

1

Objectives



- Define Parkinson's disease (PD) voice issues
- Identify four therapies to address dysphonia in PD
- Pros/cons of each treatment
- Ideal patient for each treatment



What causes PD voice?

 "Decreased airflow from lungs, incomplete vocal fold vibration, and an inadequate coordination and range of motion speech of articulators" (Levitt et. al., 2015).



3

Lee Silverman Voice Treatment (LSVT)



- Behavioral program designed for individuals with PD to retrain their perception of loudness and use their voice at a volume that others can hear.
- Duration: One-on-one sessions. Held 4x/week for four weeks.
 Daily homework is provided for continued practice.
- Patients show improvement in volume, pitch, and inflection.
- Once LSVT is complete, patients are recommended to practice vocal exercises daily for 10-15 minutes.
- Certification: Must be an SLP or student SLP. Online or inperson course available. LSVT course is 12 hours long but duration to complete varies.
- Course contains videos, reviews, questions, and a final exam.

What is LSVT loud, n.d.

Δ

SPEAK OUT!



- Treatment that is centered around speech, voice and cognitive exercises to train individuals with PD into making speech an intentional act.
- Patients have online access to free materials such as the SPEAK OUT! workbook and library for continued practice.
- Duration: Twelve 40-minute sessions (3x/week for 4 weeks)
- Free workbook is provided, and daily homework tasks are assigned. Additional learning materials can be accessed online.
- Certification: Must be an SLP, SLPA, or SLP graduate student.
 10-hour online course that educates how professionals can conduct individual SPEAK OUT! sessions and LOUD Crowd group therapy.

About speak out, n.d.

5

Phonation Resistance Exercises Training (PhoRTE)

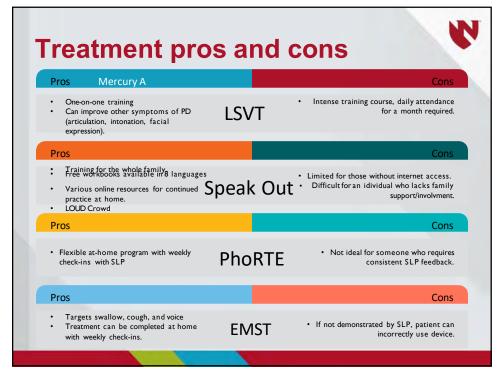


- Treatment aims to increase vocal loudness through increased laryngeal muscle activity.
- Consists of four exercises to help patient speak louder without straining their voice.
 - 1. Sustained /a/ phonation
 - 2. High and low /a/ glides
 - 3. Saying functional phrases using a louder, higher-pitched voice.
 - 4. Saying functional phrases with an authoritative, lower pitched voice.
- Patient is reevaluated weekly by SLP.
- Resistance is increased by 5dB as patient's endurance improves (target +20 dB).
- Certification: Must be an SLP. Live 2023 workshop information to be released via PhoRTE website soon. Online course underway.

Ziegler & Hapner, 2013



/



Ideal patients for each treatment



LSVT

 All stages of PD and PD+, flexible schedule to attend daily sessions, tolerate 1-hour sessions 4 days/week.

Speak Out

 All stages of PD and PD+, family involvement and support, retiree, flexible schedule to attend 3x/ week sessions, internet access for e-library materials.

PhoRTE

 Early PD, consistent with practicing and completing at-home exercises, family support.

EMST

• Early PD, consistent with at-home practice, best for those having trouble with swallow function, voice, and cough.

9

References



About speak out. (n.d.). Parkinson Voice Project. Retrieved March 13, 2023. https://parkinsonsvoiceproject.org

Levin, S., Chitnis, S., & Walker-Batson, D. (2015). The effects of the "speak out" and "loud crowd" voice programs for parkinson disease. *International Journal of Health Sciences*, *3*(2),13-19. DOI: 10.15.640/ijhs.v3n2a3.

Vasquez Miloro, K. (2016, October 1). *Take my breath away: expiratory muscle strength training to improve deglutition and cough functions.* Dysphagia Café.

Wetering-van Dongen, V., Kalf, J., Van der wees, P., Bloem, B., & Nijkrake, M. (2020). The effects of respiratory training in parkinson's disease: a systematic review. *Journal of Parkinson's Disease*, 10,1315-1333.

What is LSVT loud. (n.d.). LSVT Global. Retrieved March 13, 2023. https://www.lsvtglobal.com

Ziegler, A. & Hapner, E. (2013). The behavioral voice-lift. *The ASHA Leader*, 18(3). https://doi.org/10.1044/leader.FTR4.18032013.np

