THE PROBLEMS OF DEVELOPMENTAL DYSLEXIA IN LOGOPEDIC EDUCATION IN POLAND

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Abstract

This article presents the problems of developmental dyslexia from the perspective of logopedic education in Poland. In our country, logopedics has been developing dynamically and according to the European rules, the range of professional competences of the speech therapist has been determined as well as vocational specialities have been established (apart from specialising studies in logopedics, that is neurologopedics and surdologopedics, speech therapists and also other professionals interested in reading and writing problems have access to the studies in the area of reading and writing disorders for years.) At the time of changes, the subjects of the research have become: the problems of developmental dyslexia in teaching contents of logopedic education; students’ perception about the logopedics and the profession of a speech therapist also connected to the actions taken on persons suffering from reading and writing disorders; understanding the problems of developmental dyslexia on the basis of knowledge and experience of prospective speech therapists.

In order to recognize the problem, the following research methods were employed: 1/ the analysis of the documentation – the curriculum of the studies, teaching content and higher education outcomes of postgraduate studies in general logopedics at the Department of Logopedics and Applied Linguistics with the Logopedic Laboratory of Maria Curie-Skłodowska University in Lublin, which is the oldest centre for speech therapists’ education in Poland and currently the biggest research and educational institution; 2/ the survey about the needs and preferences of postgraduate students in general logopedics at Maria Curie-Skłodowska University in Lublin, conducted in the group of 50 students, considering the issues such as motivation to study logopedics, preferences of educational model, programme, place of employment, vocational speciality and projections of the possibility of being employed as a speech therapist; 3/ the survey about specific reading and writing disorders, conducted in the group of 25 students of the first year of postgraduate studies in general logopedics at Maria Curie-Skłodowska University in Lublin, in order to establish the level of knowledge about developmental dyslexia possessed by prospective speech therapists and their awareness of the problems facing children and adults suffering from dyslexia as well as of the needs of children with the risk of dyslexia.

The empirical studies that were conducted highlighted that the developmental dyslexia should be perceived in logopedic perspective as one of the linguistic communication disorders – written communication disorder that is frequently connected with speaking disorder. In terms of education, the interest in problems of written communication and its relationship with speaking disorders shall be increased among speech therapists.

Keywords: developmental dyslexia, logopedic education, speech therapists.

1 INTRODUCTION

From the logopedic point of view [1], developmental dyslexia (or, in other words, specific reading and writing difficulties) is perceived as one of the types of language communication disorders: a written communication disorder often strictly linked, in terms of its determining conditions, to a disorder or delay in the development of speech in a child (the impeded acquisition of language competences and skills, especially phonological-phonetic ones, but also morphological, lexical, syntactic and those connected to the structure of a text).

Written Communications disorders are in the scope of interest of Speech Language Pathology/Logopaedics – in “Network for Tuning Standards and Quality of Education Programmes in Speech and Language Therapy/Logopaedics across Europe (NetQues): a multilateral academic and professional network” [2] it is claimed that “Human communication involves processes associated with the comprehension and production of oral and written language, as well as appropriate forms of non-verbal communication” (p. 22) and “In some countries there is considerable involvement in working
This article presents the problems of developmental dyslexia from the perspective of logopedic education in Poland. In our country, logopedics has been developing dynamically and according to the European rules, the range of professional competences of the speech therapist has been determined as well as vocational specialities have been established (apart from specialising studies in logopedics, that is neurologopedics and surdologopedics, speech therapists and also other professionals interested in reading and writing problems have access to the studies in the area of reading and writing disorders for years.) At the time of changes, the subjects of the research have become: the problems of developmental dyslexia in teaching contents of logopedic education; students’ perception about the logopedics and the profession of a speech therapist also connected to the actions taken on persons suffering from reading and writing disorders; understanding the problems of developmental dyslexia on the basis of knowledge and experience of prospective speech therapists.

2 METHODOLOGY

In order to recognize the problem, the following research methods were employed:

1. The analysis of the documentation – the curriculum of the studies, teaching content and higher education outcomes of postgraduate studies in general logopedics at the Department of Logopedics and Applied Linguistics with the Logopedic Laboratory of Maria Curie-Skłodowska University in Lublin, which is the oldest centre for speech therapists’ education in Poland and currently the biggest research and educational institution;

2. The survey about the needs and preferences of postgraduate students in general logopedics at Maria Curie-Skłodowska University in Lublin, conducted in the group of 50 students in April 2016, considering the issues such as motivation to study logopedics, preferences of educational model, programme, place of employment, vocational speciality and projections of the possibility of being employed as a speech therapist (detailed information about the methodology of the survey is contained in [3]);

3. The survey about specific reading and writing disorders, conducted in the group of 25 students of the first year of postgraduate studies in general logopedics at Maria Curie-Skłodowska University in Lublin in April 2016, in order to establish the level of knowledge about developmental dyslexia possessed by prospective speech therapists and their awareness of the problems facing children and adults suffering from dyslexia as well as of the needs of children with the risk of dyslexia (detailed information about the methodology of the survey is contained in [4]).

3 RESULTS

3.1 Developmental dyslexia in the programs of university courses in Logopedics

In Poland, like in some other countries, for instance in Australia [5] and the Czech Republic [6], speech therapists are seen as specialists dealing primarily with communication disorders: problems with using speech and also with writing. The programs of Polish university courses in Logopedics (Speech Therapy), both under- and postgraduate ones, contain modules dedicated to the issues of diagnosis and treatment of people with reading and writing difficulties, including people with developmental dyslexia.

As far as the issues discussed here are concerned, the competencies of the speech therapists educated at Maria Curie-Skłodowska University in Lublin (Division of Humanities) are shaped in accordance with the stipulations of the standard for logopedic treatment of developmental dyslexia; the standard determines the preventive, diagnostic and treatment-related tasks [1] which the logopedist performs in relation to developmental dyslexia. The completion of the four-term postgraduate studies in general logopedics at Maria Curie-Skłodowska University in Lublin, which is aimed at candidates who have already obtained master's degrees (primarily in Pedagogy, Psychology or Polish Studies), equips graduates with the qualifications necessary for the job of a logopedist. The program of the postgraduate studies in general logopedics includes a module called Reading and Writing Difficulties (25 hours of classes, 4 ECTS points), which is part of the second year list of
subjects and encompasses the problems of specific reading and writing difficulties (developmental dyslexia) as well as nonspecific reading and writing difficulties.

The issues concerning developmental dyslexia covered in the program include such matters as:

- the definition of specific reading and writing difficulties (developmental dyslexia)
- the determining conditions of developmental dyslexia
- the symptoms of developmental dyslexia
- the types of specific reading and writing difficulties
- the differentiation between specific and nonspecific reading and writing difficulties
- the role of the speech therapist in the prevention, diagnosis and treatment of developmental dyslexia
- the risk of specific reading and writing difficulties in the case of children with language development disorders.

The students of the postgraduate studies in general logopedics at Maria Curie-Skłodowska University in Lublin acquire the theoretical knowledge of the above-mentioned issues and at the same time develop practical skills in diagnosing people with developmental dyslexia and those at risk of developmental dyslexia, as well as in planning logopedic treatment in this kind of cases.

3.2 The professional needs and preferences of students of postgraduate studies in general logopedics

The research into professional needs and preferences was conducted in April 2016 in the group of 50 students of the postgraduate studies in general logopedics (in two equal, twenty-five-person groups of first- and second-year students) [3]. Participation in the survey was voluntary and anonymous; it consisted in filling in a paper questionnaire. In the researched group there were 49 women and 1 man. The group consisted of people aged 23 to 49; all of the subjects had university education (master’s degrees, in most cases in Pedagogy); the subjects worked in a variety of institutions (the majority worked for primary and/or junior high school schools).

The questionnaire encompassed the following set of issues:

1 Motivation behind enrolling on studies in Logopedics
2 Reasons behind the choice of the university offering studies in Logopedics
3 Personal experience in the field of Logopedics before taking the studies
4 The job of a speech therapist: preferences concerning individual spoken and written communication disorder entities
5 The job of a speech therapist: preferences concerning workplace
6 The job of a speech therapist: preferences concerning professional specialization
7 Qualification in Logopedics: preferences concerning the model of education
8 The job of a speech therapist: other professional qualifications useful for working as a speech therapist
9 Training in Logopedics: preferences concerning the programs on offer
10 The prospects of finding employment as a speech therapist

The issue of developmental dyslexia was raised in the students’ answers referring to points 3, 4 and 6 above.

- Regarding point 3.

In answer to the question: What types of communication disorders (concerning oral or written communication) had you had personal experience with before enrolling on the studies in Logopedics? 26% of the subjects mentioned dyslexia (here the more frequently mentioned disorders were articulation disorders – 54% and stammering – 48%).

- Regarding point 4.
In answer to the question: What types of communication disorders (concerning oral or written communication) would you like to deal with after completing the studies in Logopedics?, the subjects most often mentioned dyslalia (named by 42% of the subjects), stuttering (24%), aphasia (20%) and written communication disorders – reading and writing difficulties, including dyslexia (16%); it should be noted that the percentage of subjects declaring such preferences was higher among the second-year students. The subjects in both groups often mentioned two or more pathology entities of similar nature (e.g. communication disorders which may co-occur with each other, such as dyslalia and reading and writing difficulties).

- Regarding point 6.

The request for defining the area of professional specialization or further training in the field of logopedics which the subjects considered pursuing (If you were to continue education, would you enroll on the studies focusing on: Neurologopedics, Surdologopedics (Speech Therapy for the Deaf and Hearing Impaired), Gerontologopedics (Gerontology in Speech Therapy), various types of speech therapy, reading and writing difficulties, or speech therapy for actors and singers?) enabled the researchers to find out that 18% of the subjects would choose reading and writing difficulties as the area of further professional specialization (the most commonly declared area of specialization was Neurologopedics, which was named by 48% of the subjects).

3.3 Specific reading and writing difficulties – the knowledge and personal experience among future speech therapists

Studies on knowledge and experience concerning developmental dyslexia were conducted in April 2016 in a group of 25 first year students of the postgraduate students in general logopedics at Maria Curie-Skłodowska University in Lublin [4]. It needs to be noted that the study took place before the students started attending classes on reading and writing difficulties (the issues concerning dyslexia are part of the second-year of the postgraduate studies program). Participation in the survey was voluntary and anonymous (not all of the students participated in the research), and it consisted of filling in a paper questionnaire. The surveyed group consisted of 24 women and 1 man. The subjects were between 23 and 45 years of age, all of them had university education (master’s degrees, in most cases in Pedagogy); the subjects worked in a variety of institutions (the majority worked for preschool and primary schools).

Apart from questions concerning the subject’s age, type of workplace and education, the questionnaire included a Test on Dyslexia and 2 open-ended questions regarding the subjects’ experience in the field of developmental dyslexia.

The Test on Dyslexia came from a resource book aimed at parents and other people taking care of children at preschool and early-school age [7]. It consists of 12 statements, whose veracity is assessed by the person taking the test: they classify the statements as either true or false. Giving fewer than 12 correct answers in the test or uncertainty/hesitation when answering indicate that the person should familiarize themselves with information about dyslexia and the risk of dyslexia.

The analysis of the test results revealed that 21 out of 25 subjects gave fewer than 12 correct answers (in total: 245 correct answers, 53 incorrect answers, 2 cases where no answer was given); additionally, the majority of the subjects made more than 1 mistake.

Only two of the statements included in the Test on Dyslexia were correctly classified by all of the subjects: statements no. 1 and no. 5:

Statement 1: Developmental dyslexia is one of the many types of specific learning difficulties.

The above statement is true: developmental dyslexia is listed as one of the types of Specific developmental disorders of scholastic skills in the International Statistical Classification of Diseases and Related Health Problems – ICD [8], and as a type of Specific Learning Disorder in the Diagnostic and Statistical Manual of Mental Disorders – DSM [9].

Statement 5: An intelligent child will overcome reading and writing difficulties by him/herself, therefore s/he cannot suffer from dyslexia.

The above statement is false. People with higher-than-average intelligence are also diagnosed with dyslexia and, like people with average or lower-than-average intelligence; they also need help with mastering reading and writing.

Four of the statements (no. 2, no. 7, no. 10 and no. 4) were incorrectly classified once:
Statement 2: Dyslexia is outgrown.

The above statement is false. Specific reading and writing difficulties, as a developmental disorder, emerge as these skills are being acquired; their symptoms are many and varied, and, as numerous researchers point out [10], the dynamics of the symptoms and their variability in the course of the individual's development are substantial (especially in children).

Statement 7: Special provisions can be made for children with dyslexia at national examinations.

This statement is true: in Poland children with dyslexia can take examinations on completion of junior high school, under special provisions (adjusted to their disorder).

Statement 10: The symptoms of the risk of dyslexia can be observed in preschool education, before the child begins learning to read.

The above statement is true. Although the symptoms of developmental dyslexia are diagnosed as children are learning to read and write, the symptoms of partial disorders of psychomotor development are often observed before the child begins school education (this syndrome is described as the risk of dyslexia). In Poland, pupils in the first three years of primary education are also diagnosed with the risk of dyslexia [11].

Statement 4: A child with a speech disorder is a child at risk of dyslexia.

The statement is true: the symptoms of the risk of dyslexia as far as language functions are concerned can be observed before the child begins learning to read and write, in which case preventive action should be taken so as to avert the occurrence of dyslexic disorders or minimize their severity [1]. It is the speech therapist's responsibility to diagnose the risk of dyslexia when dealing with a child with speech disorders; the risk of dyslexia especially involves children with specific speech and language development disorders [12].

Four of the statements (no. 11, no. 9, no. 12 and no. 8) were incorrectly classified two to four times:

Statement 11: Teachers are obliged to modify attainment targets to match the individual needs of children at risk of dyslexia.

The statement is true. In Poland, teachers are obliged to modify attainment targets to match the needs of children at risk of dyslexia (on the basis of recommendations formulated in the opinion issued by a psychological-pedagogical clinic).

Statement 9: A parent can only make an appointment in a psychological-pedagogical clinic at the recommendation of their child's preschool/school teacher.

The statement is not true: in Poland, parents can take their child to a psychological-pedagogical clinic not only at a teacher's recommendation, but also if they themselves make a decision to do so. No referral is necessary.

Statement 12: A parent is obliged to submit the results of diagnostic tests performed in a psychological-pedagogical clinic to the child's school.

The above statement is false: in Poland, parents can, but are not obliged to, submit the results of diagnostic tests performed in a psychological-pedagogical clinic to their child's school.

Almost half of the researched group (12 people) incorrectly classified statement no. 6:

Statement 6: Dyslexia is not diagnosed if a child has an intellectual disability.

The statement is true: according to the defining descriptions of specific reading and writing difficulties, an intellectual disability excludes the diagnosis of dyslexia [8, 9] – children with intellectual disabilities are diagnosed with nonspecific reading and writing difficulties.

The majority of the subjects (21 people) classified statement no. 3 as false:

Statement 3: Dyslexia is a hereditary disorder.

The statement is true; it may, however, arouse controversy due to the fact that researchers often endorse the idea of developmental dyslexia as a multi-etiological disorder. Experimental research
supports the constitutional basis for dyslexia (structural changes in the central nervous system) [14]; the authors of the Test on Dyslexia [7] present developmental dyslexia as a neurobiologically based disorder, which is caused by subtle, genetically-determined changes in the structure and functioning of the brain which emerge in the prenatal period.

The final part of the questionnaire, where two open-ended questions were included, provided interesting information.

**Question 1.** Do you know a person or persons suffering from developmental dyslexia? If so, could you enumerate the difficulties that they encounter at school, at home, at work, etc.?

The question was answered by 12 subjects while 13 people did not respond. The subjects enumerated the following difficulties that dyslexia-sufferers face:

- learning difficulties, especially with learning to read and write
- difficulties with learning mathematics (dyscalculia), accompanying reading and writing difficulties
- slow pace of work
- language difficulties (also when learning a foreign language)
- isolation from peers
- lack of understanding for the problems faced by dyslexia-sufferers

**Question 2.** What forms of help and support do the dyslexia-sufferers whom you know use?

The question was answered by 11 subjects while 14 people did not respond. The following forms of help and support were enumerated by the subjects:

- help from a psychological-pedagogical clinic
- help from a logopedist
- help from teacher-specialists
- special testing and evaluation methods
- help from a teacher
- help from parents.

### 4 CONCLUSIONS

Summing up the results of the survey conducted among the students of the postgraduate studies in general logopedics before they began attending lectures and seminars dedicated to written communication disorders, we conclude that their knowledge about developmental dyslexia and the risk of dyslexia is fragmentary, and that they have limited awareness of both the problems which students and adults with specific reading and writing difficulties face and the needs of children at risk of dyslexia. Such results should urge future speech therapists to broaden their knowledge on specific reading and writing difficulties and on the risk of dyslexia. Since the future speech therapists’ personal experience proved to be limited, it is necessary to develop the students’ social competence in this area. This is especially important in view of the fact that – as our research has revealed – the majority of the subjects wish to seek employment in various types of educational institutions: schools, psychological-pedagogical clinics and preschools, when they have completed their logopedics studies.

The general conclusion which can be drawn from the presented research applies not only to the training of speech therapists, but also to university courses in the area of pedagogy and philology: university course programs should deal more extensively with the problem of specific reading and writing difficulties (as well as nonspecific difficulties in written language acquisition), including practical aspects, such as forms of help and support for people with developmental dyslexia (in and outside educational institutions) as well as preventive measures in the case of risk of dyslexia, which should be taken in preschool (kindergarten) and in the first years of primary education.

We believe that it is essential to promote social awareness concerning nonspecific and specific reading and writing difficulties (their causes, symptoms, diagnosing the risk of difficulties in written language acquisition, prevention methods, ways of helping people with dyslexia and their rights); in the process of raising social awareness and enhancing social sensitivity in this respect, specialists (teachers, psychologists and speech therapists) should receive support from the media.
The empirical studies that were conducted highlighted that the developmental dyslexia should be perceived in logopedic perspective as one of the linguistic communication disorders – written communication disorder that is frequently connected with speaking disorder. In terms of education, the interest in problems of written communication and its relationship with speaking disorders shall be increased among speech therapists.

REFERENCES


