DEPRESSION
Major depression is a serious medical illness affecting 15 million American adults, or approximately 5 to 8 percent of the adult population in a given year.

People with depressive illnesses do not all experience the same symptoms. The severity, frequency and duration of symptoms will vary depending on the individual and his or her particular illness.

Symptoms include:
- Persistent sad, anxious or "empty" feelings
- Feelings of hopelessness and/or pessimism
- Feelings of guilt, worthlessness and/or helplessness
- Irritability, restlessness
- Loss of interest in activities or hobbies once pleasurable, including sex
- Fatigue and decreased energy
- Difficulty concentrating, remembering details and making decisions
- Insomnia, early–morning wakefulness, or excessive sleeping
- Overeating, or appetite loss
- Thoughts of suicide, suicide attempts
- Persistent aches or pains, headaches, cramps or digestive problems that do not ease even with treatment

Depression and medical comorbidity
Depression also often co–exists with other serious medical illnesses such as heart disease, stroke, cancer, hiv/aids, diabetes, and Parkinson's disease.

Studies have shown that people who have depression in addition to another serious medical illness tend to have more severe symptoms of both depression and the medical illness, more difficulty adapting to their medical condition, and more medical costs than those who do not have co–existing depression.

Research has yielded increasing evidence that treating the depression can also help improve the outcome of treating the co–occurring illness.

Research indicates that depressive illnesses are disorders of the brain. Brain-imaging technologies, such as magnetic resonance imaging (MRI), have shown that the brains of people who have depression look different than those of people without depression. The parts of the brain responsible for regulating mood, thinking, sleep, appetite and behavior appear to function abnormally. In addition, important neurotransmitters—chemicals that brain cells use to communicate—appear to be out of balance. But these images do not reveal why the depression has occurred.

Genetics research indicates that risk for depression results from the influence of multiple genes acting together with environmental or other factors.

There are several forms of depressive disorders. The most common are major depressive disorder and dysthmic disorder.

Major depressive disorder, also called major depression, is characterized by a combination of symptoms that interfere with a person's ability to work, sleep, study, eat, and enjoy once–pleasurable
activities. Major depression is disabling and prevents a person from functioning normally. An episode of major depression may occur only once in a person's lifetime, but more often, it recurs throughout a person's life.

**Dysthymic disorder**, also called dysthymia, is characterized by long-term (two years or longer) but less severe symptoms that may not disable a person but can prevent one from functioning normally or feeling well. People with dysthymia may also experience one or more episodes of major depression during their lifetimes.

**Some forms of depressive disorder exhibit slightly different characteristics than those described above, or they may develop under unique circumstances. However, not all scientists agree on how to characterize and define these forms of depression. They include:**

- **Psychotic depression**, which occurs when a severe depressive illness is accompanied by some form of psychosis, such as a break with reality, hallucinations, and delusions.

- **Postpartum depression**, which is diagnosed if a new mother develops a major depressive episode within one month after delivery. It is estimated that 10 to 15 percent of women experience postpartum depression after giving birth.

- **Seasonal affective disorder (SAD)**, which is characterized by the onset of a depressive illness during the winter months, when there is less natural sunlight. The depression generally lifts during spring and summer. SAD may be effectively treated with light therapy, but nearly half of those with SAD do not respond to light therapy alone. Antidepressant medication and psychotherapy can reduce SAD symptoms, either alone or in combination with light therapy.

**Common Antidepressants**

*Selective serotonin reuptake inhibitors (SSRIs)* act specifically on the neurotransmitter *serotonin*. They are the most common agents prescribed for depression worldwide. These agents block the reuptake of serotonin from the synapse to the nerve, thus artificially increasing the serotonin that is available in the synapse (this is functional serotonin, since it can become involved in signal transmission, the cardinal function of neurotransmitters). SSRIs include fluoxetine (Prozac), sertraline (Zoloft), paroxetine (Paxil), citalopram (Celexa), escitalopram (Lexapro), and fluvoxamine (Luvox).

*Serotonin and norepinephrine reuptake inhibitors (SNRIs)* are the second-most popular antidepressants worldwide. These agents block the reuptake of both serotonin and norepinephrine from the synapse into the nerve (thus increasing the amounts of these chemicals that can participate in signal transmission). SNRIs include venlafaxine (Effexor) and duloxetine (Cymbalta).

*Bupropion (Wellbutrin)* is a very popular antidepressant medication classified as a norepinephrine-dopamine reuptake inhibitor (NDRI). It acts by blocking the reuptake of dopamine and norepinephrine.

*Mirtazapine (Remeron)* works differently from the compounds discussed above. Mirtazapine targets specific serotonin and norepinephrine receptors in the brain, thus indirectly increasing the activity of several brain circuits.

*Tricyclic antidepressants (TCAs)* are older agents seldom used now as first-line treatment. They work similarly to the SNRIs, but have other neurochemical properties which result in very high side effect rates, as compared to almost all other antidepressants. They are sometimes used in cases where other antidepressants have not worked. TCAs include amitriptyline (Elavil, Limbitrol), desipramine (Norpramin),
doxepin (Sinequan), imipramine (Norpramin, Tofranil), nortriptyline (Pamelor, Aventyl), and protriptyline (Vivactil).

*Monoamine oxidase inhibitors (MAOIs)* are also seldom used now. They work by inactivating enzymes in the brain which catabolize (chew up) serotonin, norepinephrine, and dopamine from the synapse, thus increasing the levels of these chemicals in the brain. They can sometimes be effective for people who do not respond to other medications or who have “atypical” depression with marked anxiety, excessive sleeping, irritability, hypochondria, or phobic characteristics. However, they are the least safe antidepressants to use, as they have important medication interactions and require adherence to a particular diet. MAOIs include phenelzine (Nardil), isocarboxazid (Marplan), and tranylcypromine sulfate (Parnate).

**ANXIETY**

Anxiety Disorders affect about 40 million American adults age 18 years and older (about 18%) in a given year, causing them to be filled with fearfulness and uncertainty.

Unlike the relatively mild, brief anxiety caused by a stressful event (such as speaking in public or a first date), anxiety disorders last at least 6 months and can get worse if they are not treated.

Anxiety disorders commonly occur along with other mental or physical illnesses, including alcohol or substance abuse.

**Patient Quotes**

“I always thought I was just a worrier. I’d feel keyed up and unable to relax. At times it would come and go, and at times it would be constant. It could go on for days. I’d worry about what I was going to fix for a dinner party, or what would be a great present for somebody. I just couldn’t let something go.”

“I’d have terrible sleeping problems. There were times I’d wake up wired in the middle of the night. I had trouble concentrating, even reading the newspaper or a novel. Sometimes I’d feel a little lightheaded. My heart would race or pound. And that would make me worry more. I was always imagining things were worse than they really were: when I got a stomachache, I’d think it was an ulcer.”

**Anxiety Disorders**

- **Panic Disorder** -- Characterized by panic attacks, panic disorder results in sudden feelings of terror that strike repeatedly and without warning. Physical symptoms include chest pain, heart palpitations, shortness of breath, dizziness, abdominal discomfort, feelings of unreality, and fear of dying. Children and adolescents with this disorder may experience unrealistic worry, self-consciousness, and tension.

- **Obsessive-compulsive Disorder (OCD)** -- OCD is characterized by repeated, intrusive, and unwanted thoughts (obsessions) and/or rituals that seem impossible to control (compulsions). Adolescents may be aware that their symptoms don’t make sense and are excessive, but younger children may be distressed only when they are prevented from carrying out their compulsive habits. Compulsive behaviors often include counting, arranging and rearranging objects, and excessive hand washing.

- **Post-traumatic Stress Disorder** -- Persistent symptoms of this disorder occur after experiencing a trauma such as abuse, natural disasters, or extreme violence. Symptoms include nightmares; flashbacks; the numbing of emotions; depression; feeling angry, irritable, and distracted; and being easily startled.
• **Phobias** -- A phobia is a disabling and irrational fear of something that really poses little or no actual danger. The fear leads to avoidance of objects or situations and can cause extreme feelings of terror, dread, and panic, which can substantially restrict one’s life. "Specific" phobias center around particular objects (e.g., certain animals) or situations (e.g., heights or enclosed spaces). Common symptoms for children and adolescents with "social" phobia are hypersensitivity to criticism, difficulty being assertive, and low self-esteem.

• **Generalized Anxiety Disorder** -- Chronic, exaggerated worry about everyday, routine life events and activities that lasts at least six months is indicative of generalized anxiety disorder. Children and adolescents with this disorder usually anticipate the worst and often complain of fatigue, tension, headaches, and nausea.

**GENERALIZED ANXIETY DISORDER -- GAD**

GAD is diagnosed when a person worries excessively about a variety of everyday problems for at least 6 months. People with GAD can’t seem to get rid of their concerns, even though they usually realize that their anxiety is more intense than the situation warrants. They can’t relax, startle easily, and have difficulty concentrating. Often they have trouble falling asleep or staying asleep. Physical symptoms that often accompany the anxiety include fatigue, headaches, muscle tension, muscle aches, difficulty swallowing, trembling, twitching, irritability, sweating, nausea, lightheadedness, having to go to the bathroom frequently, feeling out of breath, and hot flashes.

**ANXIETY REFERENCES**

15. LeDoux J. Fear and the brain: where have we been, and where are we going? *Biological Psychiatry*, 1998; 44(12): 1229-38.

**DEPRESSION REFERENCES**


