

### Speech and Language Deficits in Parkinson Disorder

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#### ABSTRACT

**Background and Aim:** Parkinson disease (PD) is a neurodegenerative disorder of central nervous system that causes partial or full loss in motor reflexes, speech, behavior, mental processing, and other vital functions. People with Parkinsonism suffer from speech impairments like dysphonia (defective use of the voice), hypophonia (reduced volume), monotone (reduced pitch range), and dysarthria (difficulty with articulation of sounds or syllables). Diagnosis and treatment of PD at early stage is important issue in speech and language pathology.

**Materials and Methods:** We conducted a search in PMC, Web of Science, PubMed, Scopus, Medline, SID, Ovid databases. The present information is available reviewing the articles from 1996 Google Scholar and to 2020 through the search of the resources.

**Results:** speech and language problems occurs in about 90 percent of PD patients. The disorder impairs the expression and reception of language as well as reading and writing. Therefore, parkinsonian speech is characterized by respiratory and laryngeal problems such as lower fundamental frequency, monopitch and monoloudness, resonance imbalance, phonoasthenia and lack of articulatory integrity. They have dysphagia signs include delayed oral transit time, festinated tongue movement, uncontrolled bolus with premature loss to the pharynx, piecemeal deglutition, reduced movement of the hyolaryngeal complex, pharynx, tongue base, and epiglottis, esophageal motility and reflux issues. Parkinsonism assessments is generally based on four criteria of expression and comprehension, repetition and naming ability. Speech therapy is among one of the most important rehabilitation treatments for PD patients, which can help regain important cognitive and communication functions.

**Conclusion:** An SLP will also teach to PD patients how to adapted and relearn speech and language, also can help PD patients regain cognitive function and memory, which can improve word retrieval and regaining problem-solving skills. Speech therapy methods can improve brain synaptic plasticity. The aim of therapy is to recover as much of speech as possible and/or find alternative ways of communicating.

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