

# **Speech, Language and Communication Disorders after Acquired Neurological Damage**

## **Definition**

Speech is a unique and dynamic motor activity through which humans express themselves. It requires neurocognitive, neuromuscular, and musculoskeletal processes to fully serve its purpose, which is communication. However, when the nervous system is disrupted, speech and language production is expected to be affected.

## **Etiology**

The main causes of these disorders are strokes, traumatic brain injuries, neurodegenerative diseases, brain tumors, infections and inflammations of the nervous system, as well as psychiatric or psychogenic disorders.

The effects of a neurological injury can include aphasia, dysarthria, dyspraxia, and other related neurological disorders, in both children and adults.

**Aphasia** is a language disorder that affects the way people communicate. It is classified into several types, but the two main types of classification are fluent or non-fluent aphasia. A person with aphasia may have difficulty understanding, expressing, reading, and writing.

**Dysarthria** is a motor speech disorder in which a neurological lesion affects the function of the muscles. It can range from mild to severe and occurs in both children and adults. According to research by the Mayo Clinic, the main types of classification of dysarthria are seven: 1. Flaccid, 2. Spastic, 3. Ataxic, 4. Hypokinetic, 5. Hyperkinetic, 6. Mixed, and 7. Unilateral upper motor neuron.

**Dyspraxia** is also a motor speech disorder and refers to the inability to plan and execute voluntary movements, despite the fact that muscle strength and coordination are not affected. It is divided into Limb Dyspraxia, Oral Dyspraxia and Verbal Dyspraxia. The severity of Verbal Dyspraxia varies from slightly indistinct articulation errors to completely unintelligible speech. It can occur in both children and adults.

## **Intervention**

In the above disorders, the main goal of a treatment plan is to improve the individual's communication skills. The cooperation of the individual with the therapist and the family is considered important. The type of treatment that will be applied depends on the needs and abilities of each individual. The activities within the framework of the treatment should help the individual to participate in activities that are important to him/her and that will serve him/her in his/her daily life, thus enhancing his/her functionality and quality of life.

## **Bibliography**

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