

IMPORTANCE OF USING ORTHOPEDIC APPLIANCES IN PHYSICAL EDUCATION IN PROCESS OF INCLUSIVE EDUCATION OF CHILDREN WITH MOTORIC DISABILITIES

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Abstract

Last few years main accent is on education of children with special needs on regular plan and program with total equality in all segments of educational areas in adapting existing educational system to needs of students with is basic way of new approach to inclusion. Main goal of checking of possibilities of realization of teaching physical education with students with motor disabilities in inclusive education, if they use some orthopaedic appliance, push true only these research in 2 special school (on sample of 64 students with motor disabilities) in 3 regular schools (sample of 32 teachers). Test data on students with motor disabilities were gain observing with consultation of their teachers while test data of the teachers in regular school were gain by questionnaire. Results of the research show that large number of children with motor disabilities is using some kind of orthopaedic appliance that small number of teachers knows very little about orthopaedic appliances with is influenced on equality of incorporation of the children with motor disabilities, in teaching of physical education. We can conclude that for inclusive education of these children in areas of physical education still do not exist prepared conditions and that is need help, cooperation and additional information in these areas (this necessity needed more than half teachers)

Key words: *inclusion, students with motor disabilities, physical education, orthopaedic appliances*

Introduction

"Children with special needs are birth twice. In the first birth they must learn how they live in a world which they didn't prepare. In the second birth they depended of you, or something which you can do for them. They birth twice, but it is very hard to live for them, but in the end that will be another birth for you." (Pontića)

The most important of culture need is education and it must be precondition of psychological and physical develop, and that are given right forming and socialization personality. Children with special needs must have this right. The reform of education is going on two directions, on the first direction when the school will be dividing up for the pupils with motor disabilities and aim all this pupils will be included in regular schools (Ilić-Stošović, 2005), in last few years this second direction is got more importance in inclusive education form. Inclusion has another different system of value and base on him another philosophy of education. That it means important changes in relation to programmes about work, education of teachers, method of work and way of estimate carried out the results. Progress of motivation all children is aim of inclusion (Hrnjica, 2004). The inclusion system of education implies educational environment for all people independent of sex, capability, economic status, religion... (Salend, 2001). "That it means for example, a physically disabled child in wheelchair has the right to attend the nearest

school in the neighbourhood which he attend, if he didn't have special needs, and to share his school desk with his peer." The notion of inclusion education obligatorily implies as an integral and inseparable part of this process implies specific preparations and adapting of an already existing educational system for the special needs of this pupils, which means huge changes and reforms of the regular system of education." (Radoman, 2004). According to the progress complexity and heterogeneity motor disabled children represent an extremely specific and versatile group of disability which stops them in physical, pedagogical, educational and recreational activity. Motor disabled children are distinguished amongst them causes of their state are numerous but consequences are made dissimilar intensity. According to Kaljević, (1990) the causes of disabilities can share in three groups: physical invalidity can being starts owing to damage central or periphery nervous system, physical invalidity in consequence of damage locomotive apparatus and physical invalidity in consequence of chronic disease. The realization the teaching of physical education motor disabled children characterizes specific work which undivided attention to pupils with individual capabilities but and respect basic claims of physical education as the aims and assignments. "The physical capabilities of pupils is factor which often takes a decision about do the child with saved intelligence attend regular school or he attend school for motor disabled children.

The elements which we must respect are: the existence extremely needs for helping devices architectural barrier, influence on speed and tempo overcoming curriculum, or especial access in work with this children". (Nikolić & Ilić, 2001). The definite expertise is claimed from the teachers which realizes teaching of physical education well knowledge this subject, their contents of the program, the methods, the means, the form of works,... but and knowledge individual capability any pupils.' The programme of physical education for pupils with physical invalidity need to be rehabilitation on basic which means every teacher on cooperation with kinaesthetic therapist, physiotherapist, doctor which takes rehabilitation procedure makes individual programmes and basic on motor capability of child" (Čukić, Stošljević & Eminović, 2004).

The specific problem represents realization teaching of physical education with pupils which use any helping device in uprising-educational process. "The disability which comes owing to damage locomotive apparatus or state which project on locomotive apparatus, insists use of orthotic, protetic instrument and another helping devices." (Stošljević et al., 1997), which serves as restitution or prevention and or slowdown farther loss of function. Helping devices to share: 1. Ortho-Protetic supplies, proteases (upper arm, forearm, above the knee, below the knee), Orthoses (hands, legs, vertebral column), Orthopaedic shoes and towels, Aids to move (rod, glass, walkers, shopping carts), Equipment for self-care, Aids and relief in the home and workplace. 2. Electronic helping devices. Often, the child with motor disabilities excludes from physical teaching which is contrary basic of principle inclusive access which accentuates diversity on force ,capabilities and needs, natural and desirable, respect pupils diversity and needs, keep teaching the programme for all pupils to the utmost individual adapting contents and methods of works every pupils, including creativeness and diversity didactic material and access and realization teaching of physical education through permanent cooperation with any pupils and with motor disabled pupil.

Aim

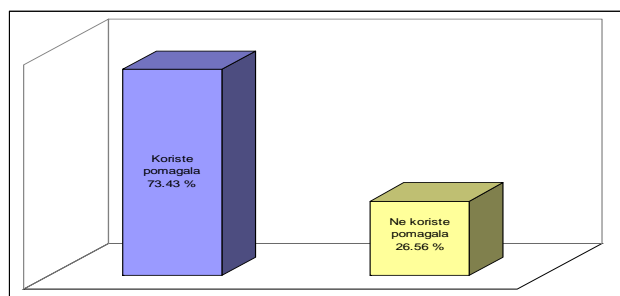
The aims of this research are: 1. The fortify percentage of pupils with motor disabilities which uses someone orthopaedic helping device, 2. The fortify important orthopaedic helping device at realization of physical education, 3. The test an attitudes class-teaching on (the regular school) about the possibilities inclusion pupils with motor disabilities at the physical teaching in the inclusive system of education.

Methods

The research includes the children with motor disabilities and the teachers of class-teaching from the regular primary school. The first sample of the research implies consists of 64 pupils with motor disabilities (37 girls and 27 boys) from two schools primary school "Miodrag Matić"-Belgrade, (16 pupils) and primary school "Dr.Dragan Hercog", Belgrade (47 pupils) which attend the teaching in the moment or research I till VIII class (I-8, II-7, III-9,IV-8, V-8, VI-9, VII-9, VIII-6 pupils). The observation and the consultation with teachers get the data about their possibilities of standing and walking. Sit, but don't stand and don't walk (use wheelchair) 39.06% (25 pupils), stand and walk depend on wheelchair 34,38% (22 pupils) and has saved capability of sitting, standing and walking 26,96% (17 pupils). The second sample makes 32 teachers class-teaching from three primary schools: primary school "Braća Baruh", Belgrade (12 teachers), primary school "Starina Novak", Belgrade (7 teachers) and primary school "Braća Jerković" Železnik (13 teachers). The teachers filled in a forms which constructed by 5 questions, four of five is closed make (questions number 1,3,4 and 5, questions number 1 and 5 with multifunctional choice) and the question open make (question 2).

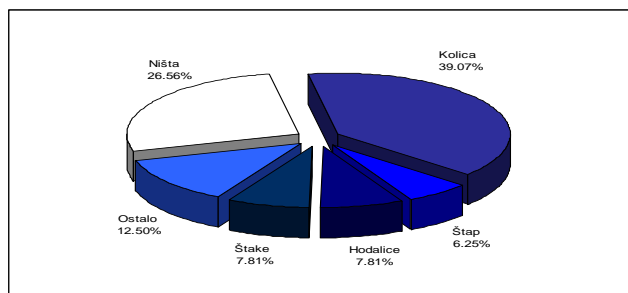
Results and discussion

An analysis of the results is got an observation and the consultation by teachers showed by graphic with explanation an analysis of the results is got by questionnaire which is filled in by the teachers, realised question by question, with tabular or graphic representation the results with adequate explanation, for any question included on questionnaire for the teachers.

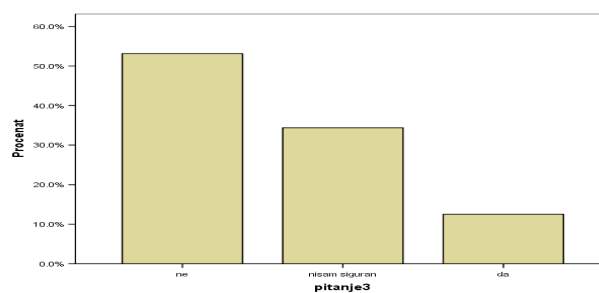


Graph 1. Helping device

On the graph 1 is shown percentage of pupils which used any helping device 73,43% (47 pupils) it is more than pupils which don't used any helping device 26,56% (17 pupils). When we talk about kind of orthopaedic helping device, the most pupils used wheelchair 25 pupils or 39,07%, walkers and stick by 5 pupils or 7,8%, crutches 4 pupils or 6,25% and smoother kind of helping device 8 pupils or 12,5%.



Graph 2. Types of devices



Graph 3. To be included

Table 1. The frequency and percentage of 'hardest' teachers

Subject	f	%
Language (Serbian)	2	6,3
Mathematics	1	3,1
Life sciences	0	0,0
Art	0	0,0
Physical education	23	71,8
Musical education	0	0,0
Physical ed. / Art	6	18,8
Total	32	100,0

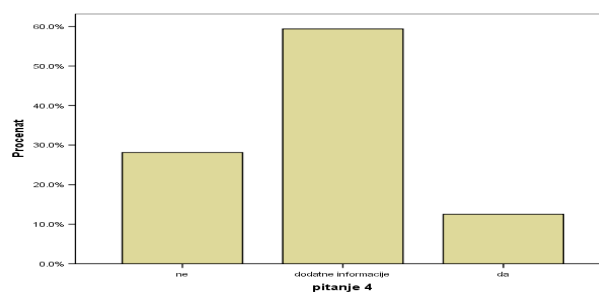
The table 1 shows the most teachers 23 or 71,8%, if they had a child with motor disabilities in class, they would have hardest realization of physical education. Many less 6 teachers or 18,8% mean that is realization physical and art, 2 teachers or 6,3% think that is the Serbian language, a teacher or 3,1% mathematics and none teacher don't think if they had motor disabled children, they wouldn't have problem at realization teaching of life sciences and musical education.

Table 2. Reasons

Reason	f	%
Heavy movement	22	68,7
Fear of hurting	3	9,4
Plans and programmes	5	15,6
Relation with other children	2	6,3
Total	32	100,0

The results which present into the table 2 show that in 68,7% teacher mean heavy movement is reason because it is hardest realization teaching of physical education children with motor disability. The teachers have other reasons in addition to explanation: the maladjustment of plans and programmes (15,6%), the fear of hurting (9,4%) and unacceptably or motor disabled children from other children in class (6,3%).

Because of equality in regard equally, at teaching of physical education only 4 teachers (12,5%) would be include the child with motor disabilities which uses any helping device on an equal footing with another children, whereas more than half teachers do it, and 11 teachers or 34,4% don't sure what will they do in that situation show on graph 3.



Graph 4. Knowledge

In an aim check of knowledge about orthopaedic helping device which use the children with motor disabilities we get the data that only 4 teachers (12,5%) have knowledge 9 teachers or 2,8% don't have knowledge, while at the most of percentage 59,4% or 19 teachers want additional information from these area shown on graph 4.

Table 3. Our activity

What we do to adapt	f	%
Consist of programmes	4	12,5
Methods	1	3,1
Means	4	12,5
All	23	71,9
Total		100

In the end on a wish what the teachers do to adapt and give better recommendation at realization the teaching of physical education which include a child with motor disabilities 23 teachers or 71,9% of teachers want to change all (consists of programmes, methods, means, forms) consists of programmes and means are adapted 4 teachers (12,5%) while a teacher (3,1%) is adapted methods.

Conclusion

An analysis of the results which are got by polls the teachers of class-teaching in regular school with aim of inclusive education the children with motor disabilities, we are getting till knowledge that can be hardest realisation teaching of physical education for them and that mean at the most teachers (71,8%) as all too often reason of that are heavy movement. A less number of teachers (12,5%) want to include child with motor disabilities with other children.

This means a child with motor disabilities which uses some helping device on an equal footing with other children. Huge number of children with motor disabilities use orthopaedic helping device (73,43%) and only a less number of teachers has knowledge about orthopaedic helping device which use motor disabled children while huge then half teachers want an additional informs from these area. That mean for an inclusive education motor disabled children at physical education still don't exist prepared

conditions that mean the teachers need help and cooperation with expert person-special educator and rehabilitator for motor disabilities. An aim is ensuring on an equal footing education for all, prothopaedic helping device which use these children should be fill own primary goal and an aim- helps child at the function, but don't because the fear and insufficient notified teachers, from that process completely or partly exclude.

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ZNAČAJ UPORABE ORTOPEDSKIH POMAGALA U NASTAVI FIZIČKE KULTURE U PROCESU INKLUZIVNOG OBRAZOVANJA DJECE S MOTORIČKIM POREMEĆAJIMA

Sažetak

Posljednjih godina sve se više inzistira na školovanju djece s posebnim potrebama po redovitom planu i programu, uz potpunu ravnopravnost u svim segmentima i nastavnim područjima i prilagođavanju postojećeg obrazovnog sustava potrebama ovih učenika, što je osnovno načelo novog pristupa-inkluziji. U cilju provjeravanja mogućnosti realizacije nastave tjelesnog odgoja učenika s motoričkim poremećajima u inkluzivnom obrazovanju, a koji koriste neko ortopedsko pomagalo, sproveli smo ovo istraživanje u 2 specijalne škole (na uzorku od 64 učenika sa motoričkim poremećajima) i u 3 redovite škole (uzorak od 32 nastavnika razredne nastave). Podatke o učenicima s motoričkim poremećajima dobili smo opservacijom uz konzultaciju njihovih učitelja dok smo podatke od nastavnika iz redovite škole dobili putem upitnika. Rezultati istraživanja pokazuju da veliki broj dece s motoričkim poremećajima koristi neko ortopedsko pomagalo, da mali broj nastavnika posjeduje znanje o ortopedskim pomagalima što utječe na ravnopravnost uključivanja djece s motoričkim poremećajima u nastavu tjelesnog odgoja. Zaključujemo da za inkluzivno obrazovanje ove djece u području tjelesnog odgoja još uvijek ne postoje pripremljeni uvjeti i da je potrebna pomoć, suradnja i dodatna obaviještenost iz ovog područja (tu je potrebu izrazilo više od polovine nastavnika).

Gljučne riječi: inkluzija, učenici s motoričkim poremećajima, tjelesni odgoj, ortopedska pomagala

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