

PROPHYLAXIS AND CORRECTION OF KYPHOSIS IN THE PHYSICAL EDUCATION LESSON IN THE GYMNASIUM CYCLE

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Abstract: The made studies with much more classes of pupils point out that, on the average 5 pupils in every class have this minor deficiency, kyphosis.

Introduction: Field statistics show that most students, especially those in high school, are prone to deficient attitudes. Starting from this premise, it was found that in middle school age the most common deficiency is kyphosis. Research conducted on several classes of students showed that there are on average 5 students with this small degree of deficiency in each class. There are classes with 2-3 or no students with physical disabilities as there are classes with 6-7 students in this situation. Instead, the "wrong posture" the premise of the installation of physical deficiencies by perpetuating them, is found in more than 60% of the number of students observed.

We considered that by applying a series of complex exercises in physical education classes, both collectively and especially individually, at certain moments of it, kyphotic attitudes and deficiencies, and what derives from them, can be prevented or partially corrected. Thus, we performed measurements specific to the technique of assessing the posture of students in all schools V-VIII in the city of Suceava.

Material-method.

Starting from the basic method of researching body activities, namely the experiment, and from the hypothesis, that applying a series of physical exercises in certain links of the lesson, methodically oriented and properly located muscle, it can be shown that this deficiency or deficient attitude can be prevented or partially corrected. [1,2] As a result, we applied for a year a complex of physical exercises and methodical recommendations, and after some initial, intermediate and final tests it was observed that the biological parameters of the subjects

detected with kyphosis, and the other attitudes derived from it, modified to normal indices. [3, 4]

Among the types of experiments we used the verification or confirmation experiment and the provoked experiment, which aims to produce the independent variable and observe its effects. In the experiment, the independent variable is represented by the proposed sets of physical exercises, and the dependent variable is the correction of deficiencies or kyphotic attitudes. Following the somatoscopic and anthropometric examination of 777 students, of which 357 are boys and 420 are girls, it was found that 466 of them have wrong postures and physical disabilities. Of these, 466, so almost 60% of those with deficiencies or wrong postures, following the measurements, were found to have kyphotic and even kyphosis.

Following the application of complexes of corrective exercises for kyphosis, there is a decrease in the values of the curves of the spine, the disappearance of kyphotic posts and kyphosis. Thus, in girls from the initial average of 4.33 cm, a final average of 3.77 cm is reached, at the cervical level, and at the lumbar level, from 3.36 cm initially to 3.11 cm final. Also, at the dorsal level (6) the initial average is 0.58 cm, and the final one 0.08 cm. At the sacral level the difference is insignificant. In boys, cervical from a value of 4.50 cm initially reaches a value of 3.50 cm in the end, and lumbar from an average of 3.27 cm initially to an average of 3.08 cm in the end. At the dorsal level (6) the initial average has a value of 0.50 cm, and finally reaches the value of 0.07 cm. At the initial test it can be seen that the average is higher in boys (4.50 cm) than in girls (4.33 cm), and at the dorsal (6), lumbar and sacral level the initial averages are higher in girls, respectively (0.58 - 0.50; 3.36 - 3.27; 0.13 - 0.08). Final tests show that at all levels the average values are higher in girls than in boys (cervical 3.77 - 3.50; dorsal (6) 0.08 - 0.07; lumbar 3.11 - 3.08), and at the sacral level the values are equal. Comparing the differences between the initial and final averages, it can be seen that at the cervical level in boys the difference is greater than in girls (1 cm boys; 0.66 cm girls). At the lumbar level, the differences between the initial and final averages are 0.19 cm in boys and 0.25 cm in girls. The differences in the dorsal (6) and sacral averages are 0.50 cm, 0.12 cm in girls and 0.43 cm, 0.07 cm in boys.

Conclusions:

The first action to be taken by the physical education teacher in the prevention of physical deficiencies, of kyphosis in particular, is that of educating and improving in students the habit of correct attitude of the body. This action must begin once the children have entered first grade and continued for as long as necessary. The process of educating the reflex of correct attitude in schoolchildren has been talked about for a long time, but this action has not acquired the exact outline, regarding the ways of achievement, the means and the necessary organizational framework. The second action, undertaken by the physical education teacher, is the structuring of current exercises, used for the purpose of physical development of students according to the requirements of the complex physiological mechanism of maintaining the correct attitude of the body. In order for these exercises to be effective and to prevent and correct kyphosis, I present some recommendations, which I consider useful:

- Exact knowledge, by the physical education teacher, of students with kyphosis;
- Students with this deficiency will not perform exercises whose movement structure leads to its accentuation;
- Carrying out corrective exercises during the lesson, intended at the same time for normally developed students as well as for kyphotic ones;
- Execution individually of a complex consisting of 5-6 corrective exercises specific to kyphosis and repeated a sufficient number of times, at different times of the lesson (link II "Preparing the body for effort", link III a "Selective influence of the locomotor system", links IV and VI for the development of basic motor qualities, through relays, circuits and link aVa for accomplishing the topics of the lesson), which the teacher considers the most appropriate. I recommend that the most effective exercises for correcting kyphosis be included in the respective complex, adapting them to the material conditions in which the lesson takes place and to the possibilities of effort of the deficient person; [5]
- Exercises should be performed symmetrically and influence all body segments;
- The structure of the exercises for physical development should be chosen according to the particularities of the growth period in which the student is;
- Limiting some exercises or even excluding them if they contravene the principles of kyphosis prevention. These exercises could be: deep

flexions of the head and neck; forward and backward rotations of the upper limbs and shoulders; deep trunk flexions in which the thoracic kyphotic curvature of the spine is accentuated and the clogging of the thoracic base which is favored by the uncontrolled position in the bench.

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