## Section Ceknia VIII

### EDUCATION IN BIOMEDICINE, TELEMEDICINE AND E-HEALTH

#### ОСВІТА В ГАЛУЗІ БІОМЕДИЦИНИ, ТЕЛЕМЕДИЦИНИ ТА ОХОРОНИ ЗДОРОВ'Я

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# THE PROBLEM OF PRESERVING THE PHYSICAL AND MENTAL HEALTH OF THE CIVILIAN POPULATION BY MEANS OF PHYSICAL EDUCATION IN EXTREME WARTIME CONDITIONS

**Abstract.** In the article the problems of physical training of civilian population are designated, an attempt is made to determine the direction of physical training in today's conditions, which would be able to prepare civilian population to act in extreme wartime conditions as quick and effective as possible.

**Keywords:** physical education, physical training, civilian activity, extreme conditions, wartime.

Changes in the socio-cultural situation in Ukraine, which is associated with a radical restructuring of the economic, political and military doctrine in society, requires adequate transformations in physical education. The problem arises against the background of the need for special physical preparedness of the civilian population to operate in the conditions of the country's combat operations. Moreover, according to the data of draft commissions of military commissariats, only one out of 4 conscripts to the Armed Forces of Ukraine has proper physical and mental preparedness [2].

It should be noted that mental and physical health are in close correlation (on some occurrences) [4]. Yes, a reliable correlation between the level of physical fitness of officers and the results of their performance of psychometric tests has been determined [5, 6]. A greater magnitude of the correlation (p < 0.05) and a greater change in this magnitude after exposure to sub-extreme factors (p < 0.05) is observed in the group of officers with a lower level of physical fitness [1].

Conditions of today in Ukraine are characterized by significant intensity of mental tension and a wide variety of situations that can lead a person into a state of affect, complete disorientation in space and situation. In such conditions it is very important to have the skills of self-control, to be able to self-manage his feelings and behavior, to make adequate decisions. The lack of practice of real armed conflicts in our country suggests that physical and moral preparedness to act in extreme conditions of war among the majority of the population does not meet the necessary requirements. This finds its manifestation in poor orientation in the situation in conditions of constantly arising extreme situations, uncertainty in actions, insufficient efficiency of use of own physical potential, etc. All this can lead to the loss of life, which is the highest social value defined by the Constitution of Ukraine [3].

Almost simultaneously with the introduction of Russian troops into the territory of Ukraine, resistance from the civilian population was organized, which completely eliminated the possibility of their gradual physical and psychological adaptation to the combat conditions of activity. The

speed of combat operations, their fierce nature, survival in extreme conditions with a real threat to life do not allow us to hope that the skills developed under normal conditions will gradually acquire the necessary sustainability in adapting the civilian population to the combat environment. Consequently, in the future it will be necessary to take into account that the abilities and skills that have been mastered in the process of physical education during peacetime should become resistant to the influence of military condition factors even before the beginning of combat operations, which is the purpose of the process of special physical training of students to act in extreme conditions.

In today's extreme conditions in which our state finds itself, the purpose of physical education is to bring it to a qualitatively new level, which can provide the maximum improvement of physical condition, physical and mental health of different segments of the population. In this context, physical education is presented as a system of interrelated activities undertaken to achieve socially significant goals, such as ensuring an appropriate level of self-defense; implementation of volunteer activities, which may require a sufficiently high level of manifestation of both physical and mental endurance; survival skills in extreme conditions, etc.

In this situation, we believe that the process of physical training in educational institutions should include tasks for the formation of readiness to act in extreme conditions by means of physical culture. This can be determined by the formation of activity algorithms in the individual consciousness of each trainee through the simulation of extreme conditions of combat activity. It is necessary to develop a set of tools to reduce the degree of mental uncertainty on stressful situations, to develop speed and accuracy, analysis and decision-making in extreme conditions.

Physical training as an important and integral part of training and education, along with the development of physical qualities, improvement of necessary motor skills, health promotion and maintenance of the ability to work of various segments of the population, has a wide range of opportunities and a huge arsenal of means to improve the ability to act in various extreme conditions [6, 7]. However, in the theory and methodology of physical education in educational institutions, where didactic aspects prevail over educational ones, this issue has not yet been given sufficient attention.

In fact, the means of physical education are predominantly used only to improve the individual level of students (pupils) in the aspect of physical fitness. This approach to the assignment of physical exercises limits the possibilities of solving problems related to action in a military environment, which has affected the lack of special literature aimed at revealing the problems of using physical education means as the most important component of physical and social adaptation of young people during wartime and forming special knowledge and skills to overcome unexpected obstacles related to the features of extreme situations.

The analysis of conceptual provisions allows us to identify typical factors that can cause intense negative reactions in the population during wartime. These include: constant danger to life, exacerbated by the possibility of nuclear and other new types of weapons; great physical stress, various wanderings and problems that disrupt the mode of life; great nervous and mental stress associated with intense mental activity; emotional stress caused by novelty, complexity and responsibility of the work performed in conditions of acute shortage of time to make the best decision to action; the impact of emotional factors associated with unpredictable situations [1, 7].

These factors are associated with the manifestation of moral-will qualities and the variability of skills to act in existing situations. Improvement of preparation of the civilian population in this component is more consistent with the intensification of the use of means of physical education.

The analysis of theoretical and methodological provisions on the use of means of physical training of different strata of the population to act in extreme conditions allowed us to identify in the discussed sphere the existing contradictions

- between the dependence of human performance on his ability to act actively in extreme conditions and the lack of a practical set of tools aimed at the formation of special knowledge, skills and abilities in this area of training;
- between the potential possibility of solving the problems of preparing the population to act in extreme conditions with the help of physical culture and the focus of physical training in educa-

tional institutions only one-sided development of physical qualities, without purposeful formation of special skills of successful overcoming of extreme conditions of public activity.

The ways to resolve these contradictions are seen in improving the content and technology of the educational process of physical education in educational institutions through the inclusion of effective teaching tools.

Of the many questions arising in this connection, the main one is the question of how the most effective should be organized pedagogical process of preparation of different segments of the population, whose social activity today is associated with extreme conditions. The answer to this question requires the study and comprehension of the conditions for improving the system of physical education and physical training, the search for effective ways, means and methods of resolving the identified contradictions.

#### References

- 1. Alimpiev A.M., Pevtsov G.V. Peculiarities of the Russian Federation's Hybrid War against Ukraine. *Science and Technology of the Air Force of the Armed Forces of Ukraine*. 2017. № 2. P. 19–25.
- 2. Glazunov S.I. Analysis of the relationship between the indicators of the mental state of officers and their physical fitness under different conditions of activity. *Scientific Journal of the National Pedagogical University named after M.P. Dragomanov.* 2017. URL: http://enpuir.npu.edu.ua/handle/123456789/20168
- 3. Ivanov V. I., Gubka P. I. Effective ways of education of reliability in the actions of future soldiers. *Pedagogics, psychology and medico-biological problems of physical education and sport.* 2001. №3. P. 32–39.
- 4. Constitution of Ukraine. (1996, June). Retrieved from https://zakon.rada.gov.ua/laws/show/254κ/96-вр#Text
- 5. Podhorna V.V., Smoliakova I.D. & Apenko D.V. Influence of strength training on psychomotional state of students. *Perspectives and Innovations of Science*. 2021. № 5(5). P. 542–554.
- 6. Popovich O.I., Fedak S.S. & Romanchuk S.V. Special physical training as a means of adaptation to stress-factors of training and combat activity of servicemen. *Pedagogic, Psychology, Medical and Biological Problems of Physical Upbringing and Sport.* 2010. T. 11. P. 88–91.
- 7. Topol O. V. Socio-psychological rehabilitation of participants of the anti-terrorist operation. *Vest-nik Chernigov National Pedagogical University*. 2015. №. 124. P. 230–233.