

*Karel Neubauer*¹

Children with a developmental dysphasia syndrome at the department of medical speech-language therapy

Abstract: The complex treatment of children with developmental dysphasia is a fundamental and frequently very difficult area for a clinical speech therapist. This area requires long-term cooperation with the family, adequate therapeutic strategies and sustainment of motivation during the long-term treatment. For the present study, we have selected a compact group of 20 children with the syndrome of developmental dysphasia out of a group of children with severe retardation in the development of speech ability, who had been treated at the Department of Clinical Speech and Language Therapy in Česká Lípa. The paper summarises all essential components of a complex speech therapy program and some important components of a successful long-term treatment. It also describes some common difficulties that may impede the development of an adequate and long-lasting intervention strategy.

Keywords: developmental dysphasia, speech and language therapy (logopaedic) strategy, development of visual differentiation, effectiveness of the treatment.

*

Dzieci z rozwojowym zespołem dysfazji na oddziale klinicznej terapii logopedycznej

Abstrakt: Złożone leczenie dzieci cierpiących na dysfazję rozwojową jest podstawowym i często bardzo trudnym obszarem dla logopedy. Obszar ten wymaga długoterminowej współpracy z rodziną, odpowiednich strategii leczniczych i podtrzymywania motywacji podczas długoterminowego leczenia. Na potrzeby niniejszego opracowania, wybraliśmy małą grupę 20 dzieci z zespołem dysfazji rozwojowej z większej grupy dzieci z poważnym opóźnieniem w rozwoju umiejętności językowych, leczonych na Oddziale Logopedii Klinicznej w Ceskiej Lipie. Tekst streszcza wszystkie podstawowe elementy złożonego programu leczenia logopedycznego oraz ważne wspólne cechy udanego leczenia długoterminowego. Opisuje również pewne wspólne trudności, mogące hamować rozwój właściwej i trwałej strategii interwencyjnej

Słowa kluczowe: dysfazja rozwojowa, strategia logopedyczna, rozwój rozróżniania wzrokowego, skuteczność leczenia.

¹ **Doc. PaedDr. Karel Neubauer, Ph.D.** – Special pedagogy department, Faculty of Pedagogy Hradec Králové University; Clinical speech language therapy, Česká Lípa; Czech Republic.

1. Introduction

Children diagnosed with a developmental dysphasia syndrome represent quite a prominent group treated at the Department of Clinical Logopaedics. These children require high standards in special pedagogy and therapeutic abilities on the part of speech therapists. A successful long-term therapy demands a long-lasting therapeutic procedure, frequently continuing for several years on end. This procedure also requires effective and adequate support of the integrative school for children with developmental dysphasia in the type of the educational program provided, which must correspond to their educational capacity.

Developmental dysphasia is a multidimensional disorder in the development of speech capacity, which is caused by minor diffusion impairment of the central nervous system, which in turn generates difficulties in the development of cognitive, lingual and motor speech abilities. The dominating communication disorder is nested within the individual linguistic system of a given child, who is left with the ability to make use of a limited range of single-word formulations and dis-grammatical figures, accompanied by a limited comprehensibility of speech. The dominating cognitive deficiency consists mostly in the delayed development of visual and auditory differentiation in relation to physical age. Moreover, there typically appear some affiliated deficits in attentiveness related to hyperactivity and difficulties within verbal memory.

The symptoms of a developmental dysphasia syndrome have been well described in contemporary literature (Škodová, Jedlička, 2007; Lechta, et al., 2011). In this paper, we will mostly emphasize the area related to the problems with distinctive learning disabilities in children with developmental dysphasia. On the basis of comparison with some respected scientific studies and the terminology used in international literature, it is possible to relate the developmental dysphasia syndrome to a group of children with consistent phonological disorders (Dood, 2006; Bernthal, et. al., 2009). Moreover, similar methods of phonology oriented therapy are used in these cases, which differ from the method used in children with difficulties in the development of articulation.

2. Speech therapy treatment of children with a developmental dysphasia syndrome

These children are mostly forwarded into the care of the Department of Clinical Logopaedics at the age of 3 to 4, with the primary diagnosis of "delayed speech development", based on the recommendation of a paediatrician, a neurologist or a speech-language therapist. The diagnosis of the developmental dysphasia syndrome is usually confirmed by subse-

quent long-term cooperation of speech-language therapy, psychological and neurological diagnosing.

Subsequently, the primary stimulation program is elaborated at the Department of Clinical Logopaedics, supporting the child's communicative and cognitive abilities. This program is based on the principles of fundamental components of therapeutic strategies.

1. The primary component of the therapy consists in the stimulation of cognitive functions, which then influence the development of speech functions, thus affecting the development of visual and auditory differentiation (related to graphic and motor abilities) and influencing the child's individual language system, i.e. impressive and expressive vocabulary, as well as grammaticalization of multi-word figures in speech.

2. The development of articulation originates in the development of the above cited areas and respects the particularities of cognitive abilities in a child with developmental dysphasia. It is oriented towards its phonemic sense of hearing, i.e. differentiation of close speech sounds, and it makes efforts to develop speech comprehensibility. Therefore, this strategy is not closely oriented towards one particular speech sound, but it aims to develop the differentiation of a group of phonemically close sounds, such as sibilants or voiced-voiceless phonemes, and it applies rhythmical procedures in relation to speech organs and manual movement. Thus, this strategy gradually reduces the instances of mistaking sounds, reducing word parts and the occurrence of *mogilalia*.

3. The employment of writing in children with developmental dysphasia stabilizes and develops their labile speech performance. The situation may be further complicated by the development of dyslexia and dysgraphia. Therefore, from preschool age, the program is oriented towards the differentiation of letters, graphic and motor abilities and an individually tailored range of holistic reading of letters accompanied by pictures.

4. The therapeutic procedure strategy must be supported by effective school integration, chiefly by the support in comprehensive speech development, in the progress of visual and auditory differentiation and in graphic, motor and fine motor skills.

3. Research on a group of children with developmental dysphasia

The Department of Clinical Logopaedics in Česká Lípa monitors the implementation and outcome of its speech therapy intervention on the basis of long-term observation. This strategy has been repeatedly applied and oriented towards the attained level of speech communication in these children (Neubauer, 2008a), towards the prevention of particular educational disorders in the group of children with developmental dysphasia (Neubauer, 2008b) and towards the duration and orientation of the logopaedic treatment (Neubauer, 2009).

The currently presented research on a group of children with developmental dysphasia originates from an effort to establish comparable criteria of a long-term intervention procedure, with regard to previous research studies at the same Department of Clinical Logopaedics. The stipulated group consists of 20 children diagnosed with developmental dysphasia. These children, during their long term logopaedic treatment, were successfully integrated into a primary or special practical school in their place of residence. The group consisted of 16 boys and 4 girls, born from 2000 to 2004, whose logopaedic intervention began between 2007 and 2009. The children were 3 to 6 years old when they first visited the Logopaedic Department.

The research group of children with developmental dysphasia was assembled with respect to the following common criteria:

1) A subject was typically a child with a diagnosis of a severe developmental dysphasia syndrome. At the beginning of the treatment, the subject's speech was non-grammatical and incomprehensible, or in very severe cases even unarticulated with a repetition of syllabic formulations;

2) The child had been treated at the Clinical Logopaedics Department for a long-term period, lasting 1 to 4 years;

3) Regular logopaedic treatment had been given during the whole period, with proper cooperation with the family. The frequency of therapeutic sessions had been at the level of approximately 1 session every 2-3 weeks, during different treatment sections, according to the capacity of the department;

4) Now, the child is at primary school or special practical school (3 children), years 1 to 3 and successful outcome of school education is anticipated;

5) Currently, the child speaks in phrases, with satisfactory comprehensibility and low frequency of possible disgrammatisms.

The mean duration of logopaedic intervention from the beginning of school education in this group was 2 to 4 years. The figure demonstrates slightly different values of treatment duration depending on the gender.

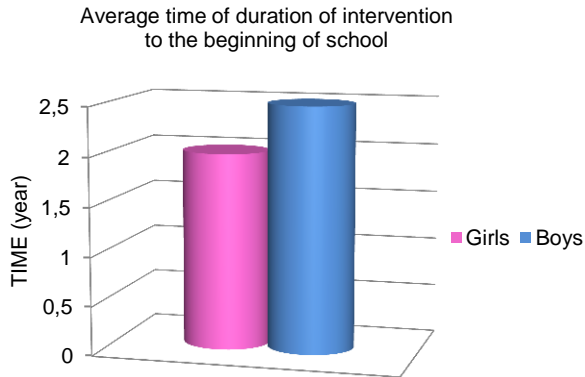


Figure 1. Treatment duration values depending on the gender

The mean age when the logopaedic intervention started in this group was 5 years. Again, the figure demonstrates slightly different mean values in girls versus boys, where boys on average began the treatment at a later age and their treatment preceding school education was longer.

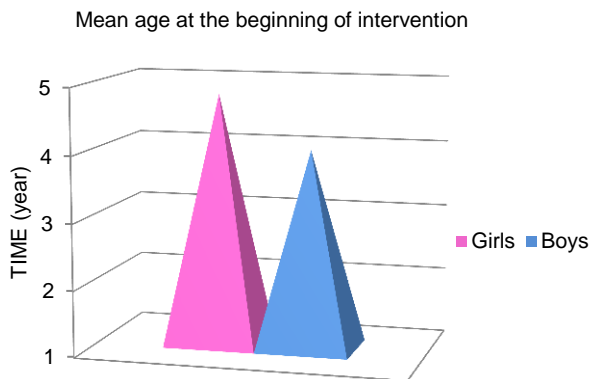


Figure 2. Mean age at the beginning of intervention

The duration of treatment preceding school education expressed individually for every subject ranging from 1 to 4 years before the enrolment into school.

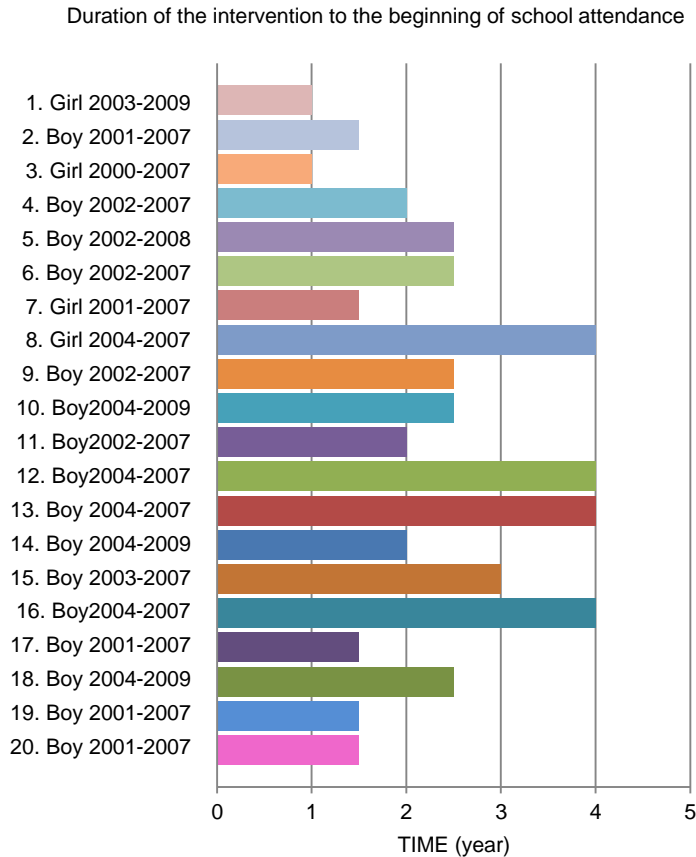


Figure 3. Duration of treatment preceding school education

The procedure of long-term logopaedic intervention – advantages and limitations. The essential components of the effective development within long-term logopaedic treatment:

- 1) Motivation of the child's family for long-term and intensive cooperation for the sake of their child;
- 2) Appropriate guidance of the therapeutic program by a clinical logopaedist, confidence in favourable outcome and long-term motivation in the child and his family;

3) Integration of the child into the program of a logopaedic class at nursery school, appropriate and lasting cooperation between the Clinical Logopaedics Department and nursery school teachers;

4) Appropriate form of cooperation between the Clinical Logopaedics Department and the class teacher from the beginning of school education, which is conducive to a favourable exchange of information about the child's abilities, its potential difficulties at school and a recommended approach within school education;

5) Mutual exchange of knowledge between the Clinical Logopaedics Department and the pedagogic and psychological counselling, if it is required for a child with developmental dysphasia who manifests a specific educational disorder.

Frequent difficulties:

1) Use of inappropriate methods of logopaedic therapy, such as inadequate orientation to articulation drill, without emphasis on the development of cognitive and perceptive abilities;

2) Lack of permanent family interest in helping the child, which is unfortunately a quite common complication;

3) Attempts to integrate the child into a residential program of a special school, regardless of the results of the previous treatment and irrespective of the perspective of quality education in the place of residence. Following the examination by special pedagogy therapists within nursery school, half of the children in the study group were advised to be placed in boarding logopaedic schools. However, this recommendation was not accepted by parents;

4) Development of distinct dispositions to specific learning disabilities, which may create, together with difficulties in speech development, a situation which is very difficult to cope with in case of a child with developmental dysphasia;

5) Lack of acceptance of the state of a child's speech on the part of its teacher, his or her indifference towards the prognostic prospects, efforts to redirect the child to another type of school, regardless of the clinical logopaedist's advice.

4. Conclusions

The presented results of logopaedic intervention in a group of 20 children with severe manifestation of a developmental dysphasia syndrome, who had long-term treatment at the Department of Clinical Logopaedics, demonstrate that this procedure frequently turns out favourably, in a form of a successful start of compulsory school education. Subsequently, these children usually come to develop intact levels of speech communication. The complex treatment of children with a developmental dysphasia syndrome represents quite a unique and difficult area in the practice of a clin-

ical speech therapist. This treatment requires systematic and long-lasting efforts to establish effective cooperation with the child's educational institution.

Another demanding part of the procedure is the long-term cooperation with the child's family and adequate motivation during the long-lasting procedure. When embarking on the multiple task, a clinical speech therapist often encounters some limitations and possibilities within cooperation between the medical and educational institution, which are nowadays present in the area of assistance to children with a developmental dysphasia syndrome in the Czech Republic.

References:

Bernthal, J., Bankson, N., Flipsen, P. (2009). *Articulation and Phonological Disorders. Speech Sound Disorders in Children*. Boston: Pearson Education Inc.

Dood, B., Ed. (2006). *Differential Diagnosis and Treatment of Children with Speech Disorders*. London: Whurr Publishers Ltd.

Lechta, V., et al. (2011). *Terapie narušené komunikační schopnosti*. Praha: Portál.

Neubauer, K. (2008a). *Dlouhodobá péče o děti s vývojovou dysfázií – úskalí i možnosti úspěšné péče*. In: *9. Mezinárodní konference o problematice osob se specifickými potřebami a 4. dramatoterapeutická konference*. Olomouc: Univerzita Palackého.

Neubauer, K. (2008b). *Prevenca rozvoje špecifických poruch učení u dětí s vývojovou dysfázií*. In: *Špecifické poruchy učenia a správania v kontexte inkluzívnej edukácie*. Prešov: Prešovská univerzita.

Neubauer, K. (2009). *The results of long-term speech therapy in a group of children with dysphasia*. 7th European Congress of CPLOL, May 14-16, Ljubljana.

Škodová, E., Jedlička, I. (2007). *Klinická logopedie*. Praha: Portál.