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# DRAFTING OF INDIVIDUAL PROGRAMS FOR MEDICAL COLLEGES USING THE ELEMENTS OF HORTING

Relevance of the problem. The search of new ways to improve the method of physical education for students helped to develop and draft individual programs for medical colleges using the elements of horting. The solution of this task will be reached by the implementation of new methods for the development of physical qualities of students in medical colleges as the basis for physical training for independent living. Thus, the pedagogical task, which is set for the teacher of physical education, is aimed to develop a method, which will develop physical qualities for students with the implementation of new methods. Such method is an actual and timely using of the elements of horting (horting is national sport in Ukraine, founded in our country in 2008. The official recognition of horting took place under the Order No. 3000 of Ministry of Ukraine for Family, Youth and Sport to the Independence Day of Ukraine from August 21, 2009. The development of the rules of competitions for horting, as well as its qualification system, are directed solely at the natural invention of self-defense techniques and sporting techniques of the single-event, initiated by famous sportsmen E. Eremenko – an alumnus of the Dnipropetrovsk State Institute of Physical Culture and Sports, Department of horting, combat and weightlifting) [5, p. 6].

The term "physical quality" reflects the capabilities of the human body based on its natural possibilities. To sum up, physical qualities are developed in the process of education and purposeful training of the human impulses that determine its ability to perform successfully certain motor activity. For example, to overcome a large external resistance, first of all, the muscular strength; to overcome a short distance during a little time; long-term and effective physical work which requires stamina; flexibility is required for high amplitude motion; and agility required for the rational restructuring of motor activity according to the changing conditions [4].

**The purpose** of this article is the implementation of individual programs for medical colleges using elements of horting, which improve the development of physical qualities of students.

**Presentation of the main research's material.** The main factor, which influence the development of physical qualities, is the physical activity that a person receives doing the physical exercises. Physical loading – this is a certain measure of the impact of human motor activity on the body, which is accompanied by an increase (relative to the state of rest) the level of its function. To achieve the effect improving physical qualities is possible only by a clear dosage of loading.

So, in each case it is necessary to ensure that volume and intensity which will give the best growth of developing quality. Such load is called influential.

The intensity can be adjusted by changing: the speed of movement, the magnitude of acceleration, the coordination complexity of exercises, the speed of exercises, the number of repetitions per unit time, the magnitude of stress, as a percentage of the personal record in a particular exercise, the amplitude of movements (the larger it is, the greater is the intensity of the load ), the resistance of the environment (terrain, wind, water flow, etc.), the amount of additional encumbrance, mental tension during the exercise.

If the intensity is on the lower border of the important zone, the appropriate physical qualities develop slowly, but they reach a high level of strength. The effects of high intensity give a rapid increase in motor qualities, but achieved adaptations are not so stable. In individuals, who have a low level of physical development, each load has a complex impact on adaptive processes (in adolescence, adaptation changes take place faster than in adults).

The basic scheme of constructing of the method of motor qualities' development should include the following operations:

1. Setting of educational objectives, which aimed to analyze the physical state of students and specific definition of the basis of motor characteristics and its level, which must be developed.

- 2. The selection of the most effective physical exercises in order to solve the problem (with a specific contingent of students).
- 3. The selection of appropriate methods of exercises according to preparation of students and quality, which can be improved.
- 4. Determination of the place for exercises in a separate field of occupation and in the system of adjacent fields of occupation in accordance with the regularity of the transfer of motor qualities.
- 5. Determination of the duration of influence on the development of the specific quality and the necessary number of training sessions.
- 6. Determination of the total value of training loads and their dynamics in accordance with the regularity of adaptation to training effects [4].

During the process of students' physical education while using the elements of horting, following main objectives are resolved: improvement of health, increasing student's physical state; possession of vital motor skills and abilities, in particular those which obtain an applied nature; education moral qualities of personality and patriotic education of students under health and cultural traditions of the Ukrainian people, the formation of posture, development the qualities of speed, agility and coordination, learning special preparatory exercises of horting, learning the basic pillars and techniques, methods, moving in racks and systems, learning the "Rules of Sport Etiquette" in accordance with the requirements of the Ukrainian Federation of Horting [3].

It is too important to assess the effect of physical education of students in each session through observation and interviews, which help to assess the degree of fatigue and emotional state of the student by their appearance. In order to prevent injuries in each session it is necessary to check locations and comply the requirements of methods for specific health exercises of horting using specially-development exercises for the elements of basic techniques. During the studying of the horting's techniques by different ways it is necessary to pay attention on the correct movement of students in horta (place for trainings).

The trainings are carried out by an appropriate trained teacher (instructor) who has professional knowledge.

During the trainings with the elements of horting, the teacher should apply a personoriented and differentiated approach to each student. During the horting training, the following groups of methods are used: visual (showing exercises, demonstration of exercises in the scheme, layout, screen, etc.); verbal (narration, explanation, indication, remark, conviction, conversation, etc.); practical (method of exercises and its variants – the initial study of the technical action in the whole or partly), method of multiple repetition (variable, interval, game, competitive, etc.) [2].

During the studying of health-improving horting elements' in physical education classes, students develop certain motor skills using physical and respiratory exercises.

The learning material, which is adapted for classes with students of different physical states should be required in the curriculum of physical education. It provides professional-applied physical training and orientation and contains elements of horting technology, theoretical information, as well as exercises with.

Theoretical information: the influence of horting on the basic functions and systems of the organism, HIV/AIDS prevention, the concept of psychological training in horting, main technical actions on horting. Introduction to horting tactics. Basic concepts of tactics: strategy, system, style.

Types of tactics. The simplest tactical preparation of technical actions. The main factors which influence on the quality of horting techniques during the processing of techniques. Rules of self-control and safety during the performance of horting techniques.

During the teaching of technical techniques of horting, it is necessary at each physical education session to use the exercises of general and special physical training, such as: acceleration from different starting positions, running with speed changing and direction on the signal, multiple repetition of the basic health-improving technique of horting movements by air in the rack and in movements, the implementation of health-improving training forms of horting – formal complexes, jumping from sitting upwards, lifting from sitting in a rack with wings straight legs, and following the methods of preparatory study and improving techniques of horting using basic exercises [3].

General physical training: general developmental exercises: for the development of flexibility of the upper shoulder girdle, strength of the upper and lower extremities, abdominal press, back, stretching exercises; special exercises; jumping exercises; uniform running 800 m (girls), 1000 m (boys).

Special physical training: exercises for extreme endurance: shaking foot up from the front rack – 4 minutes alternately left and right leg with frequent repetition; internal mahness with a straight leg from the front rack – 4 minutes. Alternately left and right leg with frequent repetition; "free simulation on time" (free imitation of engineering elements), 2 pts for 3 minutes. with an interval of 1 minute; mobile games: general development; special-applied nature; with technical and tactical bias (with elements of horting; relay with elements of horting for the development of physical qualities), jumping through a rope.

Technical and tactical training: movement: the combination of ways of moving with the technical basic movements of horting; Speed travel, movement with turns and visual control around; recreational breathing exercises: Abdominal Breath; With aperture rising; Variable rate (slow breath-high-speed exhalation, high-speed breathing-slow exhalation); Wellness breathing exercises on the spot and in motion in the rack; High-speed exhalation Actuation exercises for strengthening of technical elements by high-speed exhalation; Hand technique: simulation exercises and forearm releases to the middle and upper levels (forward, aside), waves and hand gaps from below, from the side (relaxed, tense); Swirling with two hands (forward, backward) in place and in motion; Performance of series of improving elements of horting technique; Foot technique: simulation exercises, fly exercises, slow and high lifting of the hips (straight, sideways, with slowly improving and speeding exhalation); Ejection of the cartilage (forward side, back); Performing a series of imitation foot exercises; Bodywork: torso in place and in motion; Slopes, deviations (left, right), kidneys with easy walking on the legs; Imitation of twists back to a partner (simple and with the setting of the leg); Body action when performing amplitude exercises [3].

The main components of a student's physical fitness are strength, speed, agility, coordination and balance. Despite these components of general physical training, such qualities as flexibility, precision, reaction, sense of time, endurance and mental stability should develop. Exercises for the development of force are very large and they all are characterized by great tension of the muscles. A set of physical exercises:

- 1. Bending and extension of hands in the emphasis (one-fourth times).
- 2. Lifting the trunk in the seat for 30 seconds. (Number of times).
- 3. Bending and extension of hands in the emphasis laying.
- 4. Lifting the trunk to the side for 30 s. (Number of times).
- 5. Body tilt forward from sitting position (cm).
- 6. Jumping through a rope in one minute (number of times).
- 7. Technique of feet in air for 30 s. (Number of times).
- 8. Implementation of the form of horting (formal complex): first-third defensive, 1–12 points.

Some exercises are characterized by multiple repetitions. At the same time, it is best to use the exercises in physical education classes, which, by their nature and structure, will be similar to the movements performed in a duel. The number of repetitions of the exercise may decrease if the burden or resistance is large enough. If exercises are carried out with a low amount of burdens, then, it is necessary to process them with maximum speed and repeatedly. In this case, along with the development of force, the speed of movement develops. The ability to sustain long-term effort is performed with repetitions of exercises with small or medium burdens before the appearance of fatigue, which prevents further work, that is, failure. It is necessary to repeat these exercises repeatedly in physical education classes. If exercises do not cause strong muscle tension and fatigue, the effect of their performance will be negligible.

With increasing of strength the exercises that were carried out earlier with great efforts, will be easy and will not cause existent stresses. It is necessary for the teacher to constantly complicate the complexes of physical exercises, for the student to increase the burden, the number of repetitions, the speed of execution, etc. The development of student's strength in physical

education classes should be combined with the development of other physical qualities such as speed, agility and flexibility. Students have sharp and fast movements, and thanks to well-built systematic physical education classes, speed can even be increased. Trying to speed in the performance of any movement, you need to repeat it many times in training. The instructor must be careful because the student performs it easily, without any hesitation, in a relaxed way, as sluggishness impedes speed. In addition to the student's special exercises for speed development, it is suggested to use exercises from other sports, such as athletics, basketball, football and others.

Here, in addition to the emergence of positive emotions that contribute to the improvement of the general state of the body, the necessary physical qualities, including the speed, are necessary for the conduct of the horting fight. An important factor for the student's physical development is flexibility. The well-developed flexibility allows you to exhibit strength, agility and technical skills with great effect. Exercises that develop flexibility should be applied throughout the entire duration of the training session. These include acrobatic exercises, stretching exercises, exercises with a wide range of movements. Exercises for flexibility should be carried out daily in each training session.

The most effective means of improving inter-muscular coordination are the next exercises: with the weighting of objects; on simulators; in overcoming the resistance of the body of its own body with additional burdening. During the using of this way, interval and combined methods are used. Purposeful action on the development of one of the physical qualities affects the development of others. The nature and magnitude of such influence depends on the level of physical training of the student, as well as, on the magnitude and nature of the applied loads. For a first-year student, who has a low level of general physical training, exercises which are required a manifestation of mainly one physical quality, place significant demands on the manifestation of others. Wellness horting is also an indispensable mean for the development of the student's coordination abilities.

Due to a great amount repetition of various revolutions, rotations, jumps, the body is less and less responsive to unusual body positions. It is a system of exercises in which the student improves all body properties, such as flexibility, jumping, balance, learning to move back and forth, left and right, up and down, freely and universally. The development of physical qualities must always be a complex nature, ensuring their harmonious development in the required ratio. At the same time, this requirement does not imply the effect of the same intensity on all physical qualities at the same time. It should always have an accentuated effect on one of them, which is carried out in accordance with the most favorable age of their natural development. In this case, according to the method of horting, special attention should always be paid to the development of power abilities, as basic in relation to other athlete's physical abilities [3].

The teacher in physical education classes should provide a moderate load on muscle groups that can improve the overall health of the student. In each case, it is possible to make a special complex of exercises with elements of horting in a certain sequence that can improve the health of students. These positive examples are noted in the process of physical education classes with students of the NMU's medical college of the O. Bohomolets. At classes, students master and develop the reserves of their body and consciousness, enrich with new knowledge, realize their capabilities. The gradual increase in the loads and difficulties of various physical and mental tasks associated with the assimilation of simple basic horting technique, without a doubt, contributes to the growth of abilities necessary for the student in everyday life. "From practice it is known that the degree of muscle recovery is largely determined by the complete purification of muscle from lactic acid.

As scientific studies have shown, if after intensive training to make a delay in the form of a half-hour run "treadmill", the amount of lactic acid in the muscles will decrease by 20 %, which in itself will reduce the period of restoration of the athlete in 1,5–2 times" [5, p. 90].

# Conclusion.

- 1. The importance of horting, as in the sport included in the physical education program, is the simplicity and accessibility of tools and exercises.
- 2. Physical education courses with elements of horting with students aims at the development of professional-applied physical training. Therefore, when conducting a special (directed) training, they select and use such exercises, which directly affect the restoration of the functions of the system.

3. The main focus of the lessons on physical education is the improvement of the functional and emotional state of the organism and the physical preparedness of the student, preparing him for professional work. Efficiency of physical exercises of health-improving direction is determined by the frequency and duration of classes, the nature of the means used with the corresponding intensity, mode of work and rest. Exercises with horting elements are designed in a way which are suitable for students of different levels of physical training, both male and female. Separate physical exercises of a special developing nature can be used for students with different pathologies and with disabled children.

*Prospects for further* research sees the development of a modular system software for medical colleges using elements Horting.

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### Лариса Пустолякова.

Складання індивідуальних програм для медичних коледжів із використанням елементів хортингу.

У праці "Складання індивідуальних програм для медичних коледжів із використанням елементів хортингу" розглядається вид бойового мистецтва — хортинг, а саме, використання його елементів на заняттях фізичного виховання. При визначенні режиму та регламентації рухової активності студента, з використанням елементів хортингу, викладачу необхідно враховувати ступінь функціональних відхилень, вік, стать, а також домашні обставини, стан тренованості. Впроваджуючи новітні досягнення педагогічної науки та практики, профільної галузі знань, розробили систему нового змісту фізичного виховання й розвитку фізичних якостей студентів медичного коледжу з застосуванням нестандартного інвентарю, оволодіння технікою виконання спеціальних фізичних вправ із хортингу (спортивною технікою яка дозволяє поліпшити здоров'я, професійно-прикладну фізичну підготовку студента та застосувати отримані знання і вміння для побудови адекватного своїм особливостям і життєвим цілям здорового способу життя).

**Ключові слова:** програма, фізичне виховання, фізичні вправи, фізичний розвиток, фізичні якості, хортинг.

## Larysa Pustolyakova.

National Bohomolets Medical University (Tarasa Shevchenka Avenue 13, Kyiv, Ukraine). *Drafting of individual programs for medical colleges using the elements of horting.* 

In the work "Formation of individual programs for medical colleges using elements of Horting" is considered the type of martial arts – horting, namely the use of his elements is on employments of physical education. At determination of the mode and regulation of motive activity of student, with the use of elements from horting, it is necessary to take into account the degree of functional rejections, eyelids, sex, and also terms of domestic circumstances and state of trained a teacher. Inculcating the newest achievements of pedagogical science and practices, profile area of knowledge, worked out the system of new maintenance of physical education and development of physical internalss of students of medical college with application non-standard to the inventory and capture of implementation of the special physical exercises a technique from horting (that allowed a sporting technique to improve a health, professionally-applied physical preparation of student and to apply gain knowledge and abilities for a construction adequate to the features and vital aims of healthy way of life.

**Key words:** are the program, physical education, physical exercises, physical development, physical internals, Horting.

# Лариса Пустолякова.

Составление индивидуальных программ для медицинских колледжей с использованием элементов хортинга.

В работе "Составление индивидуальных программ для медицинских колледжей с использованием элементов хортинга" рассматривается вид боевого искусства — хортинг, а именно, использование его элементов на занятиях физического воспитания. При определении режима и регламентации двигательной активности студента, с использованием элементов хортинга, преподавателю необходимо учитывать степень функциональных отклонений, возраст, пол, а также условия домашних обстоятельств и состояние тренированности. Внедряя новейшие достижения педагогической науки и практики, профильной области знаний, было разработано систему нового содержания физического воспитания и развития физических качеств студентов медицинского колледжа с применением нестандартного инвентаря и овладение техникой выполнения специальных физических упражнений хортинга (спортивной техникой, которая позволила улучшить здоровье, профессионально-прикладную физическую подготовку студента и применить полученные знания и умения для построения адекватного своим особенностям и жизненным целям здорового образа жизни).

**Ключевые слова:** программа, физическое воспитание, физические упражнения, физическое развитие, физические качества, хортинг.