

Sakhnenko Anna Vasylivna

postgraduate student,

Sumy State Pedagogical University named after A. S. Makarenko, Ukraine

DEVELOPMENT OF PROFESSIONALLY IMPORTANT PHYSICAL QUALITIES OF STUDENTS OF AGRARIAN SPECIALTIES BY MEANS OF PROFESSIONAL-APPLIED PHYSICAL TRAINING.

The main task of the educational process in higher education institutions is training of qualified specialists for successful professional activities. In the system of physical education of students this task can be solved with the help of professional-applied physical training of future specialists. Its means create conditions for reducing the period of adaptation to working conditions, increasing professional skills, achieving high professional ability, improving health, increasing adaptive capacity, reducing injuries [1].

Recently, in the field of agrarian industry there has been a shortage of skilled personnel capable of meeting the requirements of modern production [3, p. 27]. Modern working conditions in the agro-industrial complex are characterized by increased complexity and intensity of work, speed and accuracy in decision-making, motor activity of a person, and also require manifestation of mental qualities [4]. Taking into account the requirements for psychophysical preparedness of future agrarians will increase the quality of professional-applied physical training in higher education institutions.

In the works of R. T. Raievskiy, S. M. Kanishevskiy, L. P. Pylypei, V. P. Krasnov, the requirements to the natural sciences – agrarian group of specialties are considered. The future agrarian must have an appropriate level of development of physical qualities: general, strength, speed endurance, explosive force, shoulder

girdle strength, static endurance of neck and back muscles, coordination abilities. Equally important is the level of development of mental qualities: emotional stability, ability to focus attention, creative thinking, analytical abilities [5, 7-9].

Development of the above mentioned professional qualities of future agrarians is carried out under the targeted influence of means of professional-applied physical training, which include general means of physical culture, specially selected in accordance with the tasks of professional-applied physical training of specialists in a particular field of specialties. According to their direction the means of professional-applied physical training are divided into: applied physical exercises or separate elements of various sports; applied and profiled sports; recreational forces of nature and hygiene factors; aids that provide quality of the educational process of professional-applied physical training [2, 6-9].

Therefore, taking into account the above mentioned, we will consider the influence of the means of professional-applied physical training on the development of professionally important physical qualities of students of agrarian specialties. Formation of general endurance is ensured by implementation of the cyclic exercises of low and average load in the mode of heart rate up to 155 beats / min. The practical indicator that corresponds to the mode of general endurance is overcoming the second half of the proposed load and control of heart rate [6, 9].

Development of strength endurance is provided by exercises with encumbrances, resistance to the power of weight, resistance to the external environment, performed mainly in the form of circular training and a method of repeated efforts with multiple overcoming resistance to achieving a state of significant fatigue. Pause for rest between attempts is from 30 seconds to 2 minutes. It is recommended to do smaller pauses between exercises for small muscle groups, and long pauses – between exercises that involve large muscle groups [6-9].

Developing speed endurance, the main focus should be on the number of exercises with a maximum speed. Training does not stop even when there are first symptoms of lowering the speed of the proposed exercises. The repeated method is used in series with rest from 30 seconds to 10 minutes. The optimal condition for

determining this mode is the repeated exercise at the end of the phase of rapid reduction of heart rate (HR) 120-135 beats/min [6-9].

In the mode of development of dynamic force is used the load, which does not exceed 50 % of the individual maximum, with a number of repetitions not more than 10 and a rest of 0,5–1 min between repetitions and up to 3 minutes – between series. In the development of explosive force it is recommended to perform explosive, jumping, striking exercises in the background of complete recovery. The striking and variational method of force development is used [6-9].

Development of coordination abilities requires implementation of exercises for the development of equilibrium, without visual orientation and with improvement of the technique of complex coordination exercises (gymnastics, acrobatic exercises, etc.) [6-9].

Resistance to temperature fluctuations is achieved by physical exercises performed in the open air (walking, Nordic walking, running, sports games) at elevated or lowered ambient temperatures [2, 9].

Concentration and stability of attention can be successfully developed by performing the following exercises: various tasks for signal, ball driving on a certain route, ball games, chess and draughts. Emotional stability should be brought up under the influence of exercises that require volitional behavior in conditions of emotional stress (relay race, barrier, gymnastics exercises) [7, 8].

Consequently, taking into account the requirements for psychophysical preparedness and peculiarities of the future professional activity of the natural sciences and agrarian group of specialties and appropriate means of professional-physical training, it is possible to increase professional skills and ability to work, the level of health, resistance to diseases, and also to improve adaptation of students of agrarian specialties to conditions of future professional activity.

References

1. Bobyreva, M. M. Improving the methodology of professional-applied physical training of medical students: PhD thesis abstract: specialty 13.00.04 “Theory and methods of physical education, sports training, recreational and adaptive physical culture”. Almaty, 2008. 27 p.
2. Bondarenko I. H. Means of professional-applied physical training in the physical education of students-ecologists: PhD thesis abstract: specialty 24.00.02 “Physical Culture, Physical Education of Different Groups of the Population”. Dnipropetrovsk, 2009. 17 p.
3. The state personnel policy in Ukraine: state, problems and prospects of development. K.: NAPA, 2012. 72 p.
4. Karabanov Ye. O. Professional-applied physical training of future specialists in agro-industrial production: Pedagogy, psychology and medical and biological problems of physical education and sports. 2015. № 1. P. 34–38.
<http://dx.doi.org/10.15561/18189172.2015.0107>
5. Krasnov V. P. Physical education: psychophysical requirements for specialists in agro-industry: teaching manual for higher education institutions. K.: Agrarian Education, 2000. 133 p.
6. Mudrik V. I. Organizational-methodological bases of physical education of students of higher education institutions: monograph. K.: Pedagogical thought, 2010. 192 p.
7. Raievskiy R. T. Professional-applied training of students of higher education institutions: Science and Technology. Odessa, 2010. 380 p.
8. Raievskii R. T. Physical education as an integral part of the education of young students: Theory and Practice of Physical Education. 2002. P. 31–37.
9. Pylypei L. P. Professional-applied physical training of students: Monograph. Sumy: SHEI “UBA NBU”, 2009. 312 p.