

Receiving a diagnosis of **Parkinson's disease (PD)** can be a life-altering event. When a person has symptoms of anxiety and depression, we may think that's a "normal" response to such an event. However, these symptoms may be much more profound than a response. There is evidence that mood disorders such as anxiety and depression are not only the results of a PD diagnosis but may also be symptoms of that condition.

### Key takeaways:

- Depression and anxiety are present in almost half of people with Parkinson's Disease (PD) at some time during the disease process.
- Depression and anxiety may occur years before a diagnosis of Parkinson's Disease.
- Early diagnosis and treatment by your healthcare provider may impact the rate of progression of PD and general well-being.
- Lifestyle modifications may reduce the impact of mood changes associated with PD.

While not everyone with PD has a mood disorder, statistics show that [40-50% of people diagnosed with Parkinson's will have depression](#), and [20-40% will have anxiety](#) throughout the illness. Unfortunately, it is sometimes difficult to determine if someone with PD has depression. Physical features associated with Parkinson's are similar to those with depression. For example, the slowness of movement, decreased appetite, and sleep disturbances commonly seen in Parkinson's, may or may not indicate depression. As a result, depression in PD is often unacknowledged and not treated as promptly as it should be for better results.

Symptoms of depression in Parkinson's may begin years before diagnosing PD. In Parkinson's, changes in the brain chemistry affecting dopamine levels also affect serotonin and norepinephrine production, which regulate mood. As a result, a mood disorder can adversely affect the quality of life and impact cognitive deficits and motor function. There is evidence that a delay in treatment may also [increase the progression of Parkinson's disease](#). It's vital to be alert to mood changes for early identification and treatment.

## Symptoms of Depression

- Loss of interest in daily life
- Slower motor movements
- Decreased appetite
- Changes in sleep patterns
- Fatigue or low energy levels
- Low sex drive
- Feelings of worthlessness or guilt
- Difficulty with concentration
- Difficulty making decisions
- Irritability
- Suicidal thoughts

## Symptoms of Anxiety

- Excessive worry
- Restlessness
- Racing heart rate
- Nausea and fatigue
- Change in sleep patterns
- Difficulty with concentration
- Change in appetite
- Muscle tension
- Irritability

## Diagnosis

If you or your loved one with PD suspects depression or anxiety, the first action is to visit your healthcare provider. They will conduct a physical exam and lab tests to determine the cause of a change in mood. Abnormalities in thyroid hormone levels or vitamin deficiencies such as vitamin B12 can contribute to those changes. A doctor should also review your medications to determine if any of the drugs taken for PD require adjustments to reduce mood fluctuations. Your healthcare provider may also recommend imaging exams, including CT (computed tomography scan) or MRI (magnetic resonance imaging.)

A thorough mental health history should also be part of the evaluation, including a depression scale assessment. This assessment serves as a baseline and is ongoing to monitor treatment effectiveness. Your healthcare provider can utilize validated depression scales such as the Geriatric Depression Scale (GDS) or Cornell Depression Scale. Your healthcare provider may also consider referral to a geriatric psychiatrist for further treatment.

## Treatment

### Non-Pharmacological treatment

#### Lifestyle tips:

- Physical activity and exercise for 20-30 minutes at least five days a week
- Eat a well-balanced diet with whole grains, nuts, fruit, vegetables, and proteins. Avoid processed foods.
- Vitamin supplements such as Vitamin B12, Vitamin D, or a multivitamin may be beneficial
- Avoid or eliminate alcohol
- Maintain family and social connections to reduce feelings of isolation
- Practice good sleep hygiene
- Make sure you take your prescribed medications. If you have trouble remembering, use an alarm or a medication compliance system.

#### Counseling:

**Psychotherapy** is a broad range of talk therapies, including Cognitive Behavioral Therapy (CBT) and Supportive Counseling, used to treat mood disorders. A therapist will work with you or your loved one to devise a plan that addresses your specific needs. Therapy groups or other support groups may also be beneficial. Contact your local [American Parkinson's Disease Association](#), [Alzheimer's Society](#), or healthcare provider for a recommendation or referral. A therapist with experience in treating people with PD will provide the best outcomes.

#### Light Therapy (LT):

In sleep medicine research, [Light Therapies have improved depression and sleep disorders](#) in some cases of people with PD. Recommendations outline using a light box with "10,000 lux" twice daily for 20 minutes for optimal effect. Consult your healthcare provider before using light therapy.

### Pharmacological treatment

Studies in people with PD and significant depression [treated with antidepressants](#) showed improved mood and a reduction in motor disability. Some antidepressants, such as citalopram, also show improvement in anxiety. Antidepressants work best in combination with [talk therapy or counseling](#). A thorough assessment by your healthcare provider for you or your loved one will assist in determining the best possible treatment for depression. More common antidepressants used in treating depression in PD include SSRIs and SNRIs.

**-SSRIs:** selective serotonin reuptake inhibitors are the most frequently prescribed antidepressant in Parkinson's disease. They work by increasing serotonin levels in the brain to improve mood. SSRIs are generally well tolerated with few troubling side effects. Examples include citalopram, sertraline, paroxetine, and fluoxetine.

**-SNRIs:** serotonin-norepinephrine reuptake inhibitors work by increasing the levels of norepinephrine and include venlafaxine and duloxetine. However, SNRIs tend to have more side effects and are not used as often in treating depression in PD.

**-Tricyclic Antidepressants:** thought to balance the neurotransmitters norepinephrine and serotonin to alleviate depressive symptoms. Only if SSRIs and SNRIs are not effective are tricyclics considered. These tricyclics include amitriptyline, nortriptyline, and desipramine.

**-Dopamine Agonists:** This drug class works by acting in place of dopamine used for motor symptoms in PD and restless leg syndrome. However, dopamine agonists also demonstrate some efficacy in reducing symptoms of depression. An example is the drug pramipexole and ropinirole.

Other drugs commonly used to reduce anxiety in the general population, such as diazepam, and lorazepam, are not recommended in the older adult population due to sedating effects presenting a falls risk. The person with PD already has a high risk of falls due to the motor impact on gait and balance.

Depression and anxiety are common mood disorders in Parkinson's, sometimes emerging years before a PD diagnosis. Because symptoms may overlap the symptomology of PD, mood disorders are often not recognized and under-treated. A delay in treatment may not only impact a person's mental health and well-being, but it may also increase the progression of PD. Contact your healthcare provider if your loved one shows signs of depression or anxiety. Prompt assessment and treatment will likely help to improve mood and increase a person's quality of life.

## Resources:

1. [Depression and Parkinson's Disease: Current Knowledge](#)
2. [Management of Depression in Parkinson's Disease](#)
3. [Anxiety in Parkinson's Disease: Correlation with Depression and Quality of Life](#)
4. [Depression and Anxiety](#)
5. [The effects of bright light therapy on depression and sleep disturbances in patients with Parkinson's disease: a systematic review and meta-analysis of randomized controlled trials](#)