

For More Information on Depression

Visit the National Library of Medicine's MedlinePlus <http://medlineplus.gov>
En Español <http://medlineplus.gov/spanish>

For information on clinical trials
<http://www.nlm.nih.gov/health/trials/index.shtml>

National Library of Medicine clinical trials database
<http://www.clinicaltrials.gov>

Information from NIMH is available in multiple formats. You can browse online, download documents in PDF, and order materials through the mail. Check the NIMH website at <http://www.nlm.nih.gov> for the latest information on this topic and to order publications. If you do not have Internet access please contact the NIMH Information Resource Center at the numbers listed below.

National Institute of Mental Health

Science Writing, Press & Dissemination Branch
6001 Executive Boulevard
Room 8184, MSC 9663
Bethesda, MD 20892-9663
Phone: 301-443-4513 or
1-866-615-NIMH (6464) toll-free
TTY: 301-443-8431 or
1-866-415-8051 toll-free
FAX: 301-443-4279
E-mail: nimhinfo@nih.gov
Website: <http://www.nlm.nih.gov>

For More Information on Parkinson's Disease

National Institute of Neurological Disorders and Stroke (NINDS)

P.O. Box 5801
Bethesda, MD 20824
Phone: 1-800-352-9424 or 301-496-5751
TTY: 301-468-5981
E-mail: http://www.ninds.nih.gov/contact_us.htm
Website: <http://www.ninds.nih.gov>

Citations

1. Kessler RC, Chiu WT, Demler O, Merikangas KR, Walters EE. Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry*. 2005 Jun; 62(6):617–27.
2. Rahman S, Griffin HJ, Quinn NP, Jahanshahi M. Quality of life in Parkinson's disease: the relative importance of the symptoms. *Mov Disord*. 2008 Jul 30; 23(10):1428–34.
3. Raskind MA. Diagnosis and treatment of depression comorbid with neurologic disorders. *Am J Med*. 2008 Nov; 121(11 Suppl 2):S28–37.
4. Boileau I, Warsh JJ, Guttman M, Saint-Cyr JA, McCluskey T, Rusjan P, Houle S, Wilson AA, Meyer JH, Kish SJ. Elevated serotonin transporter binding in depressed patients with Parkinson's disease: a preliminary PET study with [11C] DASB. *Mov Disord*. 2008 Sep 15; 23(12):1776–80.
5. Wilkins KM, Ostroff R, Tampi RR. Efficacy of electroconvulsive therapy in the treatment of nondepressed psychiatric illness in elderly patients: a review of the literature. *J Geriatr Psychiatry Neurol*. 2008 Mar; 21(1):3–11.

Reprints

This publication is in the public domain and may be reproduced or copied without permission from NIMH. We encourage you to reproduce it and use it in your efforts to improve public health. Citation of the National Institute of Mental Health as a source is appreciated. However, using government materials inappropriately can raise legal or ethical concerns, so we ask you to use these guidelines:

- NIMH does not endorse or recommend any commercial products, processes, or services, and our publications may not be used for advertising or endorsement purposes.
- NIMH does not provide specific medical advice or treatment recommendations or referrals; our materials may not be used in a manner that has the appearance of such information.
- NIMH requests that non-Federal organizations not alter our publications in ways that will jeopardize the integrity and "brand" when using the publication.
- Addition of non-Federal Government logos and website links may not have the appearance of NIMH endorsement of any specific commercial products or services or medical treatments or services.

If you have questions regarding these guidelines and use of NIMH publications, please contact the NIMH Information Resource Center at 1-866-615-6464 or e-mail at nimhinfo@nih.gov.



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health
National Institute of Mental Health
NIH Publication No. 11–5007
Revised 2011

Depression and Parkinson's Disease



Depression not only affects your brain and behavior—it affects your entire body.

Depression has been linked with other health problems, including Parkinson's disease. Dealing with more than one health problem at a time can be difficult, so proper treatment is important.



What is depression?

Major depressive disorder, or depression, is a serious mental illness. Depression interferes with your daily life and routine and reduces your quality of life. About 6.7 percent of U.S. adults ages 18 and older have depression.¹

Signs and Symptoms of Depression

- Ongoing sad, anxious, or empty feelings
- Feeling hopeless
- Feeling guilty, worthless, or helpless
- Feeling irritable or restless
- Loss of interest in activities or hobbies once enjoyable, including sex
- Feeling tired all the time
- Difficulty concentrating, remembering details, or making decisions
- Difficulty falling asleep or staying asleep, a condition called insomnia, or sleeping all the time
- Overeating or loss of appetite
- Thoughts of death and suicide or suicide attempts
- Ongoing aches and pains, headaches, cramps, or digestive problems that do not ease with treatment.

For more information, see the NIMH booklet on Depression at <http://www.nimh.nih.gov/health/publications/depression/index.shtml>.

What is Parkinson's disease?

Parkinson's disease is a chronic disorder that worsens over time and results in the loss of brain cells that produce dopamine, a chemical messenger that controls movement. Parkinson's disease usually affects people over age 50. The main symptoms of Parkinson's disease are:

- Tremor, or shaking, in the hands, arms, legs, jaw, and face
- Rigidity, or stiffness, of the arms, legs, and torso

- Slowness of movement
- Impaired balance and coordination.

Parkinson's can also affect thinking and emotions. At present, there is no way to predict or prevent Parkinson's disease.

How are depression and Parkinson's disease linked?

For people with depression and Parkinson's disease, each illness can make symptoms of the other worse. For example, people with both illnesses tend to have more movement problems and greater levels of anxiety than those who have just depression or Parkinson's disease.^{2,3} Compared with people who are depressed but do not have Parkinson's, people who have both illnesses may have lower rates of sadness and guilt, but greater problems with concentration.³ One recent brain imaging study also suggests that people with Parkinson's disease may have an unusually high number of reuptake pumps for the brain chemical messenger serotonin.⁴ Serotonin helps regulate mood, but overactive pumps reduce serotonin levels, possibly leading to depressive symptoms in some people with Parkinson's disease.

How is depression treated in people who have Parkinson's disease?

Depression is diagnosed and treated by a health care provider. Treating depression can help you manage your Parkinson's disease treatment and improve your overall health. Recovery from depression takes time but treatments are effective.

At present, the most common treatments for depression include:

- Cognitive behavioral therapy (CBT), a type of psychotherapy, or talk therapy, that helps people change negative thinking styles and behaviors that may contribute to their depression
- Selective serotonin reuptake inhibitor (SSRI), a type of antidepressant medication that includes citalopram (Celexa), sertraline (Zoloft), and fluoxetine (Prozac)
- Serotonin and norepinephrine reuptake inhibitor (SNRI), a type of antidepressant medication similar to SSRI that includes venlafaxine (Effexor) and duloxetine (Cymbalta).

While currently available depression treatments, particularly SSRIs, are generally well tolerated and safe for people with Parkinson's disease, talk with your health care provider about side effects, possible drug interactions, and other treatment options. For the latest information on medications, visit the U.S. Food and Drug Administration website at <http://www.fda.gov>. Not everyone responds to treatment the same way. Medications can take several weeks to work, may need to be combined with ongoing talk therapy, or may need to be changed or adjusted to minimize side effects and achieve the best results.

A variety of medications can provide dramatic relief from the symptoms of Parkinson's disease. However, no current medication can stop the progression of the disease, and in many cases, medications lose their benefit over time. In such cases, the doctor may recommend deep brain stimulation, a surgery that places a battery-operated medical device called a neurostimulator—similar to a heart pacemaker—to deliver electrical stimulation to areas in the brain that control movement. Some doctors recommend physical therapy or muscle-strengthening exercises to improve movement and balance and make it easier to continue doing daily tasks, such as getting dressed and bathing. Although usually associated with treating severe or treatment-resistant depression, electroconvulsive therapy may improve Parkinson's disease symptoms in some people.⁵

More information about depression treatments can be found on the NIMH website at <http://www.nimh.nih.gov/health/publications/depression/how-is-depression-detected-and-treated.shtml>. If you think you are depressed or know someone who is, don't lose hope. Seek help for depression.

