

Major Depressive Disorder

Major depressive disorder is a mood disorder. People with major depressive disorder have low moods more often than is normal. Although major depressive disorder is one of the most common mental disorders in the United States it is still a serious mental illness and should be treated accordingly.

Parts of the brain that are affected by major depressive disorder

Frontal Lobe Involved with behavior, emotions, reactions, motivation

Cingulate Cortex Connects structures involved with emotions and pain

Contributes to low mood, lack of energy

Parietal Lobe Involved with locating things

Temporal Lobe Involved with telling what things are
Influences how the person views reality

Symptoms of Depression

When many people hear depression, they think of feeling sad all the time. While sadness can be a part of depression, it is often accompanied by other symptoms. No two cases of major depressive disorder are the same. People will express their symptoms in many different ways. Some of these symptoms are

Feeling emotionally exhausted or numb

Having no energy or motivation to do things

Drastic weight changes

Not sleeping or sleeping too much

Inability to concentrate

Feeling worthless

Further Reading

The Brain by BrainFacts.org, 2022. <https://www.brainfacts.org/3d-brain#intro=false&focus=Brain>

An interactive digital 3D brain

Foundations of Neuroscience by Casey Henley, 2021. <https://openbooks.lib.msu.edu/neuroscience/>

A free textbook about how the brain works

Psychiatric medication A to Z by Mind, 2022. <https://www.mind.org.uk/information-support/drugs-and-treatments/medication/drug-names-a-z/>

A list of medications and their side effects

Nursing Pharmacology by Chippewa Valley Technical College, 2020. <https://wtcs.pressbooks.pub/pharmacology/>

A free textbook about medications are processed in the body

DSM-5, 2013.

The diagnostic manual for all mental disorders. It is not open access but can likely be found at your local library

Medications often used for major depressive disorder

These medications aim to stabilize mood, mostly by acting on serotonin. Serotonin is a neurotransmitter that is closely connected to mood. It is believed that too little serotonin can cause depression.

SSRIs

- Leads to more serotonin in frontal lobe
- Helps mood
- Can trigger mania or hypomania in a person misdiagnosed with major depressive disorder

SNRIs

- Increases the amount of serotonin and norepinephrine
- Helps mood
- Increases energy

Neurotransmitters: How Does the Brain Talk to Itself?

Parts of the brain will release chemicals that tell other parts of the brain what to do. Some chemicals will make the brain more active or calm it down, and some are connected with certain moods.

Serotonin involved with mood

Norepinephrine involved with excitement, “fight or flight” response

Dopamine involved with motivation and movement

Glutamate involved with increasing brain function

Suicide

One of major depressive disorder’s most infamous aspects is suicide. Suicidal thoughts are a common symptom for people living with a depressed mood. There is a common myth that people who attempt or complete suicide are selfish or weak. This is not true. Suicide is a result of a sickness that manipulates your perception of reality. People who die by suicide have often succumbed to a long, exhausting fight, not immediately given up.

We live in an era of unprecedented progress in mental healthcare. New treatments come out all the time. There are many new pathways out of depression. If you ever feel an overwhelming need to die, please call the National Suicide Prevention Lifeline at 800-273-8255, text Crisis Text Line by texting HOME to 741741, or call someone you love and trust. You are worth living for.

If you see these symptoms in yourself or a loved one, see a medical professional. You can text your zip code to 898211 to find local resources. If you are in an active crisis, call 911.

Works Cited

Liang, M., Zhou, Q., Yang, K.-R., Yang, X.-L., Fang, J., Chen, W.-L., & Huang, Z. (2013). Identify Changes of Brain Regional Homogeneity in Bipolar Disorder and Unipolar Depression Using Resting-State fMRI. *PloS One*, 8(12), e79999–e79999. <https://doi.org/10.1371/journal.pone.0079999>

Available at: <https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0079999&type=printable>

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