

## PREVENTION OF ARTICULATION DISORDERS IN PRESCHOOL-AGE CHILDREN

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**Abstract.** Articulation disorders have been a most common disorder in recent years. They are the reason for the delayed mental, communicative, and emotional-behavioural development of preschool-age children. Of particular importance for the personal development of children are early diagnosis and treatment of articulation disorders. The purpose of this article is to present and analyse practices for the prevention, diagnosis, and elimination of speech disorders from an early age.

*Keywords:* prevention; articulation disorders; children; preschool age

### Introduction

Identity cultivation begins in early childhood. “Preschool childhood is a fundamental period for the overall formation of individuals” (Ivanova 2023, p. 119). Children’s speech is extremely vulnerable and susceptible to environmental influences. It is dynamic and difficult to treat.

Relationships between parents and impact of educational institutions determine the development of preschool children. “Any child development disorder, when identified and realized by parents, is a severe stressogenic factor. Parental reactions to child development disorders in recent years have been influenced by changes in the structure and functioning of Bulgarian families... and by the nature of the disorder. Whether it is a congenital or acquired disorder, the first parental reaction is denial of the disorder identified. This is related to belittling and neglecting the information presented, doubting the specialist’s competence, accepting just the positive side of the information presented, etc. (Matanova, Todorova 2013, p.166).

Families that are aware of the difficulties in the development of their children’s speech and oral speech and respond adequately by seeking help from specialists to prevent and overcome articulation disorders contribute to the prevention and normal speech development of their children. This is an aspect of conscious commitment provoked by the understanding that speech is an important tool for the adequate communication of children with adults in the family and kindergarten as well as

with their peers, and for the formation of social skills in the years of early and preschool childhood, too. That is why in this period it is necessary for the parents of children with articulation disorders to search and discover, together with speech therapists, the reasons for the disorders so that timely measures can be taken to treat them. To support the efforts of specialists, responsible parents use various tools to provide a positive environment where “by way of example and through encouragement from parents children can learn a number of strategies to overcome difficulties” (Konakchieva 2019, p. 23).

For the proper articulation of sounds, the speech apparatus must be properly developed, and hearing and vision must be intact. If their functioning is delayed or impaired, consultation with medical specialists is a must. Ignoring preventive measures to eliminate articulation disorders can adversely affect children’s sensory, cognitive, emotional, and social development.

### **Methods**

The methods of the research aim to examine and analyse practices for the prevention, diagnosis, and elimination of speech disorders from early childhood (1 to 3 years of age) and preschool age, before children enter school.

Based on studies carried out by specialists in the field of speech therapy being a science studying the causes and specifics of articulation disorders as well as on the national educational requirements for speech therapy assistance, the need for early diagnosis, development and implementation of methods, means, and forms for the prevention and treatment of speech disorders is emphasized.

Speech development of preschool children varies among individuals. “Language system is impaired when language differs in content, form, and use from the language expected and associated with the age and sociocultural environment. Generally, children have language pathologies when their language skills are below the ones expected for their age and level of development. To function properly, language should not differ in content, form, and use from the language expected and associated with the age and sociocultural environment of individuals” (Vasileva 2018, p. 30). Children go through various stages where speech delay can be observed. Some errors in pronunciation are normal in the ontogeny for the age, but others should be seen as indicators of speech disorders requiring that adequate measures be taken.

In other cases, the problems with the correct pronunciation of sounds may be related to a delayed muscle development or coordination of the articulatory system. The causes can be genetically inherited or a consequence of ear diseases, past infections of the brain, nervous diseases, and congenital anomalies and deformities. Serious difficulties arise when children’s phonological disorders are detected in the early stages of childhood.

A factor in the occurrence of children’s speech disorders is social environment. Children are not able to realize language norms and incorrectly assimilate the

pronunciation of sounds the way adults pronounce them. Children try to imitate them. They expand their vocabulary and gradually develop their dialogical speech, which further allows them to communicate successfully with their peers should there be no sound articulation disorders. This thesis was also confirmed in research by R. Hristova. According to the author, “in the years of preschool childhood, the role of the subjects contributing to the social development of children changes. In the first years of early preschool childhood, children need and strive for communication with adults who initiate, maintain, stimulate, and encourage communication, and in the middle of the period, the interest is transferred from adults to other children” (Hristova 2022, p. 64).

Where there are articulation disorders, children’s speech is incomprehensible. This makes it difficult for them to communicate socially and requires corrective support aimed at overcoming the omission, substitution, or distortion of sounds.

While correction of speech disorders of children is a main task of speech therapists, kindergarten teachers have an essential role, too, as their task is to enrich the vocabulary of children and support them in learning language grammar rules.

Other important subjects for the prevention of articulation disorders are parents, without whose help, cooperation, and consent the efforts of speech therapists and teachers cannot achieve positive results. Parents provide information on the children’s prenatal and perinatal development, which would contribute to preventing disorders from deepening.

Early identification and intervention by speech therapists are essential. Timely diagnosis and therapy are required to detect most common speech disorders. Speech therapists include the information submitted in speech cards and supplement it with information from kindergarten teachers. After the communication with parents and teachers, collected evidence is summarized and disorders are identified. If the information collected by speech therapists is insufficient, additional diagnostic methods and means are applied. Those could be:

- Surveys with parents and teachers.
- Individual conversations with parents.
- Individual conversations with teachers.
- Games and game exercises, creative activities, and activities related to children’s interests.
- Monitoring and filling in individual diagnostic cards for children with articulation disorders.

The attitude and inclusion of significant subjects in the educational process, i.e., speech therapists, parents, and teachers, to overcome articulation disorders are the basis for the prevention of the disorders.

## **Results**

Articulation disorders in preschool age have been most common in recent years according to statistics. “They correlate with the development of basic men-

tal processes, with communicative skills, with subsequent problems in studying and learning, with the specifics of emotional and behavioural functioning. Their early diagnosis and treatment are extremely important for the personal and social development of adolescents” (Vasileva 2018, p. 30). Speech pathologies “have a negative impact on children’s mental development and behaviour, the speech does not correspond to the children’s age, and speech pathologies can be overcome only with speech therapy” (Karagyozev 1998, p. 135).

Prevention of articulation disorders can be effective and faster, and more reliable results can be achieved where it takes place in a communicative environment and speech therapists, parents, teachers, and children work together. Here, with attention and care, an “individual approach to each child should be guaranteed while stimulating contacts and communication as conditions for mutual understanding, provoking action, and experiencing emotional satisfaction” (Konakchieva 2016, p. 204).

Speech therapy aimed at the elimination of language and speech disorders as part of the activities for the prevention of “educational difficulties under Art. 15, item 9 is carried out by speech therapists in kindergartens, schools, and centres for personal development support, as well as by speech therapists of the State Speech Therapy Centre.” (Ordinance on Inclusive Education). Their work is related to the:

- prevention of communication disorders and learning difficulties. diagnosis of communication disorders.
- corrective and therapeutic activities in case of indications of communication disorders” (Ordinance on Inclusive Education).

The preventive measures at the State Speech Therapy Centre are included in the regulations on its organization and activities and are as follows:

- “1. Studies oral speech of children of preschool age in kindergartens and schools.
2. Analyses and summarizes the data from the study of children’s speech under item 1 carried out by speech therapists in compliance with the Personal Data Protection Act and stores the information electronically and on paper; the information is compatible with the data stored in the children’s personal files according to the National Electronic Information System of the Ministry of Education and Science.
3. Supports the early education of children with complex communication disorders so that children can be included in the educational process.
4. With the participation of parents, develops programs supporting early intervention” (Regulations on the organization and activities of the State Speech Therapy Centre).

Speech therapy activities and planning of preventive measures for children with articulation disorders were also introduced by A. Garbacheva and I. Karagyozev. The authors presented and structured them by importance as follows:

- Study of the causes of occurrence as well as the development, symptoms, and degree of spread of speech disorders.

- Systematization and classification of different forms of speech disorders.
- Development of methods and methodologies for the diagnosis of speech disorders.
- Study of the mechanisms for the formation of speech function in various deviations in the development of children and adults.
- Development of principles and guidelines and organization of support as well as institutions for the implementation thereof.
- Creation of methods and methodologies for specific speech treatment, as well as for education and re-education of children with speech disorders.
- Study of the stages in the formation of correct speech in the presence of correction activities” (Karagyzov, Garbacheva 1996, p.71).

From the measures presented so far to prevent articulation disorders in preschool children, we can summarize that they begin before children are born. It is important for the correct formation of speech to create favourable conditions as early as in the sensitive period of children’s development. In preschool age, where articulation disorders are indicated by parents and teachers, it is imperative to take preventive measures.

For the successful prevention of articulation disorders, it is necessary for speech therapists to identify the causes and symptoms by applying diagnostic methods and methodologies. Upon identification, a methodology is developed to correct the articulation disorders using games, game exercises, and creative activities. The leading idea is that “game interaction is a dynamic indicator of the overall development of children and a key factor in cultivating the competences necessary for the life in the 21<sup>st</sup> century, namely critical thinking, cooperation, communication, creativity, digital literacy, and social-emotional intelligence” (Ivanova 2023, p. 123).

The effectiveness of speech therapy is related to the achievement of reliable results in the mental, physical, and emotional development of children. It can be implemented by integrating into society and reducing the influence of negative factors. “Standardized tests, based on the individual examination of children, can be defined as the most reliable, as they provide controlled conditions in which children can demonstrate their skills. The advantage of standard assessment options is that they enable an unbiased and precise comparison of the achievements of children and their peers” (Chuhovska 2022, p. 351).

For the prevention of articulation disorders, it is necessary to select “the right diagnostic approach as well as quality and adequate procedures for measuring and evaluating the shortcut to evidence-based therapeutic planning. Correct diagnosis is essential to limit the short-term and long-term negative effects of speech disorders on individuals and their functioning, such as increased risk of social-emotional and behavioural problems, delayed language development, all of which with their later consequences for the abilities and realization of individuals in adulthood” (Deleva 2022, p. 119).

Elena Boyadzhieva-Deleva introduced the following diagnostic measures for timely prevention of articulation disorders:

“1. Thoroughness and comprehensiveness: to extract as much information as possible, based on which to make an accurate diagnosis and provide correct recommendations.

2. Application of a combination of different means: diagnostic interview, history, formal and informal testing, observation.

3. Evidence of assessment validity.

4. Reliability of assessment: use of various methods.

5. Individual planning: materials are selected according to the age, gender, skill level, and ethno-cultural characteristics of individuals examined” (Deleva 2022, p. 118).

A detailed selection of information is required to identify the articulation disorders of different individuals in relation to the main symptoms. Evidence from observation, experimental-research study, and analysis of products of other activities such as creativity and educational activities can be added. Through the data collected, information about the status of children is obtained. An important requirement for the successful collection of data is that it takes place in conditions where children can fully demonstrate their qualities and skills. For the diagnosis to be effective, it is imperative to study the documentation related to children’s disorders.

In fact, diagnostic and correctional works are closely related to the normative documents of the institutions where they take place, too.

In an ordinance on inclusive education and general support of children in kindergarten and their inclusion in activities for the prevention of articulation disorders, the work is formulated according to children’s needs such as: “training through additional modules; implementation of programs for psychomotor, cognitive, and language development, individual and group work in case of identified language and/or emotional-behavioural and/or sensory difficulties – the activity is carried out by a psychologist, speech therapist or another pedagogical specialist if necessary, e.g. a hearing and speech rehabilitator and others..., teamwork of teachers and other pedagogical specialists; interest activities; health care based on information from parents, children’s representatives, or individuals caring for the children; activities for the prevention of learning difficulties, including speech therapy work”.

The joint work of teachers, psychologists, speech therapists, and other specialists under Art. 178, para. 1, item 1 of the Preschool and School Education Act includes “discussion of problems and exchange of good practices in their work with one and the same child to increase the effectiveness of pedagogical approaches. Teachers at municipal kindergartens, schools, and service facilities know and use in their direct work the various types of general support for personal development under Art. 178, para. 1 of the Preschool and School Education Act.

To identify articulation disorders, children from 3 to 6 years of age are diagnosed at the beginning and end of the school year. The implementation of speech therapy from an early age (3 – 4 years) and the involvement of parents and teachers can also prevent the emergence of difficulties in social interaction, emotional-behavioural and personal functioning at a later stage of children's development. Should a disorder be identified, corrective and therapeutic work is carried out with children, and individual plans for corrective and therapeutic work are prepared.

Regular meetings with parents and teachers, their support and active involvement in the prevention of articulation disorders is essential in the speech therapy process.

The joint work of speech therapists, parents, teachers, and children, the discussion of activities, and the exchange of information improve the work on the prevention, diagnosis, and correction of articulation disorders.

### **Conclusions and summary**

Promoting proper speech development and preventing articulation disorders in preschool children should be a priority. Stimulating sound imitation, correcting speech patterns, engaging in articulation practice, and involving parents and teachers significantly contribute to the prevention of articulation disorders. The indicated tools for early intervention and targeted support provide chances for children to improve their speech and participate fully in the educational process.



## NOTES

1. PRESCHOOL AND SCHOOL EDUCATION ACT, promulgated, SG No. 79 of 13.10.2015, effective 01.08.2016.
2. ORDINANCE NO. 5 of 3 June 2016 on preschool education, SG No. 46 of 17.06.2016, effective 01.08.2016, issued by the Ministry of Education and Science, promulgated, SG No. 46 of 17 June 2016.
3. ORDINANCE ON INCLUSIVE EDUCATION, effective 27.10.2017, adopted by Decree of the Council of Ministers No. 232 of 20.10.2017.
4. REGULATIONS FOR THE ORGANIZATION AND ACTIVITIES OF THE STATE SPEECH THERAPY CENTRE. Issued by the Ministry of Education and Science, promulgated, SG No. 96 of 2 December 2016.

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