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Hygienic assessment of lifestyle features and adaptive resources of the students' organism depending on the level of motor activity

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In the course of scientific research conducted in recent years, it was found that the state of the usual conditions of stay, which does not meet the regulatory requirements, is one of the leading risk factors for the development of negative shifts in the functional capabilities of the organism, the formation of maladaptation phenomena and negative changes in health [1, 2, 3, 4, 5]. That is why an important place in the study, which is devoted to the hygienic assessment of the motor activity of students, should be occupied by the issues regarding the implementation of the hygienic assessment of the lifestyle, daily routine and adaptive resources of the organism of young women and young men who are in the conditions of modern institutions of higher education [6, 7, 8, 9, 10].

In the course of scientific research, 150 female students and 135 male students, who were in the conditions of a modern medical institution of higher education, were divided into 3 comparison groups according to the amount of motor activity, namely: 1st group – the level of motor activity up to 9000 kJ in young women and up to 11,000 kJ for young men; 2nd group – level of motor activity from 9000 to 11000 kJ in young women and from 11000 to 13500 kJ in young men; 3rd group – the level of motor activity over 11,000 kJ in young women and over 13,500 kJ in young women and young men.

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It was determined that during the performance of educational activities in the conditions of a medical institution of higher education among 80.0–84.0% of young women and 73.2–86.5% of young men exceeded 7–8 hours, the total time spent on homework at home was 56, 0–64.0% of female students exceeded 4 hours, in 49.9%–55.5% of male students it was from 3 to 4 hours and more than 4 hours, which in both cases significantly exceeded the value of hygienically justified normative values. As the preferred duration of time spent in the fresh air on educational days, time within the range of less than 1 hour and between 1 and 2 hours should be noted. It was necessary to recognize such forms as the use of breaks to prepare for the next pair (young women) and the use of passive forms of rest (young men) as the predominant form of organization of rest during breaks between educational courses.

It was found that the duration of sleep in the vast majority of female students was from 5 to 6 hours (22.0–38.0%) and from 6 to 7 hours (28.0–55.0%), in the vast majority of male students – from 6 to 7 hours (40.0–53.0%), which did not correspond to the values of the established normative indicators. From 66.0% to 76.0% of female students and from 51.1% to 80.0% of male students ignored the performance of morning hygienic gymnastics exercises, from 72.0% to 78.0% of female students and from 64.4% to 80.0% of students – ignored the use of hardening procedures.

From 28.0 to 42.0% of young women and from 24.2 to 31.2% of young men considered the level of neuro-emotional stress during educational activities to be significant. Evaluating the nature of studying at a higher education institution, it should be emphasized that the majority of the surveyed persons defined it as stressful and moderately stressful. Among them, 50.0% and 42.2% and 32.0% and 33.3%, respectively, among young women and young men belonging to the 1st group of motor activity, 40.0% and 40.0% and 38.0% and 35.5%, respectively, among young women and young men who belonged to the 2nd group of motor activity, 46.0% and 42.2% and 34.0% and 37.7%, respectively, among young women and young men who belonged to 3rd groups of motor activity.

The data of the hygienic assessment of the peculiarities of the organization of daily activities and the way of life of students, depending on the level of motor activity, testified to the fact that the smallest number of people with negative subjective (degree of stress of the educational

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process, level of neuro-emotional tension, peculiarities of well-being at the end of educational and weekends days, etc.) and objectively (incidence rate, etc.) significant manifestations were registered among young women and young men whose daily energy expenditure ranged from 9,000 to 11,000 kJ among the former and from 11,000 to 13,500 kJ among the latter. In such conditions, the largest number of correlations of different strength and direction ($rs=0.28-0.52$, $p<0.05-0.001$) was observed between individual characteristics of the organization of educational and extracurricular activities and indicators of adaptive resources of the organism and state of health young women and young men, and precisely such a phenomenon is a sign of a higher level of interaction of individual components of a multidimensional system in which the processes of formation, self-organization and development take place, as well as their most profound and intimate character. A significantly smaller number of correlations between the studied indicators was typical for students whose daily energy expenditure level was more than 11,000 kJ among young women and more than 13,500 kJ among young men, and, especially for young women and young men, whose daily energy expenditure level was, respectively, 9,000 kJ and up to 11000 kJ.

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