



Mindfulness with Parkinson's Exercise

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Value of Therapy

Everyone who has Parkinson's is affected differently but almost all people with Parkinson's would benefit from evaluation by a Physical Therapist who is familiar with Parkinson's.

Benefits from therapy include:

- Improve fitness, strength, and flexibility
- Work on strategies for everyday tasks such as transitioning in and out of vehicles, bed, and showers
- Standing and changing directions
- Improve fluidity and pace of movement
- Improve use of hands
- Decrease falls risk
- Improve ability to climb stairs and curbs
- Improve the ability to multi-task
- Meet your activity goals

Does Group, Individual or Home Exercise Best Improve Mobility for People With Parkinson's Disease?

By King et al

- 3 study groups: home exercise, individualized Physical Therapy, and group exercise class
- In all 3 groups the program targeted
 - Physical Constraints
 - Movement Challenges
 - Limits of Stability
 - Anticipating adjustments in posture and balance
 - Decreased movement amplitude
 - Coordination in walking

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- 6 stations for the exercises:
 - Tai Chi
 - Boxing
 - Lunges
 - Kayaking
 - Agility Course
 - Pilates

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- Each activity was progressed by:
 - Challenging sensory integration via changing of visual and surface conditions
 - Making the patient work more independently
 - Increasing speed
 - Increasing resistance
 - Adding additional mental or physical tasks

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- Home Exercise:
 - Met 1 on 1 with PT once to receive their individualized program
 - Exercise level assigned based on participant's ability to safely conduct the exercises in the home
 - Patient provided handouts
- Individualized PT:
 - Met 1 on 1 with PT 3x a week for one hour at outpatient rehab
 - PT would progress the participant through the program based on their ability to complete the exercises safely
- Group Exercise Class:
 - Performed the exercises in a group environment at a wellness center 3x a week for 1 hour
 - The group exercise session was led by an experienced PT
- Regardless of assignment the program was designed for 3x/week for 4 weeks with 60- minute sessions

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- Primary measurement was a Physical Performance Test
 - Writing
 - Simulated eating
 - Donning/doffing a jacket
 - Picking up a penny from the floor
 - Performing a 360 deg turn
 - Walking 50 ft

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- Only the Individualized PT group saw clinically significant improvements on the Physical Performance Test overall.
- The individualized PT group saw the most improvements in secondary measures that looked at function, depression, and balance
- Group exercise class participants saw the most improvement in gait measures including freezing, stride velocity, arm swing, and walking while multi-tasking

Effects of Mindfulness Yoga vs Stretching and Resistance Training Exercises on Anxiety and Depression for People With Parkinson Disease

J. Kwok et al

- Compared completion of mindfulness yoga vs stretching and resistance training exercises in a group of people with Parkinson's Disease
- Used the Hospital Anxiety and Depression scale to compare anxiety and depression within these populations

Effects of Mindfulness Yoga vs Stretching and Resistance Training Exercises on Anxiety and Depression for People With Parkinson Disease

J. Kwok et al

- Hatha Yoga Group:
 - 8 weeks of 90-minute sessions 1x a week
 - Sun salutations (60 minutes)
 - Controlled breathing (15 minutes)
 - Mindfulness meditation (15 minutes)
 - 2x weekly home sessions (20 minutes)
- Stretching and Resistance Training Group:
 - 8 weeks of 60 minute in person therapy sessions 1x a week
 - Home practice 2x weekly (20 minutes)

Effects of Mindfulness Yoga vs Stretching and Resistance Training Exercises on Anxiety and Depression for People With Parkinson Disease

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- Outcomes were measured at:
 - Start of study
 - 8 weeks (immediately following the exercise programs)
 - 20 weeks (3 months following the conclusion of the exercise program)

Effects of Mindfulness Yoga vs Stretching and Resistance Training Exercises on Anxiety and Depression for People With Parkinson Disease

J. Kwok et al

- The yoga group was clinically superior to the strength and resistance training group for managing anxiety and depressive symptoms
- The yoga group was found to be as effective as the strength and resistance training group at improving motor dysfunction and mobility

Mindfulness & Exercise

- Definition
 - Mindfulness - the state or quality of being mindful; non-judgmental of one's heightened awareness (Merriam-Webster)
- Application in the exercise setting
 - A thought process of integrating motor movements while paying attention to what is being achieved

Mobile & Fit/ Aurora BayCare Sports Medicine

- An exercise class for individuals with Parkinson's.
- Classes are scheduled twice a week, led by PWR! Certified instructors.
- A consultation is required prior to participation.
- Currently in a virtual format due to Covid precautions

Mobile & Fit

- Class goal
 - Assist participants maintain independence for their active daily living (ADL).
 - Encourages mind-connection movements from the BIG & LOUD programs (LSVT) and PWR! With repetitions
- Exercise and purposeful activities throughout the day requires thinking to make movements happen
 - For the general population, most movements are learned from habit
 - This can be challenging for people with Parkinson's due to the nature of the diseases

Mobile & Fit

- Application
 - Breathing exercises
 - Weight shift practice
 - Muscle activation/ Body awareness
- Bottom line
 - Consistency is the key - most studies recommend attending sessions at least 2x/ week for optimal benefits
 - For new diagnosis - 1:1 interactions fares best
 - For prolonged benefits – group exercise setting fares best

References

<https://www.choosept.com/symptomsconditionsdetail/physical-therapy-guide-to-parkinsons-disease#HowCanPhysicalTherapistHelp>

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