Speech Deficiencies In Preschool Children And Methods Of Correcting Them

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ABSTRACT: The main purpose and task of the report on speech defects in children with speech defects is to classify speech defects in children, to acquaint them with the ways and methods of psychological and pedagogical diagnosis of children with speech defects, to use them in practice, formation of skills on methods of prevention and correction.  
KEYWORDS: preschool children, correction, speech impediment, stuttering, methods and skills, speech function.

1. INTRODUCTION

Speech is a unique human talent that provides communication with the processes of consciousness through this or that language. The organization of speech function in the brain has been a comprehensively studied science by clinicians, neurophysiologists, and psychologists since the mid-nineteenth century. The first information about the mechanism of speech appeared in the works of P. Brock (1861), K. Vernike (1873). Subsequent studies of different parts of the cortical zone providing speech activity (Brock's center) captured (localized the motor functions of the frontal lobes of the brain (for the right side) in the posterior part of the forehead; ), and the sensory side - (Wernicke center) can be prevented (localized) areas of the left side of the temple, which are twisted. The functions of speech organization on the basis of A.R. Luria's neuropsychology are comprehensively covered (1971). Injury to the upper and central sections of the auditory, visual, and motion analyzers is a consequence of speech pathology. When the upper part of the auditory analyzer is injured, the perception of oral speech is impaired, resulting in sensory aphasia (or alalia) as a result of a violation of auditory phonemics. Damage to various parts of the visual analyzer is observed in impaired written speech perception. Impairment of the motor zone in the motion analyzer leads to pronunciation defects, as moving (tongue, lip, soft palate) articulatory organs and immobile (hard palate) as well as sound-producing and breathing (vocal cords, larynx, lungs, bronchi, trachea), diffraction) members are damaged.

Speech consists of complex mental activities of various appearances and types. It is divided into expressive and impressive speech. Expressive (remembering) speech is the expression
of one's opinion using language, which is directed outwards and goes through several stages: idea - inner speech - external expression of one's opinion.

Impressive speech is the process of understanding the speech of others (verbal or written), and goes through several stages: the perception of a speech message is the separation of information moments - the formation of internal speech in the perceived common sense scheme. Speech activity is divided into four general types of independent, of which expressive speech includes oral and written speech (like letters), and impressive speech - oral comprehension and written speech comprehension (reading). Oral speech is a complex, multifaceted process that involves: the phonetic side of speech (meaningful separation of sound from speech); lexical-grammatical (words, phrases, information); melody-intonation (intonation, sound, colouring); temp-rhythmic (speech tempo and rhythm).

It can be oral dialogue and monologue. Written speech is constructed and developed on the basis of oral speech, which can be written independently or orally, and can be read. According to one or another component of speech, children are divided into the following linguistic disorders:

1. Phonetic disorders - mispronunciation of one or more groups of sounds (whistling, whistling, middle and back tongue sounds; violation of the softness of the consonant sounds, deafness).

2. Lexical and grammatical disorders. These disturbances are distinguished: limited vocabulary reserve; impoverished expression; incorrectly formed words in the phrase; misused agreements and additions; half-spoken, alternating words.

3. Tune-intonation disorders: misuse of stress (so-called - grammatical, in phrase - logical); disturbances related to the timbre, pitch, power of the sound (quiet, muffled, squeaky, squeaky, meaningless, buzzing, low sound, unmodulated).

4. Rhythmic disorders: the accelerated tempo is associated with the predominance of excitatory processes in the cerebral cortex (taxilalia); slowed tempo, predominance of braking processes (bradylalia); intermittent tempo (unreasonable pauses, seizures, stuttering in the form of seizures (physiological iteration, poltern) and seizures without clear reading of the accented syllable in words and sounds).

5. Disturbances in written speech: letters: incorrect re-encryption of a phoneme into a grapheme; incomplete writing; dropping and shuffling letters in a word; repositioning and disagreeing words in a sentence; out of line and so on.

Reading: switching and mixing sounds; literal reading; sound-syllable distortion in word structure; impairment of comprehension of what is read; agrammatisms.

The right hemisphere plays an important role in the developmental processes of speech in childhood. The current view is that insufficient understanding and freedom in the early stages of a child’s speech development necessarily depend on the active participation of the right hemisphere to form a speech act. The leading role in the application of conscious and free formation of the means of speech belongs to the subdivisions of the cerebral hemisphere.
(usually the left) that dominate in speech. (E.G.Simerniskaya, 1985). The peculiarity of speech disorders in childhood is that they have the ability to recur, because it is associated with a high degree of elegance (plasticity) of the child's brain.

Speech disorders observed in childhood can be physiological (depending on the maturity of the upper (peripheral) central structure of the brain) and pathological (diseased). Pathological disorders of speech are divided into organic and functional parts depending on the nature of the central and upper (peripheral) disorders.

Clinical types of speech disorders:

1) Superficial: mechanical dyslalia - (sound disorders due to various disorders of the articulatory apparatus); functional dyslalia (impairment of articulatory function - the movement of the articulatory apparatus incorrectly, inaccurately, due to the preservation of the device of the articulatory organs);

Rhinolaryngitis is a prosodic aspect of speech and disorders of sound production, primarily - alveolar tumour, gums, hard and soft palate, sounds in the form of cracks (nezarasheniya) on the lips, disorders of the structure of the articulatory apparatus.

When making a sound, the air flow passes not only through the mouth, but also through the nasal cavity, open and closed, the normal passage in the nasal cavity is adenoids, tumours, curvature of the nasal bone, chronic in the nose disturbances may appear as a result of processes;

Rhinophony - a violation of the timbre of the voice in the normative articulation of speech sounds, taking into account the inconsistency of the participation of the oral and nasal cavity in the phonation process; dysphonia - failure of phonation due to pathological changes of the vocal apparatus. Either the phonation (aphonia) is absent, or the power of the voice (dysphonia) is absent, or the timbre is disturbed. Rather, the sound of a central and upper (peripheral) character causes organic and functional disorders of the forming mechanism;

2) Central nature: dysarthria - a disorder of the sound system of the tongue due to organic damage to the central nervous system (vocalization, prosody, sounds). Dysarthria is often not limited to pronunciation disorders, but relates to speech comprehension and lexical-grammatical aspects;

Alalia is the absence or underdevelopment of speech (until speech formation) as a result of organic damage to the speech zone of the cerebral cortex in the fetus or in the early stages of child development.

Difficulties in understanding the speech addressed in motor alalia in a comparatively stored opportunity will be related to the development of individual speech. In sensory alalia, the opposite is observed: to one degree or another, the comprehension of the speech of others is impaired;

Aphasia is the complete or partial loss of previously speech that covers speech zones due to severe brain injury, inflammatory processes, and tumors. Underlying the mechanism of aphasia lies a loss of speech stereotype, resulting in a loss of pronunciation skills or the
ability to understand unfamiliar speech. In young children (5–7 years), speech impairment is mostly extinct in aphasia-type brain injury and is more related to speech-auditory memory (LS Svetkova, 1988); dysgraphia, or agraphia - a specific, partially compatible or complete failure of the writing process. In the distorted view of the speech structure and the sound-joint system, the optical-spatial images of the letters appear vague. No matter where the left side of the cerebral hemisphere is injured, the back forehead, temples, neck - writing can be impaired;

Dyslexia - (alexia) -is a severe impairment of reading due to underdevelopment of the neck-temporal lobes of the brain.

Pedagogical description of speech, children with the same speech disorder are grouped together, it will be easier to carry out correctional work. Typically, groups are divided according to the following disorders:

1) phonetic-phonemic disorders (FFB, with children with many defects in pronunciation: functional and mechanical dyslalia, rhinolalia mild manifestations of dysarthria);

2) Incomplete speech development (with children with many lexical and grammatical defects in speech at different levels of speech development: dysarthria, alalia, dyslexia and alexia, as well as in complex forms of dysgraphia and agraphy);

3) melody-intonation defects (rhinophony, dysphonia, aphonia) and tempo-rhythmic aspects of speech (with stuttering, iteration, poltern, taxilalia, bradylalia).

Causes of speech disorders in children include external (exogenous) and internal (endogenous) factors, as well as external environmental conditions. An evolutionary-dynamic approach is taken in considering the various causes of speech impairment. It consists of analyzing the process of occurrence of the defect, taking into account the general laws of defect development and the laws of speech development at each age (Abu Ali Ibn Sino, IM Sechenov, LVVogotsky).

The principle of unity of biological and social processes in the formation of mental (including speech) processes allows determining the influence of the development of the speech system - the speech environment, behaviour, emotional communication and other factors. Speech problems, chronic mental trauma in the family, and stuttering in a bilingual child can occur in children with normal hearing who are brought up by deaf and dumb parents and are chronically ill and often hospitalized. is an example of how the speech environment negatively affects speech development.

2. THE MAIN CAUSES OF SPEECH DEFECTS IN CHILDREN ARE:

1. Environmental causes: internal and external radiation; production, agricultural motor transport; harmful effects of the military range; poor quality of food and water supply.

2. Medical and social reasons: double kinship; developmental delays of parents; injuries (physical and mental); chronic diseases of the parents; harmful habits (alcoholism, drug addiction, toxomonia, smoking); chronic severe anamnesis of the mother: ways of poor family planning, abortions, gynecological diseases of the mother, early and late births
(presence of the first fetus before the age of 16 and after the age of 40); prenatal injuries; somatic diseases in children; bacterial-viral infections; malnutrition of mother and child; failure to provide timely medical, diagnostic and correctional care to the family.

3. Psychological and pedagogical reasons: mass and complex deprivation; lack of attention from parents; cruelty to children; low intellectual level of family and population; incompleteness of the family; tragic situation (environmental, social, economic); the quality, scope and non-compliance of psycho-pedagogical diagnosis and correction with modern requirements.

Phonetic-phonemic underdevelopment of speech is a disorder of the formation of the system of pronunciation of sounds in the native language in children as a result of defects in the pronunciation and perception of sounds. In such a speech defect, the violation of the phonetic-phonemic aspect of speech based on cognitive and pronunciation defects comes first. There are undifferentiated sounds in a child’s speech, substitution of sounds, misuse of them in speech, distorted pronunciation of many sounds, as well as insufficient differentiation of sounds according to hearing.

Thus, the following pronunciation defects are observed in the oral speech of children belonging to the group of phonetic-phonemic development:

a) Replacement of sounds with articulate sounds (for example, replacement of "s", "sh" with "f", pronunciation of "r" as "y");

b) Inconsistent use of sounds in various forms of speech;

c) Substitution of sounds for articulatory sounds;

g) Mispronunciation of one or more sounds; Disorders of phonemic perception are clearly expressed in the following:

a) Not clearly distinguishing phonemes in their speech and the speech of others (primarily resonant-silent, slurred-noisy, noisy-affricate sounds);

b) Unwillingness to perform simple analysis and synthesis of sounds;

c) Difficulties in analyzing the sound content of speech.

Often there are difficulties in pronouncing multi-syllable words and phrases, as well as mispronunciation and perception of sounds.

Moreover, the problem of stuttering can be considered as one of the oldest in the history of the development of the doctrine of speech disorders. Different interpretations of its essence are related to the development of science and the extent to which the authors have approached and are approaching such speech disorders.

Stuttering-peripheral type is a violation of the speed of speech as a result of contraction of the muscles of the speech apparatus. In ancient times, stuttering was thought to be a disease associated with Aristotle, due to the accumulation of moisture in the brain (Hippocrates) or the misalignment of the parts of the articulatory apparatus. Galen Selis and IbnSina
Acknowledged that there may be a disturbance in the central or peripheral sections of the speech apparatus during stuttering.

Ancient physicians Itar, Vuazen, ShuliTess, Colombo, Klenke, Norden have shown that men are more prone to stuttering than women. In the 17th and 18th centuries, attempts were made to explain that stuttering was the result of imperfect peripheral speech.

For example, the anatomist Sanatorium explains that there is a hole in the hard palate of the stutterers, through which sticky fluid flows into the tongue and speech becomes heavy.

A number of other authors have linked stuttering to impaired speech organ function. Excessive rapid breathing (Beckerelli) is associated with spasmodic contractions that hold the tongue in the oral cavity (Itar, Lee, Deffebax), inconsistency of thought and speech processes (Blume), imperfection of the child's will (Merkeli) langandir.

Until the late 16th century, stuttering was considered a common disease of the body (Hippocrates, Galen) or a malformation of the speech organs. The existence of such concepts has led to the continuation of therapeutic and surgical treatment of stuttering.

For example, the surgeon Deffenbach in 1841 suggested that the tongue should be cut and burned to treat stuttering.

The surgical method was used from the 1st century BC to the middle of the 19th century. In the 19th century, the surgical method was abolished after it was proved that this method was unnecessary and life-threatening (Antill, PavelEginsky, Fabrisius, Dionysus, Petty, Bonne). The surgical method may have resulted in the stuttering being understood as a pathological structure of the articulatory apparatus or a lack of innervation of the lingual muscles.

Many publications suggest that orthopedic devices and various movement exercises can be used to relieve and correct speech. Mechanical devices used for orthopedic purposes, according to Plutarch, were originally used by Demosthenes. He held something (sea stones) under his tongue during speech exercises to eliminate his stuttering. As a result, a number of authors have used various mechanical devices to eliminate stuttering.

Orthopedic devices, however, are not of independent importance in eliminating stuttering, but are recommended as auxiliary guides.

Over time, a new methodological direction - the didactic method of overcoming stuttering with the help of special exercises began to develop. One of the creators of this direction, the American educator Lee, proposed a series of voice exercises. From him the French physician Colombo is also the author of several vocal exercises.

In the early 19th century, a number of French researchers explained stuttering by various disorders in the peripheral and central parts of the speech apparatus. Dr. Vuazen linked the mechanism of stuttering to a lack of central nervous system function.

Dr. Delo interpreted it as the result of speech disorders such as rotasism, lamdasism, and believed that organic injury to the vocal apparatus would cause stuttering.

He was the first to point out the need for stutterers to pay acoustic attention to their speech.
The introduction of the term ‘neurosis’ into the clinic in the 19th century allowed for a more accurate approach to the nature of stuttering. Among the scientists who have made a significant contribution to the study of stuttering are Christopher Laguzen, I.A. Sikorsky, G.D.Netkachev. H. Laguzen considered stuttering as a neuropsychiatric disorder. He put forward the above idea while criticizing western authors. His book was published the same year. In this book, the author pointed out the need to limit not only exercise, but also the use of psycho-therapeutic methods in the elimination of stuttering. In IA Sikorsky's book, Russian psychiatry was the first to point out that stuttering is associated with periods of speech development in a child.

Many authors have recognized stuttering as a hereditary defect. The hereditary factor mailum plays a role in the occurrence of stuttering.

It has now been found that the tendency to seizure reactions, which pass with the probability of weakness of the second signaling system rather than the stuttering itself, is passed down from generation to generation. Since the second half of the 19th century, many authors have viewed stuttering as a neurosis. But the concept of neurosis itself was not clear enough for a long time. At present, the mechanism of neurosis is considered in terms of the teachings of IP Pavlov.

In Russia, many researchers have considered stuttering as a functional disorder in the field of speech, speech neurosis IA Sikorsky, IK Khmelevsky, E. Andres and others, or as a purely mental illness characterized by involuntary movement in the speech apparatus.

H. Laguzen, D. G. Netkachev, Kamenka identified 1900 as psychosis. In the late 19th century, it was agreed that stuttering was a complex psychophysical disorder. Stuttering, like other neuroses, occurs as a result of a variety of causes that cause tension in the processes of excitation, inhibition, and the formation of a pathological conditioned reflex.

Stuttering is neither a symptom nor a set of symptoms, but a general disease of the central nervous system. According to some authors, it is expedient to interpret the mechanism of stuttering in first-year children in terms of reactive neurosis and developmental neurosis. Reactive neurosis in development is understood as a disorder of higher nerve activity.

During the period of developmental neurosis, pathological stereotypes gradually occur in cases of extreme irritability, depression, weakness of the environment. Developmental stuttering occurs during the transition of complex expressive speech forms, in the case of retention of "physiological slurred speech" in the early years of the child.

Physiological symptoms include tension of the organs involved in the formation of speech, disorders of the central nervous system and physical health, general and speech movements. Psychic symptoms include speech retardation and other disorders of emotional speech, speech recording phenomenon, logophobias, deception and other disorders, speech recording phenomenon, logophobias, deception and other mental aspects.

To date, researchers are trying to study the mechanism of stuttering not only from a medical and physiological point of view, but also from a neurophysiological, psychological, psycholinguistic point of view.
Studies have shown that stuttering in the organization of speech activity is neurophysiological in that the dominant (left) hemisphere in stuttering during speech is not able to fully perform its leadership function relative to the right hemisphere.

VM Shkolovsky's data confirms the rule that stuttering interacts with some dominance in speech pronunciation. Psychologically speaking, the study of attention, memory, thinking, mental movement shows that the structure of mental activity, the process of its self-coordination has changed. They perform poorly on activities that require a high degree of automation (especially quick access to activities), but as soon as voluntary performance is achieved, the difference in efficiency between a stuttering and a healthy person disappears.

It is effective to check the personal characteristics of smokers both with the help of medical observations and the use of experimental psychological techniques. They have been used to identify cases of anxiety, suspicion, insecurity, inhumanity, predisposition to depression, weak-defensive and defensive-aggressive response to a defect.

Consideration of the mechanisms of stuttering from a psycholinguistic point of view is also noteworthy. This aspect of the study requires us to determine at what stage in the pronunciation of stuttering muscle contractions occur.

3. CONCLUSION

Preschool education requires the development of a special program for the will-emotional, spiritual-educational, taking into account the individual characteristics of the child. The main goal is to develop the child's cognitive activity in overcoming the defect. The special preschool institution is the main educational institution for children. It provides comprehensive medical care to doctors, pedagogues-defectologists, psychological-pedagogical, medical-social care, as well as targeted correctional services by specialists through frontal and individual programs, developmental and educational work is carried out.

A special preschool institution solves complex, socially important tasks, which create the conditions for the child's adaptation to society, form the ways of entering the society, equip him with the knowledge, skills and competencies needed in further education and upbringing.

The main goals and objectives of pre-school correctional-developmental-education are the formation of emotional, social and personal characteristics of the child, the elimination, compensation, correction of primary defects, the elimination of secondary defects.

The goals and objectives listed above are closely related to the child’s main activities and educational areas. These include physical, mental, musical, social education, sensory and motor development, cognitive activity, and school readiness.

Based on this goal, the following tasks are solved in the special preschool educational institution: Diagnostic, spiritual-cultural, correctional-developmental, educational and correctional-psychological. The diagnostic task is the leading task, which is a complex, i.e. medical-psychological-pedagogical study of the child. The purpose of the diagnosis is to help the child make a diagnosis and create a unique and appropriate individualized application program.
The spiritual and cultural task is to form a sense of homeland, patriotism, national ideology, the idea of independence, as well as a child who loves and is loyal to his territory, country, people in accordance with his age, shortcomings and characteristics. From an early age, children are brought up at home, on the street, in the garden, as a guest, rules of conduct, manners, eating, dressing, grooming, being polite, hardworking, and appreciating the work of others.

Corrective developmental tasks - the content and organization of correctional and developmental work, firstly, to develop mechanisms that complement the psyche of the child's activity, and secondly, to prevent, correct, eliminate cognitive activity, primary and secondary defects in personality. Correctional and developmental work is organized systematically not only in special classes, but also during the time the child is in the whole special institution.

Rehabilitation tasks - determine the necessary conditions for maintaining and strengthening the health of children. At the same time, the child develops an understanding of ways to maintain their health and a healthy lifestyle. These tasks include the creation of a set of medical and preventive measures developed for the life and health of the child. Educational tasks are aimed at the development of cognitive activity, the formation of all types of activities, the acquisition of social experiences. Another important task of education is to prepare the child for school. This takes into account the capabilities and unique characteristics of each child.

4. REFERENCES