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## **SOCIO-EDUCATIONAL "PORTRAIT" OF SPECIAL MEDICAL GROUP SCHOOLCHILDREN**

### **Abstract**

Social-gender, biomedical and psycho-pedagogical activities contribute to socio-pedagogical «portrait» of special medical group pupils. Dwelling in cities, being female, obtaining general secondary education at special new type schools are the traces which compose the «portrait» of special medical group pupils. Those schoolchildren possess low and below the average rates of physical development, lacking socially important mental and physical qualities, displaying lower level of physical activity.

### **Key words**

physical education, special medical groups, schoolchildren, physical development, physical fitness.

### **Introduction**

Population health is one of the most urgent problems facing contemporary society in Ukraine. Rapidly deteriorating health and decline of schoolchildren physical fitness arouse definite concern in parents and healthcare practitioners.

Of late ten years the number of healthy first-graders has declined from 40.3% to 23.6%. Only one out of every eight children who enter school doesn't have significant aberrations from a sound state, while an only one out of twenty school graduate remains healthy. About twenty one per cent (20.77%) of children have one disease, 21.74% have 2 diseases, 7.25% - 3 diseases, 3.86% - 4 diseases. According to some experts only 1.1% of school-age children might be considered healthy [2, 5, 9, 10]. The number of pupils referred to special medical groups has been growing rapidly. Some fifteen years ago their percentage ranged from 10 to 20-25%, while of late years it has reached up to 40% (Bulkina N.P, 2008).

Physical exercises are effective and economically sound mode of health improvement. In order to gain health-improving effect by means of exercising it is necessary to obtain information about fitness shape and level of physical conditioning of the students. Specialized publications, however, contain a very few data about the health rates of special medical groups pupils.

## Methods and organization of research

The aim of research was to compose a socio-pedagogical "portrait" of special medical group pupils. The following tasks have been assigned:

1. Identification of social and gender characteristics of special medical group pupils.
2. Specification of psycho-pedagogical and medico-biological properties inherent to the students of special medical group.

Over 150 literary sources have been processed, thesis analysis, research papers published in Ukraine and abroad among them.

## Results

### Social and gender characteristics of special medical group pupils

We can observe a cause-and-effect relation between the scope of motor activity and the level of health. Motor activity of girls is usually less than that of boys. As a result girls (2.19%) are referred to specialized medical groups more often than boys (1.79%) due to health deteriorations [4].

It was found that morbidity of pupils who study at schools of a new type (specialized secondary schools) is higher as compared to ordinary grammar schools [8]. Increased academic workload, significant educational and emotional overstrain, need to process huge amount of information, examination stress factors – all these factors multiplied by reduced motor activity, not getting enough sleep, often scanty or occasional meals - produce harmful effect over the youth health.

Urban schools ( $4,91 \pm 0,35\%$ ) in big cities and regional centers ( $3,75 \pm 0,41\%$ ) have more pupils subjected to lapses from a sound state than in rural schools. Body malfunctions could be more often observed in urban boys (41.7%) than in boys from rural areas (39.7%) [3, 8, 13]. Thus the lifestyle of students from rural areas appears to be healthier as compared to that of urban young men. As a result female urban students attending secondary schools of a new type are more often referred to special medical groups.

### Medico-biological features inherent to special medical group students

It was found that the majority of special medical group students have low or below average level of physical development. The students allotted to special medical groups manifest lower than average or low physical development three times more frequently than the students of main medical group. Children with sight disturbances have lower rates of physical development (height – by 3 to 5%; body weight - by 6 to 11%; lungs capacity - by 3 to 6%) as compared to the children who have dimensions refraction. The pupils of special and main medical groups manifest reliable distinctions according to Skibinski and Rouffier indices. Girls with hearing disorders differed ( $P < 0.05$ ) by bigger contents of subcutaneous fat as compared to their healthy peers. Forty five point four per cent of the main group students possess harmoniously developed physique, whereas only 8% of special medical group students are well-shaped. We attribute the reasons for such physical development lagging of special medical group students to the lack of physical activity. Children with poor health revealed lower rate of physical activity (boys - 2101 loco motions less, girls - 2488 loco

motions less) than their healthy peers [1, 7, 12, 13, 14, 17]. Special medical group students are dissatisfied with their physical activity (20.8% boys and 18.6% girls). This particular index tells considerably the special medical group students from those of main one [6].

Fitness shape characteristics of children with poor health declare themselves in functional diseconomy under relative calmness and in limited potential opportunities during physical activities. Sixty eight per cent of special medical group representatives revealed adverse reactions of cardiovascular system to standard exercise load. Functional activity of cardiovascular and respiratory systems in these children is reduced by 4 to 10% [1].

Psycho-pedagogical features inherent to special medical group students

Special medical group children don't possess sufficiently developed mental qualities, like initiative, self-restraint, emotional stability, self-discipline. They have more pronounced positive traits like credulity, obedience, submissiveness, kindness, sensitivity, consideration [15]. Such traits as shyness, vulnerability, suspiciousness, affectivity could be ascribed to negative qualities [16]. Students of specialized medical groups often manifest lack of activity, hesitation at physical training lessons. They prefer to remain unnoticed during motor activities. This causes low mobility during physical education lessons and after hours, which contributes even more to lagging behind the children from main medical group.

Pupils of special medical group demonstrated lower level of physical fitness and physical performance [7, 9, 12, 13, 14, 17] as compared to their healthy classmates. From 25.3% to 41.8% of special medical group pupils have underdeveloped basic physical characteristics, while 72% display low physical performance. More than 75% of pupils in special medical groups do not meet the requirements of standard tests for fitness. From 13% to 23% of special medical group children have low level of physical fitness. Low rating of Shapovalova index is peculiar to 20% of girls from special medical group, which testifies to lack of strength, speed and speed endurance. Girls with hearing disorders had lower ( $P < 0, 05$ ) rates of physical qualities (strength endurance of the abdominal muscles, balance and aerobic endurance). Guys have significant differences ( $P < 0, 05$ ) with healthy classmates in hand strength indices. Children with sight disturbances also manifest developmental lagging of hand's muscle strength (8-12%), of hand's and feet high-speed strength (22,7-27%) and (16-20%) accordingly. The students of special medical group have low level of the whole range of physical qualities (except flexibility), endurance discrepancy being the most clearly manifested.

According to the majority of experts [1, 6, 12, 13, 14 etc.], significant difference between the rates of physical development of students of various medical groups has not been registered. This fact justifies the possibility of conducting combined simultaneous physical education lessons.

Nowadays integration of pupils with different psychophysical development is widely introduced as a leading philosophical attitude towards children. Physical education teachers claim that special medical group pupils' separation is a crucial

mistake. They admit the possibility of joint classes for the students of different medical groups provided that special medical group students are paid closer attention [11].

However practical knowledge as well as analysis of recent research and publications indicates lack of methodological concepts of physical education classes for the special medical group pupils alongside with their healthy peers. Elucidation and description of the psycho-pedagogical "portrait" features of the special medical group pupils might enable to define scientifically grounded technologies, methodological and logistic support for integrated physical education of the students referred to special medical groups under the conditions of general educational process.

## Conclusions

Social-gender, biomedical, psycho-pedagogical indicators constitute socio-pedagogical «portrait» of pupils referred to special medical groups.

The level of children's health depends on the following social and gender factors:

- the type of school in which the child learns: at the institutions of a new type sickness rate is higher as compared to that of ordinary schools
- locality in which the student resides: in rural areas the sickness rate of pupils is lower than in urban areas
- sex: girls prevail in special medical groups.

Low and lower than average rates of physical development, showing lower functional indicators as compared to the pupils of main medical groups, underdeveloped physical qualities are typical for special medical groups children.

Following psychological and pedagogical qualities like credulity, obedience, submissiveness, kindness, sensitivity, consideration shyness, vulnerability, suspicion and emotionality are more pronounced in special medical groups' children.

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