

Preconditions for the physical state optimization concept formation of female students of medical higher educational institutions

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Purpose: on the basis of the analysis of the special literature to determine the preconditions for the formation of technology to optimize the physical condition of female students by means of fitness in the conditions of medical higher educational institutions.

Material & Methods: preconditions for the formation of the concept of optimizing the physical condition of female students of medical higher educational institutions are determined on the basis of theoretical analysis and generalization of literary sources and data from the Internet network.

Result: directions of formation of the concept of optimization of a physical condition of female students of medical higher educational institutions are determined on the basis of use of means of fitness.

Conclusion: indicated the need to create a technology to optimize the physical condition of female students of higher educational institutions on the basis of primary monitoring of the physical condition and the use of fitness in the process of physical education.

Keywords: preconditions, concept, optimization, technology, physical condition, fitness, female students.

Introduction

During the training in the university students are influenced by a number of factors that significantly determine their physical condition. Specialists note that in the conditions of higher educational institutions of the medical profile, complex, prolonged and intense educational activity in combination with hypodynamia and high requirements to the level of professional preparedness of future medical workers form specific morphofunctional conditions characterized by reduced levels of physical development, physical performance and health [4]. Existing state of affairs is also conditioned by the rather weak sports base of Ukrainian universities and low motivation of the overwhelming majority of female students to the formation of a healthy lifestyle and exercising, adversely affects both the state of health and the indices of the professionally applied physical training of future medical workers. On the other hand, it is in medical higher educational institutions that there are specialized specialists controlling the physical condition of female students on annual preventive medical examinations and providing the necessary advisory assistance to determine the direction of practical exercises in physical exercises for physical rehabilitation, medical physical training and physical education. So, there is a problem that relates to the discrepancy between the physical conditions of female students of medical schools and the availability of conditions for exercising during training, indicates its relevance and timeliness.

According to the definition of the International Committee for the Standardization of Tests (ISO), the physical state comprehensively characterizes the level of physical health, physical development, and functional capabilities of the organism, physical working capacity and preparedness [31]. In the categories of "healthy" and "practically healthy" people, respectively, the following levels of physical condition (low, below average, average, above average, high) [1]. Optimization is

usually understood as an activity or a complex of them aimed at providing the most advantageous characteristics of the subject of research [22]. Thus, the optimization of the physical state should be understood as a complex increase in the level of physical development, physical fitness and health.

Problem of determining the prerequisites for the formation of the concept of optimizing the physical condition of female students by means of physical education is not entirely new in the scientific and methodological literature. In the study A. Buikova, V. Tristan (2016) [4] noted the need for the formation of a fund of assessment tools for physical education in a medical school, which will improve the procedures for monitoring the physical condition of female students who are engaged in physical exercises. The questions of diagnostics of psycho-physiological states of the organism as one of the key problems of sports medicine are considered in the study of L. Korobeinikova et al. (2016) [10]. Authors of the study emphasize the need for systematic, integrated approaches to solving this problem and allocate physical education as the most effective factors for correcting the physical condition.

One of the most effective means of physical education in the conditions of the university is a practical training in fitness fitness. J. Persheguba et al. (2015) point out the need for the formation of conceptual approaches to the optimization of the physical conditions at the same time, highlighting the rational nutrition factors in practical conjunction with health and fitness classes [18]. Many studies have examined the impact of practical training in physical education on the physical condition of students. Importance of using the optimal systems for assessing the level of the physical state as a tool for quality control of physical education and physical health of students [2; 3; 5]. V. Koryagin, A. Blavt (2013, 2016) note that, in accordance with the current level of health of student youth, there are certain contraindications for exercising and the possibility of correct-

ing the physical states of students in the course of physical education classes with exercises of a certain orientation [8; 9].

Foregoing allows us to state that the problem of optimizing the physical states of student youth has been paid enough attention in scientific research, but taking into account the specifics of higher educational institutions of the medical profile, the educational process in which has a specific nature, which is related to the complexity and large volume of educational material. In addition, in higher educational institutions of the medical profile there is a clinical and laboratory base for preventive medical examinations in order to determine the level of health, diagnosis of diseases and primary prevention, including physical education. In combination with the consultative services of the profile specialists of the Departments of Physical Rehabilitation, Sports Medicine, Physical Culture, Physical Education and Health, this creates a specific specificity for the process of optimizing the physical condition of female students in the conditions of a medical school, testifies to the final unresolved issue.

Relationship of research with scientific programs, plans, themes. Theoretical studies were conducted in accordance with the plan of research work of the Department of Physical Rehabilitation, Sports Medicine, Physical Education and Health of the Zaporozhye State Medical University of the Ministry of Health of Ukraine on the topic "Optimization of the physical condition of students by means of physical education and sports in the conditions of medical high school". The research topic is consistent with the Consolidated Plan of Research in the field of physical culture and sports for 2016–2020. Ministry of Youth and Sports of Ukraine on the topic 3.13. "Theoretical and methodical foundations of health forming technologies in the process of physical education of various population groups", state registration number 0116U001615.

Purpose of the study: on the basis of the analysis of the special literature to determine the preconditions for the formation of technology to optimize the physical condition of female students by means of fitness in the conditions of medical higher educational institutions.

Material and Methods of the research

Prerequisites for the formation of the concept of optimizing the physical condition of female medical students are determined on the basis of theoretical analysis and generalization of literary sources and data of the Internet network. Our own theoretical generalizations regarding the definition of the prerequisites for the formation of the concept of optimizing the physical condition of female students in medical schools by means of fitness is the basis for the formation of practical technology for optimizing the physical state.

Results of the research and their discussion

Concept of research – is a system of initial theoretical propositions that are the basis of a research search. In the process of scientific search, the adopted initial assumptions that verify, develop, correct, if necessary - exclude, which leads to its modification or modernization. Concept includes the following components [30]:

– methodology (the system of research principles), which is based on a dialectical method and system approach: the con-

cept of optimizing the physical condition of female students is based on general scientific laws – knowledge of the system approach, which treats the system under study as an integral set of individual elements, taking into account the internal relationships and relations between them; dialectical-materialistic method – studying regularities, trends of development and transformation of reality; scientific method as a set of basic methods and technologies for obtaining new knowledge and solving problems. This allows us to consider the process of optimizing the physical state as a variable hierarchical process with medical and biological and social characteristics that are inherent in the body of students;

– a list of relevant research methods. In general, the set of methods for optimizing the physical state of the body of students is divided into three main groups: research methods aimed at studying the processes of physical development; methods of research aimed at studying the processes of physical preparedness, development of motor abilities and physical performance; methods of research aimed at the primary monitoring of morbidity;

– principles of the organization of the process, the nature (theoretical, descriptive, analytical, empirical) and the research program: concerning the problems of optimizing the physical state in the process of physical education, the most effective and rational means.

Analysis of scientific and methodological literature and data from the Internet allows us to state that fitness tools are important for optimizing the physical condition of student youth, which are available and effective in improving the level of physical preparedness, physical development and morbidity [27; 29]. Researchers note that, in addition to purely physical recovery, fitness exercises have a positive effect on the psychological sphere of students, allow the formation of important communications during extra-curricular time, which in turn contributes to a better recovery of the student body after training [6; 12; 23; 28]. As the most popular and common today, the following types of fitness are distinguished: aerobics and its varieties, bodyflex, shaping, pilates, callanetics, stretching, fitball, crossfit, TRX-exercises, etc. [16; 25]. From the point of view of such approaches, questions on the formation of technology to optimize the physical condition of female students by means of fitness are important [7; 13; 19]. Peculiarities of the educational process in the conditions of medical universities are quite difficult for mastering the educational material, on the one hand, and the availability of qualified medical personnel, controls the state of physical health and the incidence of female students on annual preventive medical examinations. Thus, in the process of formation the concept of optimizing the physical condition of female students in medical schools, fitness means also need to take into account the levels of physical development, physical preparedness and the peculiarities of the primary monitoring of morbidity, which makes it possible to raise the question of professional and applied physical training as a component of the professional training of future medical workers in general [24].

This statement is the basis for a possible correction model curricula of medical schools in the field 7.12010001 "Medical case" 7.12010005 "Dentistry" (direction of training 1201 "Medicine") and 7.12020101 "Pharmacy" (direction of preparation 1202 "Pharmacy"). Thus, it can be argued that in order to improve the professional training of future specialists in the

medical field, the issues of increasing the importance of the professionally applied physical fitness and physical working capacity are topical, which will make it possible to realize the existing professional potential in the work of a doctor or pharmacist. In turn, this situation requires more attention from the medical universities guide to the appropriate logistics practical lessons on discipline “Physical Education and Human Health”, revitalization of sports clubs, scientific and methodological support for physical education classes and mass sports in universities [14].

Figure shows the general scheme of the optimization of the physical state of students of medical universities by means of fitness, which consists of three main areas, namely: improving the level of physical fitness and physical development, reducing the incidence and harmonization of the psycho-emotional sphere.

Pedagogical analysis of the above-mentioned concept of optimizing the physical condition of female students of medical

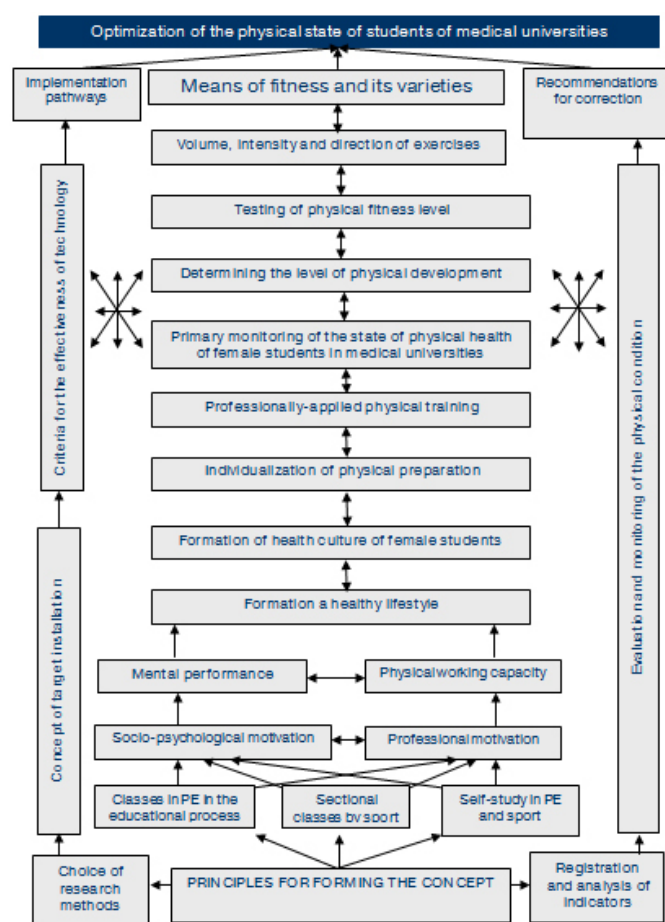


Fig. General scheme for optimizing the physical condition of female students in medical schools by means of fitness

universities allows us to determine the prerequisites for its formation. In the process of generalization of the data available in the scientific and methodical literature, we state the presence of the following prerequisites for the formation of the concept of optimizing the physical condition of female students in the conditions of medical universities:

– availability of appropriate material and technical base and financial support for practical training in physical education

and sectional classes in sports [21; 26];

– presence of an appropriate clinical-laboratory base and specialized specialists in medical universities for primary prevention of morbidity, early diagnosis of pre-morbid and pre-morbid conditions of the body, annual preventive medical examinations;

– the formation of motivation for a healthy lifestyle, fashion to maintain a high level of health [15];

– orientation of practical training in physical education and sectional occupations by sports for an increase in professional-applied physical preparedness, mental and physical performance [11; 17; 20].

Conclusions

Analysis of data from special scientific and methodological literature and the Internet network allowed us to formulate the following:

1. Means of fitness is an effective and affordable tool for optimizing the physical condition of female students in medical universities in physical education classes and sectional classes in sports (aerobics, bodyflex, shaping, pilates, callanetics, stretching, fitball, crossfit, TRX exercises, etc.), basis for the creation of appropriate technology.

2. In medical universities there is a clinical and laboratory base for primary monitoring of the state and determining the level of health, diagnosis of diseases and primary prevention, including physical education and physical rehabilitation. In combination with the possibility of providing consultative services to specialized specialists in the departments of physical rehabilitation, sports medicine, medical physical training, physical education and health, this creates a specific specificity for the process of optimizing the physical condition of students by means of fitness.

3. As the preconditions for the formation of the concept of optimizing the physical condition of female students in medical universities, the following:

– presence in the university of a modern material and technical base and appropriate financial support for practical classes in the discipline of “physical education and health” and sectional classes in sports;

– presence in the structure of higher educational institutions of the appropriate clinical and laboratory basis for primary prevention of morbidity, early diagnosis of donor and pre-morbid states of the body, conducting preventive medical examinations and determining the appropriate groups for classes (basic, preparatory, special medical);

– focus of practical classes on the formation of motivation for a healthy lifestyle, fashion to maintain a high level of health, improve the professional and applied physical preparedness, mental and physical performance of students.

Prospect for further research based on the need to create a comprehensive practical technology to optimize the physical condition of female students of medical university by means of fitness on the basis of the above concept.

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