



Харківський національний медичний університет

Кафедра фізичного виховання та здоров'я

**III Науково-практична заочна конференція
з міжнародною участю
«Фізична активність і якість життя
ЛЮДИНИ»**

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«Фізична активність і якість життя ЛЮДИНИ»

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міжнародною участю
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1. <http://sportmedicine.uni-sport.edu.ua/article/download/85274/80931>
2. <https://www.sciencedirect.com/science/article/pii/S0306987719309831>
3. <https://www.omicsonline.org/canada/chronic-fatigue-syndrome-peer-reviewed-pdf-ppt-articles/>

Anshu

**EXPRESS ASSESSMENT OF THE FUNCTIONAL STATE
OF THE CARDIOVASCULAR SYSTEM OF MEDICAL
STUDENTS
BY MEANS OF FUNCTIONAL TESTS**

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One of the most important strategic tasks of the state is to preserve and strengthen health of student youth. Annual medical examinations of students going to higher education educational institutions, show a significant deterioration in their functional status, especially cardiovascular system (CVS), lag in physical development, and a high percentage persons with chronic diseases. These tendencies are especially pronounced in relation to medical students. The activity of a medical student is one of them

emotionally stressful types of work, which is reflected at the level of their mental and somatic health.

Deviations in the state of health, formed in adolescence, reduce the possibility implementation of important social and biological functions when joining the socially active period of life. In this regard, it is important to assess the functional state of students, primarily the cardiovascular system as an indicator of the autonomic nervous system. The purpose of the study is to assess the functional state of the cardiovascular system of students first year with the help of functional tests of Rufier and Martin-Kushelevsky.

Materials and research methods. The research was conducted on the basis of Kharkiv National Medical University. All participants were first-year students. To determine the Rufier index, participants had their heart rate (HR) measured 15 seconds before and after exercise. Assessment of heart function was calculated by the appropriate formula. The results were evaluated on a scale from 1 to 15. To determine the type of CCC response, heart rate and blood pressure before and after exercise were evaluated. Then the analysis of the received data was carried out.

Research results and their discussion. It should be noted that the Rufier index was used to assess the performance of the heart during physical activity, the Martine-Kushelevsky test - to assess the restorative processes of the CCC during exercise. The analysis of the obtained data allowed to divide the students into three groups: 30.9% had a normotonic type of reaction; 45.6% of participants had hypotonic and 23.5% hypertensive type. The participants in the first group had a Rufier index of 6.7 ± 0.5 , the second group - 7.9 ± 0.7 and the last - 9.6 ± 0.4 .

That is, a third of first-year students who had a hypertensive type of reaction have an integrated CCC in the "voltage" range, which indicates an increased load on the blood supply with some reduction in variability, most likely due to most energy expenditure by students to prepare for external independent evaluation and to be in stressful situations due to the high mental load at the university.

Conclusions. In our work, we showed that one third of students have functional stress of the cardiovascular system. The adaptive activity of their body is carried out to the limit, which may be accompanied by the development of certain disorders. The state of functional stress of adaptation mechanisms is the initial stage of the border zone between health and disease. It is necessary not to waste time and to have time to make correction.

Sivakumar Nekha

**HARVARD STEP TEST IN ASSESSING THE ADAPTIVE
CAPACITY OF STUDENTS DEPENDING FROM THEIR
LEARNING SUCCESS**

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In the modern practice of medical and biological control over the health of students is essential the place is occupied by functional diagnostic methods, which involve the establishment of the level functional state of the organism and its adaptive