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Dynamics of changes in the structure and morbidity level of technical college students

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Purpose: to conduct a comparative analysis of the dynamics and structure of morbidity technical college students.

Material & Methods: analysis of scientific and methodical literature, the study of statistical reports of the city's 20th student polyclinic in Kharkov.

Results: it found that students major morbidity factors for noncommunicable diseases are low locomotors activity in combination with a high traffic load, deterioration of socio-economic conditions, and the growth of chronic fatigue, which leads to a reduction of compensatory-adaptation reactions of the organism. It was revealed that the highest level of prevalence have diseases of the respiratory system, vision and diseases of the nervous system.

Conclusion: these data suggest about the maximum growth rate of circulatory diseases, endocrine and urogenital systems, infectious and parasitic diseases in the last 10 years. This problem requires the development and implementation of various activities aimed at counteracting the risk factors of diseases among technical college students.

Keywords: students, morbidity, dynamics, health status.

Introduction

The problem of students' health has always been relevant, and attracted the attention of teachers and doctors [1; 3; 5; 6; 8; 9]. This is due to the high incidence of both the adult population of Ukraine and the younger generation [2; 4].

The lifestyle of modern students has its own characteristics: low motor activity combined with a large information load, deterioration of socio-economic conditions and the growth of chronic fatigue negatively affect all body systems and lead to a decrease in its compensatory-adaptive reactions. The state of health of students is directly related to the available adaptation resources [3; 5]. Reducing the protective forces of the body leads to the emergence of various diseases. In such conditions, the functioning of the body systems of students is at the limit of opportunity and often borders on pathology.

Researches of scientists [1; 2; 4; 5; 10; 11] showed that more than 70% of students have a low and below average level of physical health.

Over the past 10 years there have been significant changes in the computerization and organization of the educational process in higher education, as well as in the number of classes and in the organization of the process of physical education.

The purpose of the research

An analysis of the dynamics and structure of the incidence of students of Kharkov National University of Radio Electronics for the period from 2003 to 2016.

Objectives of the study:

- 1. Conduct an analysis of the incidence of KhNURE students for the period from 2003 to 2005 and from 2013 to 2016.
- 2. Give a comparative description of the state of health of students for the indicated periods.
- 3. Investigate the dynamics of changes in the incidence of students.

Material and Methods of the research

Over the years we have been conducting a comprehensive study of the health and morbidity of KhNURE students [7; 8; 9; 10; 11]. One of the components of our research – is to study of the level of prevalence of diseases in the main systems and organs based on the annual medical examination of students by specialists of the city student polyclinic.

Research methods: the analysis of scientific and methodological literature, the study of statistical reports of the city's 20th student polyclinic in Kharkov.

Results of the research and their discussion

We analyzed the prevalence of diseases in the main systems and organs, as a result of which, that the number of students surveyed by KhNURE for the last 10 years has significantly decreased, and the prevalence (accumulated incidence, the incidence of all existing diseases) has practically not changed. This indicates a general trend towards to deterioration in the state of student's health.

In a percentage ratio, the number of diagnosed diseases increased almost 2-fold (Fig. 2).

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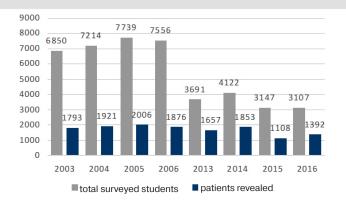


Fig. 1. Number of surveyed students and revealed diseases

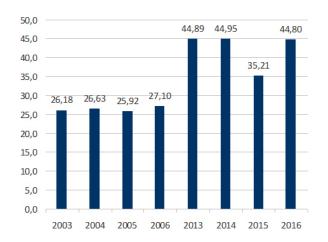


Fig. 2. Number of diagnosed diseases, %

Diseases of the respiratory system (acute respiratory disease, acute respiratory viral infection, acute bronchitis) and the organs of vision throughout the entire study period constitute a large percentage of the total disease level (Fig. 3) and are undulating.

Diseases of the nervous system occupied one of the highest prevalence sites in the period from 2003 to 2006 (after respiratory and sight diseases), but in recent times there has been a significant decrease in the level of these diseases (the average value of diseases of the nervous system decreased 3,5 times). Also significantly (4 times) decreased diseases of the musculoskeletal system (Fig. 4).

At the same time, there is an increase (in 2 times) in the level of infectious and parasitic diseases (due to an increase in the incidence of pulmonary tuberculosis and yeast colpitis), diseases of the endocrine system (obesity, diabetes and thyroid diseases) and diseases of the genitourinary system (which is especially important for human reproductive health) (Fig. 5).

These official figures are incomplete due to the large number of private clinics that provide anonymous help.

The level of diseases of the circulatory system, which includes: borderline hypertension, hypertension, other heart and vascular diseases, was one of the highest among all the universities studied and was significantly higher than the average level of morbidity in higher education institutions [9], this trend continues to persist. Regarding the period of 10 years

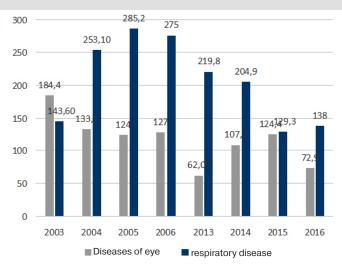


Fig. 3. The level of diseases that are undulating

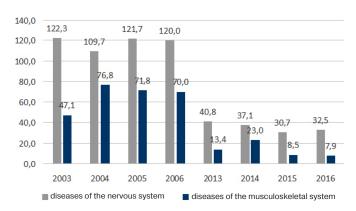


Fig. 4. The prevalence of diseases of the nervous and musculoskeletal systems

ago, the average increase in the level of these diseases increased by 80%.

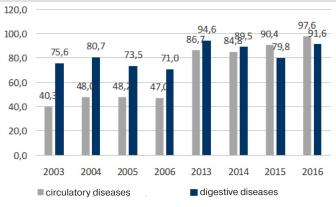
On average, the level of digestive diseases increased by 10% (due to the growth of diseases such as dyskinesia of the gastrointestinal tract, gastritis and duodenitis).

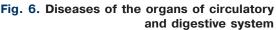
Conclusions

- 1. As a result of the analysis, it was found that throughout the study period there was a high prevalence of respiratory, eye, nervous system diseases.
- 2. The maximum growth rates in recent years are inherent in circulatory diseases, infectious and parasitic diseases, diseases of the endocrine and genitourinary systems.
- 3. Our results confirm the findings of other authors about the deterioration of the health of students in Ukraine and confirmed the urgent need to improve preventive and medical care this contingent and the need to develop and conduct various activities aimed at counteracting the risk factors of diseases among KNURE students.

Further research is planned to be conducted in the direction of investigating the level of interrelation between the incidence and level of physical fitness of students over the last decade and the development and implementation of various measures aimed at counteracting the risk factors of diseases of students of a technical university.

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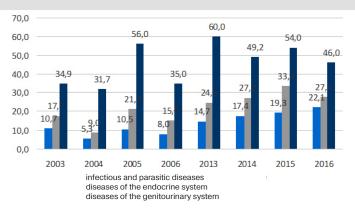


Fig. 5. Diseases which tend to increase

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