

# A Whole-Body Approach to Speech-Language Pathology for People with Parkinson's



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## Disclosures



- Financial:
  - Owner Southeast Parkinson's Speech Services LLC and Total Body Cognition LLC
  - Employee Wellstar Health System
  - Paid mentor (PD, motor speech, cognition) for the Medical SLP Collective
  - Trainer at the Center for Movement Challenges (LDBF Boxing for Parkinson's)
- Non-financial:
  - Advisory board member for Parkinson Foundation's Georgia chapter
  - Trained Educator for Ageless Grace

## Time-Ordered Agenda



1-hour session:

- 5 minutes: Introductions and Disclosures
- 15 minutes: Movement and traditional speech therapy
- 15 minutes: Adding wellness into speech and voice activities
- 15 minutes: Adding cognitive challenges into speech and voice activities
- 5 minutes: Ideas and discussions
- 5 minutes: Q&A

## The participant will:



By the end of this presentation, participants will be able to:

- Describe ways to incorporate whole-body movements into speech therapy activities.
- Utilize Parkinson's-related patient education materials in speech therapy sessions (i.e., helping patients understand and implement their physician's recommendations).
- List five cognitive tasks that may benefit people with Parkinson's.

## About Me



- Career began as a 22-year old CF in 1990.
- Many adult settings: SNF, SAR, LTAC, Acute, IRU, OP, HH, Mobile MBS.
- Started specializing in PD in 2015.
- Became a certified health coach in 2017.
- Became a certified personal trainer in 2018.
- Became a Brain Health Trainer and a Precision Nutrition Level 1 Coach in 2020.
- In process of completing Sleep, Stress Management, and Recovery Coach certification.
- Competitive powerlifter with 1 world record, 3 national records, and multiple state records.



# Basics About PD



## WHAT IS PARKINSON'S DISEASE?

- A neurodegenerative disorder
- Almost 1,000,000 in U.S. and 10,000,000 worldwide
- Incidence increases with age.
- About 4% diagnosed before age 50.
- People assigned male at birth are 1.5% more likely than people assigned female at birth to be diagnosed with PD.
- Diverse symptoms
- Not fatal, but complications from PD lead to 14th cause of death in the U.S.
- Cause is largely unknown.
- No cure, but treatment options exist.
- Symptoms can be motor or non-motor.

## HOW DOES PD AFFECT SLP-RELATED FUNCTIONS?

- Motor speech
- Voice
- Swallowing
- Cognitive-communication
- Word finding

Understanding Parkinson's. Parkinson's Foundation. (n.d.). Retrieved December 4, 2021, from <https://www.parkinson.org/understanding-parkinsons>.  
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# Ways to Learn More



## PARKINSON'S FOUNDATION

<https://www.parkinson.org>

## MICHAEL J. FOX FOUNDATION

<https://www.michaeljfox.org>

## DAVIS PHINNEY FOUNDATION

<https://davisphinneyfoundation.org>

## AMERICAN PARKINSON DISEASE ASSOCIATION

<https://www.apdaparkinson.org>

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# PD and Motor Speech



## MOTOR SPEECH

- Imprecise articulation
- Reduced vocal intensity
- Monopitch
- Monoloudness
- Repetition of syllables
- Inappropriate pauses
- Short rushes of speech

## VOICE

- Hoarseness
- Breathiness
- Roughness
- Tremors

## EVIDENCE-BASED TX APPROACHES

- LSVT-LOUD
- Speak OUT!
- Clear Speech
- Compensations

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## Why Incorporate Movement?



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01 IT'S GOOD FOR THE BRAIN AND THE BODY

02 BETTER CARRYOVER

## How to Incorporate Movement Into Speech Tasks?



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01 UPPER BODY  
Play along!

02 ACT OUT  
Perform everyday physical tasks while having a conversation

## Incorporate Yoga Principles Into Speech Tasks?



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### A Few Basics

There are many more yoga techniques and benefits that are beyond the scope of this presentation.

- 01 POSTURE**
  - Posture and PD
  - Cueing for posture
- 02 BREATHING**
  - Breathing and PD
  - Diaphragmatic breathing
  - To cue or not to cue

## Keeping Patients Safe



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- 01 CONSULT WITH PT/OT**
- 02 SEATED TASKS**

## Adding Wellness to the Treatment Activities



- 01 USING THE AFTER VISIT SUMMARY**
  - Oral reading
  - Retelling
  - Comprehension
  - Memory
  - Thought organization
- 02 TALK ABOUT SLEEP**
  - The importance of sleep
  - Strategies to improve sleep
- 03 MINDFULNESS**
  - Good for overall well-being
  - Essential for people with PD who have to be intentional about every movement
- 04 STRESS EXERCISE**
  - Talk about
  - Do it
  - Help the patient find it
  - Help the patient include it
- 05 RESOURCES**
  - Major PD organizations - NARROW the search
  - Support groups

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# Divided Attention 01 and Other Cognitive Challenges



- 01 **WHAT IS DIVIDED ATTENTION?**  
"Divided attention is the ability to pay attention to two tasks at once such as cooking a meal while talking to a friend or driving a car and talking to a passenger at the same time – neither activity is stopped in order to carry out the other activity." -Scottish Acquired Brain Injury Network
- 02 **WHY SHOULD IT BE ADDRESSED?**
  - Communication takes place over a variety of contexts.
  - Divided attention tends to be challenging for people with PD.
- 03 **PERSON-CENTERED OR DRILL?**
  - The goal is better adherence and carryover through personally-relevant activities.
  - But, there is a role for multiple repetitions and for using low-challenge cognitive tasks such as naming tasks.
- 04 **STRATEGY TRAINING**
  - Train cognitive strategies.
  - Train the communication partners.

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# How to Incorporate Cognition Into Motor Tasks?



- 01 **USE ROTE TASKS**
  - Counting
  - Alphabet-based
  - Days
  - Months
  - Biographical information
- 02 **INCORPORATE MEMORY DEMANDS**
  - When I do this, you do that.
  - Switched On app
  - Read and retell
  - Medication recall
- 03 **RESPONSE INHIBITION TASKS**
  - AKA Go/No-Go tasks
- 04 **BRAINSTORM**
  - What else?

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- 01 **IDEAS FOR EARLIER STAGES**  
Play along!
- 02 **IDEAS FOR LATER STAGES**  
Play along!

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## references



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## Links to Major Parkinson's Disease Non-Profits

PARKINSON'S FOUNDATION

<https://www.parkinson.org>

MICHAEL J. FOX FOUNDATION

<https://www.michaeljfox.org>

DAVIS PHINNEY FOUNDATION

<https://davisphinneyfoundation.org>

AMERICAN PARKINSON DISEASE ASSOCIATION

<https://www.apdaparkinson.org>