

Fall Prevention in Parkinson Disease

Produced by: Parkinson Disease Knowledge Translation Task Force

Fact Sheet

Physical therapists should implement balance training either alone or in combination with strength training, cueing, or dual task training to lower fall risk in people with PD. There are few studies that were designed to specifically address fall reduction, limiting the evidence available.

Types of individuals with PD who would most/least benefit from fall prevention training:

- Studies did not include individuals with cognitive impairment.
- Fall prevention should be started early in the disease as it is most effective in earlier stages of the disease. One study showed a trend toward an increase in falls after an exercise intervention in individuals with more severe disease.

Evidence Based Fall Prevention Interventions

- Studies demonstrating decreased fear of falling and fewer falls utilized balance training, either alone or in combination with strength training, cueing or other interventions. Studies generally do not provide detailed information on exercise routines. Therapists should follow the CPG recommendations for designing specific routines.
- Duration of therapy with fall reduction was typically 6 months but ranged from 8 weeks to 6 months. Most studies recommend about 3 hours of weekly exercise, either daily for 30 minutes or on alternating days for 40-60 minutes.
- Recognizing that PD is a chronic condition, client preferences for home- or community-based exercise routines should be considered, taking into account home gym equipment and/or community-based exercise program availability.
- Individuals who fear falling or for other reasons are not good candidates for land-based therapy may chose aquatic-based balance exercise to reduce fall risk.
- A study examining speed-dependent treadmill training showed a significant reduction in falls at low (2 times a week) and intermediate (3x a week) frequency but not at high frequency (5x a week) training.

Fear of Falling

- Fear of falling is often cited as a leading barrier to exercise among people with PD and is related to increased fall risk. Overcoming this barrier as early as possible in the disease progression may have compounding benefits, e.g., more exercise → fewer falls → more exercise → etc.
- Therapists should screen for fear of falling in their clients with PD and introduce individualized strategies to address the fear of falling to create an exercise plan that is appropriate for that individual.
- Fear of falling is typically measured using the Falls Efficacy Scale in studies of people with Parkinson disease.
- Consider implementing behavior change strategies in clients with fear of falling.
- Clients engaging in unsupervised, community-based exercise therapy should be periodically evaluated for changes in fall risk or frequency and programs modified accordingly.



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Stop Falls in PD

