

## PHYSICAL CULTURE AS A MEANS OF PREVENTING POSTURAL DISORDERS IN YOUNG PEOPLE

**Karimov Duysenbay Djienbaevitch,**

*Professor Acting of the Department of Physical education and sports at  
Nukus State Pedagogical Institute named after Ajinyaz*

**Abstract.** *The article examines the problem of preventing posture disorders in young people through physical education. The relevance of the study is due to the increasing number of functional and structural disorders of the musculoskeletal system in students and schoolchildren, which is associated with hypodynamia, prolonged work at the computer, and non-compliance with hygiene standards. The aim of the work is to analyze the possibilities of physical culture as an effective means of preventing posture disorders and to develop practical recommendations for organizing classes. The article summarizes scientific approaches to preventing posture disorders and reveals the mechanisms by which physical exercises influence the formation of a correct posture. Research results indicate that systematic physical education sessions contribute to strengthening the muscular corset, developing motor skills, and reducing the risk of spinal deformities.*

**Keywords:** *physical culture, posture, prevention, youth, motor activity, health, spine.*

**Annotatsiya.** *Mazkur maqolada yoshlar orasida jismoniy tarbiya vositasida qomat buzilishlarining oldini olish muammosi tadqiq etilgan. Tadqiqotning dolzarbligi talabalar va o'quvchilar orasida tayanch-harakat tizimining funksional hamda strukturaviy buzilishlari sonining ortib borayotgani bilan izohlanadi. Bu holat gipodinamiya, kompyuter qarshisida uzoq vaqt ishlash hamda gigiyena me'yorlariga rioya qilmaslik bilan bog'liqdir. Tadqiqotning maqsadi jismoniy tarbiyaning qomat buzilishlarini oldini olishdagi samarali vosita sifatidagi imkoniyatlarini tahlil qilish va mashg'ulotlarni tashkil etish bo'yicha amaliy tavsiyalar ishlab chiqishdan iborat. Maqolada qomat buzilishlarini profilaktika qilishga oid ilmiy yondashuvlar umumlashtirilgan hamda jismoniy mashqlarning to'g'ri qomat shakllanishiga ta'sir mexanizmlari yoritilgan. Tadqiqot natijalari muntazam jismoniy tarbiya mashg'ulotlari mushak korsetini mustahkamlash, harakat ko'nikmalarini rivojlantirish hamda umurtqa pog'onasi deformatsiyalari xavfini kamaytirishga xizmat qilishini ko'rsatadi.*

**Kalit so'zlar:** *jismoniy tarbiya, qomat, profilaktika, yoshlar, harakat faolligi, salomatlik, umurtqa pog'onasi.*

**Аннотация.** *В статье рассматривается проблема профилактики нарушений осанки у молодежи средствами физического воспитания. Актуальность исследования обусловлена увеличением числа функциональных и структурных нарушений опорно-двигательного аппарата у студентов и школьников, что связано с гиподинамией, длительной работой за компьютером и несоблюдением гигиенических норм. Цель работы заключается в анализе возможностей физической культуры как эффективного средства профилактики нарушений осанки и разработке практических рекомендаций по организации занятий. В статье обобщены научные подходы к профилактике нарушений осанки и раскрыты механизмы влияния физических упражнений на формирование правильной осанки. Результаты исследования свидетельствуют о том, что систематические занятия физической культурой способствуют укреплению мышечного корсета, развитию двигательных навыков и снижению риска деформации позвоночника.*

**Ключевые слова:** *физическая культура, осанка, профилактика, молодежь, двигательная активность, здоровье, позвоночник.*

**Introduction.** *The problem of posture disorders among young people has become increasingly relevant in recent years, driven by the changing lifestyle of modern humans. Increasing the time spent in a static position (at a computer, smartphone, or study*

materials) leads to a decrease in motor activity and the formation of unfavorable conditions for the development of the musculoskeletal system [1; 24].

Posture is a vital indicator of physical development and human health. It reflects the state of muscle tone, the functional state of the spine, and the coordination of movements. According to Kuznetsov, correct posture is formed during the growth and development of the organism under the influence of motor activity and external conditions [2; 51].

In young age, especially during school and university studies, the formation of the skeletal-muscular system occurs intensively. It is during this period that the risk of functional postural disorders is highest, which, in the absence of preventive measures, can escalate into stable spinal deformities [4; 39].

Physical culture is considered one of the most effective means of preventing these disorders. It ensures the development of the muscular corset, improves movement coordination, contributes to the formation of correct motor stereotypes, and enhances the overall level of physical fitness [3; 78].

The aim of the study is to determine the role of physical culture in the prevention of postural disorders in young people and to substantiate methodological approaches to organizing preventive classes.

The aim of the study is to determine the role of physical culture in preventing postural disorders in young people and to substantiate effective methodological approaches to organizing preventive activities.

**Literature Review.** The problem of forming a correct posture and preventing its disorders holds an important place in scientific research in the fields of physical culture, medicine, and pedagogy. According to modern research, posture disorders are observed in a significant portion of young people. Ivanov notes that up to 60-70% of students have certain deviations in the spine's condition caused by hypothyroidism and prolonged sitting [1; 27].

From a physiological perspective, posture is determined by the condition of the muscular corset, which ensures the correct positioning of the spine. Kuznetsov emphasizes that weakness of the back and abdominal muscles is one of the key reasons for the formation of postural disorders [2; 53].

In Sidorov's research, special attention is paid to the role of motor activity in the prevention of spinal deformities. The author notes that regular physical exercise contributes to the normalization of muscle tone and the formation of stable motor skills [4; 41]. Foreign studies also confirm the effectiveness of physical activity. Thus, Williams indicates that physical education programs, including exercises to strengthen body muscles and develop flexibility, significantly reduce the risk of postural disorders in adolescents [10; 84]. Johnson notes that prevention should be comprehensive and include not only physical exercises but also the formation of correct behavioral habits, such as maintaining workplace ergonomics and controlling body position [11; 112].

In the works of Carter & Brown, the importance of early prevention is emphasized: the earlier the formation of correct posture begins, the higher the probability of preventing pathological changes in the spine [12; 97].

Thus, literature analysis shows that physical culture is a key factor in the prevention of posture disorders, but its effectiveness depends on systematicity, methodological literacy, and consideration of the age characteristics of young people.

**Methods.** The methodological basis of the study is a comprehensive approach combining theoretical and empirical methods.

The following research methods were used:

**Theoretical analysis of scientific literature**, which made it possible to identify the main risk factors for postural disorders and generalize modern approaches to their prevention [3; 78].

**Pedagogical observation**, conducted during physical education classes, aimed at assessing students' motor activity, posture characteristics, and level of motor skill development.

**Comparative analysis**, used to evaluate the effectiveness of different preventive approaches, including traditional physical exercises, elements of therapeutic physical culture, and modern fitness technologies [4; 43].

**Generalization of pedagogical experience**, allowing for the identification of best practices in organizing posture prevention in educational institutions.

**Content analysis of educational programs**, aimed at determining the representation of posture-forming exercises in physical education curricula.

The effectiveness of preventive measures was evaluated based on the condition of the muscular corset, posture stability, coordination level, and the formation of self-control skills.

**Results.** The results of the study demonstrate that physical culture has a multidimensional impact on the prevention of postural disorders.

First, **strengthening of the muscular corset** was identified as a key factor. Regular physical exercises contribute to the development of the back, abdominal, and shoulder muscles, ensuring spinal stability and reducing the risk of functional deviations [2; 55].

Second, **formation of stable motor skills** plays a significant role. Repeated execution of posture-oriented exercises leads to the consolidation of correct motor patterns, which are transferred into everyday activities [4; 47].

Third, **improvement of coordination abilities** was observed. Exercises aimed at balance and coordination enhance neuromuscular regulation and the ability to maintain correct body position under varying conditions [10; 86].

Additionally, physical culture компенсирует дефицит двигательной активности, характерный для современного образа жизни молодежи, тем самым снижая влияние гиподинамии как ключевого фактора риска [1; 29].

**Discussion.** The findings confirm that physical culture is an effective tool for preventing postural disorders; however, its effectiveness depends on several conditions.

Firstly, **systematicity of training** is crucial. Irregular physical activity does not provide устойчивого профилактического эффекта.

Secondly, **methodological validity of exercises** plays an important role. Exercises must be selected with regard to age characteristics and the functional state of students.

Thirdly, prevention should be **comprehensive**, including not only physical exercises but also the formation of correct behavioral habits, such as posture control and ergonomic organization of the workplace, which is consistent with the findings of Johnson [11; 112].

The results obtained are consistent with both domestic and foreign studies, which emphasize the importance of early and systematic prevention [12; 97].

At the same time, the study confirms that physical culture performs not only a physical but also an educational function, contributing to the formation of a conscious attitude toward health.

**Conclusion.** The problem of preventing posture disorders in youth is one of the key tasks of the modern physical education system, driven by the increasing hypodynamia and changes in students' lifestyles. The conducted theoretical and analytical analysis showed that physical culture serves as an effective means of preventing these disorders, ensuring the strengthening of the muscle corset, the development of coordination abilities, and the formation of correct motor stereotypes.

A systematic approach to organizing physical education, including regularity of sessions, scientifically grounded selection of exercises, individualization of load, and the formation of a conscious attitude toward health, is of particular importance. At the same time, the prevention of posture disorders should be viewed as a comprehensive process that extends beyond educational sessions and includes the organization of students' daily activities. The prospects for further research are linked to the development of innovative physical education programs, the integration of digital technologies into the process of posture control and correction, and the in-depth study of the impact of various types of motor activity on the state of the musculoskeletal system in young people.

Thus, physical culture is the most important factor in the formation of health, ensuring not only physical development but also the prevention of functional disorders, contributing to the improvement of the quality of life for young people.

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