



Published in final edited form as:

Arch Phys Med Rehabil. 2023 July ; 104(7): 1161–1164. doi:10.1016/j.apmr.2022.11.020.

Falls Prevention, Home Safety, and Rehabilitation Services for People with Parkinson's Disease: A Client and Caregiver Guide

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Art Hein, PT, Pallavi Sood, PhD, PT, Patricia C. Heyn, PhD, FGSA, FACRM on behalf of the Neurodegenerative Diseases Networking
Group, Alzheimer's Disease and Parkinsonism and Related Movement Disorders Task Force from the American Congress of the
Rehabilitation Medicine. The authors acknowledge Lorelei Phillip Johnson, PhD, CCC-SLP for insights into how the speech language
pathologist can assist in falls prevention for PwPD.

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Keywords

Parkinson's disease; fall prevention; fall risk; rehabilitation; safety; therapy; balance

Parkinson's Disease (PD) is a brain disease that affects a person's ability to move and perform daily activities¹. As the disease progresses, loss of balance and falls are the leading cause of injuries and disability¹. People with Parkinson's Disease have a much higher risk of falling and getting hurt compared with the general population^{1,2}.

What are the common risk factors for falling in people with Parkinson Disease?

People with Parkinson's Disease (PwPD) are likely to fall because of problems with balance, posture, "freezing" when walking, leg weaknesses, fear of falling, cognitive impairment and difficulty moving in the home^{2,3}. To prevent falls, it is important to promote safe walking by evaluating and maintaining a safe home environment as well as participating in a specific rehabilitation program^{3,4}.

Recommendations to decrease the risk for falls and to create a safe environment for

PwPD^{3,5}:

- Wear well-fitting, rubber soled shoes to prevent falling.
- Do not wear loose pants or pants that have wide legs which can cause falls.
- Free the floor of clutter, cords, and rugs as they can be tripping hazards.
- Evaluate potential hazardous objects such as lamps and corner tables that can be in the way of main walking areas.
- Make sure entrances, hallways, and rooms are well lit.
- Make sure the home lightning is appropriate and has good light in the key walking areas.
- Color contrasts areas that have ramps, steps, or thresholds to avoid tripping.
- Install grab bars by the toilet and bathtub area.
- Put a commode over the toilet
- Place a shower chair/ bench in the bathtub or shower stall.
- Use a bed rail to prevent falls out of bed.

- Use an assisted device such as cane or walker to help with balance when walking.
- Place frequently used item within arms-reach to prevent loss of balance when reaching.
- Wear a 24-hour medical alert emergency response device to notify local first responders when you fall.

How can family members and care partners help the PwPD³?

- Walking and doing daily activities such as eating, dressing and going to the bathroom will be more difficult to perform as PD progresses.
- The ability to move and walk safely will get worse as the PwPD gets older and the disease progresses. Daily activities, mood, and thinking skills may get worse as well and their risks for falls will increase.
- Many family members will become caregivers to people with PD. It is important for them to properly and safely learn how to take care of their loved one as the disease progress.
- It is also important for them to learn on how to cope with the disease and what to expect when the disease progress. They are key in supporting a comprehensive care plan for their loved one that might include a multidisciplinary team of rehabilitation professionals.
- Learning on how to prevent falls is a key component of a treatment plan for PwPD.
- Family members and care partners are key in supporting their loved ones to safely participate in physical exercises that stimulates walking and balance.
- It is also important to safely participate in activities that increase mental and physical function to help stimulate and maintain independence.
- Physical and occupational therapy for PwPD can help reduce their risk for fall and improve their balance.
- The family member or care partner should be aware of the resources and services available to help them adjust to their new roles. Attending a Parkinson's Disease Support Group will provide information about the disease, treatment options, how to care for the PwPD as the disease progresses, and how to manage caregiver stress.
- Example of resources to help families and caregivers are:
 - National Institute of Health <https://www.nia.nih.gov/health/parkinsons-disease>
 - Parkinson's Foundation <https://www.parkinson.org>
 - Michael J. Fox Foundation <https://www.michaeljfox.org>

How can rehabilitation and specialized care help prevent falls for people with Parkinson's Disease³?

Working with a specialized team of rehabilitation professionals is critical for the safety and quality of life of PwPD. Below we have summarized common rehabilitation services that are important for the function and quality of life of PwPD's:

Physiatrist

- The physiatrist is a medical doctor who specializes in rehabilitation medicine and coordinates the PwPD's rehabilitation care needs with the goal to improving a person's quality of life. They are key in helping to reduce falls and improve falls prevention.
- The physiatrist will manage the PwPD's care, prescribe medications, and make recommendations for additional specialized evaluations and treatments that can help the person's function, health, and wellbeing
- Physical, occupational, psychological, and speech therapy may be prescribed as part of a falls prevention treatment for a person with PD.

Physical Therapist (PT)

- Although the physical therapist (PT) and the occupational therapist (OT) share common rehabilitation goals, the PT will focus on maintaining and improving the PwPD posture, balance, walking, and movement. Exercises to improve the person's balance, posture, and physical strength might be part of the person's treatment plan.
- The PT might also recommend a walking device such as a cane to improve the person's balance and ability to walk safely.
- The PT will evaluate the person's environment (i.e., home) for safety and to decrease their risk for falls.

Occupational Therapist (OT)

- The OT will evaluate the PwPD ability to perform safely daily living activities by altering the activity, the environment, or the skills of the person. The OT will make recommendations on how to do these activities easier and safer and therapy will be prescribed as needed.
- The OT might help the PwPD to improve their fine motor skills. Fine motor skills are typically small movements involving the upper body. These movements are essential for many daily activities such as picking up a toothbrush and brushing the teeth, cutting food with a fork or knife, getting dressed, using a smartphone, or driving a car.
- If needed, the OT will recommend adapted or assistive device aids to help the PwPD do their daily routine safely and prevent falls.

Speech Therapist

- The speech-language pathologist (SLP) will evaluate the PwPD's memory, thinking skills, and problem-solving ability during daily activities and walking to prevent falls.
- The SLP may assist with developing a specific falls prevention program to improve daily activities, walking, talking-while-walking ability, balance and speech.

In summary, rehabilitation services are very important for falls prevention for PwPD. They can help preventing falls for by maintaining the function, independence, and quality of life for PwPD. In the United States, many PwPD are eligible for these services through health insurance programs including Medicare. We recommend that you contact your insurance company or government agencies to determine if these services are provided and if you are eligible to receive financial assistance. Usually, the person needs to have a referral for rehabilitation services. The person's primary doctor should be able to evaluate the rehabilitation services that are the most appropriate for the care needs of the PwPD.

Exercises are important for falls prevention, and they help the PwPD to maintain strength, flexibility, balance, posture and cognitive function. The exercise resources below will provide exercise recommendations designed for PwPD for you to share with your rehabilitation therapist.

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Exercise Resources for PD:

The Benefits of Exercise for PD. Stanford Medicine: <https://med.stanford.edu/parkinsons/treating-PD/exercise.html>

Exercise for People with Parkinson Disease. Cleveland Clinic: <https://my.clevelandclinic.org/health/articles/9200-exercise-for-people-with-parkinsons-disease>

Being Active When You Have Parkinson's Disease. American College of Sports Medicine Exercise is Medicine: https://www.exerciseismedicine.org/wp-content/uploads/2021/04/EIM_Rx-for-Health_Parkinsons-Disease.pdf

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