Depression

Type of psychology: Psychopathology
Fields of study: Depression

Depression is the single most common psychiatric disorder, caused by biological and/or psychological factors; approximately 15 percent of cases result in suicide.

Principal terms
Bipolar disorder: a mood disorder characterized by one or more manic and major depressive episodes occurring simultaneously or in cycles
Cyclothymia: a mood disorder characterized as a less intense form of bipolar disorder
Dysthymia: a mood disorder characterized as a less intense form of depressive disorder
Electroconvulsive therapy: the use of electric shocks to induce seizure in depressed patients as a form of treatment
Major depressive disorder: a pattern of major depressive episodes that form an identified psychiatric disorder
Major depressive episode: a syndrome of symptoms characterized by depressed mood; required for the diagnosis of some mood disorders
Manic episode: a syndrome of symptoms characterized by elevated, expansive, or irritable mood; required for the diagnosis of some mood disorders
Seasonal affective disorder: a mood disorder associated with the winter season, when the amount of daylight hours is reduced

Causes and Symptoms
The term “depression” is used to describe a fleeting mood, an outward physical appearance of sadness, or a diagnosable clinical disorder. It is estimated that 13 million Americans suffer from a clinically diagnosed depression, a mood disorder that often affects personal, vocational, social, and health functioning. The Diagnostic and Statistical Manual of Mental Disorders (4th ed., 1994, DSM-IV) of the American Psychiatric Association delineates a number of mood disorders that subsume the various types of clinical depression.

A major depressive episode is a syndrome of symptoms, present during a two-week period and representing a change from previous functioning. The symptoms include at least five of the following: depressed or irritable mood, diminished interest in previously pleasurable activities, significant weight loss or weight gain, insomnia or hypersomnia, physical excitation or slowness, loss of energy, feelings of worthlessness or guilt, indecisiveness or a diminished ability to concentrate, and recurrent thoughts of death. The clinical depression cannot be initiated or maintained by another illness or condition, and it cannot be a normal reaction to the death of a loved one (some symptoms of depression are a normal part of the grief reaction).
In major depressive disorder, the patient experiences a major depressive episode and does not have a history of mania or hypomania. Major depressive disorder is often first recognized in the patient’s late twenties, while a major depressive episode can occur at any age, including infancy. Women are twice as likely to suffer from the disorder than are men.

There are several potential causes of major depressive disorder. Genetic studies suggest a familial link with higher rates of clinical depression in first-degree relatives. There also appears to be a relationship between clinical depression and levels of the brain’s neurochemicals, specifically serotonin and norepinephrine. It is important to keep in mind, however, that 20 to 30 percent of adults will experience depression in their lifetime. Common causes of clinical depression include psychosocial stressors, such as the death of a loved one or the loss of a job, or any of a number of personal stressors; it is unclear why some people respond to a specific psychosocial stressor with a clinical depression and others do not. Finally, certain prescription medications have been noted to cause clinical depression. These drugs include muscle relaxants, heart medications, hypertensive medications, ulcer medications, oral contraceptives, and steroids. Thus there are many causes of clinical depression, and no single cause is sufficient to explain all clinical depressions.

Another category of depressive disorder are bipolar disorders, which affect approximately 1 to 2 percent of the population. Bipolar I disorder is characterized by one or more manic episodes along with persisting symptoms of depression. A manic episode is defined as a distinct period of abnormally and persistently
elevated, expansive, or irritable mood. Three of the following symptoms must occur during the period of mood disturbance: inflated self-esteem, decreased need for sleep, unusual talkativeness or pressure to keep talking, racing thoughts, distractibility, excessive goal-oriented activities (especially in work, school, or social areas), and reckless activities with a high potential for negative consequences (such as buying sprees or risky business ventures). For a diagnosis of bipolar disorder, the symptoms must be sufficiently severe to cause impairment in functioning and/or concern regarding the person’s danger to himself/herself or to others, must not be superimposed on another psychotic disorder, and must not be initiated or maintained by another illness or condition. Bipolar II disorder is characterized by a history of a major depressive episode and current symptoms of mania.

Patients with bipolar disorder will display cycles in which they experience a manic episode followed by a short episode of a major depressive episode, or vice versa. These cycles are often separated by a period of normal mood. Occasionally, two or more cycles can occur in a year without a period of remission between them, in what is referred to as rapid cycling. The two mood disorders can also occur simultaneously in a single episode. Bipolar disorder is often first recognized in adolescence or in the patient’s early twenties; it is not unusual, however, for the initial recognition to occur later in life. Bipolar disorder is equally common in both males and females.

Genetic patterns are strongly involved in bipolar disorder. Brain chemicals (particularly dopamine, acetylcholine, GABA, and serotonin), hormones, drug reactions, and life stressors have all been linked to its development. Of particular interest are findings which suggest that, for some patients with bipolar disorder, changes in the seasons affect the frequency and severity of the disorder. These meteorological effects, while not well understood, have been observed in relation to other disorders of mood.

Cyclothymia is another cyclic mood disorder related to depression; it has a reported lifetime prevalence of approximately 1 to 2 percent. This chronic mood disorder is characterized by manic symptoms without marked social or occupational impairment (“hypomanic” episodes) and symptoms of major depressive episode that do not meet the clinical criteria (less than five of the nine symptoms described above). These symptoms must be present for at least two years, and if the patient has periods without symptoms, these periods cannot be longer than two months. Cyclothymia cannot be superimposed on another psychotic disorder and cannot be initiated or maintained by another illness or condition. This mood disorder has its onset in adolescence and early adulthood and is equally common in men and women. It is a particularly persistent and chronic disorder with an identified familial pattern.

Dysthymia is another chronic mood disorder affecting approximately 2 to 4 percent of the population. Dysthymia is characterized by at least a two-year history of depressed mood and at least two of the following symptoms: poor appetite, insomnia or hypersomnia, low energy or fatigue, low self-esteem, poor concentration or decision making, or feelings of hopelessness. There cannot be evidence of
a major depressive episode during the first two years of the dysthymia or a history of manic episodes or hypomanic episodes. The patient cannot be without the symptoms for more than two months at a time, the disorder cannot be superimposed on another psychotic disorder, and it cannot be initiated or maintained by another illness or condition. Dysthymia appears to begin at an earlier age, as young as childhood, with symptoms typically evident by young adulthood. Dysthymia is more common in adult females, equally common in both sexes of children, and with a greater prevalence in families. The causes of dysthymia are believed to be similar to those listed for major depressive disorder.

**Treatment and Therapy**

Crucial to the choice of treatment for clinical depression is determining the variant of depression being experienced. Each of the diagnostic categories has associated treatment approaches that are more effective for a particular diagnosis. Multiple assessment techniques are available to the health care professional to determine the type of clinical depression. The most valid and reliable is the clinical interview. The health care provider may conduct either an informal interview or a structured, formal clinical interview assessing the symptoms that would confirm the diagnosis of clinical depression. If the patient meets the criteria set forth in the DSM-IV, then the patient is considered for depression treatments. Patients who meet many but not all diagnostic criteria are sometimes diagnosed with a “subclinical” depression. These patients might also be considered appropriate for the treatment of depression, at the discretion of their health care providers.

Another assessment technique is the “paper-and-pencil” measure, or depression questionnaire. A variety of questionnaires have proven useful in confirming the diagnosis of clinical depression. Questionnaires such as the Beck Depression Inventory, Hamilton Depression Rating Scale, Zung Self-Rating Depression Scale, and the Center for Epidemiologic Studies Depression Scale are used to identify persons with clinical depression and to document changes with treatment. This technique is often used as an adjunct to the clinical interview and rarely stands alone as the definitive assessment approach to diagnosing clinical depression.

Laboratory tests, most notably the dexamethasone suppression test, have also been used in the diagnosis of depression. The dexamethasone suppression test involves injecting a steroid (dexamethasone) into the patient and measuring the production levels of another steroid (cortisol) in response. Studies have demonstrated, however, that certain severely depressed patients do not reveal the suppression of cortisol production that would be expected following the administration of dexamethasone. The test has also failed to identify some patients who were depressed and has mistakenly identified others as depressed. Research continues to determine the efficacy of other laboratory measures of brain activity to include computed tomography (CT) scanning, positron emission tomography (PET) scanning, and magnetic resonance imaging (MRI). At this time, laboratory tests are not a reliable diagnostic strategy for depression.

Once a clinical depression (or a subclinical depression) is identified, there are at least four general classes of treatment options available. These options are depend-
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ent on the subtype and severity of the depression and include psychopharmacology (drug therapy), individual and group psychotherapy, light therapy, family therapy, electroconvulsive therapy (ECT), and other less traditional treatments. These treatment options can be provided to the patient as part of an outpatient program or, in certain severe cases of clinical depression in which the person is a danger to himself/herself or others, as part of a hospitalization.

Clinical depression often affects the patient physically, emotionally, and socially. Therefore, prior to beginning any treatment with a clinically depressed individual, the health care provider will attempt to develop an open and communicative relationship with the patient. This relationship will allow the health care provider to provide patient education on the illness and to solicit the collaboration of the patient in treatment. Supportiveness, understanding, and collaboration are all necessary components of any treatment approach.

Three primary types of medications are used in the treatment of clinical depression: cyclic antidepressants, monoamine oxidase inhibitors (MAOIs), and lithium salts. These medications are considered equally effective in decreasing the symptoms of depression, which begin to resolve in three to four weeks after initiating treatment. The health care professional will select an antidepressant based on side effects, dosing convenience (once daily versus three times a day), and cost.

The cyclic antidepressants are the largest class of antidepressant medications. As the name implies, the chemical makeup of the medication contains chemical rings, or “cycles.” There are unicyclic (buproprion and fluoxetine, or Prozac), bicyclic (sertraline and trazodone), tricyclic (amitriptyline, desipramine, and nor-triptiline), and tetracyclic (maprotiline) antidepressants. These antidepressants function to either block the reuptake of neurotransmitters by the neurons, allowing more of the neurotransmitter to be available at a receptor site, or increase the amount of neurotransmitter produced. The side effects associated with the cyclic antidepressants—dry mouth, blurred vision, constipation, urinary difficulties, palpitations, and sleep disturbance—vary and can be quite problematic. Some of these antidepressants have deadly toxic effects at high levels, so they are not prescribed to patients who are at risk of suicide.

Monoamine oxidase inhibitors (MAOIs) (isocarboxazid, phenelzine, and tranylcypromine) are the second class of antidepressants. They function by slowing the production of the enzyme monoamine oxidase. This enzyme is responsible for breaking down the neurotransmitters norepinephrine and serotonin, which are believed to be responsible for depression. By slowing the decomposition of these transmitters, more of them are available to the receptors for a longer period of time. Restlessness, dizziness, weight gain, insomnia, and sexual dysfunction are common side effects of the MAOIs. MAOIs are most notable because of the dangerous adverse reaction (severely high blood pressure) that can occur if the patient consumes large quantities of foods high in tyramine (such as aged cheeses, fermented sausages, red wine, foods with a heavy yeast content, and pickled fish). Because of this potentially dangerous reaction, MAOIs are not usually the first choice of medication and are more commonly reserved for depressed patients who do not respond to the cyclic antidepressants.
A third class of medication used in the treatment of depressive disorders consists of the mood stabilizers, the most notable being lithium carbonate, which is used primarily for bipolar disorder. Lithium is a chemical salt that is believed to effect mood stabilization by influencing the production, storage, release, and reuptake of certain neurotransmitters. It is particularly useful in stabilizing and preventing manic episodes and preventing depressive episodes in patients with bipolar disorder.

Another drug occasionally used in the treatment of depression is alprazolam, a muscle relaxant benzodiazepine commonly used in the treatment of anxiety. Alprazolam is believed to affect the nervous system by decreasing the sensitivity of neuronal receptors believed to be involved in depression. While this may in fact occur, the more likely explanation for its positive effect for some patients is that it reduces the anxiety or irritability often coexisting with depression in certain patients.

Psychotherapy refers to a number of different treatment techniques used to deal with the psychosocial contributors and consequences of clinical depression. Psychotherapy is a common supplement to drug therapy. In psychotherapy, the patients develop knowledge and insight into the causes and treatment for their clinical depression. In cognitive psychotherapy, cure comes from assisting patients in modifying maladaptive, irrational, or automatic beliefs that can lead to clinical depression. In behavioral psychotherapy, patients modify their environment such that social or personal rewards are more forthcoming. This process might involve being more assertive, reducing isolation by becoming more socially active, increasing physical activities or exercise, or learning relaxation techniques. Research on the effectiveness of these and other psychotherapy techniques indicates that psychotherapy is as effective as certain antidepressants for many patients and, in combination with certain medications, is more effective than either treatment alone.

Electroconvulsive (or “shock”) therapy is the single most effective treatment for severe and persistent depression. If the clinically depressed patient fails to respond to medications or psychotherapy and the depression is life-threatening, electroconvulsive therapy is considered. It is also considered if the patient cannot physically tolerate antidepressants, as with elders who have other medical conditions. This therapy involves inducing a seizure in the patient by administering an electrical current to specific parts of the brain. The therapy is quite sophisticated and safe, involving little risk to the patient. Patients undergo six to twelve treatments over a two-day to five-day period. Some temporary memory impairment is a common side effect of this treatment.

A variant of clinical depression is known as seasonal affective disorder. Patients with this illness demonstrate a pattern of clinical depression during the winter, when there is a reduction in the amount of daylight hours. For these patients, phototherapy has proven effective. Phototherapy, or light therapy, involves exposing patients to bright light (greater than or equal to 2,500 lux) for two hours daily during the depression episode. The manner in which this treatment approach modifies the depression is unclear and awaits further research.
Psychosurgery, the final treatment option, is quite rare. It refers to surgical removal or destruction of certain portions of the brain believed to be responsible for causing severe depression. Psychosurgery is used only after all treatment options have failed and the clinical depression is life-threatening. Approximately 50 percent of patients who undergo psychosurgery benefit from the procedure.

**Perspective and Prospects**

Depression, or the more historical term “melancholy,” has had a history predating modern medicine. Writings from the time of the ancient Greek physician Hippocrates refer to patients with a symptom complex similar to the present-day definition of clinical depression.

Major depressive episodes and the various subtypes of depression are the leading psychiatric diagnoses treated by health care professionals. Prevalence rates from large-scale studies of depression suggest that approximately 1 in 20 adults will meet the criteria for a major depressive episode at some point in their lives; 1 in 100 for bipolar disorder; 1 in 33 for dysthymia; and 1 in 100 for cyclothymia.

The rates of clinical depression have increased since the early twentieth century, while the age of onset of clinical depression has decreased. Women appear to be at least twice as likely as men to suffer from clinical depression, and people who are happily married have a lower risk for clinical depression than those who are separated, divorced, or dissatisfied in their marital relationship. These data, along with recurrence rates of 50 to 70 percent, indicate the importance of this psychiatric disorder.

While most psychiatric disorders are nonfatal, clinical depression can lead to death. Of the approximately 30,000 suicide deaths per year in the United States, 40 to 80 percent are believed to be related to depression. Approximately 15 percent of patients with major depressive disorder will die by suicide. There are, however, other costs of clinical depression. In the United States, billions of dollars are spent on clinical depression, divided among the following areas: treatment, suicide, and absenteeism (the largest). Clinical depression obviously has a significant economic impact on a society.

The future of clinical depression lies in early identification and treatment. Identification will involve two areas. The first is improving the social awareness of mental health issues to include clinical depression. By eliminating the negative social stigma associated with mental illness and mental health treatment, there will be an increased level of the reporting of depression symptoms and thereby an improved opportunity for early intervention, preventing the progression of the disorder to the point of suicide. The second approach to identification involves the development of reliable assessment strategies for clinical depression. Data suggest that the majority of those who commit suicide see a physician within thirty days of the suicide. The field will continue to strive to identify biological markers and other methods to predict and/or identify clinical depression more accurately. Treatment advances will focus on further development of pharmacological strategies and drugs with more specific actions and fewer side effects. Adjuncts to traditional drug therapies need continued development and refinement to maximize the success of integrated treatments.
Bibliography


This reference book lists the clinical criteria for psychiatric disorders, including the mood disorders that incorporate the depressions.


Matson, Johnny L. *Treating Depression in Children and Adolescents.* New York: Pergamon Press, 1989. This book, written by one of the leaders in the scientific study of depression, presents a guide to the evaluation and treatment of depression in children and adolescents. The author describes the assessment and treatment approaches that are unique for this nonadult population.

Roesch, Roberta. *The Encyclopedia of Depression.* New York: Facts on File, 1991. This volume was written for both a lay and a professional audience. Covers all aspects of depression, including bereavement, grief, and mourning. The appendices include references, self-help groups, national associations, and institutes.


in basic behavioral science discusses depression and other mental disorders, interpersonal relations, and methods of psychotherapy. A bibliography and an index are provided.

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See also:
Anxiety Disorders; Child and Adolescent Psychiatry; Dementia; Eating Disorders; Electroconvulsive Therapy; Geriatric Psychiatry; Grief and Guilt; Hypochondriasis, Conversion, Somatization, and Somatoform Pain; Manic-Depressive Disorder; Midlife Crises; Obsessive-Compulsive Disorder; Paranoia; Phobias; Psychoanalysis; Psychosomatic Disorders; Stress; Suicide.