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ABSTRACT

The purpose of the study is to substantiate and experimentally verify the effectiveness of the teaching method of the theoretical component of physical education with the use of author's methods of teaching in the context of increasing the level of social health of students of a special medical group. The following diagnostic tools were chosen: “value orientations” questionnaire (M. Rokich) “need for achievement questionnaire” (Y. B. Orlov). It was established that in real practice, with the traditional method of teaching theoretical material on physical education in a special medical group, mostly inefficient teaching methods are used, which do not involve students in active, creative activities in the class. Students of the control group (n = 156), students of the experimental group (n = 159) took part in the experimental work. Study of the dynamics of the levels of formation of the motivation of students of the special medical group to increase their own level of social health shows the significant advantages of the experimental group over the control group, which, in turn, confirms the effectiveness of the teaching method of the theoretical component of physical education. The use of the Pearson χ^2 test made it possible to find out that at the final control stage (after the end of the experiment) the differences between the distributions of the control and experimental groups are statistically significant ($p < 0,001$).

Keywords: physical education, social health, special medical group, self-realization, motivation.

INTRODUCTION

Recently, there is an urgent need to quickly adapt to new living conditions, the orientation of the individual to maximum self-realization in various spheres of life. It is especially difficult in such conditions for young people who have chronic diseases of one or more systems at the same time to fully realize themselves. We are talking about a rather vulnerable category of society - students, classified according to their physical health to a special medical group. Modern research shows that the health of student youth deteriorates even before they enter the university (V. Fotyniuk, 2017). That is, a significant number of students already have deviations in their physical health upon entering higher educational institutions. On the other hand, the presence of chronic diseases often causes students to have low self-esteem, lack of confidence in their own abilities, a sense of inferiority, unwillingness, or a vague desire for personal and professional self-improvement, self-development, etc. (Babich V, 2018; 2022). The situation is complicated by the obsolescence of approaches to teaching physical education, in particular its theoretical component. Quite often, classes are characterized by their uniformity, lack of interest, lack of opportunity to show themselves to the student, especially creatively. This, in turn, negatively affects students' desire to attend physical education classes.

The analysis of the curriculum for physical education showed that its content almost does not include consideration of issues both in the context of the essence of social health and the disclosure of opportunities for its improvement

in students of a special medical group, etc. In addition, the previously conducted survey of students of the special medical group indicates that the teachers mostly adhere to traditional methods of teaching the theoretical component of physical education. First of all, it is characterized by the teaching of the topics offered in the program only in the form of lectures using the least effective teaching methods, among which the most common story in the form of a monologue (Babich V, 2018). The content of the program also lacks recommendations on the implementation of organizational innovations to improve the level of social health of students. This statement is consistent with other studies (M. Kudryavtsev, I. Kramida, S. Iermakov, A. Osipov), which emphasize the need for the formation of students' emotional stability and tolerance in relation to others, the development of appropriate recommendations for the implementation of this process (M. Kudryavtsev, 2016).

We note that we consider the social health of a student of a special medical group as a complex integrated personal quality (the essence of which is a set of relevant personal and professional competencies), which are revealed through: the future specialist's desire for maximum self-realization in social life; focus on achieving results; presence of stress resistance.

The purpose of the study is to substantiate and experimentally verify the effectiveness of the teaching method of the theoretical component of physical education with the use of author's teaching techniques in the context of increasing the level of social health of students of a special medical group.

METHODS OF RESEARCH

The state of formation of the motivation of students of the special medical group to improve the level of their own social health was determined by the following indicators: «students' desire for maximum self-realization in social life» and «value relation to health». The choice of the above indicators is primarily determined by the specificity of the phenomenon itself - social health. The «need for achievement questionnaire» (Y. B. Orlov) and the «value orientations» questionnaire (M. Rokich) were used as diagnostic tools.

To compare the frequency distributions of the experimental and control groups of future teachers at the first (initial) and second and third stages of the experimental work, we used the Pearson test χ^2 , which allows you to compare two empirical distributions and conclude whether they agree with each other.

The Pearson test χ^2 is calculated by the formula:

$$\chi^2 = \sum_{i=1}^k \sum_{j=1}^m \frac{(N_{ij} - N_{ij}^0)^2}{N_{ij}^0}$$

Organization of the experiment: Students of the control group ($n = 156$) and students of the experimental group ($n = 159$) participated in the experimental work. When developing the methodology for teaching the theoretical component of physical education in the context of the formation of social health of special medical students, we relied on the characteristics of the teaching methodology identified by T. Turkot. According to the scientist, the teaching method is a system of scientifically based methods, rules and methods of teaching a specific subject (T. Turkot, 2011). It was also important to take into account the opinion of S. Honcharenko, who defines the methodology of an educational subject as a branch of pedagogical science that investigates the regularities of studying a certain educational subject. At the same time, in the opinion of the scientist, the methodology of a separate educational subject can be legitimately considered as partial didactics (S. Goncharenko, 1997). Considering the above, we could not fail to take into account that the tasks of didactics are to scientifically substantiate the content of education, to investigate and explain the regularities of the learning process and the conditions for its optimal organization, to develop and introduce more advanced technologies and learning methods into pedagogical practice (T. Turkot, 2011).

Thus, the methodology developed by us was based on: improving the content of theoretical training by supplementing the elective component of the educational subject «Physical education» with additional topics on social health; the application of active and interactive learning methods in the process of studying the updated content of the program with the mandatory consideration of the specifics of the proposed subject; use of author's methodological techniques. At the same time, it was important to consider the following positions: firstly, during the entire period of study of additional theoretical material on the formation of social health of SMG students, teaching methods should be applied according to the principle «from simple to complex», i.e. starting with methods that involve students' participation only in discussing anything, gradually applying methods that require students to take more active actions in class, show creative thinking, etc., secondly, the overwhelming number of methods should be primarily search-creative, thirdly, teaching methods should be aimed at involving as many students as possible in joint, active work in class, fourthly, the majority of methods should be aimed at ensuring

that students, through their own efforts, have the opportunity to convince each other (from the group mates) in the significance of increasing one's own level of social health and the need for additional acquisition of theoretical knowledge and practical skills for the implementation of this process.

Therefore, the theoretical component of the elective component of the educational subject «Physical education» was supplemented with the following topics: «The essence, content and structure of the social health of the individual»; «The importance of social health for students of a special medical group»; «The place of personal and professional self-realization in the life of every individual»; «The importance of individual (and characterological) features in the construction of a system for improving the social health of students of a special medical group», «Determination of the possibilities of increasing the level of social health within the limits of physical education (in educational and extracurricular activities)», «The basics of realizing one's own potential, taking into account existing deviations in the state of somatic health» etc.

We characterize the main aspects of the teaching methodology of the above topics with examples of the application of the most optimal methods and methods of learning. Thus, for more effective assimilation by students of the essence, content and structure of the social health of the individual, we used the method of collective search for a common solution, or a common view of a certain object «Snowball». The essence of the method is that students personally have the opportunity to participate in the creation of a definition (P. Fenrich, 2005), in our case «personal social health». Thus, each participant contributed his own unique experience to the formulation of the definition. As P. Fenrich notes, the name of the method reflects its essence well, because in the final result of the work of the group, the experience of each participant is embedded in the snowball, individual ideas and intuition are combined into a single whole, like snow into small lumps, and those, in turn, into a large ball. It is important that the final result is agreed upon through a joint discussion (P. Fenrich, 2005).

When familiarizing students with the following topic, we also sought to involve students in independent reflection on the problem of the value of health in general and social health for each individual in particular. That is why such a method as «reflection essay» was used. Students were asked to write a short essay on the topic «The importance of social health for students of a special medical group». We justify the use of this particular method by the fact that, in order for students to realize the value of social health, it is not necessary to impose this belief. The advantages of this method, when studying the above-mentioned topic, compared to other methods, are that students, reflecting on the issue of the importance of social health for each individual, involuntarily think about its significance for themselves personally. That is, the student had the opportunity to think about why he needs to try to improve his social health, and what can change in his life accordingly in this case.

In the same context, when mastering the topic «The place of personal and professional self-realization in the life of every individual», we involved students in the discussion, i.e. active participation in expressing one's own opinions and discussing the issues contained in the above-mentioned topic. This, again, was due to the fact that we sought, firstly, for students to feel themselves as subjects of the educational process, where their opinion is important, secondly, in the form of a discussion, students, exchanging opinions on the mentioned subject, had to hear new convincing arguments precisely from their group mates. It should be noted that the teacher did not take an active part in the discussion of the problem, while he played a rather significant role, as he carefully steered the discussion in the right direction and tried to keep the topic of discussion unchanged.

Mastering the topic «Determining the possibilities of increasing the level of social health within the limits of physical education (in educational and extracurricular activities)» was offered to students in the form of a creative dialogue. As when familiarizing with the previous topics, we tried not to provide students with ready-made knowledge and not to impose any beliefs on the part of the teacher himself. Through a creative dialogue, the students themselves took an active part in identifying the possibilities of physical education in the context of increasing the level of social health of individuals with abnormalities in the state of somatic health. Working together in small groups (3-5 students), they identified and offered to another microgroup their own vision of the possibilities of physical education, both in the theoretical and practical part of the lesson regarding the improvement of the social health of the individual, or its individual components.

Using the knowledge of the essence, content, structure and features of the social health of a person with an existing diagnosis, as well as a certain idea (from their own experience of attending classes) regarding the organization of physical education, students were invited to make proposals for optimizing the relevant classes taking into account ensuring the process of social health formation.

The study of the topic «The importance of individual (and characterological) features in the construction of a system of improving the social health of SMG students» was offered to students in the form of Oxford debates (P. Fenrich, 2005). Dividing into two teams («proposition side» and «opposition side»), students were asked to conduct a debate on such debated theses as, for example: «in the formation of social health, it is inappropriate to take into account characterological features». Thus, expressing their own opinions from one or another position, delving into the essence of the problem, students had the opportunity to be convinced of the importance of taking into account their own characterological, individual features in the context of building a methodology for improving their own social health.

Familiarization with the topic «Fundamentals of realizing one's own potential, taking into account existing deviations in the state of somatic health» was carried out using the method «analysis of a specific situation». Carrying out the analysis of a specific example from the life of an outstanding personality and accepting direct participation in his analysis helped students to think about the presence of their own potential in high achievements, even taking into account the existing diseases.

Meanwhile, the method of teaching the theoretical component of physical education of students of a special medical group in the context of forming the latter's motivation to improve their own level of social health was not limited to the above. At the end of the class, we also involved students in active intellectual activity using author's techniques, by combining practical and theoretical work.

We will give an example of the application of one of the author's methodical techniques, which we called «intellectual recreation with a ball». This methodical technique is aimed at consolidating the educational material that students learned at the beginning of the class or several previous classes. In accordance with the conditions of application of the methodological method, students, dividing into two teams, are positioned against each other. One of the teams starts the game. A student of microgroup № 1 directs the ball to one of the players of the opposite team, who must catch the ball and listen carefully to the question. For example, after studying the topic «Uncovering the possibilities of increasing the level of social health within the limits of physical education», a question was heard: «What means of physical education are the most optimal for increasing stress resistance in students with physical health disorders», or «Name, please, with the help of which techniques it is possible to increase self-confidence in non-primary time», etc. According to the terms of the game, the student who caught the ball had to briefly (1-1.5 min.) answer the question and redirect the ball to one of the players of the opposite team (with another question to his opponent). In addition, each member of the team to whom the question was addressed had the opportunity to help their teammate with the answer if the answer was incomplete. For this, the person who wanted to help had to perform several simple, but preferably unfamiliar physical exercises for students, for example, for the development of flexibility or autogenic training exercises, etc. Thus, all students, trying to ensure that their team received maximum points for theoretical training in the class, strove not only to answer well, but also to be active participants from the beginning to the end of the class. Accordingly, in order to win the above game, students (prior to the class) during independent work also had to take an active part in finding new exercises, health techniques or systems, as this allowed them to help a member of their team with the answer. In turn, during the game, students not only consolidated the knowledge gained in a specific lesson (or previous lessons) on improving their own social health, but also constantly updated their knowledge in the context of strengthening the physical aspect of health. With the help of this methodological technique, the formation of "team spirit" in the group took place, the desire of students to help each other increased, friendly relations between students were strengthened, which also had a positive effect on the formation of the social health of students. .

The novelty of the technique is:

- in expanding the possibilities of assimilating the theoretical material of physical education, as well as additional topics on social health issues by combining students' intellectual and physical activities in each lesson;
- application of a complex of active and interactive learning methods, taking into account the specifics of the topic proposed for study;
- in the implementation of the author's teaching methods, which contributes to the creation of an atmosphere of relaxation and non-coercion in the class, students' search for creative solutions, the desire to attend classes, and to increase their own level of social and physical health.

RESULTS

Since the author's method of teaching the theoretical component of physical education was aimed mainly at the formation of the motivational component of the social health of students of the special medical group, it was important to establish the level of formation of the corresponding motivation of students before and after the implementation of the developed method.

The state of formation of the motivational component of social health of students of the special medical group in terms of increasing the level of their own social health was determined by the following indicators: «students' desire for maximum self-realization in social life» and «value relation to health». The choice of the above indicators is, first of all, determined by the specificity of the phenomenon itself - social health.

Using the need for achievement questionnaire (according to Yu. B. Orlov), it was established that at the stage of initial control (before the introduction of the method in the experimental group), only 18,7% of the students of the control group and 17,6% of the students of the experimental group had a high level of need for achievement. The average level was recorded in 38,9% of the students of the control group and 39,3% of the students of the experimental group. The vast majority of students in the control (42,4%) and experimental (43,1%) groups did not feel the need for achievement (low level).

Close to the previous results according to the first indicator, we obtained results according to the «valuable relation to health» indicator. With the help of the «value orientations» questionnaire (M. Rokich), students ranked the list of proposed values from the first to the last place. During the analysis of the results of the original control, it was established: 19,3% of the students of the control group and 18,9% of the students of the experimental group placed the value of «health» in the first and second places, which indicated a high level of formation of motivation according to this indicator; 39,5% of the control group and 41,1% of the experimental group assigned «health» the third to fourth ranking numbers (average level). Instead, 41,2% of the students of the control group and 40% of the students of the experimental group placed the value of «health» in the fifth place and below (low level). During the analysis of the obtained results, it was found that the vast majority of students of the special medical group (76,4% of the control group, 82,1% of the experimental group), who put «health» in the first and second places in the list of values, had chronic diseases two and even three systems simultaneously. In turn, this allows us to state that only in case of tangible problems in the state of somatic health, the majority of students of the special medical group highly appreciate the value of health.

The use of the above-mentioned diagnostic tools, as well as the generalization of the data obtained from the first and second indicators of the motivational component of social health, made it possible to establish that at the initial stage, no significant differences were found between the control and experimental groups.

To confirm the obtained data, we used the Pearson test χ^2 . The use of the Pearson χ^2 test also proved that the differences between the distributions of the control and experimental groups according to both indicators of the formation of motivation to increase one's own level of social health were found to be insignificant ($p > 0,05$).

After the implementation in the experimental group of the developed method of teaching the theoretical component of physical education, students of the experimental group showed more positive changes in the first and second indicators compared to the control group, in which theoretical training in physical education took place according to the traditional teaching method. A comparative analysis of the obtained results showed an increase in the number of students of the experimental group, who recorded a high level according to the first indicator by 11,5%. At that time, positive changes in the control group were noted at the level of +1,8% of students. More convincing are the changes in the experimental group regarding the decrease in the number of students with a low level of need for achievement. Their decrease occurred from 43,1% at the initial control stage to 12,4% at the final control stage (- 30,7 %). In the control group, the indicators remained almost unchanged, from 42,4% at the initial control stage to 39,8% at the final control stage.

Similar positive dynamics were observed in the experimental group and in relation to the second indicator of the motivational component of social health before increasing one's own level of social health. Thus, at the stage of the final control, the number of students who put health in first and second place (high level) in the list of proposed values was 16,9% more than at the initial control. In the control group, similar changes occurred in only 2,1% of students. The decrease of students with a low level according to this indicator occurred as follows: in the control group by 6,9%; in the experimental group by 28,2%.

The generalization of the data obtained according to the first and second indicators, as well as the comparative analysis of the results obtained at the initial and final control stages, made it possible to state a noticeable

advantage of the author's method of teaching the theoretical component of physical education compared to the traditional method, in the context of increasing the level of the motivational component of social health of students of the special medical group.

If at the initial control stage the level of formation of the motivational component of social health of students of the special medical group did not have significant differences, then at the final control, the number of students of the experimental group with a high level of motivation was 32,4%, which is 14,2% more than before the implementation of the method. In the control group, the number of students with a high level, on the contrary, decreased by 2,6%. This, in our opinion, indicates the obsolescence of the methodology of teaching the theoretical component of the subject, the insufficiency of the current physical education program of topics and issues that would reveal the importance of social health for the individual, which, in turn, negatively affects the motivation of students of the special medical group to improve their own level of social health. Meanwhile, it should be noted that minor positive changes in the control group occurred in relation to an increase (by 8,3%) in the number of students with an average level of motivation, as well as a decrease in respondents (- 5,7%) who lacked motivation to increase their own level of social health. Note that in the experimental group, the number of students with a low level of motivation was 12,1%, which is 29,5% less than at the initial control stage.

The use of the Pearson test χ^2 made it possible to find out that at the stage of the final control, the differences between the distributions of the control and experimental groups are statistically significant ($p < 0,001$). So, the study of the dynamics of the levels of formation of the motivational component of social health of students of the special medical group of students shows the noticeable advantages of the experimental group over the control group, which, in turn, confirms the effectiveness of the teaching method of the theoretical component of physical education.

DISCUSSION

When developing the methodology for teaching the theoretical component of physical education, we took into account the recommendations made by specialists in the field of physical education (V. Kondakov, E. Kopeikina, N. Balysheva, A. Usatov, D. Skrug). Accordingly, it is noted that when organizing the physical education of students, it is necessary to use such methods of influence that correspond to the humanistic principle «to induce, not to force» (V. Kondakov, 2015). Long-term observations of the authors of the article testify to the unchanged approaches to the organization of physical education of students of the special medical group in general and the teaching of the theoretical component of the subject in particular. It was also important for us to consider the results of the study V. Druz, which emphasizes the urgent need to increase students' interest in physical education by finding new approaches to their organization (V. Druz, 2017).

V. Fotynyuk, having conducted a number of studies, notes that students have a low level of motivation for physical education classes, the latter lack of interest in following the health system in their free time from studying (V. Fotynyuk, 2017). This completely correlates with the results of our study. It should be noted that recently there have been attempts to introduce new approaches to the organization of physical education, including to increase the level of motivation of female students for classes. Thus, L. Zaharova, in order to strengthen the psychophysical state and psychosocial health of female students of special medical groups, substantiates the importance of using fitness yoga in the above context (L. Zaharova, 2014). We cannot ignore the opinion of the domestic scientist Yu. Boychuk, who convincingly proves the need for humanitarianism in physical education, its focus on the high professional, spiritual, value and general cultural development of the student's personality, the disclosure of spiritual and social aspects of the organization of physical education of the young generation (Yu. Boychuk, 2013). Our scientific searches are also related to scientific developments of S. Adyrkhaeva. Which emphasize the importance of finding modern technologies for physical education of students with health disabilities in the context of inclusive education (S. Adyrkhaev, 2016). In the development of the methodology for the formation of social health of students of the special medical group within the theoretical component of physical education, we relied on scientific developments of L. Bartnovskay. In which it is stated that the basis of preserving and strengthening the health of students of the special medical group should be the methodology of individual human health, his deeply socially motivated needs to be healthy (L. Bartnovskay, 2017).

CONCLUSIONS

1. The development of diagnostic tools made it possible to establish that at the initial control stage, no significant differences were found between the control and experimental groups regarding the formation of the motivation of students of the special medical group to improve their own level of social health. Both groups were dominated by students with a low level of motivation.
2. Based on the analysis of the curriculum for physical education, it was established that its content does not include consideration of issues related to the essence of social health and the possibilities of its improvement. In real practice, with the traditional method of teaching theoretical material on physical education in a special medical group, mostly ineffective teaching methods are used, which do not involve students in active, creative activities during class.
3. The results of the study testify to the effectiveness of the developed and tested author's method of teaching the theoretical component of physical education in the context of forming motivation to improve the level of social health among students of a special medical group. It was established that the implemented method of teaching the theoretical component of physical education with the use of author's methods of teaching had a significant effect on improving the level of social health of students of the special medical group.

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