

# HEALTH AND PHYSICAL DEVELOPMENT OF MEDICAL STUDENTS

Beysenova Ayzada Dayrabaevna

Assistant Professor of the Department of Public Health,  
Healthcare Management and Physical Education  
Tashkent State Medical University, Tashkent, Uzbekistan

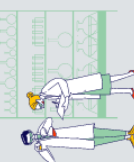
## Abstract

This paper examines the health and physical development of medical students. It analyzes key factors affecting their health, including high academic workload, psychoemotional stress, and lifestyle factors. Common disorders, such as gastrointestinal diseases, poor posture, decreased physical activity, and decreased immunity, are highlighted. Particular attention is paid to students' physical development and the problem of physical inactivity. It concludes that preventive measures aimed at improving the health and increasing the physical activity of medical students are necessary. This paper examines the health and physical development of medical students as a specific social and professional group. Studying at a medical school is accompanied by high intellectual and emotional stress, which significantly impacts the functional state of students. Key risk factors, such as chronic stress, sleep deprivation, irregular meals, physical inactivity, and intense academic workload, are analyzed.

Particular attention is paid to the prevalence of various functional and chronic diseases among students, including disorders of the nervous system, gastrointestinal tract, visual organs, and musculoskeletal system. The impact of lifestyle on students' immunity and overall health is examined. It is noted that despite a high level of theoretical health literacy, students do not always adhere to healthy lifestyle principles.

The study also analyzes indicators of students' physical development, such as height, weight, fitness level, endurance, and physical activity. It highlights the problem of insufficient physical activity and its impact on the decline of the body's functional capacity. Based on the analysis, it is concluded that the health of medical students can generally be characterized as satisfactory; however, it is negatively impacted by a combination of academic and behavioral factors. It substantiates the need to implement preventive programs aimed at optimizing work and rest schedules, increasing physical activity levels, and developing sustainable healthy lifestyle habits among medical students.

**Keywords:** Student health, physical development, medical students, physical inactivity, lifestyle, academic workload, stress, immunity, prevention, physical activity, functional state of the body, healthy lifestyle.



## Introduction

**The purpose of this study was** to examine the health and physical fitness of medical students and identify the key factors influencing their development and maintenance.

In accordance with the stated goal, **the following objectives have been defined in the work:** to study the health status of medical students; to analyze their level of physical development; to identify the main factors influencing the health of students, including academic workload, lifestyle characteristics, and the level of psychoemotional stress; to assess the level of physical activity and the prevalence of physical inactivity among students; to determine the most common deviations and diseases; and to develop recommendations aimed at improving the health and increasing the physical activity of students.

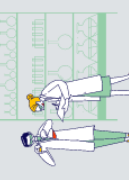
**The following methods** were used in the study : analysis of scientific and educational literature on the topic of study; student surveys to identify their lifestyle and health characteristics; observation; anthropometric measurements, including determination of height, body weight, and calculation of body mass index; as well as comparative analysis and statistical processing of the obtained data.

## Study Results

The study collected data characterizing the health and physical fitness of medical students. Analysis of the survey results revealed that a significant proportion of students experience regular psycho-emotional stress associated with intense academic workload. Most students report disrupted daily routines, including insufficient sleep and irregular meals. A health assessment revealed that students most frequently experience functional disorders of the nervous system, manifested as increased fatigue, anxiety, and decreased performance. A high prevalence of gastrointestinal diseases, visual impairments, and musculoskeletal disorders, including postural disorders, was also found.

The results of the physical development analysis indicate that the main anthropometric indicators (height and weight) of most students are within age norms. However, some students exhibited deviations in the form of underweight or overweight. Overall, their level of physical fitness was assessed as average or below average, due to insufficient physical activity. A study of physical activity levels revealed that a significant proportion of students lead a sedentary lifestyle. Only a small proportion of students engage in regular physical exercise, while the majority limited themselves to occasional physical activity or ignored it entirely. Thus, the obtained results indicate that, despite satisfactory overall health, medical students exhibit a number of negative trends related to lifestyle and academic workload, requiring the development and implementation of effective preventive measures.

Human health is the result of many factors. For children, it consists of their level of physical, mental, and functional development at different ages, the state of adaptive responses during growth, illness, the state of nonspecific resistance, immune defense, and more. During ontogenesis, childhood and adolescence are an extremely intense period of morphofunctional changes, which must be taken into account when assessing health development. At the same



time, this period is characterized by the influence of a whole range of social conditions and their frequent changes (nursery, kindergarten, school, vocational training, work). This complex interaction of biological and environmental factors shapes the health of children and adolescents.

The structure of student morbidity has also undergone significant changes. Among younger schoolchildren, the proportion of neurotic and autonomic disorders, musculoskeletal and digestive system pathologies, and allergic diseases has increased. In the structure of morbidity among senior schoolchildren, diseases of the digestive system predominate, the proportion of which has doubled. The proportion of nervous system diseases has increased 4.5 times, and the frequency of musculoskeletal pathologies has increased significantly. An increase in the prevalence of gynecological diseases in adolescent girls is noteworthy: the frequency of menstrual irregularities in girls aged 10-14 has increased by more than 50%, in 15-17-year-olds - by 35%, and inflammatory diseases of the female genital organs - by 7%. The results of a study of the distribution of modern schoolchildren by health groups show that the number of absolutely healthy children, i.e., classified as health group 1, is only 2-5%, with only functional deviations, i.e., Health group 2 accounts for 29-50% of schoolchildren, while 45-68% of schoolchildren with chronic diseases in health group 3. The proportion of children in health group 4 is 1-1.5%. Over the past 10 years, the growth rate of functional disorders and chronic diseases among schoolchildren has been 40-76%.

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