

formation of priorities of physical health culture and motivation to improve, preserve, from childhood to older age groups.

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EFFECTIVENESS OF HEALTH FITNESS PROGRAMS ON STUDENTS 'PHYSICAL CONDITION INDICATORS

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Abstract. *The publication reveals the effectiveness of the development and use of health fitness programs based on the indicators of the physical condition of female students studying at the university.*

Keywords: *fitness, student, program, physical condition*

An important factor in the healthy lifestyle of modern man is rational motor activity, which manifests itself in the form of natural locomotives (walking, running, swimming), games, strength and gymnastics complexes, exercise systems, and various non-

traditional exercises, usually innovative. Today, this whole arsenal of means of physical culture and health, aimed at achieving and maintaining physical well-being, is commonly referred to as "health fitness" [6]. Its appearance and popularity objectively reflect the situation of fundamental reform of the field of physical education in conditions of competition, initiative and market economy, when the care of the appropriate level of psychophysical fitness becomes a personal matter.

Health is the only thing you can't buy for money and exchange for gold. Our health is what determines our life expectancy. And the more careless you are with him, the less you will live accordingly. After all, being healthy is fashionable!

Negative trends in health and lack of physical activity lead to a deterioration in quality of life (O. Apaichev, 2016; R. Bannikova, O. Marchenko, A. Rashed, 2008; V. Kashuba, 2010; JD Bowen, 2006).

Today, the industry of sports and health services offers a wide variety of scientifically sound programs of preventive and health-oriented (LV Sidneva, SA Gonyants, TS Lysytska, 2017; L.Ya. Ivashchenko, OL Blagiy, YA Usachev, 2008, AV Ognisty, 2020), which help to slow down involutionary processes and increase the physical potential of the organism (VK Balsevich, 2009; M. Segar, 2008).

Goal: to substantiate the method of classes of health fitness of female students taking into account the indicators of physical condition.

Object of study: health-improving physical culture of female students.

Subject of study: programming of fitness classes for students, taking into account indicators of their physical condition.

Task:

1. To study the problem of organization and methods of conducting fitness classes with students of higher educational institutions in the available scientific and methodological literature.

2. Investigate the physical condition of students of future teachers.

3. Develop a program of health classes for students, taking into account indicators of their physical condition and check its effectiveness.

Research methods: analysis of scientific-methodical and special literature, questionnaire method, medical-biological, pedagogical research methods, methods of mathematical statistics.

The analysis of modern methods allowed us to form the components of fitness programs. Data from primary testing included indicators of physical fitness, the results of which could determine the degree of development of physical qualities, the level of health, which we determined by the method of G. Apanasenko and physiometric indicators (body weight, height, heart rate, blood pressure, recovery time, body mass index, life index, power index, Robinson index according to these indicators and determines the level of health of the client) [2].

The second block contains recommendations, comments and warnings based on the client's health [3,4,5].

The third task of the program was the main task. For example, the correction of the client's body weight, which indicates the desired body weight and the time required for its correction. Because the programs were developed for each student individually.

For 3 months, the girls of the control group (KG, n-13) attended health fitness classes, which were held three times a week, and the girls of the experimental group (EG, n-15), in addition to attending health fitness classes, still engaged in individually designed for each program.

After the experiment, we once again determined the indicators of the physical condition of female students and compared them with the data we obtained before the experiment. In the analysis of questionnaires to determine self-esteem, there were significant changes in the girls of the experimental group. It was found that 46% have perfect health, 31% - good health, 15% - mediocre health and 8% - satisfactory health. Unsatisfactory health has not been identified.

In the comparative analysis of the questionnaire according to the method of Dushanin SO to determine the degree of possible risk of cardiovascular disease, there have also been some changes. The results of the survey showed that 75% of the surveyed girls in the experimental group have no risk of developing cardiovascular disease, 25% of respondents - minimal.

Comparative analysis of the values of physical fitness of the experimental group before and after independent health-improving classes showed a tendency to improve. The analysis of the values of the average indicators of oxygen dynamometry (static force) obtained in our study in the experimental group improved by 2.4 kg. This shift was due to the fact that we included badminton and skipping rope in individual fitness programs. In the control group, this figure increased by only 0.4 kg.

After physical training and health classes revealed changes in anthropometric indicators of body weight, which decreased by 0.6 kg, such a low figure can be explained by the fact that our task was not to lose weight, but to reduce body fat and change it to muscle, which prove changes in the average amount of skin and fat folds (decreased by 2.8 mm) and fat mass (decreased by 1.5%). In the control group, changes in these averages were barely noticeable.

In terms of physiometric parameters, there was a normalization of heart rate in all subjects of the experimental group, this figure decreased by 5.6 beats / min due to strengthening the heart muscle by running, swimming and walking, which we recommended in our individual programs. Similarly, there was a normalization of blood pressure parameters.

The condition of the respiratory system, represented by the value of vital capacity of the lungs, improved by an average of 200.1 ml compared to baseline. This figure has increased due to cyclic exercise and swimming.

After our experiment, the indicators of somatic health also changed. The average value of the strength index of the girls of the experimental group increased by 5.1% due to the increase in the strength of the hand, and is within normal limits. In the study of the control group, the strength index increased by an average of 2.7%.

As a result of positive changes in somatic health indicators in the girls of the experimental group, its level increased significantly.

23% of girls have a higher average level of health, although before the experiment none of the girls had such a level of health. 46% of girls had an average level of health, and 30% of girls - below average. Moreover, girls with low levels were not identified.

As for the control group, the girls also made positive changes due to the fact that they attended aerobics training, but not as significant as in the experimental group, in which the girls, in addition to attending aerobics, also engaged in individual fitness programs.

Conclusions.

Assessing the level of indicators of physical condition of female students, we determined that:

- the majority of girls surveyed (56%) rated their health as good and 44% as satisfactory. This shows that girls overestimate their level of health, because according to the results of the survey we found that 8% of girls have mediocre health, 28% - unsatisfactory and 64% - satisfactory (according to the method of VP Voitenko);

- the degree of possible risk of cardiovascular disease according to the method of Dushanin SO, 8% of respondents, respectively 36% of girls have no risk of cardiovascular disease, 56% of respondents - minimal;
- 40% have an average level of health, below average and 20% have a low level of health. Assessment of health was associated with almost all indicators of physical fitness (according to the express method of GL Apanasenko [1]);
- taking into account the physical condition of female students, we have developed individual fitness programs. The direction, intensity and volume of loads in the health program were determined by us in accordance with the individual indicators of the physical condition of the girls. The health effect was achieved by the optimal ratio of intensity and duration of exercise, the correct training pulse regime;
- Approbation of the developed program of health-improving classes has shown sufficient efficiency, which is confirmed by the positive dynamics of indicators of physical condition of female students. The girls' cardiovascular performance improved, their motor activity increased, all respondents in the experimental group completely gave up bad habits and began to eat rationally, which ultimately led to increased self-esteem (8% have perfect health, 15% good health, 31% mediocre health and 46% satisfactory health) and reduced possible development of cardiovascular disease (70% of girls surveyed in the experimental group no risk of cardiovascular disease, 30% respondents - minimal);
- the results of the experimental technique showed a tendency to improve physical fitness: the results of shuttle running improved by an average of 0.1 s, lifting in the saddle for 1 minute increased by 1.7 times., hand dynamometer increased by 2.4 kg, flexion and extension hands from the floor in the supine position improved by 4.4 times, jumping into the ground from the place increased by 9.4 cm

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ROLA PŁYWANIA W KSZTAŁTOWANIU WYTRZYMAŁOŚCI, SIŁY I SZYBKOŚCI W INNYCH DYSCYPLINACH SPORTOWYCH

Wyższa Szkoła Wychowania Fizycznego i Turystyki w Białymstoku

Adnotacja. Artykuł przedstawia wyniki badań własnych, w których eksperymentalnie udowodniono wpływ treningu w wodzie na poprawę sprawności zawodników piłki nożnej i piłki siatkowej.

Annotation. The article presents the results of the author's own research, in which the influence of training in water on the improvement of the fitness of football and volleyball players was experimentally proven.

Ключові слова: плавання, тренування, витривалість, сила, швидкість.

Ключевые слова: плавание, тренировка, выносливость, сила, быстрота

Key words: swimming, training, endurance, strength, speed.

Trafność tematu badań. W XXI wieku rola uprawiania sportu nabrała szczególnego znaczenia. Współcześnie organizowane na dużą skalę imprezy sportowe, takie jak: igrzyska olimpijskie, mistrzostwa świata w różnych dyscyplinach sportowych, turnieje, różnego rodzaju zawody czy wyścigi, dowodzą, iż w coraz szerszych kręgach ludzi sport stanowi jedną z najważniejszych pasji życiowych. Jednocześnie podkreślić należy, że