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ANALYSIS OF SOMATIC HEALTH STATE OF STUDENTS AT LESYA UKRAINKA EASTERN EUROPEAN NATIONAL UNIVERSITY

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Abstract

The research urgency is caused by necessity of studying the students somatic health level due to a sharp deterioration of health state during the last decade**.** ***The aim*** of the investigation is studying the dynamics and nosological forms of students diseases of higher educational institutions. ***The results of the work*.** It is established that the incidence of students in the dynamics of 2010–2016 is growing rapidly. The diseases of cardiovascular system, stomach and digestive organs, musculoskeletal system are the most common. In the analysis of nosologic forms of diseases for a gender characteristics, the percentage of women with pathology, from the first to the fourth year study within the specified research period is significantly more than men. ***Conclusions.*** The state of students health is unsatisfactory. This requires the search for new approaches for setting issue of youth health.

Key words: disease, special medical groups, students, nosological forms, somatic health.

Василь Пантік. Аналіз стану фізичного здоров'я студентів Східноєвропейського національного університету імені Лесі Українки. ***Актуальність дослідження*** зумовлена потребою вивчення рівня соматичного здоров'я студентської молоді внаслідок різкого погіршення стану здоров'я протягом останнього десятиріччя. ***Мета дослідження*** – вивчити динаміку та нозологічні форми захворювань студентів вищих навчальних закладів. ***Результати роботи***. Установлено, що рівень захворюваності студентів у динаміці 2010–2016 р. стрімко зростає. Найбільш поширені хвороби серцево-судинної системи, шлунку та органів травлення, опорно-рухового апатату. Під час аналізу нозологічних форм захворювань за гендерними ознаками відсоток жінок I–IV курсів із патологією протягом зазначеного періоду дослідження значно більший, ніж чоловіків. ***Висновки*.** Стан здоров'я студентів є незадовільним. Це вимагає пошуку нових підходів до вирішення питання здоров'я молоді.

Ключові слова: захворюваність, спеціальні медичні групи, студенти, нозологічні форми, соматичне здоров'я.

Василий Пантик. Анализ состояния соматического здоровья студентов Восточноевропейского национального университета имени Леси Украинки. ***Актуальность исследования*** обусловлена необходимостью изучения уровня соматического здоровья студенческой молодежи вследствие резкого ухудшения состояния здоровья в течение последнего десятилетия. ***Цель исследования*** – изучить динамику и нозологические формы заболеваний студентов высших учебных заведений. ***Результаты работы.*** Установлено, что уровень заболеваемости студентов в динамике 2010–2016 гг. стремительно растет. Наиболее распространенные болезни сердечно-сосудистой системы, желудка и органов пищеварения, опорно-двигательного аппарата. При анализе нозологических форм заболеваний по гендерным признакам процент женщин I–IV курсов с патологией в течение указанного периода исследования значительно больше, чем мужчин. ***Выводы.*** Состояние здоровья студентов является неудовлетворительным. Это требует поиска новых подходов к решению вопроса здоровья молодежи.

Ключевые слова: заболеваемость, специальные медицинские группы, студенты, нозологические формы, соматическое здоровье.

Introduction. The problem of maintaining health becomes global in recent decades. The health of the population is an indicator of spiritual, social, economic and medical-biological level of welfare of civilized country. As shown by numerous scientific researchers, in recent years the level of somatic health of young students significantly deteriorated. It is associated with a number of objective and subjective reasons. In our view, many factors influence the formation of the health of students in the learning process. These factors can be conditionally divided into two groups. The first group includes factors, which directly related to the educational process (the length of the school day, workload, due to a schedule, break between classes, status of the classrooms, etc.). The second group of factors is subjective, personal characteristics, which include diet, physical activity, recreation organization, presence or absence of bad habits, etc. [1; 3; 8; 15].

The negative impact on the health of young people has a low social level, inappropriate conditions of training activities, the lack of incentive mechanism of a healthy lifestyle, decreased interest in physical activity, lack of stimulation mechanism of a healthy lifestyle, which leads to lower immunity and increase in

the number of infectious diseases, diseases of the musculoskeletal system, respiratory and cardiovascular systems, the spread of drug abuse, reducing the reproductive potential of young people [2; 5; 9; 11].

European vector of social development and reform of higher education in Ukraine aims to bring its content to international standards. It significantly changed the organization of teaching in higher educational institutions, has formed a new outlook on the development of the education system, its capabilities and prospects. This, in turn, puts high demands on the health status of students. In the higher educational institutions there is a tendency to decline in motor activity of students as a result of the intensification of educational process. Chronic shortage of motor activity in the mode of life of young student poses a threat to their health and normal physical development. The problem of maintaining health in the last decade has gained priority status, including young students as socially important part of society and reproductive potential of state [1; 4].

In studies of many authors there is a clear trend of poor health of young people [2; 6; 10; 17]. Due to the scientific research, in Ukraine, about 90 % of students have deviations in health state, 50 % – poor physical fitness, in 70 % of students there is a low level of motor activity [3; 4; 15; 16].

To the structure of these problems the first place is still occupied by chronic fatigue (50 %), depressed mental condition (25 %), slight indispositions (9 %), headache (12 %) and other factors (4 %). Nowadays, the health of students has the negative consequences of national importance [2; 12; 13].

In the context, the topical issue is studying of health state of students.

The aim of the investigation is to determine the level of somatic health state of higher educational institutions and to analyze the dynamics and nosological forms of students diseases in 2010–2016 years.

Material and Methods of Analysis. Analysis and synthesis of the literature, teaching observation, analysis of medical records of students. The incidence of students at the Lesya Ukrainka Eastern European National University studied based on medical records, the number of requests for medical care, chronic diseases and medical certificates of temporary exemption from classes. We evaluated the incidence of both general and specific for each class (International Statistical Classification of Diseases and Related Health Problems), based on nosology scheme proposed by the World Health Organization. The research, which took place during the years 2010-2016, was attended by 13,177 students.

The Result of Research. Discussion. In our research we studied the health state of students of I–IV courses at the Lesya Ukrainka Eastern European National University from 2010 to 2016.

The analysis of diseases of young students viewed on medical records of students' clinics at the Lesya Ukrainka Eastern European National University and municipal institution «Lutsk Center of Primary Health Care». Due to the analysis of the results, it can be argued that not all students underwent planned medical examination, and after health reform in 2015, the number of people who underwent it residence of the family doctor significantly decreased (table 1).

Table 1

Number of Checkups of Students at the Lesya Ukrainka Eastern European National University

Categories /Years	2010	2011	2012	2013	2014	2015	2016
1	2	3	4	5	6	7	8
Subject to a medical examination, including people:	8050	8010	7474	7093	6651	6501	6438
Number of people who have not undergone the medical examination	1543	1407	871	413	959	1574	1712
Examine persons	6507	6603	6693	6680	5692	4927	4726
Persons with temporary disability	3458	3657	3715	2913	4837	2445	1906
Revealed chronic pathologies, *persons*	1844	1822	1921	1910	1858	1879	1943
Relatively healthy contingent, *persons*	1205	1124	1057	1003	997	903	877
Subject to medical examination % including:	100	100	100	100	100	100	100
Number of people who have not undergone the medical examination, *%*	19,17	17,57	11,65	5,82	14,42	24,21	26,59

Table 1

1	2	3	4	5	6	7	8
Examine persons, % including:	80,83	82,43	89,55	94,18	85,58	75,79	73,41
– Persons with temporary disability, %	53,14	55,38	55,51	43,61	84,98	49,62	40,33
– Revealed chronic pathologies, %	28,34	27,59	28,70	28,59	32,64	38,14	41,11
– Relatively healthy contingent, %	18,52	17,02	15,79	15,01	17,52	18,33	18,56

As seen from this table, the number of people who have not undergone the planned medical examination do not have a clear trend and is chaotic. The main reason that leads not to visit doctors, as indicated by students – is irresponsible attitude to their health. They motivated it primarily by the fact that they do not feel significant variations in health, do not want to stand in queues during medical examinations, so there is no need to visit a doctor. However, if there are any pathology, they will necessarily go to the doctor. It is also worried that the percentage of people in this category increased in years in dynamics from 19,17 % in 2010 to 26,59 % in 2016.

It can be also argued that absolute figures of the number of persons with temporary disability dynamics decreased slightly – from 53,14 % to 40,33 % in 2016. However, the percentage of people with chronic disorders has increased significantly – from 28,34 % in 2010 to 41,11 % in 2016. The dynamics of indicators makes it possible to assert that the percentage of people in this category is a clear trend in the annual increase in chronic pathologies since 2014, and these are the obvious candidates for health to special medical group.

The relatively healthy people have minor fluctuations both upwards and in the downwards every year. But over the years the percentage of people in this category has not changed significantly: from 18,52 % in 2010 to 18,56 % in 2016.

The structure of the lymphoma disease forms of students is also disturbing. The following pathologies are on the top for the last years (fig. 1).

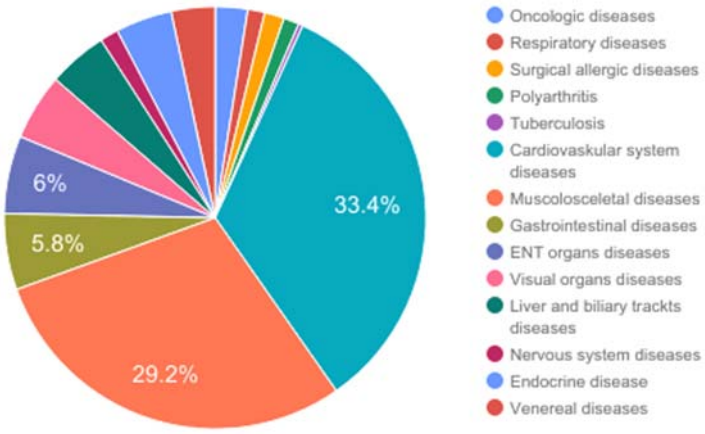

Figure 1. *The Statistic of Students Diseases for 2010–2016 in Lesya Ukrainka Eastern European National University*

The results of the study show that cardiovascular system diseases are the most spread (30,9 %), the second place is taken by musculoskeletal diseases (27,0 %),than go gastrointestinal (5,4 %), ENT organs diseases (5,5 %) and others. The lowest percentage among the students is observed in TB disease (0,3 %) and polyarthritis (1,1 %). What concerns the most is that the dynamics of nosological forms disease data fluctuates both upward and downward, but during the observation the data remains unchanged. The most spread diseases, the students suffer from are the following: visual organs disease (4,7 %), nervous system diseases(4,3 %), liver and biliary tract infection (4,2 %), endocrine diseases (4,0 %), venereal system diseases (3,1 %), skin diseases (2,4 %), oncologic diseases(2,3 %), respiratory diseases (1,2 %) and surgical-allergic diseases (1,4 %).

Having analyzed the overall growth rate of incidence from 2010 (22,91 %) to 2016 (30,17 %), a significant increase in the incidence is observed (7,26 %).

Taking into account gender indicators, the number of females, who have certain diseases, significantly exceeds the number of males diseases. So, during the study, the dynamics of the percentage of men among people with pathologies has not significantly increased: 7,34 % vs. 9,77 % in 2016, but there is an increase – 2,43 %. Meanwhile, the indicator among women is slightly higher: 15,59 % vs. 20,52 % in 2016. The total increase is 4,93 %, which is almost twice higher than the dynamics of disease among men.

Table 2

Quantitative and Gender Incidence Rate Indicators Among LUEENU Students During 2010–2016

Indicators		2010	2011	2012	2013	2014	2015	2016	Total
Total number of students of the university	total	8050	8010	7474	7093	6651	6501	6438	50217
Students, detected to have a disease, *q-ty*	m	591	618	679	656	623	573	629	4369
	f	1255	1203	1244	1253	1237	1308	1321	8821
	total	1844	1825	1920	1908	1859	1880	1945	13181
Incidence rate, *%* converted to number of students	total	22,91	22,75	25,70	26,93	27,94	28,90	30,17	26,24
Incidence rate, *%* converted to number of university students	m	7,34	7,72	9,08	9,25	9,37	8,81	9,77	8,70
	f	15,59	15,02	16,64	17,67	18,60	20,12	20,52	17,57
	total	22,91	22,78	25,69	26,90	27,95	28,92	30,21	26,25

The analysis of the study results confirms the general trend of decreasing of students physical health level during last years. It has been noticed that the level of physical health of young people, who are regularly engaged in exercises and sport, has been increased twice. Therefore, we think that the physical condition of students may be significantly improved due to physical activity increase, taking into account gender, age and morphological features.

Conclusions and recommendations for further research. A comparative analysis of the physical health of students makes it possible to assert that the number of students with chronic diseases is steadily growing, and it will increase the number of people who were included special medical group because of their medical status. The percentage of women`s disease is much more higher than the one of men`s.

Poor health indicators of students can be connected in first place with low physical activity, a violation of the NPT regime, a violation of the usefulness of nutrition, inadequate conditions of training activities, as well as neglect to their health and the presence of harmful habits.

That is why one of the priorities of the current stage of education of education is the formation and development of modern health culture of students, the formation of knowledge, values and practical skills to ensure effective management of the vital forces of the body at the maximum realization of physical and physiological capabilities.

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