

A large, bold, red letter 'D' graphic that serves as the first letter of the word 'Depression' in the following text.

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

affects how one thinks about things, and one's self-perception. A depressive disorder is not the same as a passing blue mood. It is not a sign of personal weakness or a condition one can will or wish away. People with a depressive illness cannot merely “pull themselves together” and get better. Without treatment, symptoms can last for weeks, months, or years. However, appropriate treatment, 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.<sup>1,2</sup> 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 7 percent of men (more than six million men).<sup>3</sup> But important questions remain to be answered about the causes underlying this gender difference. We still do not know if depression is truly less common among men, or if men are 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, men were concerned that seeing a mental health professional or going to a mental health clinic would have a negative impact at work if their employer or colleagues found out. 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 caused

by mental illness. Brain imaging technologies are now allowing scientists to see how effective treatment with medication or psychotherapy is reflected in changes in brain activity.<sup>4</sup> As research continues to reveal that depressive disorders are real and treatable, and no greater 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

Just like other illnesses, such as heart disease, depression comes in different forms. 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 symptoms 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, chronic 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 only a few; 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 or pessimism.
- Feelings of guilt, worthlessness, or helplessness.
- Loss of interest or pleasure in hobbies and activities that were once enjoyable, including sex.
- Decreased energy, fatigue; feeling “slowed down.”
- Difficulty concentrating, remembering, or making decisions.
- Trouble sleeping, early-morning awakening, or oversleeping.
- Changes in appetite and/or weight.
- Thoughts of death or suicide, or suicide attempts.
- Restlessness or irritability.
- Persistent physical symptoms, such as headaches, digestive disorders, and chronic pain that 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.<sup>5,6</sup> Depression is

especially prevalent among people with PTSD, a debilitating condition that can develop 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.<sup>7</sup>

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

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.<sup>6,9</sup> 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 illness.

## 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 reveal that, in depression, neural circuits responsible for the regulation of moods, thinking, sleep, appetite, and behavior fail to function properly, and critical neurotransmitters—chemicals that brain cells use to communicate—are out of balance. Studies of brain chemistry, including the effects of antidepressant medications, continue to inform our understanding of the biochemical processes involved in depression.

In some families, depressive disorders seem to occur generation after generation; however, they can also occur in people with no family history of these illnesses.<sup>10</sup> Genetics research indicates that risk for depression results from the influence of multiple genes acting together with environmental or other nongenetic factors.

Very often, a combination of genetic, cognitive, and environmental factors is involved in the onset of a depressive disorder.<sup>11</sup> 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.

## Men and Depression

Researchers estimate that at least six million men in the United States suffer from a depressive disorder every year.<sup>3</sup> 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.<sup>12,15</sup> 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.<sup>15</sup>

**“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;<sup>14</sup> 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.

**“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

More than four times as many men as women die by suicide in the United States, even though women make more suicide attempts during their lives.<sup>15,16</sup> In addition to the fact that men attempt suicide using methods that are generally more lethal than those used by women, there may be other factors that protect women against suicide death. In light of research indicating that suicide is often associated with depression,<sup>17</sup> 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 that 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 men 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 Older 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.

Depression is not a normal part of aging.<sup>18</sup> 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. Older adults may be reluctant to discuss feelings of sadness or grief, or loss of interest in pleasurable activities.<sup>19</sup> They may complain primarily of physical symptoms. 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 may cause depressive symptoms or may be treated with medications that have side effects that cause 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

Identifying and treating depression in older adults is critical. There is a common misperception that suicide rates are highest among the young, but it is older white males who suffer the highest rate. Over 70 percent of older suicide victims visit their primary care physician within the month of their death; many have a depressive illness that goes undetected during these visits.<sup>20</sup> This fact has led to research efforts to determine how to best improve physicians' abilities to detect and treat depression in older adults.<sup>21</sup>

Approximately 80 percent of older adults with depression improve when they receive treatment with antidepressant medication, psychotherapy, or a combination of both.<sup>22</sup> In addition, research has shown that a combination of psychotherapy and antidepressant medication is highly effective for reducing recurrences of depression among older adults.<sup>23</sup> 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.<sup>18</sup> Improved recognition and treatment of depression in later life will make those years more enjoyable and fulfilling for the depressed elderly person, and his family and caregivers.

## Depression in Boys and Adolescent Males

Only in the past two decades has depression in children been taken very seriously. Research has revealed that depression is occurring earlier in life today than in past decades.<sup>24</sup> 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.<sup>25</sup> 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 six-month period, with 4.9

percent having major depression.<sup>26</sup> 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.<sup>27</sup> The risk of developing bipolar disorder remains approximately equal for males and females throughout adolescence and adulthood.

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 and grouchy, and feel misunderstood. 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. 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.<sup>28,29</sup>

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.<sup>25,30,31</sup> Unfortunately, these disorders often go unrecognized by families and physicians alike.

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. An NIMH-funded clinical trial of 439 adolescents with major depression found that a combination of medication and psychotherapy is the

most effective treatment.<sup>32</sup> Additional research is needed on how best to incorporate these treatments into primary care practice.

Bipolar disorder, although rare in young children, can appear in both children and adolescents.<sup>33</sup> 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.

Depression in children and adolescents is associated with an increased risk of suicidal behaviors.<sup>25,34</sup> This risk may rise, particularly among adolescent males, if the depression is accompanied by conduct disorder and alcohol or other substance abuse.<sup>35</sup> In 2002, suicide was the third leading cause of death among young males, age 15 to 24.<sup>36</sup> NIMH-supported researchers found that among adolescents who develop major depressive disorder, as many as 7 percent may die by suicide in the young adult years.<sup>25</sup> 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 limitations on 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 the toll-free, 24-hour hotline of the National Suicide Prevention Lifeline at 1-800-273-TALK (1-800-273-8255) to be connected to a trained counselor at the 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, the physician should do a psychological evaluation or refer the patient 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, their severity, and whether the patient had them before and, if so, if 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., "talk" therapies), that 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, pages 19-20) 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, ***you should never discontinue your medication without first talking to your doctor.*** For individuals with bipolar disorder and those with chronic or recurrent major depression, medication may have to be maintained indefinitely.

Recently, concerns have been raised that the use of antidepressant medications themselves may induce suicidal behavior in youths. In fact, following a thorough and comprehensive review of all the available published and unpublished controlled clinical trials of antidepressants in children and adolescents, the FDA has adopted a “black box” label on SSRI medications to warn the public about an increased risk of suicidal thoughts (suicidal ideation) or behavior (“suicidality”) in children and adolescents

treated with these medications. However, studies show that there are substantial benefits from medication treatment for adolescents with moderate and severe depression, including many with suicidal ideation. Parents and children should work with their health care provider to determine the best and most appropriate treatment. For more information, visit the NIMH website at [http://www.nimh.nih.gov/healthinformation/antidepressant\\_child.cfm](http://www.nimh.nih.gov/healthinformation/antidepressant_child.cfm).

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, doctors must carefully monitor these treatments to determine if the patient is getting the most effective dosage. The doctor should check regularly the dosage of each medicine and its effectiveness.

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, and the patient should carry it 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.*** Health professionals who may prescribe a medication, such as a dentist or other medical specialist, should be told of all the medications the patient is taking. Some medications, although safe when taken alone, can cause severe and dangerous side effects if taken in combination with others.

Alcohol—including wine, beer, and hard liquor—or street drugs may reduce the effectiveness of antidepressants and should be avoided. However, doctors may permit people who have not had a problem with alcohol abuse or dependence 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. Doctors must carefully monitor its use 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 the Food and Drug Administration has approved valproate for first-line treatment of acute mania. Other anticonvulsants that are being used now include lamotrigine (Lamictal®), and topiramate (Topamax®); 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. In addition to lithium and/or an anticonvulsant, doctors often prescribe 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* – will usually go away.
- *Nausea* – also temporary, but even when it occurs, it is short-lived after each dose.
- *Insomnia and nervousness* (trouble falling asleep or waking often during the night) – may occur during the first few weeks but are usually resolved over time or with a reduction in dosage.
- *Agitation (feeling jittery)* – notify your doctor if this happens for the first time after the drug is taken and is persistent.
- *Sexual problems* – consult your doctor if the problem is persistent or worrisome. Although depression itself can lower libido and impair sexual performance, SSRIs and some other antidepressants can provoke sexual dysfunction. 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. For some men, dosage reductions or acquired tolerance to the medication reduce sexual dysfunction symptoms. Although changing from one SSRI to another has generally not been shown to be beneficial, one

study showed that citalopram (Celexa®) did not seem to cause sexual impairment in patients who had experienced such events with another SSRI.<sup>37</sup>

Some clinicians treating men with antidepressant-associated sexual dysfunction report improvement with the addition of bupropion (Wellbutrin®)<sup>38</sup> or sildenafil (Viagra®)<sup>39</sup> to ongoing treatment. Be sure to discuss the various options with your doctor and inquire about other interventions that can help.

Tricyclic antidepressants have different types of side effects:

- *Dry mouth* – drinking sips of water, chewing sugarless gum, and cleaning teeth daily is helpful.
- *Constipation* – adding bran cereals, prunes, fruit, and vegetables to your diet should help.
- *Bladder problems* – emptying the bladder may be troublesome, and the urine stream may not be as strong as usual; notify your doctor if there is marked difficulty or pain. This side effect 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 they are worrisome, discuss these side effects with your doctor.
- *Blurred vision* – will pass soon and will not usually necessitate a new glasses prescription.
- *Dizziness* – rising from the bed or chair slowly is helpful.
- *Drowsiness as a daytime problem* – usually passes soon. If you feel drowsy or sedated you 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 understand their depression and resolve problems related to it. 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, two mental health professionals may 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.<sup>40</sup>

In recent years, ECT has much improved. Before treatment, which is done under brief anesthesia, patients are given a muscle relaxant. 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 six 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 (M-ECT), which is delivered on an outpatient basis at a rate usually of one treatment weekly, tapered off to bi-weekly to monthly for up to one year.

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).<sup>40,41</sup> A recent study showed no adverse cognitive effects of M-ECT after one year.<sup>42</sup>

### **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 for long-term treatment of depression, the National Institutes of Health (NIH) conducted a 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 an inert pill (placebo).<sup>43</sup> Another study is underway looking at St. John's wort for the treatment of minor depression.

Research from NIH has shown that St. John's wort interacts with some drugs including certain drugs used to control HIV infection. The Food and Drug Administration issued a Public Health Advisory on February 10, 2000, which stated that the herb appears to affect an important metabolic pathway that many prescription drugs use to treat conditions such as heart disease, depression, seizures, certain cancers, and rejection of organ transplants. The same pathway is also responsible for the effectiveness of oral contraceptives to prevent pregnancy. Using the herb may limit the effectiveness of these medications. People taking HIV medications should be especially careful since St. John's wort may reduce the

HIV medication levels in the bloodstream and could allow the AIDS virus to rebound, perhaps in a drug-resistant form. 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 can make one feel exhausted, worthless, helpless, and hopeless. It is important to realize that these negative views are part of the depression and do not accurately reflect the actual circumstances. Negative thinking fades as treatment begins to take effect. In the meantime:

- Engage in mild exercise. Go to a movie, a ballgame, or participate in religious, social, or other activities.
- Set realistic goals 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.
- Postpone important decisions. 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.
- Do not expect to ‘snap out of’ a depression. But do expect to feel a little better day-by-day.
- Remember, positive thinking will replace the negative thinking 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 laziness or of faking illness, 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 people you trust who have 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 1-800-789-2647 (toll-free).

## Conclusion

A man can experience depression in many different ways. He may be grumpy or irritable, or have lost his sense of humor. He might drink too much or abuse drugs. It may be that he physically or verbally abuses his wife and his kids. He might work all the time, or compulsively seek thrills in high-risk behavior. Or, he may seem

isolated, withdrawn, and no longer interested in the people or activities he used to enjoy.

Perhaps this man sounds like you. If so, it is important to understand that there is a brain disorder called depression that may be underlying these feelings and behaviors. It's real: scientists have developed sensitive imaging devices that enable us to see depression in the brain. And it's treatable: more than 80 percent of those suffering from depression respond to existing treatments, 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 sound like 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 Further Information

### **National Institute of Mental Health**

Public Information and Communications Branch  
6001 Executive Boulevard, Room 8184, MSC 9663  
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  
TTY toll-free: 1-866-415-8051  
Web site: <http://www.nimh.nih.gov>  
E-mail: [nimhinfo@nih.gov](mailto:nimhinfo@nih.gov)

For information about the Real Men Real Depression (RMRD) campaign, e-mail [menanddepression@mail.nih.gov](mailto:menanddepression@mail.nih.gov) or visit the RMRD Web site at [www.menanddepression.nimh.nih.gov](http://www.menanddepression.nimh.nih.gov).

This publication is also available in Spanish.

Visit the NIMH Website at <http://www.nimh.nih.gov> for information that supplements this publication.

For information on organizations and related resources for depressive disorders, go to MedLinePlus®, a service of the U.S. National Library of Medicine and the National Institutes of Health, at the following site:

<http://www.nlm.nih.gov/medlineplus/depression.html>.

## References

- <sup>1</sup> 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.
- <sup>2</sup> 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.
- <sup>3</sup> 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.
- <sup>4</sup> Sackeim HA. Commentary: Functional brain circuits in major depression and remission. *Archives of General Psychiatry*, 2001; 58(7): 649-50.
- <sup>5</sup> 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.
- <sup>6</sup> 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.

<sup>7</sup> 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.

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

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

<sup>10</sup> Tsuang MT, Faraone SV. *The genetics of mood disorders*. Baltimore, MD: Johns Hopkins University Press, 1990.

<sup>11</sup> Lewinsohn PM, Hoberman HH, Rosenbaum M. A prospective study of risk factors for unipolar depression. *Journal of Abnormal Psychology*, 1988; 97(3): 251-64.

<sup>12</sup> 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.

<sup>13</sup> Cochran SV, Rabinowitz FE. *Men and depression: clinical and empirical perspectives*. San Diego: Academic Press, 2000.

<sup>14</sup> Robins L, Regier D. *Psychiatric disorders in America*. New York: Free Press, 1991.

<sup>15</sup> 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.

<sup>16</sup> 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.

<sup>17</sup> Moscicki EK. Epidemiology of completed and attempted suicide: toward a framework for prevention. *Clinical Neuroscience Research*, 2001; 1: 310-23.

<sup>18</sup> 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.

<sup>19</sup> Gallo JJ, Rabins PV. Depression without sadness: alternative presentations of depression in late life. *American Family Physician*, 1999; 60(3): 820-6.

<sup>20</sup> Conwell Y. Suicide in later life: a review and recommendations for prevention. *Suicide and Life Threatening Behavior*, 2001; 31(Suppl): 32-47.

<sup>21</sup> 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.

<sup>22</sup> 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.

<sup>23</sup> 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.

<sup>24</sup> Klerman GL, Weissman M. Increasing rates of depression. *Journal of the American Medical Association*, 1989; 261: 2229-35.

<sup>25</sup> 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.

<sup>26</sup> 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.

<sup>27</sup> 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.

<sup>28</sup> Angold A, Costello EJ. Depressive comorbidity in children and adolescents: empirical, theoretical, and methodological issues. *American Journal of Psychiatry*, 1993; 150(12): 1779-91.

- <sup>29</sup> Kovacs M. Psychiatric disorders in youths with IDDM: rates and risk factors. *Diabetes Care*, 1997; 20(1): 36-44.
- <sup>30</sup> 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.
- <sup>31</sup> 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.
- <sup>32</sup> 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): 807-20.
- <sup>33</sup> 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.
- <sup>34</sup> 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.

- <sup>35</sup> Shaffer D, Craft L. Methods of adolescent suicide prevention. *Journal of Clinical Psychiatry*, 1999; 60(Suppl 2): 70-4; discussion 75-6, 113-6.
- <sup>36</sup> 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.
- <sup>37</sup> Ferguson JM. SSRI antidepressant medications: adverse effects and tolerability. *Primary April 12, 2005 Care Companion Journal of Clinical Psychiatry*. 2001; 3: 22-27.
- <sup>38</sup> Clayton AH, Warnock JK, Kornstein SG, Pinkerton R, Sheldon-Keller, McGaravey EL. A placebo-controlled trial of bupropion SR as an antidote for selective serotonin reuptake inhibitor-induced sexual dysfunction. *Journal of Clinical Psychiatry*, 2004; 65(1): 62-67.
- <sup>39</sup> 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.
- <sup>40</sup> 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>
- <sup>41</sup> 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.

<sup>42</sup> Rami, L; Bernardo, M; Boget, T; Ferrer, J;Portella, M; Gil-Verona, J; Salamero, M. Cognitive status of psychiatric patients under maintenance electroconvulsive therapy: a one-year longitudinal study. *The Journal of Neuropsychiatry Clinical Neurosciences*, 2004; 16: 465-71.

<sup>43</sup> 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.

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The following staff of the NIMH Public Information and Communications Branch were contributing writers and editors of this booklet: Rayford Kytle, Margaret Strock, Melissa Spearing, Clarissa Wittenberg, Daisy Whittemore, Ruth Dubois, Lisa D. Alberts, Jennifer K. Loukissas, and James Petersen. Scientific review was provided by Matthew V. Rudorfer, M.D., and Jane L. Pearson, Ph.D., of NIMH.

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