

Early diagnosis of speech defects – needs vs. reality

Speech, being a sound way of communication among people fulfills an extremely important role in human life. The ability to speak correctly makes it possible for people to make appropriate interpersonal relationships. Thanks to speech people are able to express their own thoughts, feelings, ideas. Frequently our personality and intelligence is perceived and assessed by others on the grounds of the way we speak. Therefore, we should take into account the correlation between the speech and thinking. Furthermore, speech has impact upon child's psychic and social adjustment as thanks to it a child is able to fulfill his needs in his environment. Therefore, since early childhood speech should be stimulated and in case of its defects those should be reduced.

The impact of the speech defects upon the child's development

The development of speech is conditioned by inborn individual properties, but it is possible only in social context. According to L. Kaczmarek the following developmental stages of speech can be distinguished :

- the prenatal stage (prenatal period)
- the stage of melody (0-1 year of life)
- the word stage (1-2)
- the sentence stage (2-3)
- the peculiar child speech stage (3-7) ¹.

It is assumed that at the end of 5th year of child's life the development of speech, if articulation is considered, should be completed. Consequently, a pupil of "0" grade at school should be able to articulate all sounds correctly and create logical sentences.

Yet, as the research shows (among others: T. Bartkowska, H. Mystkowska, J. Kania, I. Styczek) 20% of six year old children still manifest various speech defects.

When talking about speech defects we account for a wide range of different problems related to language communication. These can be characterized from the point of view of their manifestation and reasons².

¹ Comp. L. Kaczmarek, Nasze dziecko uczy się mowy, Lublin 1988, p. 36.

The symptom classification of speech disorders is presented by L. Kaczmarek (1975) following Kussmaula³ . L. Kaczmarek , as a starting point takes three components of a text which can be violated: content, language form and substance.

Other etiological classification is presented by I. Styczek which accounts for the following speech defects: dysglusia, dysarthria (anarthria), dyslalia (alalia) aphasia, stuttering, neurosis speech defects (logoneurosis), oligophasia and schisophasia⁴ .

One of the latest classification of speech disorders is presented by S. Grabias:

- speech disorders related to non-shaped perceptive substances (deafness, impaired hearing, alalia, dyslalia, oligophasia);
- speech disorders related to lack or inability of skills (dysglusia, stuttering, anarthria, dysarthria);
- speech disorders related to disintegration of communicative system (aphasia, schisophasia)⁵ .

Speech defects may delay general child's development. Inappropriate speech may tend the development of school problems, particularly those related to reading and writing . Consequently, various neurosis and phobias may develop. Children with speech defects may have problems in functioning in their environment as they may be ashamed of their failures, and consequently, they will avoid contacts with their peers.

“Speech defects at the phase of speech shaping impoverish child's psyche not only at the level of understanding the orders , but also at the level of acquisition of non-semantic elements of speech characteristic for a given environment (melody, rhythm and stress)”⁶ .

A child who is conscious of his speech defects is often shy, hidden, has a very low level of self-esteem and it happens he feels underestimated.

Logopedic prophylactics

As it has been already stated, correct speech influences correct development. Therefore, it seems worth taking proper measures to stimulate correct development of speech.

² A. Sołtys – Chmielowicz, Zaburzenia artykulacji, w: (red.), T. Gałkowski, E. Szelał, G. Jastrzębowska,

Podstawy neurologopedii, Opole 2005, p. 421

³ S. Grabias, Logopedyczna klasyfikacja zaburzeń mowy, „Audiofonologia” 1994, nr 6, pp 7 – 22.

⁴ Comp. I. Styczek, Logopedia, Warszawa 1979, PWN, p. 250.

⁵ S. Grabias, Typologia zaburzeń mowy. Narastanie refleksji logopedycznej. „Logopedia”, 1996, nr 23, pp87 –88.

⁶ E. Stecko, Wczesne rozpoznawanie i leczenie zaburzeń mowy, Lublin 1991, p. 10.

As D. Kornas-Biela states, in the prenatal period a basic receiving-transmitting organ of speech i.e. brain and nervous connections develop. The prenatal phase is also a period of creating an intensive training of the organ producing a phonic substance consisting of : base, larynx and lungs. Also in this period hearing shapes and develops⁷. It seems important at this stage for a mother to “talk” to her child. It is also crucial to make prospective parents aware of the fact that inappropriate course of pregnancy as well as a difficult labour may result in speech disorders. Therefore, children who experienced some abnormalities during prenatal or perinatal stages should be under the logopedic care as soon as possible. A low level of health consciousness of prospective parents, lack of relaxation, stress, alcohol, nicotine, drugs, various diseases etc, may have enormous impact upon child’s development and his early shaping of developmental defects which consequently, may lead to delays in speech development or speech defects⁸.

When speech prophylactics is concerned it is crucial for a physician (a pediatrician) to conduct a first examination of a newborn very carefully, and assess his anatomic and physiological state, as well as reactions to stimuli. Particular attention should be focused on newborns with prenatal or perinatal problems⁹.

As E. Stecko states:” For a speech therapist extremely important is the information on the origins of articulation system conditioning the development of basic function of a speech apparatus i.e. a) anatomic state, b) functional level – evaluation of reflexes such as sucking, swallowing, opening of mouth, lip protruding, tongue pushing and head turning, c) level of senses development – mostly hearing”¹⁰.

Another factor contributing to speech development is the way a child is fed. Natural, breast feeding influences greatly the development of lips and tongue, rather than feeding with a bottle. A breast-fed child develops the lip muscle, verticalizes tongue, exercises jaws, breaths through his nose. If a child is fed with a bottle, in order to prevent him from malocclusion which leads to articulation defects, one should start feeding such a child with a spoon, and drinking from a mug, very soon. It is also important to prevent a child from sucking his thumb as this may result in malocclusion.

⁷ D. Kornas – Biela, Prenatalne uwarunkowania rozwoju mowy, w: (red.), B. Rocławski, Opieka logopedyczna od poczęcia, Gdańsk 1991, pp 13 – 14.

⁸ Comp. E. M. Minczakiewicz, Profilaktyka logopedyczna w aspekcie zdrowia psychicznego i potrzeb społecznych człowieka, „Lider”, 2001, nr 5, p. 5.

⁹ Comp. E. Stecko, Logopedyczny aspekt źródeł rozwoju mowy a karmienie piersią, „Scholasticus”, 1992, nr 1,2, p. 72.

¹⁰ Ibid. p. 72.

A child should be placed in a bed or a pram in such a position so that his head is higher than the body because in this way he will tend to close his mouth and breathe through his nose.

Environment has a tremendous impact upon speech development, too. The utterances the child listens to should be correct when articulation is considered¹¹. One should speak a lot of to a child, in a clear and natural manner.

Early diagnosis of speech defects

It is extremely important to reveal any deficiencies which may lead to speech defects as early as possible. Nowadays newborns already have their hearing examined which is important for the beginning of an early therapy, and in this way there is a chance that a child will develop speech.

A pediatrician as a first contact physician with a child, plays a significant role, too. It is he who should turn attention to the anatomic condition of the mouth cavity, face reflexes which are important from the view of articulation. Furthermore, he should emphasize the importance of breast feeding and breathing through the nose, development of pre-language vocalization such as cooing¹². In case of some deficiencies a child should be consulted by a speech therapist.

In many cases it is still too late when children are consulted by a speech therapist for a first time. It happens that parents are not aware that their child suffers from speech defects because they are used to the way of child's speaking, and they perceive it as something regular. Often they are not aware at what age a child should pronounce a particular sound correctly and they wait too long to start the therapy. Even if they notice that their child misarticulates some sounds they wait until a problem disappears being unaware that it will not disappear, but it will persist and strengthen. As E. Stecko says: "One should be aware that a child at the age of 3 or more consulted by a speech therapist has already passed through his golden stage of speech development and at this moment what can be done is to correct some persistent disturbances. Many functions cannot be restored, but by appropriate stimulation at the babyhood phase we may achieve speech development to the best level of an individual child"¹³.

¹¹ Comp. L. Kaczmarek, dz. cyt., p. 157

¹² Comp. L. Kaczmarek, dz. cyt., p. 157.

¹³ Comp.E. Stecko, Wczesne rozpoznawanie i leczenie zaburzeń mowy, Lublin 1991, p.75 – 76.

It is important for pediatricians to have proper knowledge on speech development, and in cases of a need, have the child consulted by a speech therapist as early as possible.

Only an early logopedic diagnosis may result in a successful therapy. A logopedic diagnosis is a set of defined principles and methods which aim at the assessment of speech development of an individual. A logopedic diagnosis should not be limited to the description of speech defects but also it should also be considered as the cause-effect relations.

References:

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9. Styczek I., Logopedia, Warszawa 1979, PWN