

PREVENTION AND CORRECTION OF POSTURAL ATTITUDES OF SMALL SCHOLARS BY KINETOTHERAPEUTIC MEANS

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Abstract: *The presented study aims to highlight the importance of early detection of small pupils' posture attitudes in order to make a good and efficient correction. Teachers and physical education teachers are meant to detect possible deficient attitudes and correct them before they become postural deficiencies. The subjects of the research have made quantitative and qualitative progress and have also corrected their faulty attitudes.*

Key words: *prophylaxis, physical deficiencies, scholars, pupils, exercise.*

1. Introduction

An important factor to prevent and combat physical deficiencies is physical exercise that is practiced rationally and systematically in different forms: physical education in all levels of education, recreational and performance sports.

Motion therapy provides normal growth, increasing functional and exercise capacity of the body, preserving and strengthening health, and harmonious development.

To discover, prevent and combat physical deficiency requires a minimum of knowledge about the features of the right body, how to manifest the physical deficiencies, the causes that cause them, how to prevent and treat them.

2. The problems

Characteristics and features of the small school body

The medical examination of candidates for admission to schools of various degrees and of medical check-ups repeated in each school year, but especially following research or special surveys, seeks to determine the state of health and the degree of growth and development of the pupils' body series of morphological and functional defects, known under the common name of physical deficiencies.

By physical deficiency we understand any deviation from normal in the physical form and physical functions of the body that disturbs the normal growth and harmonious development of the body, alters its external aspect, reduces its ability and power to adapt to physical effort, and reduces its productive work capacity. But these defects only, in very serious cases, get deficient from the family and school environment, but it creates a series of inferiority complexes towards healthy and normally conformed peers [2, 3].

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Identifying physical deficiencies in school-age children has raised the issue of organizing a systematic activity of preventing and correcting these children in order to ensure normal physical development and achieve maximum labor and educational returns. The treatment of physical deficiencies through the means of medical physical culture has so far yielded remarkable results in most cases. Achieving success in corrective work is the result of a diligent and conscientious work done by the teacher of physical education under the supervision and guidance of the specialized medical professor [8].

Given that the issue of physical deficiencies in our schools is being discussed with all seriousness, we have the duty to carefully scrutinize the many aspects and variants and to contribute to its solution as quickly and efficiently as possible. First of all, it is necessary to thoroughly analyze the deficiencies more frequently encountered in school and to clarify that notion in terms of their content and their delimitation [3].

Detecting and classifying deficient students is the first step towards addressing physical deviance in schools. This action will no longer endure any weight when all educators, parents and students will understand the need for it [4].

2.1. Hypothesis, Purpose and Goals of the Research

We assume that the elaboration and application in practice of a system of kinesitherapy - specific means, distributed within the physical education lesson in the primary and secondary education, will facilitate the correction of the identified physical deficiencies, the vicious attitude and the correct reflex.

The objectives of the research are to bring in the necessity to implement the prophylactic act in order to combat the physical deficiencies at the age of 8-12 years; Surveillance of the state of fact;

Develop prophylactic protocols applicable in schools; Highlighting the fact that lack of postural control among children with special needs favors somato-functional degradation.

The purpose of research is to argue and confirm that mild physical deficiencies occurring in primary and secondary school children can be prevented, ameliorated and corrected in physical education lessons using specially developed exercise programs.

3. Research Material and Methods

Investigation and experimental application of the prophylactic program took place during a school year, during 15 hours of physical education at the General School no.5 in Brasov. Twice a week physical education helps students in harmonious physical development, the normal development of the psyche, and an optimal functioning of the organs.

The prophylactic program was made up of conventional means, free and portable, indoor and outdoor [6, 7].

The objectives of the prepared and applied training program are as follows: correct posture and body alignment; increasing muscle strength; increasing joint mobility; educating muscle strength; re-training coordination and balance; respiratory re-education; reeducation of sensitivity; engaging effort capacity; relaxing [4,5].

4. Presentation of Results; Discussions

The somatoscopic examination for the detection of physical deficiencies was performed using the New York Physical Fitness Test, described by Barow H.M. and McGee Rosemary [1], [9]. One note is given for each body segment in the posture rating charts, and then the sum is calculated.

As a result, the minimum points a subject can achieve is 13 points and a maximum of 65 points, which is a normal posture.

Through this evaluation system, the body's attitude is expressed quantitatively, which gives it the possibility of longitudinally following it over several years. The resulting data and processing are found in Tables 1 and 2.

Table 1

Initial Testing Values for Body Attitude Test

	N=15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
From behind	Head	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	
	Shoulders	3	4	2	3	3	3	5	2	5	5	5	5	5	5	5	
	Scoliosis	3	4	2	4	5	3	5	3	5	5	2	5	5	5	5	
	Hip	4	4	5	4	5	5	5	4	5	5	5	5	5	5	5	
	Feet	3	5	4	5	5	5	5	5	5	5	5	5	5	5	5	
	Flat foot	4	5	5	5	3	5	5	5	5	5	5	5	5	3	5	3
	Neck	4	5	4	4	4	5	5	5	5	5	5	5	5	3	5	5
From the side	Thorax	5	3	4	5	5	5	5	3	5	5	5	5	5	5	5	
	Shoulders	3	4	2	3	3	3	3	3	5	3	3	5	5	5	3	
	Kyphosis	3	4	3	4	3	4	3	4	5	4	3	5	5	5	3	
	Trunk	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
	Abdomen	5	5	5	5	5	5	5	5	5	3	5	5	5	5	3	
	lordosis	5	3	4	5	5	5	5	4	3	5	5	5	5	5	5	
	Total points	51	55	49	56	55	58	61	53	63	60	59	65	61	65	57	

Table 2

Final Testing Values for Body Attitude Test

	N=15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
From behind	Head	4	4	4	5	4	5	5	5	5	5	5	5	5	5	5
	Shoulders	3	4	2	5	4	5	5	3	5	5	5	5	5	5	5
	Scoliosis	3	4	2	5	5	4	5	4	5	5	5	5	5	5	5
	Hip	4	4	5	5	5	5	5	4	5	5	5	5	5	5	5
	Feet	3	5	4	5	5	5	5	5	5	5	5	5	5	5	5
	Flat foot	4	5	5	5	4	5	5	5	5	5	5	5	5	5	4
	Neck	4	5	4	5	4	5	5	5	5	5	5	5	5	5	5
From the side	Thorax	5	3	4	5	5	5	5	5	5	5	5	5	5	5	5
	Shoulders	3	4	2	5	4	5	5	5	5	5	5	5	5	5	3
	Kyphosis	3	5	3	5	4	4	3	4	5	5	5	5	5	5	4
	Trunk	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Abdomen	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4
	lordosis	5	4	5	5	5	5	5	4	5	5	5	5	5	5	5
	Total points	51	57	50	65	60	63	65	60	65	65	65	65	65	65	65

From the measurements made it can be seen that 13 subjects have different vicious attitudes such as scoliosis or scoliotic attitude, flat leg, cifosis or cifotic attitude, lordosis or lordotic attitude and only 2

subjects have normal posture, but with a quantitative defect in terms of the parameters mentioned above.

From the measurements made it can be seen that 13 subjects have different vicious

attitudes such as scoliosis or scoliosis attitude, flat leg, chest figure or cytotic attitude, lordosis or lordotic attitude, and only 2 subjects have normal posture, but with quantitative defect in terms of parameters mentioned above [5], [8].

For eight months, selective means were used to correct vicious attitudes and posts, and they found that 8 out of 15 subjects reached normal posture (table 3).

The values of the comparative tests body attitude Table 3

N=15	total points on the initial test	total points on the final test	Points' difference (T.I.↔T.F.)
1.	51	51	0
2.	55	57	+2
3.	49	50	+1
4.	56	65	+9
5.	55	60	+5
6.	58	63	+5
7.	61	65	+4
8.	53	60	+7
9.	63	65	+2
10.	60	65	+5
11.	59	65	+6
12.	65	65	0
13.	61	65	+4
14.	65	65	0
15.	57	60	+3

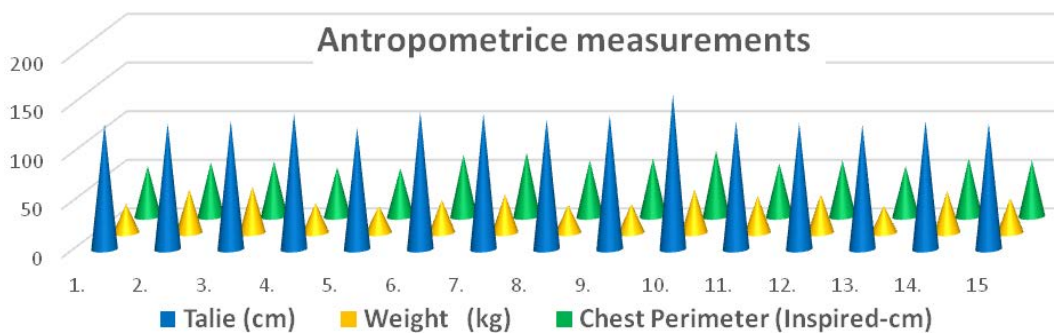


Fig.1. *Anthropometric measurements of the subjects*

In order to evaluate the part of motor procurement related to the objectives of the testing the abdominal force, back, arms, column mobility and static balance on a

kinetic programs, tests of physical condition were applied. They consisted in scale of 1 to 5, the minimum score could be 5 and the maximum score of 25 points.

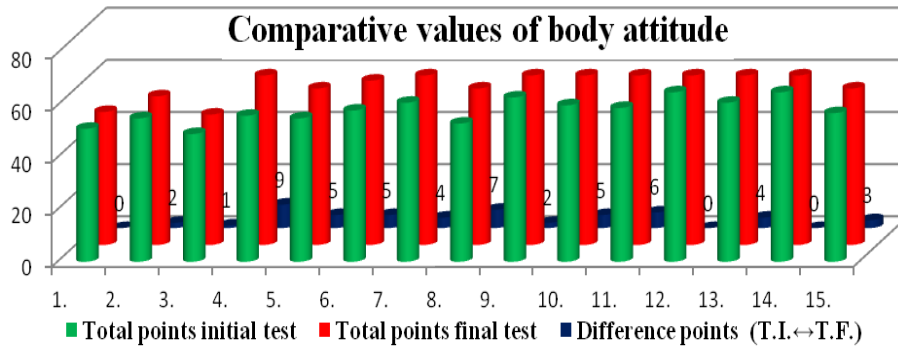


Fig. 2. Comparative value of body attitude to the subjects

This was done on the basis of a complex of exercises in which we were able to appreciate the strength and elasticity of the muscles involved in maintaining a biomechanical correctness.

Being a visual test, it carries a rate of subjectivism in terms of the way in which

the execution is done, but it gives us a confirmation that the exercises developed for the correction program and the prevention of physical deficiencies, respectively for educating the reflex of correct attitude, had positive effects on the subjects under investigation (table 4, figure 3).

Evolution of the media for testing the physical condition and posture of the body

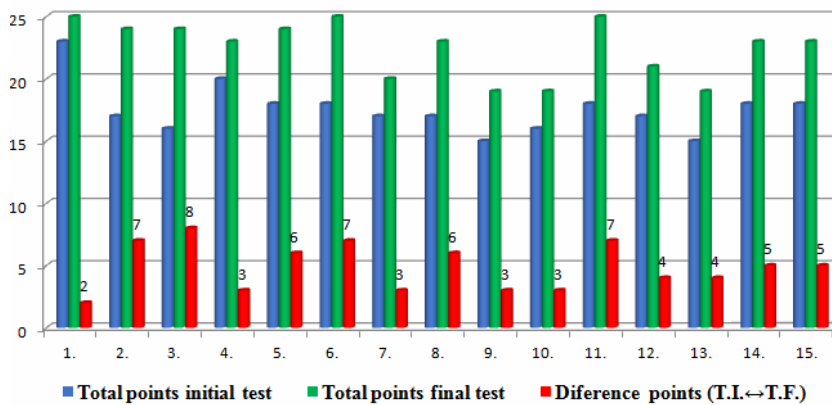


Fig.3. The sum of the points obtained in the physical condition tests

Table 4

Evolution of the media for testing the physical condition and posture of the body

N=15	Total points initial test	Total points final test	Difference points (T.I.↔T.F.)
1.	23	25	+ 2
2.	17	24	+ 7
3.	16	24	+8
4.	20	23	+3
5.	18	24	+ 6
6.	18	25	+ 7

N=15	Total points initial test	Total points final test	Diference points (T.I.↔T.F.)
7.	17	20	+ 3
8.	17	23	+6
9.	15	19	+ 3
10.	16	19	+ 3
11.	18	25	+ 7
12.	17	21	+ 4
13.	15	19	+ 4
14.	18	23	+5
15.	18	23	+5

5. Conclusions

Physical exercise and general physical education and sports classes have multiple influences on the body of the little student. He increases his physical potential by strengthening his bones and educating the rough and fine muscles, educating and relaxing the psyche, influencing behavior and relationships with others. In the work we have influenced the kinetotherapeutic means of preventing and correcting postural deficiencies. Subjects were corrected to 80%, and will continue to perform preventive exercises in leisure time.

In the comparative test of body posture in 15 students 13 different vicious attitudes of varying degrees were installed. At the end of the experiment period, 100% recovered from the disability and improved the parameters of the physical condition

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