-106.

¹³ Soares JC, Mann JJ. The functional neuroanatomy of mood disorders. *Journal of Psychiatric Research*, 1997; 31(4): 393-432.

¹⁴ 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; 147-66.

¹⁵ Cochran SV, Rabinowitz FE. Men and depression: *clinical and empirical perspectives*. San Diego: Academic Press, 2000.

¹⁶ Robins L, Regier D. *Psychiatric disorders in America*. New York: Free Press, 1991.

¹⁷ Miniño AM, Arias E, Kochanek KD, Murphy SL, Smith BL. Deaths: final data for 2000. *National Vital Statistics Reports*; 50(15). Hyattsville, MD: National Center for Health Statistics, 2002.

¹⁸ Moscicki EK. Epidemiology of suicide. In: Jacobs D, ed. *The Harvard Medical School guide to suicide assessment and intervention*. San Francisco, CA: Jossey-Bass, 1999; 40-71.

¹⁹ Moscicki EK. Epidemiology of completed and attempted suicide: toward a framework for prevention. *Clinical Neuroscience Research*, 2001; 1: 310-23.

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): 1186-90.

²¹ Gallo JJ, Rabins PV. Depression without sadness: alternative presentations of depression in late life. *American Family Physician*, 1999; 60(3): 820-6.

²² Conwell Y. Suicide in later life: a review and recommendations for prevention. *Suicide and Life-Threatening Behavior*, 2001; 31(Suppl): 32-47.

²³ Bruce ML, Pearson JL. Designing an intervention to prevent suicide: PROSPECT (Prevention of Suicide in Primary Care Elderly: Collaborative Trial). *Dialogues in Clinical Neuroscience*, 1999; 1(2): 100-12.

²⁴ 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): 1035-8.

²⁵ 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.

²⁶ Shaffer D, Fisher P, Dulcan MK, Davies M, Piacentini J, Schwab-Stone ME, Lahey BB, Bourdon K, Jensen PS, Bird HR, Canino G, Regier DA. The NIMH Diagnostic Interview Schedule for Children Version 2.3 (DISC-2.3): description, acceptability, prevalence rates, and performance in the

MECA Study. *Methods for the Epidemiology of Child and Adolescent Mental Disorders Study*. *Journal of the American Academy of Child and Adolescent Psychiatry*, 1996; 35(7): 865-77.

²⁷ Angold A, Worthman CW. Puberty onset of gender differences in rates of depression: a developmental, epidemiologic and neuroendocrine perspective. *Journal of Affective Disorders*, 1993; 29: 145-58.

²⁸ Klerman GL, Weissman M. Increasing rates of depression. *Journal of the American Medical Association*, 1989; 261: 2229-35.

²⁹ Weissman MM, Wolk S, Goldstein RB, Moreau D, Adams P, Greenwald S, Klier CM, Ryan ND, Dahl RE, Wickramaratne P. Depressed adolescents grown up. *Journal of the American Medical Association*, 1999; 281(18):1701-13.

³⁰ Angold A, Costello EJ. Depressive comorbidity in children and adolescents: empirical, theoretical, and methodological issues. *American Journal of Psychiatry*, 1993; 150(12): 1779-91.

³¹ Kovacs M. Psychiatric disorders in youths with IDDM: rates and risk factors. *Diabetes Care*, 1997; 20(1): 36-44.

³² Birmaher B, Brent DA, Benson RS. Summary of the practice parameters for the assessment and treatment of children and adolescents with depressive disorders. American Academy of Child and Adolescent Psychiatry. *Journal of the American Academy of Child and Adolescent Psychiatry*, 1998; 37(11): 1234-8.

³³ Ryan ND, Puig-Antich J, Ambrosini P, Rabinovich H, Robinson D, Nelson B, Iyengar S, Twomey J. The clinical picture of major depression in children and adolescents. *Archives of General Psychiatry*, 1987; 44(10): 854-61.

³⁴ McClellan J, Werry J. Practice parameters for the assessment and treatment of children and adolescents with bipolar disorder. *American Academy of Child and Adolescent Psychiatry. Journal of the American Academy of Child and Adolescent Psychiatry*, 1997; 36(Suppl 10): 157S-76S.

³⁵ Birmaher B, Ryan ND, Williamson DE, Brent DA, Kaufman J. Childhood and adolescent depression: a review of the past 10 years. Part I. *Journal of the American Academy of Child and Adolescent Psychiatry*, 1996; 35(11): 1427-39.

³⁶ 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): 339-48.

³⁷ Shaffer D, Craft L. Methods of adolescent suicide prevention. *Journal of Clinical Psychiatry*, 1999; 60(Suppl 2): 70-4; discussion 75-6, 113-6.

³⁸ National Center for Injury Prevention and Control. Leading Causes of Injury Deaths, United States, 2000, All Races, Both Sexes.
<http://webapp.cdc.gov/sasweb/ncipc/leadcaus10.html>

³⁹ Thase ME, Sachs GS. Bipolar depression: pharmacotherapy and related therapeutic strategies. *Biological Psychiatry*, 2000; 48(6): 558-72.

⁴⁰ Nurnberg HG, Hensley PL, Gelenberg AJ, Fava M, Lauriello J, Paine S. Treatment of antidepressant-associated sexual dysfunction with sildenafil: a randomized controlled trial. *Journal of the American Medical Association*, 2003; 289(1): 56-64.

⁴¹ U.S. Department of Health and Human Services. *Mental health: a report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance

Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health, 1999.
<http://www.surgeongeneral.gov/library/mentalhealth/home.html>

⁴² Sackeim HA, Haskett RF, Mulsant BH, Thase ME, Mann JJ, Pettinati HM, Greenberg RM, Crowe RR, Cooper TB, Prudic J. Continuation pharmacotherapy in the prevention of relapse following electroconvulsive therapy: a randomized controlled trial. *Journal of the American Medical Association*, 2001; 285(10): 1299-307.

⁴³ 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): 1807-14.

⁴⁴ Healthcare reform for Americans with severe mental illnesses: report of the National Advisory Mental Health Council. *American Journal of Psychiatry*, 1993; 150(10): 1447-65.

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