

The Rehab Experience for People Living with PD

Sat, Jan, 15th, 2022
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How Can Rehab Help?

- ▶ Improve safety
- ▶ Decrease risk of falling
- ▶ Increase independence
- ▶ Improve quality of life
- ▶ Improve function

Walking
Shopping
Household Responsibilities
Sleeping
Medication Management
Communication
Increase Energy

What To Expect For My Rehab Experience

- ▶ The Evaluation:
 - ▶ Interview with you and your caregivers
 - ▶ Review of your medical history
 - ▶ Review of your current home setting
 - ▶ Physical, cognitive, psychosocial screen and/or assessment
 - ▶ Analysis of performance
 - ▶ Use of relevant outcome measures to track performance and change over time
 - ▶ Development of goals and frequency of plan of care

What To Expect For My Rehab Experience

- ▶ The Interventions:
 - ▶ Highly dependent on your specific impairments and goals
 - ▶ Functional relevance
 - ▶ Carryover is important
 - ▶ Intensity matters: difficult but do-able
 - ▶ Repetition, repetition, repetition!
 - ▶ Education, education, education!

What To Expect For My Rehab Experience

- ▶ The Interventions:
 - ▶ May include:
 - ▶ Caregiver training
 - ▶ Adaptive equipment training
 - ▶ Compensation strategies
 - ▶ Home safety and environment recommendations
 - ▶ Teaching/creating exercise plan

What To Expect For My Rehab Experience

▶ Typical treatment plan:



Physical Therapy

Walking & Mobility
Balance
Transfers
Wellness
Dizziness/Vertigo

Occupational Therapy

Activities of Daily Living
Functional Cognition
Meaningful Activities
Self-Care
Sleep

Speech Language Pathology

Communication
Cognition/Memory
Language
Swallowing
Voice

When Would I Benefit From Rehab?

Physical Therapy

- Never had PT before or newly diagnosed
- Balance and stability changes
 - Falls
 - Almost falls
 - Furniture surfing or wall walking
 - Bumping into things
- Fear of falling has created avoidance of activities
- Difficulty doing two things at once
- Shuffling or freezing of gait

When Would I Benefit From Rehab?

Occupational Therapy

- Never had OT before or newly diagnosed
- Difficulty managing typical routines/roles
- Difficulty taking care of yourself
- Avoiding daily or meaningful activities due to:
 - Hand/arm function
 - Cognitive changes
 - Fear of falling
 - Bowel/bladder incontinence
 - Fatigue
 - Stress/anxiety/depression
 - Sleep disturbance

When Would I Benefit From Rehab?

Speech-Language Pathology

- Never had SLP before or newly diagnosed
- Swallowing difficulty:
 - Difficulty getting swallow started
 - Sensation of food sticking in throat after swallow
 - Choking and/or coughing when drinking/eating
 - Pill swallowing difficulty
- Voice changes: difficulty projecting, hoarse voice, breathy voice
- Slurred speech or changes in speech
- Needs alternative communication device

When Would I Benefit From Rehab?

Speech-Language Pathology (continued)

- Difficulty with:
 - Word finding
 - Comprehension or following directions
 - Retelling a story or organizing thoughts to form sentences
 - Memory, attention, concentration
 - Planning, being organized, and problem solving

The Literature

Evidence For Rehab Suggests:

- ▶ Physical Therapy
 - ▶ The research suggests that ongoing, vigorous exercise and physical fitness should be highly encouraged for all individuals with neurodegenerative diseases.
 - ▶ Aside from brain neuroprotective effects, physical exercise may attenuate cognitive decline via mitigation of cerebrovascular risk, including the contribution of small vessel disease to dementia.
 - ▶ The literature suggests that physical therapy can be effective in improving the strength, balance, walking, and mobility of individuals with Parkinson's Disease.

Evidence For Rehab Suggests:

- ▶ Occupational Therapy
 - ▶ Evidence supports promotion of social & physical activity, health behavior change techniques, and task-specific training for problematic activities of daily living in individuals with Parkinson's Disease.
 - ▶ Caregiver education and training is supported for all neurodegenerative disorders.
 - ▶ Evidence supports the assessment of the unique, whole person - including functional cognition, caregiver assistance, and environmental contexts - to modify and adapt activities, thereby reducing neuropsychiatric behaviors and increasing engagement in meaningful activity.

Evidence For Rehab Suggests:

- ▶ Speech Therapy
 - ▶ Cognitive interventions such as: errorless learning, spaced-retrieval training, vanishing cues, or verbal instruction/cueing were measured at the cognitive-communication impairment level of functioning and generally demonstrated positive outcomes
 - ▶ SPEAK OUT! and The LOUD Crowd programs, in which patients rely on goal-directed basal ganglia-cortical circuits to compensate for deficits in habitual automatic control, have evidence for effectiveness in mitigating hypokinetic dysarthria for individuals with PD.

Current Research

Our Facility:

- ▶ LARGE-PD Genetic Study - for those of Hispanic/Latin American Descent who have been diagnosed with Parkinson's Disease
- ▶ WizeCare Telerehab for those with Parkinson's Disease
- ▶ Functional Brain Imaging during Freezing of Gait (fNIRS)
- ▶ MORE TO COME!

**ALL DISCIPLINES WORK TOGETHER
TO HELP YOU ACHIEVE YOUR GOALS!**

I Am Interested, Now What?

- ▶ Ask your doctor for a referral to physical therapy, occupational therapy, and/or speech-language pathology if you feel it may be right for you
- ▶ Create achievable & relevant goals
- ▶ Get moving!
 - ▶ Aerobic Exercise/Activity
 - ▶ Physical & Neuroprotective Effects
 - ▶ 150 min/week
 - ▶ Moderate to vigorous intensity
 - ▶ <https://www.mayoclinic.org/healthy-lifestyle/fitness/in-depth/exercise-intensity/art-20046887>
 - ▶ Start slow and grow!

