

## INTRODUCTION

At some point in life, everyone feels sad or even depressed. Usually, these feelings pass and life returns to normal. When feelings of sadness persist longer than two weeks, it may be depression, also called major depressive disorder. Symptoms of depression include persistent sadness, feelings of hopelessness or pessimism, irritability, losing interest in things that once brought pleasure, difficulty thinking or making decisions, and changes in sleep and appetite. Sometimes depression may be accompanied by vague physical symptoms such as headaches, gastric upset, and pain in muscles and joints that have no identifiable cause. If these symptoms occur, seek help beginning with a primary care provider to rule out physical reasons.

There are societal, environmental, medical, and economic issues that impact mental health. Homelessness, race and ethnicity, aging, sexual orientation, civil and political unrest, immigration, and other factors may all impact the mental health of individuals. Excessive social media use and too much exposure to news media may also have a negative effect on mental health. Having a chronic disease such as cancer, diabetes, or heart disease may lead to depression that requires treatment. Grief and despair may also evolve into depression.

Once symptoms become obvious, and the individual recognizes the need for help, a diagnosis can be made by a medical professional. While mild cases of depression may be treated with medication from a primary care provider, a referral to a mental health professional or psychotherapist (talk therapy) may be needed. Knowing what to tell your provider will help determine your diagnosis.

Depression treatment usually involves medications such as antidepressants or anti-anxiety drugs,

psychotherapy, or both. There are other treatment options if response to these two interventions is not successful or if a different diagnosis is reached. Choosing the right treatment plan is individualized and may need to be reviewed and adjusted from time to time to achieve the best possible outcome. Support groups, complementary therapies, family counseling, and other interventions may also be included in the plan of care.

Depression or major depressive disorders are just one set of mental health issues. There are other diagnoses including bipolar disorder, postpartum depression, seasonal affective disorder, post-traumatic stress disorder, and certain medical conditions that may have a component of depression.

The most important treatment for mental health issues is admitting there is a problem. Sometimes developing self-care skills and reaching out to others for support to manage the stress of daily life is enough, but if feelings or symptoms increase, seek professional help. Recognizing symptoms in yourself and others is a proactive way to manage mental health conditions before they spiral out of control.

Don't be afraid to talk about mental health with your medical providers, family, and friends. You may not need help, but someone you love might.

Thoughts of death or suicide require immediate help. If this happens to you or someone you know, call the National Suicide Prevention Lifeline toll-free at 1-800-273-TALK (8255), go to a local hospital or call 911.

—*Patricia Stanfill Edens,*  
*MS, MBA, PhD, RN, LFACHE*

tions, hypertensive medications, ulcer medications, oral contraceptives, painkillers, narcotics, 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 is bipolar disorders. Bipolar disorders occur in about 1 percent of the population as a whole. In persons over the age of eighteen, about two to three persons out of one hundred are diagnosed. 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, de-

creased 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 symptoms of a history of a major depressive episode and symptoms of hypomania. Cyclothymia is another cyclic mood disorder related to depression. Considered a mild



*Clinical depression affects an individual's personal, social, and health functioning. Photo via iStock.com/tadamichi. [Used under license.]*

the Caribbean, and Central America; 59 percent are from Mexico. Males between the ages of eighteen and thirty-four account for 57 percent of undocumented immigrants; 73 percent of children of undocumented residents are citizens of the United States.

Homes consisting of undocumented parents and their citizen children and/or noncitizen children are called *mixed-status* homes; four million citizen children live with their undocumented parents in such homes. It is estimated that 800,000 undocumented children are attending K-12 schools in the United States. An estimated 140,000 young undocumented adults who have been living in the United States since childhood are enrolled in college.

The driving forces of undocumented migration most often are financial necessity and dangerous po-

litical situations in immigrants' countries of origin. Data indicate that undocumented immigration from Mexico is in decline. This decline has not occurred in response to stronger US border controls but because of a weakening in demand for labor in the United States, slowing population growth in Mexico, an increasingly stable economy in Mexico, and the opening of new avenues in the United States for the legal entry of Mexicans.

### IMPACT OF MIGRATION

Migration can be stressful and even traumatic, and immigrants are at risk for anxiety, depression, and posttraumatic stress disorder. Undocumented immigrants have no workers' rights and are vulnerable to exploitation in low-paying, insecure jobs. Undocu-



*Undocumented immigrants can face detention and violence, increasing risk of depression and anxiety. Photo via iStock.com/Fertmig. [Used under license.]*

changes diet, or impairs social interactions can impact the immune system's ability to function correctly. Classic symptoms of depression mimic these same factors. Changes in stress levels, changes in sleep and appetite, and social isolation are evident in depression. Considering the closely related factors, it is easy to see the relationship between autoimmune issues and depression.

Recent studies in mice have shown that stress induced an immune response that released inflammatory proteins. This inflammation caused atrophy leading to impaired responses in the brain and ultimately to depressive behaviors. The step wise progression from inflammation to depressive behaviors may suggest a cause-and-effect relationship between stress, immune function, and depression. The rationale for this cause-and-effect is threefold. Depression weakens the immune system and causes increased illness. Major, chronic, and long-term illnesses may cause mood disorders, including depression. These illnesses or conditions may have the same causative triggers as depression.

### **COMMON ILLNESSES LINKED TO DEPRESSION**

Depression may cause people to have a greater chance of developing an illness than healthy individuals. This susceptibility applies to both contagious diseases and noncommunicable illnesses. For example, depression may lead to a decrease in energy level and cause the person to make poor choices in life. Poor choices related to diet, exercise, and sleep may trigger an increased risk for heart health problems. High blood pressure, stroke, and heart attack all have lifestyle contributing factors that may be influenced by depression. Individuals hospitalized with severe infections were two-thirds more likely than average to have a mental health condition.

Autoimmune diseases exhibit an almost 50 percent greater risk of mood disorders such as depression. Graves' disease, lupus, multiple sclerosis, and other

disorders may cause an abnormally high or low immune system response. Many autoimmune disorders cause long-term stress, pain or even disability which may lead to depression.

Graves' disease, a common cause of hyperthyroidism, has a strong link to neuropsychiatric conditions which often present before the disease itself is diagnosed. Type 1 diabetes is characterized by antibodies that have been linked to neurological problems. Rheumatoid arthritis (RA) has a negative relationship with schizophrenia, but further studies are indicated to determine if schizophrenia has a protective effect on the body to prevent the development of RA. Infections are often seen as a common risk factor in autoimmune disorders and depression.

It is commonly agreed that more studies of inflammatory processes and their relationships with mental disorders is needed.

### **AUTOIMMUNE DISEASES AND GENETICS**

Studies have shown an apparent link between psychotic disorders and autoimmune diseases. The immunological pathways that play a role in a subset of psychoses have been supported by genetic findings associated with immune-related genetic markers such as seen in schizophrenia. Individuals with multiple sclerosis and lupus have a higher number of neuropsychiatric symptoms than healthy individuals and studies show a higher proportion of psychiatric diagnoses in people with autoimmune diseases as a whole. A family history of autoimmune disorders is often associated with an increased risk for psychiatric disorders, especially depression.

### **THE INCIDENCE OF DEPRESSION**

Chronic illnesses and autoimmune diseases trigger depression based in part on the severity of the associated disease and its interference with daily life. Depression may aggravate the condition especially when fatigue and pain are evident or places limitations on social interactions. Depression has been shown to am-

sufferer into an intense depression accompanied with anger and anxiety. Because chronic pain is an invisible ailment it is often overlooked or not understood by others. Even people closest to the individual experiencing chronic pain may not be able to understand the extent of struggle the person is experiencing. This may come across as invalidating or hurtful to the person suffering and may create further difficulties. On the other hand, even if family, friends, and employers are supportive they may still not have the ability to fully comprehend the limitations that the person is feeling. It can be hard to quantify the level of debilitation that chronic fatigue or headaches may cause. A person experiencing chronic pain may feel very alone in his or her suffering. Therefore, having a therapist, counselor, or support group is very impor-

tant. Finding others to share the struggle greatly alleviates the emotional turmoil these people are feeling. Moreover, support groups are known to be beneficial because having the ability to discuss and process the challenge of managing chronic pain validates the chronic pain experience and serves as a source of pain management solutions. Thus, in addition to any medical or holistic treatment options offered, mental health support is also recommended as part of treatment. Taking an all-encompassing holistic approach is the most inclusive arena for helping the person suffering with chronic pain.

Because chronic pain is generally not a curable condition, the treatment goal revolves around helping the person return to a normal level of functioning. This includes being able to manage daily routines



*Chronic pain is often undiagnosed, misdiagnosed, or ignored for long periods. Photo via iStock.com/Charday Penn. [Used under license.]*

functional integration of brain structures can be studied.

TMS has some disadvantages when compared to traditional lesion techniques. One major limitation is that TMS only affects only the brain tissue directly under the skull. This rules out any investigation into subcortical brain structures, since they are too deep to be impacted. Also, organic lesions created by surgery or by injury can be precisely localized; however, the exact boundaries of the virtual lesion created using TMS is less clear.

—Bryan C. Auday, PhD

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## VAGUS NERVE STIMULATION (VNS) AND DEPRESSION

**Category:** Treatment and Medications

**Definition:** The vagus nerve is the tenth cranial nerve, which starts in the brain stem within the medulla oblongata and sends sensory information about the function or state of the body parts to the central nervous system. Neuromodulation as a therapeutic approach is focused on the neural pathways of the brain. Joining transcranial magnetic stimulation (TMS), deep brain stimulation (DBS) and electroconvulsive therapy (ECT), vagus nerve stimulation (VNS) is a newer approach in psychiatric treatment for recurrent unipolar and bipolar depression.

### STRUCTURE AND FUNCTION

The vagus nerve is actually two nerves that run from the brain stem and exit from the skull at its base through the jugular foramen and descend the neck through the carotid sheath between the internal carotid artery and the internal jugular vein. The vagus nerve passes not only through the neck and head but also through the chest and abdomen, where it contributes to the innervation of the viscera. The superior laryngeal nerve is the first branch that travels with the superior thyroid artery, whereby this nerve innervates

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## HYPNOTHERAPY AND DEPRESSION

**Category:** Treatment and Medications

**Definition:** Hypnosis is a trancelike altered state of consciousness in which the hypnotizable subject is typically more responsive to suggestions than is a waking subject. Hypnosis research has provided psychology with a number of useful theoretical insights into human cognition, as well as practical benefits in controlling pain and treating behavior disorders such as obesity, smoking, and sexual dysfunction. The University of New Hampshire reports that hypnotherapy may help a person to deal with anxiety, stress, and

sadness that may be worsening the individual’s depression.

## INTRODUCTION

Hypnosis derives its name from the Greek *hypnos*, which translates into English as “sleep.” Hypnosis was so named by the Scottish physician James Braid, who noted the sleeplike features of the somnambulistic trance. Though hypnosis may appear to be a sleeplike state, several differences exist between hypnosis and sleep. First, hypnotic subjects will respond to suggestions from the hypnotist. Second, hypnotizable subjects exhibit a phenomenon known as waking hypnosis, in which they will open their eyes and behave as if awake yet continue to be under hypnosis. Last, brain-wave recordings in hypnosis reveal primarily an alpha pattern characteristic of a relaxed state, while those in sleep reveal theta and delta activity.

## HYPNOTHERAPY AND DEPRESSION

Hypnotherapy is hundreds of years old and is practiced widely in the United States. The goal is to better control state of awareness. When used in patients with depression, sessions focus on achieving a relaxed state to better discuss emotions and feelings. It is thought that the relaxed state will not result in higher stress and anxiety levels. It is often used in conjunction with cognitive behavioral therapy.

Sessions usually last an hour using relaxation techniques to move the individual into a hypnotic state while remaining conscious and aware. The mind becomes receptive to suggestion during this relaxed state. It is considered a complementary therapy, meaning it is used in addition to medications and psychotherapy. It may be used as a part of psychotherapy or there may be separate visits just for hypnotherapy.

Patients are encouraged to explore inner thoughts and feelings, similar to meditation but often with more clarity. Treatments are designed to elevate mood, encourage hopefulness, and create a sense of



*Spirituality may involve traditional religion, a sense of connection to the divine, or mediation and prayer. Photo via iStock.com/Boomyachoa. [Used under license.]*

dent, or have a more active private spiritual life, including prayer and meditation, are less likely to use or be dependent on alcohol and other drugs.

Myriad studies have demonstrated that spirituality is favorably correlated with positive mental health and psychological well-being, including measures such as life and relationship satisfaction, happiness, and higher morale. These findings have been demonstrated for a number of aspects of spirituality, including service attendance, a sense of connection to the transcendent, spiritual beliefs, and the use of spiritual coping in the context of stressful events.

Many dimensions of spirituality are related to mental health. These relationships are, for the most part, modest in strength but are found consistently in numerous studies conducted in samples diverse in race, ethnicity, socioeconomic status, gender, age, and religious affiliation. A caveat to these findings, however, is that research shows associations but has not demonstrated causal relationships between spirituality and

mental health. Based on these positive links, psychotherapies are being developed and implemented to assist clients in drawing on their spiritual resources.

However, some experts note that religion and spirituality are not always conducive to good mental health. A study in the December, 2007, issue of the *American Journal of Psychiatry* found that 21 percent of psychiatrists thought that religion had equally negative and positive effects on mental health. Some 82 percent found that religion or spirituality could cause guilt, anxiety, or other negative emotions that increased patients' suffering. Other studies have linked religion with failure to comply with treatment or fatalistic attitudes toward illness. Other studies have linked religion with the use of extensive medical procedures to prolong life, hoping for a medical miracle. Excessive religiosity also has been linked to adverse mental health effects, both on the individual and on the person's children.

**depression:** a mood disorder that causes persistent feelings of sadness and a loss of interest in formerly pleasurable activities; can result in changes in sleep, appetite, energy level, behavior, and self-esteem and can be associated with suicidal thoughts.

**diagnosis:** the process of identifying the nature of a disease or disorder from signs and symptoms and by using assessment techniques such as tests and examinations.

**dialectical behavior therapy (DBT):** a type of cognitive behavioral therapy that attempts to identify negative thinking patterns and replace them with positive behavioral change.

**dysthymia:** persistent depressive disorder; a continuous long-term form of depression.

**electroconvulsive therapy (ECT):** treatment involving a brief electrical stimulation of the brain while the patient is under anesthesia; most commonly used in patients with severe major depression or bipolar disorder that has not responded to other treatments.

**electroencephalogram:** a test used to evaluate the electrical activity in the brain.

**endorphins:** polypeptides made by the pituitary gland and central nervous system that help deal with stress and reduce pain.

**environmental factors:** socioeconomic, racial and ethnic, and relational conditions that can influence an individual's ability to cope with stress.

**esketamine:** a medication used as a general anesthetic and for treatment-resistant depression.

**e-therapy:** a licensed mental health care professional providing treatment via e-mail, videoconferencing, virtual reality technology, chat technology, or any combination of these.

**eye movement desensitization and reprocessing (EMDR):** a nontraditional psychotherapy using an individual's own rapid, rhythmic eye movements in an attempt to dampen the power of emotionally charged memories of past traumatic events.

**faith-based counseling:** the integration of religion or spirituality into clinical psychology.

**fibromyalgia:** a chronic disorder characterized by widespread musculoskeletal pain, fatigue, and tenderness in localized areas.

**first-episode psychosis (FEP):** refers to when an individual first shows signs of beginning to lose contact with reality.

**free association:** a psychoanalytic practice encouraging an individual to talk about whatever comes into their mind, often in response to a therapist suggesting word or idea.

**genetics:** the study of genes and variations in physical and psychological characteristics influenced by genes.

**genetics, behavioral:** the study of the influence of genetic composition on behavior and the interaction of heredity and environment as it affects behavior; also called psychogenetics.

**grief, complicated:** painful emotions over the death of a loved one that do not diminish with time and are severe enough to impact an individual's daily life.

**group therapy:** psychological therapy conducted with a group of people who are usually facing similar issues, like anxiety, depression, or addiction.

**guided imagery:** the use of words and music to evoke positive imaginary scenarios to promote relaxation and mental and physical health.

**hallucinations:** sensory experiences that appear real but are created by an individual's mind, such as hearing a voice or seeing an image that others can't hear or see.

**hypersomnia:** a condition in which an individual feels excessive sleepiness during the day; also called excessive daytime sleepiness (EDS).

**hypnotherapy:** a therapeutic technique in which suggestions are made to an individual who has undergone a procedure to relax and focus their minds; used to change habits, like smoking.