SCIENTIFIC AND THEORETICAL FOUNDATIONS OF DYSARTHRIA SPEECH DISORDER

Andijan State Pedagogical Institute, Faculty of Preschool Education and Special Pedagogy
Special Pedagogy: Speech Therapy, Group 301 student
Iminjonova Mokhichehra Alimardon qizi
iminjonovamoxichexra@gmail.com

Abstract: This article analyzes the scientific and theoretical foundations of dysarthria speech disorder, including the damage to the central and peripheral nervous systems that causes its occurrence, and the impairment of motor functions of the speech apparatus. Based on a scientific approach, the clinical manifestations, pathogenesis, and influence of dysarthria on phonetic-phonemic processes are highlighted, as well as the degrees of impairment in respiratory, vocal, and articulatory mechanisms. The article also theoretically substantiates neurological factors associated with dysarthria, psycholinguistic mechanisms, speech therapy diagnostic methods, and correctional-pedagogical technologies. Additionally, modern scientific research and methodological approaches to studying and correcting speech in children with dysarthria are presented.

Keywords: Dysarthria, speech disorder, articulation, motor alalia, central nervous system, peripheral nervous system, pronunciation defects, phonetic-phonemic disorders, pathogenesis, neurological factors, speech apparatus, respiratory-vocal mechanism, psycholinguistics, speech therapy diagnostics, correctional methods, motor functions, brain damage, types of dysarthria.

Currently, dysarthria is an important issue not only in the field of medicine but also in psychology and pedagogy. Dysarthria is primarily studied as a speech disorder. Many scientists have conducted research on this speech impairment.

The term dysarthria was introduced into medical science and speech pathology by the French neurologist P. Marie. This term is used to denote speech disorders caused by damage to the central nervous system. Dysarthria is classified as a speech disorder when, as a result of organic damage to the central and peripheral nervous systems, paralysis of the articulatory muscles leads to impaired pronunciation of sounds and voice disturbances.

M.S. Margilus says the following about dysarthria: "Dysarthria can be detected in various parts of the brain. For example, it can be observed in the system passing through the oval centers on the left and right sides of the cerebral hemispheres, in the cortex of nerve ganglia, in the diencephalic region, in the quadrigeminal plate, in the pons, medulla oblongata, and spinal cord. However, researchers working in clinical settings pay little attention to this issue. The diagnosis of dysarthria from a nosological and

topical perspective is usually carried out taking into account all aspects of neurological symptoms."

In the earliest classification of speech pathology, any disorder of articulation was divided into separate groups and designated by the term dysarthria. In 1888, the British scientist Gowers classified this type of speech disorder into cerebral and bulbar forms.

Dysarthria is associated with damage to the central or peripheral nervous system. It affects speech motor skills as a result of damage to the following components:

- Brainstem: Damage to nerve nuclei and pathways (e.g., stroke, congenital defects).
- Cerebellum: Disorder in the regulation of speech rhythm, flow, and dynamics.
- Basal ganglia: Disorders of movement automaticity and harmony.
- Corticobulbar pathways: Pathways conducting impulses from the brain to the nerve nuclei in the brainstem.

Functioning of motor units: Alpha and gamma motor neurons, muscle tone and movement, proprioceptive signaling disorders affect speech movements.

The scientific and theoretical foundations of dysarthria as a speech disorder were primarily formed at the intersection of neurology, neurophysiology, speech therapy, and rehabilitation sciences. Its essence lies in the disruption of the control of speech motor components resulting from damage to the central and peripheral nervous systems. Modern research focuses on developing individualized approaches to the diagnosis and treatment of dysarthria, stimulating neuroplasticity, and creating multidisciplinary rehabilitation programs.

References

1. M. Ayupova. Speech Therapy. Tashkent. 2007.
2. L. Muminova, M. Ayupova. Technology for eliminating dysarthria speech deficiency in children. Tashkent. 2017.
3. Jurahojaev, M. H. (2022). ORGANIZATION OF THE EDUCATIONAL PROCESS FOR CHILDREN WITH DISABILITIES IN INDIVIDUAL EDUCATION AT HOME. *PEDAGOGS journal, 1* (1), 295-298.
4. Khalilkhoja, D. M. (2022, March). PROBLEMS AND SOLUTIONS OF HOME INDIVIDUAL EDUCATORS. In *Conference Zone* (pp. 315-318).
5. Jurahojaev, M. K. O. (2022). MECHANISMS FOR INCREASING THE EFFICIENCY OF INDIVIDUAL AT-HOME EDUCATION FOR CHILDREN WITH DISABILITIES. *Mental Enlightenment Scientific-Methodological Journal, 2022* (3), 171-180.
6. Jurahojaev, M. H. Mechanisms for Increasing the Effectiveness of Individual Education of Children with Disabilities at Home: Dissertation for Doctor of Philosophy (PhD) in Pedagogical Sciences. *Jizzakh-2023.-36 pages.*

Jurahojaev, M. H. (2022). Individual