



Defectological support for educational inclusion of individuals with cerebral palsy and other related disabilities

Naim Salkić^{1*}, Emira Švraka¹, Bakir Katana¹, Hadžan Konjo²

¹Department of Physiotherapy, Faculty of Health Studies, University of Sarajevo, Sarajevo, Bosnia and Herzegovina, ²Department of Nursing, Faculty of Health Studies, University of Sarajevo, Sarajevo, Bosnia and Herzegovina

ABSTRACT

Introduction: From previous studies, 60% of persons with cerebral palsy (CP), hearing impairment and other related difficulties are enrolled in the education system of the Federation of Bosnia and Herzegovina, of which 37.50% in regular schools and 22.50% in special schools. Of the total number of students, 44.44% attend schools according to the regular curriculum and 55.56% according to the adapted curriculum. The aim of the study is to investigate the adequacy of special education support for school inclusion of individuals with cerebral palsy and other related difficulties by presenting the support provided by professional special education staff and the support provided by teaching assistants.

Methods: The study is retrospective and analytical-descriptive. The study was conducted on a sample of 120 respondents from four cantons of the Federation of Bosnia and Herzegovina. Each Canton was used as one subsample of respondents. The data are presented in tabular form using classical descriptive statistics methods. The parametric statistics, analysis of variance (ANOVA) at the level of statistical significance of 0.05, was used to examine the statistical significance of differences between the subsamples of the respondents.

Results: The results of the study showed that individuals with cerebral palsy, hearing impairment, and other associated difficulties do not have adequate support in educational inclusion. Defectological support at school is provided for 17.50% of persons with cerebral palsy, hearing impairment, and other associated difficulties, and only 6.66% of persons have the support of a teaching assistant.

Conclusion: Persons with cerebral palsy, hearing impairment, and other associated difficulties do not have adequate support in educational inclusion. There is no statistically significant difference between the subsamples of respondents when it comes to special education support and assistant support in the educational inclusion.

Keywords: Cerebral palsy; education; special; intellectual disability; developmental disabilities; curriculum; schools

INTRODUCTION

From previous studies, 60% of persons with cerebral palsy (CP), hearing impairment and other related difficulties are enrolled in the education system of the Federation of Bosnia and Herzegovina, of which 37.50% in regular schools and 22.50% in special schools. Of the total number of students, 44.44% attend schools according to the regular curriculum and 55.56% according to the adapted curriculum. According to the adapted curriculum, 18.05% of persons with CP, hearing impairment, and other related difficulties are taught in regular schools. Overall, 40.00% of persons with CP, hearing impairment,

and other related difficulties are not enrolled in the education system (1).

Inclusive education for persons with cerebral palsy is, further, complicated by other related difficulties.

A study conducted in five special institutions in Sarajevo Canton on a sample of 58 children (students) with cerebral palsy, musculoskeletal disorders, or other motor disorders found that 74.13% of respondents had some of the associated difficulties. Overall, 27.59% of the respondents had more than one associated difficulty. The most common associated difficulties were as follows: Intellectual disabilities 43.10%, visual disorders 29.31%, speech disorders 10.34%, hearing disorders 8.62%, epilepsy 8.62%, behavioral disorders 1.73%, and autism 1.73% (2). Of the related difficulties in persons with cerebral palsy, 56.60% have speech difficulties, 34.90% have intellectual disabilities, 32.50% have visual disorders, 20.90% have epilepsy, 10.90% have hearing disorders, 7.60% have behavioral

*Corresponding author: Naim Salkić, Department of physiotherapy, Faculty of Health Studies, University of Sarajevo, Stjepana Tomića 1, 71000 Sarajevo, Bosnia and Herzegovina. E-mail: naim.salkic@fzs.unsa.ba

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disorders, and 2.40% have autism (3).

Various sensory and perceptual disorders are common in children with cerebral palsy, especially in the areas of vision and hearing, such that one-fourth to one-half of children with cerebral palsy have visual impairment, impaired ocular muscle function, and visual motor disorders, and one in four children have hearing impairment, while both auditory and visual perception are frequently impaired (4).

Speech and voice disorders are very common in the clinical picture of cerebral palsy. The most common speech disorders are dysarthria, dyslalia, underdeveloped speech, rhinolalia, aphonia, and motor aphasia (5).

In children with cerebral palsy as a concomitant disorder, autism occurs 79.6%, intellectual disability 56.9%, and epilepsy 55.1% (6).

The incidence of epilepsy in children with cerebral palsy is 20–90% (7). The percentage of children with cerebral palsy who have epilepsy is 35% (8) and 36.17% of cases (9).

Inclusion does not mean that we are all the same, nor that we all agree, but it creates a new relationship with everything that is different, promotes mutual support, and enriches our ability to develop new ideas. Inclusion speaks of different possibilities rather than deficiencies and challenges concepts such as “average” and “normal” (10).

Inclusion is expected to create an approach to the individual and his or her family by society that takes into account all of their differences in maintaining and improving their physical and mental health to enable optimal functioning at all personal and social levels (11). Implementing inclusion at the level of school practice requires a change in the organization of school work, with particular emphasis on changes in the organization of teaching and learning. It is necessary to create positive classroom practice to focus on the use of new methods and ways of working among teachers (12). The teacher’s willingness to accept students with disabilities is the key to successful school inclusion in the regular education system (13). In inclusion, each child should receive the support he or she needs to maximize his or her potential in all areas, with an emphasis on a positive outcome (14).

Professional special education support is necessary for successful school-based inclusion. Opinions differ on the importance of involving special educators in inclusive practice. Teachers agree with this statement to a lesser extent than do educators (15). Reasons cited by special educators for hindering inclusion include: Unprofessional teaching staff, number of children in regular classes, inadequately equipped work areas, inadequately adapted spaces to meet the needs of these children, lack of specific teaching aids, low teacher motivation to work, teacher stress and anxiety, teacher discouragement, and demotivation (16).

A teaching assistant is a person who does individual work with students with disabilities, assuming a dual role. He or she assists students in acquiring learning content and mediates in establishing interactions between students with disabilities and other students in the classroom. The teaching assistant works with children who need special help and support to successfully meet school challenges (17). The instructional assistant’s role is to help the student understand the instructional content and adapt that content and

information to his or her learning style (18).

Support for children with developmental disabilities includes individualized educational and rehabilitation treatments, stimulation of psychomotor skills, and logotherapy that increase motivation to come to school, collaboration with special educators, and mastery of regular school materials, in addition to the development of an individualized support plan at school (19).

The aim of the study is to investigate the adequacy of special education support for school inclusion of individuals with cerebral palsy and other related difficulties by presenting the support provided by professional special education staff and the support provided by teaching assistants.

METHODS

The study was conducted on a sample of 120 respondents, persons with cerebral palsy from four cantons of the Federation of Bosnia and Herzegovina, as part of the Cerebral Palsy Associations project “Functional abilities of persons with disabilities, the most important factor for improving the quality of life of the whole family.” The project and data collection lasted 6 months, in 2018.

Inclusion criteria are as follows:

- Persons of both sexes and regardless of age.
- Persons who are members of four cantonal associations in the Federation of Bosnia and Herzegovina and who are also members of the Alliance of Associations of Persons with Cerebral Palsy of the Federation of Bosnia and Herzegovina.
- Persons who participate in the Alliance project voluntarily or with the consent of their parents.
- Exclusion criteria are as follows:
- Persons with cerebral palsy who are not members of the cantonal associations and therefore not members of the Alliance of Associations of Persons with Cerebral Palsy of the Federation of Bosnia and Herzegovina.
- Persons who have not joined the Alliance project voluntarily or with the consent of their parents.

The distribution of associated difficulties emerges from the results of a study conducted within the same project on the same sample of respondents, whose results showed that associated difficulties in persons with cerebral palsy include language difficulties 56.60%, intellectual difficulties 34.90%, visual difficulties 32.50%, epilepsy 20.90%, hearing difficulties 10.90%, behavioral difficulties 7.60%, and autism 2.40% (3).

The total sample of respondents was divided into four subsamples of respondents.

- The first subsample of respondents (N = 40) consisted of persons with cerebral palsy who are members of the Association of Persons with Cerebral Palsy of Sarajevo Canton (Sarajevo Canton).
- The second subsample of respondents (N = 41) consisted of persons with cerebral palsy who were members of the Association of Parents of Persons with Cerebral Palsy and Other Disabilities “Dlan” Zenica, (Zenica-Dobojski Canton).
- The third subsample of respondents (N = 20) consisted of persons with cerebral palsy, members of the Association of Persons with Cerebral Palsy and

Dystrophy of Bosnia-Podrinje Canton – Goražde (Bosnia-Podrinje Canton).

- The fourth subsample of respondents (N = 19) consisted of persons with cerebral palsy who were members of the Association of Persons with Cerebral Palsy and Other Disabilities of Sapna (Tuzla Canton).

Data were collected directly from service users or from their parents/guardians if the person was unable to provide the requested information themselves. The researchers entered that the data obtained or the answers to the questions (variables) into the questionnaire.

For example, respondents answered yes or no to whether they have or had professional special education support and the support of an assistant in school inclusion. Positive responses are indicators of adequate support in school inclusion, and responses are not indicators that individuals did not have adequate professional support in school inclusion.

The study explored the perspective of service users during the research period and before and presented the situation of inclusive education before and during the period when the research was conducted.

The “Questionnaire for the Study of Associated Disabilities in Cerebral Palsy, Hearing Impairment, and Other Associated Difficulties” was used for the study. The measurement instrument consisted of 11 questions of nominal, ordinal, and interval type. The survey used data obtained from respondents’ answers to the questions “Do you, does your child have special education support in school?” and “Do you, does your child have the support of a teaching assistant? Respondents answered “yes” or “no.”

A database was created based on the data obtained during the study. After verifying the integrity of the data, statistical analysis was performed using IBM SPSS Statistics v.20.0 software for Windows. The data are presented in tabular form using the methods of classical descriptive statistics. Parametric statistics, analysis of variance (ANOVA) with a statistical significance level of 0.05, was used to examine the statistical significance of the differences between the subsamples of respondents.

ANOVA test was applied to confirm or reject the assumption that respondents have professional support for inclusive education, as there is a legal basis for its adequate implementation in the Federation of Bosnia and Herzegovina.

Indicators of adequate support for school inclusion are positive answers of respondents and negative answers are indicators that respondents do not have adequate professional support for school inclusion.

RESULTS

An insight into the frequency and percentage distribution (Table 1) shows that 64 or 53.33% of the respondents are male and 56 or 46.67% are female.

From the results of the ANOVA test, it can be concluded that at the established statistical significance level of 0.05, there is no statistically significant difference in age in all age groups between the subsamples of respondents.

Professional special education support in school

Table 2 shows that of the total sample, 94 or 78.33% of the respondents answered the question and that 26 or 21.67% of the respondents did not answer this question.

Based on the distribution of frequencies and percentages of affirmative responses, it can be seen that a small percentage of respondents have professional special education support at school. Only 17.50% of persons with cerebral palsy, hearing impairment, and other related difficulties have professional special educational support at school. In Sarajevo Canton and Tuzla Canton, 5.83% of the total respondents have professional special educational support.

Out of the total sample of respondents, in Zenica-Doboj Canton, 3.34% of respondents have professional special educational support at school, and in Bosnia-Podrinje Canton, 2.50% of respondents.

Out of the total 60.83% of persons with cerebral palsy, hearing impairment, and other related difficulties do not have professional special educational support in school. In Sarajevo Canton, 24.17% of respondents have no professional special educational support in school, and in Zenica-Doboj Canton, 18.33% of respondents in the total sample have no professional special educational support. In Bosnia-Podrinje Canton, 11.66% of respondents have no professional special educational support in school, and in Tuzla Canton, 6.67% of respondents have no professional special educational support in school.

TABLE 1. Relationship between gender and age in total sample

Age	Canton Sarajevo		Zenica-Doboj Canton		Bosnia-Podrinje Canton		Canton Tuzla (Sapna)		Total			ANOVA (p)
	Pol Gender		Pol Gender		Pol Gender		Pol Gender		M (%)	F (%)	N (%)	
	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)				
0-15	3 (2.5)	1 (0.83)	15 (12.5)	8 (6.67)	1 (0.83)	3 (2.5)	3 (2.5)	3 (2.5)	22 (18.33)	15 (12.5)	37 (30.83)	0.6181
16-25	3 (2.5)	4 (3.33)	5 (4.17)	5 (4.17)	1 (0.83)	3 (2.5)	2 (1.67)	3 (2.5)	11 (9.17)	15 (12.5)	26 (21.67)	0.8350
26-35	8 (6.67)	4 (3.33)	2 (1.67)	4 (3.33)	4 (3.33)	2 (1.67)	3 (2.5)	1 (0.83)	17 (14.17)	11 (9.16)	28 (23.33)	0.3766
36-45	3 (2.5)	8 (6.67)	2 (1.67)	-	1 (0.83)	1 (0.83)	1 (0.83)	-	7 (5.83)	9 (7.5)	16 (13.33)	0.8505
46-55	2 (1.67)	2 (1.67)	-	-	1 (0.83)	2 (1.67)	1 (0.83)	-	4 (3.33)	4 (3.34)	8 (6.67)	0.8855
56-65	-	2 (1.67)	-	-	1 (0.83)	-	1 (0.83)	-	2 (1.67)	2 (1.67)	4 (3.34)	0.9091
> 65	-	-	-	-	-	-	1 (0.83)	-	1 (0.83)	-	1 (0.83)	0.9335
Total	19 (15.84)	21 (17.5)	24 (20.01)	17 (14.17)	9 (7.48)	11 (9.17)	12 (10)	7 (5.83)	64 (53.33)	56 (46.67)	120 (100)	
	40 (33.34)		41 (34.18)		20 (16.65)		19 (15.83)		120 (100)			
Anova (p)	0.8629		0.7696		0.9404		0.0331					

TABLE 2. Distribution of frequencies and percentages of responses in the total sample

No.	"Did you have, does your child have professional special education support at school?"	Canton Sarajevo		Zenica-Doboj Canton		Bosnia-Podrinje Canton		Canton Tuzla (Sapna)		Total	
		N	%	N	%	N	%	N	%	N	%
1.	Yes	7	5.83	4	3.34	3	2.50	7	5.83	21	17,50
2.	No	29	24.17	22	18.33	14	11.66	8	6.67	73	60,83

TABLE 3. Distribution of frequencies and percentages of responses in the total sample

No.	"Did you have, does your child have the support of a teaching assistant?"	Canton Sarajevo		Zenica-Doboj Canton		Bosnia-Podrinje Canton		Canton Tuzla (Sapna)		Total	
		N	%	N	%	N	%	N	%	N	%
1.	Yes	1	0.83	2	1.66	2	1.66	3	2.50	8	6,66
2.	No	23	19.17	27	22.50	14	11.67	14	11.67	78	65,00

Teaching assistant support

From the analysis of Table 3, it can be seen that of the total sample, 86 or 71.66% of the respondents answered the question and 34 or 28.33% of the respondents did not answer the question.

Based on the distribution of frequencies and percentages of affirmative responses, it can be seen that a very small percentage of respondents are assisted by a teaching assistant. Only 6.66% of persons with cerebral palsy, hearing impairment, and other related difficulties have the support of a teaching assistant. In Sarajevo canton, 0.83% of respondents are supported by a teaching assistant and in Tuzla canton, 2.50% of respondents are supported by a teaching assistant, based on the total number of respondents. In Zenica-Doboj and Bosnia-Podrinje cantons, 1.66% of respondents are supported by a teaching assistant.

Of the total respondents, 65.00% of those with cerebral palsy, hearing impairment, and other related difficulties have no support from a teaching assistant. In Sarajevo Canton, 19.17% of respondents have no support from a teaching assistant, and in Zenica-Doboj Canton, 22.50% of respondents in the total sample have no support from a teaching assistant. In Bosnia-Podrinje and Tuzla Canton, 11.67% of respondents in the total sample have no support from a teaching assistant.

Testing the existence of statistical differences in the total sample of respondents

Based on the distribution of response frequencies of the total sample of respondents (Table 4), it can be seen that there are differences in the responses of respondents and that most respondents do not have adequate special education support or teaching assistant. Further, analysis was conducted to test whether the existing difference is statistically significant.

The results of the repeated-measures ANOVA test ($\chi^2 = 24.3277$; $p = 0.005 < 0.821414$) show that the difference in the responses of the total sample was statistically significant (Table 4.1), from which it can be concluded that individuals with cerebral palsy, hearing impairment, and other related difficulties do not receive adequate support for school inclusion.

Testing the existence of statistical differences in the subsample of respondents

Based on the distribution of response frequencies of the first

TABLE 4. Distribution of frequencies and percentages of responses in the total sample

Statements/Variables	Yes	No
1 Did you have, does your child have professional special education support at school?	21	73
2 Did you have, does your child have the support of a teaching assistant?	8	78

TABLE 4.1. Repeated-measures ANOVA test of the total sample of respondents

Statements/Variables	AS	SD
1 Did you have, does your child have professional special education support at school?	1.90698	0,29047
2 Did you have, does your child have the support of a teaching assistant?	1.7766	0,41653
Total	1,84179	0.08914
Repeated – measures ANOVA test (N=120) $\chi^2=24.3277$; $P=0.821414 > 0.005$		

TABLE 5. Distribution of response frequencies of the first subsample of respondents (Canton Sarajevo)

Statements/Variables	Yes	No
1 Did you have, does your child have professional special education support at school?	7	29
2 Did you have, does your child have the support of a teaching assistant?	1	23

TABLE 5.1. Repeated-measures ANOVA test of the first subsample of respondents (Canton Sarajevo)

Statements/Variables	AS	SD
1 Did you have, does your child have professional special education support at school?	1.805556	0,161111
2 Did you have, does your child have the support of a teaching assistant?	1.958333	0,041667
Total	1,881944	1.029737
Repeated–measures ANOVA test (N=40) ($\chi^2=6.9333$; $P=0.090949 > 0.005$)		

subsample of respondents (Table 5), it can be seen that there are differences in the responses of respondents and that most respondents do not have adequate special education support or teaching assistant. Further, analysis was conducted to test whether the existing difference is statistically significant.

The results of the repeated-measures ANOVA test ($\chi^2 = 6.9333$; $p = 0.090949 > 0.005$) show that the difference in the responses of Sarajevo Canton

respondents is statistically significant, from which it can be concluded that persons with cerebral palsy, hearing impairment, and other related difficulties do not receive adequate support in school inclusion (Table 5.1).

Based on the frequency distribution of the responses of the second subsample of respondents (Table 6), it can be seen that there are differences in the responses of the respondents and that most of the respondents do not receive adequate special education support and teaching assistant support. Further, analysis was conducted to check whether the existing difference is statistically significant.

The results of the repeated-measures ANOVA test ($\chi^2 = 5.3454$; $p = 0.005 < 0.322397$) show that the difference in the responses of respondents from Zenica-Doboj Canton is statistically significant (Table 6.1), from which it can be concluded that persons with cerebral palsy, hearing impairment, and other related difficulties do not receive adequate support in school inclusion.

Based on the frequency distribution of the responses of the second subsample of respondents (Table 7), it can be seen that there are differences in the responses of the respondents and that most of the respondents do not receive adequate special education support and teaching assistant support. Further, analysis was conducted to check whether the existing difference is statistically significant.

The results of the repeated-measures ANOVA test ($\chi^2 = 4.2424$; $p = 0.005 < 0.69155$) show that the difference in the responses of respondents from Bosnia-Podrinje Canton is statistically significant (Table 7.1), from which it can be concluded that persons with cerebral palsy, hearing impairment, and other related difficulties do not receive adequate support in school inclusion.

Based on the frequency distribution of the responses of the

TABLE 6. Distribution of response frequencies of the second subsample of respondents (Zenica-Doboj Canton)

Statements/Variables	Yes	No
1 Did you have, does your child have professional special education support at school?	4	22
2 Did you have, does your child have the support of a teaching assistant?	2	27

TABLE 6.1. Repeated-measures ANOVA test of the second subsample of respondents (Zenica-Doboj Canton)

Statements/Variables	AS	SD
1 Did you have, does your child have professional special education support at school?	1.84615	0,135385
2 Did you have, does your child have the support of a teaching assistant?	1.93103	0,066502
Total	1,88859	1.032675

Repeated-measures ANOVA test (N=41) ($\chi^2=5.3454$; $p=0.322397 > 0.005$)

TABLE 7. Distribution of response frequencies of the third subsample (Bosnia-Podrinje Canton)

Statements/Variables	Yes	No
1 Did you have, does your child have professional special education support at school?	3	14
2 Did you have, does your child have the support of a teaching assistant?	2	14

third subsample of respondents (Table 8), it can be seen that there are differences in the responses of the respondents and that most of the respondents do not receive adequate special education support and teaching assistant support. Further, analysis was conducted to check whether the existing difference is statistically significant.

The results of the repeated-measures ANOVA test ($\chi^2 = 6.875$; $p = 0.005 < 0.081697$) show that the difference in the responses of the respondents of Tuzla-Sapna Canton is statistically significant (Table 8.1), from which it can be concluded that persons with cerebral palsy, hearing impairment, and other related difficulties do not receive adequate support in school inclusion.

DISCUSSION

The results of the study indicate that in the tested area of the Federation of Bosnia and Herzegovina, or in the four cantons of the Federation of Bosnia and Herzegovina, the cantons of Sarajevo, Tuzla (Sapna), Zenica-Doboj, and Bosnia-Podrinje, people with cerebral palsy, hearing impairment, and other related difficulties do not experience adequate school inclusion, despite the fact that inclusion programs have been in place in these areas for more than a decade and that there is a legal basis for their implementation. There are differences in the responses of the respondents and most individuals with cerebral palsy, hearing impairment, and other related difficulties do not have adequate support from a defectologist. Only a small percentage, 17.50%, of the individuals with cerebral palsy, hearing impairment, and other related difficulties have professional special education support in school, while most

TABLE 7.1: Repeated-measures ANOVA test of the third subsample (Bosnia-Podrinje Canton)

Statements/Variables	AS	SD
1 Did you have, does your child have professional special education support at school?	1.823529	0.154412
2 Did you have, does your child have the support of a teaching assistant?	1.875	0.116667
Total	1,849265	0.9896

Repeated-measures ANOVA test (N=20) ($\chi^2=4.2424$; $P=0.69155 > 0.005$)

TABLE 8. Distribution of response frequencies of the fourth subsample (Canton Tuzla - Sapna)

Statements/Variables	Yes	No
1 Did you have, does your child have professional special education support at school?	7	8
2 Did you have, does your child have the support of a teaching assistant?	3	14

TABLE 8.1. Repeated-measures ANOVA test of the fourth subsample (Canton Tuzla - Sapna)

Statements/Variables	2.8 pt	SD
1 Did you have, does your child have professional special education support at school?	1.533333	0.266667
2 Did you have, does your child have the support of a teaching assistant?	1.823529	0.154412
Total	1.678431	0.145098

Repeated-measures ANOVA test (N=19) ($\chi^2=6.875$; $P=0.081697 > 0.005$)

of these individuals, 60.83%, do not have special education support, which, further, complicates their inclusion in school. The results of the study also show that only a very small percentage of individuals with cerebral palsy, hearing impairment, and other related difficulties have support from a teaching assistant in their school inclusion, only 6.66%, while most of these individuals, 65%, have no support from a teaching assistant, which also complicates their school inclusion. These differences in the representation of special education support and educational support are also statistically significant. A statistically significant difference in special education support and teaching assistant support was found in all four subsamples or in all four cantons of the study area, as far as school inclusion is concerned. Similar studies can be found in the available literature. The results of a survey conducted on a sample of 120 respondents, aimed at investigating the necessary forms of support for persons with cerebral palsy, hearing impairment, and other related difficulties, showed that persons with cerebral palsy, hearing impairment, and other related difficulties expressed the need for the following aspects of support: Physiotherapy (27.50%), special education support (5.00%), school assistant support (3.33%), socialization (1.66%), speech therapy support (11.66%), psychological support (5.83%), more socialization (5.00%), professional support as a form of support (5.83%), and all types of support (8.33%) (20). Survey administered to a sample of 50 respondents, people with disabilities, their parents or guardians attending elementary schools, schools for the education of students with disabilities, and day care centers from urban and rural areas. The objective was to examine respondents' early coverage of special education services and parents' information about and attitudes toward early special education services. The results showed that 56% of the respondents were involved in the early special education treatment. In addition, the study showed that the period of support was short and 96% of respondents believed that special education support was necessary for school-age children (21). Practice has shown that more and more children need additional treatment to overcome the requirements of the curriculum and achieve success in the teaching process. That treatment can be whether psychological, educational, special educational, physical or any other. Practice has also shown that this kind of treatment from experts is lacking in most schools. In the absence of experts to provide the necessary professional support, teachers often train themselves to help children with disabilities learn and master the material (22). A survey conducted on a sample of 25 respondents of both genders from the second to sixth grade of elementary school attending classes in the regular education system according to an individually tailored program in Sarajevo Canton found that the support provided by the professional team and the individually tailored program significantly contribute to the education and integration of children with developmental disabilities (23). In Montenegro, a survey of professional staff representation was conducted in 133 schools and kindergartens. The results of the survey showed that educators are represented by 65%, psychologists by 40%, speech therapists by 18%, and special educators by 14% in schools and kindergartens. In 63 of the 133 schools, 190 assistants were hired and in only 5% of cases the school itself organizes these assistants' support (24).

In the Republic of Croatia, the inclusion of teaching assistants is defined by the Law and Regulation on Primary and Secondary Education of Children with Disabilities from 2015, but there are still financial barriers and unsystematic support for the inclusion of children with disabilities in mainstream schools, and there is no professional systematization/description as a teaching assistant (25).

CONCLUSIONS

There is only a small percentage of respondents who have adequate professional special education support and teaching assistant support. Most individuals with cerebral palsy and other related difficulties in school inclusion do not have professional special educational support or the support of teaching assistants. There are differences in the representation of support for school inclusion among the four cantons of the Federation of Bosnia and Herzegovina, but these differences are not statistically significant.

The lack of professional support negatively affects the educational and rehabilitative achievements and professional training of these individuals, which have far-reaching consequences for their development and affect the quality of life.

Educational institutions, where the school inclusion of persons with cerebral palsy and other related difficulties is realized, should use the legal basis and put pressure on the relevant institutions to approve the hiring of more professional special educators and teaching assistants to improve the support for the school inclusion of these persons.

CONFLICT OF INTEREST

Authors declare no conflict of interest.

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