

BASIS OF INTEGRATED APPROACH TO SPORTS AND RECREATIONAL ACTIVITIES OF STUDENTS OF SPECIAL MEDICAL GROUPS

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Annotation. *Purpose:* to prove the superiority of techniques integrated approach to sports and recreational activities of students of special medical groups in the educational institution. *Material / methods:* the annual pedagogical experiment conducted on three groups that have been formed based on the results of preliminary studies based on diagnosis. Learning process based on the principle of improving training. *Results:* the advantages of an integrated approach to sports and recreational activities of students with disorders of the musculoskeletal system. Recommended approaches to increase physical and functional training. Also - the formation of a stable demand of motor activity, leading healthy lifestyles, in the acquisition of social status in the educational activity. *Conclusions:* the integrated approach will meet the educational needs of students to form a cultural competence of the individual in the preservation and conservation of health, ability to adapt and successfully implement their professional activities.

Key words: approach, establishment, control, students, medical group.

Introduction

Innovative pedagogic technologies in the sphere of physical culture for special health groups' students (SHG) are based on principles of adaptive physical culture [1, 3-5, 9, 10, 13, 15] and consider basic principles of mental, psycho-motor and coordination functions' formation [7, 11].

Physical culture plays important role in HEE functioning because it has wide possibilities for correction and improvement of psycho-motor functions of persons with health problems. Great number of physical exercises and their variability permit to select purposeful combinations for every certain case, to strengthen health and improve organism's workability.

Main task of physical education is formation of students' conscious attitude to own abilities, self-confidence, to physical loads, which are required for organism's full fledged functioning as well as formation of demand in systemic practicing of physical exercises. However, the existing physical education programs are of little effectiveness at HEEs and have rather limited choice of means and methods.

The purpose of health related physical culture activity of SHG students is ensuring of possibility for their participation in social, cultural and physical culture activities by giving them right to choose one or another kind of functioning [8].

With realization of individual-differential approach to health related physical culture activity of students it is necessary to have information about current state of organism; for this purpose computer technologies are used [6, 8, 14].

Health related physical culture functioning of students with health problems is an indicator of their adaptation to educational process.

Necessity in popularization of physical culture and sports among students is conditioned not only by demands and rights of young people but also by age specificities of their development, by continuously changing conditions of life functioning as well as by "social order" of society for preparation of highly qualified specialists [11].

These principles were reflected in federal Law "On physical culture and sports in Russian Federation", № 80-ФЗ, dt. 29.04.1999. Cl. 18 of this law orders to consider organization of health related physical culture work with disabled in system of educational establishment as determining and indispensable condition for their comprehensive rehabilitation and social adaptation.

In pursuance of this law the problem of disabled students' education at higher educational establishments recent years has become the subject of specialists' and managers' of different authorities discussions.

Our research expands possibilities of application of individual approach to health related SHG students' physical culture functioning in HEE educational space. Methodic of complex evaluation of girl students' individual adaptation state parameters with the help of computer diagnostics permits to individually differentiate physical load and, at the same time, provide control of organism system's functional state at all stages of educational process.

Purpose, tasks of the work, material and methods

The purpose of the work is to prove advantage of integral approach to health related physical culture functioning of SHG girl students.

The tasks:

1. Studying and specifying of approaches to health related physical culture functioning of SHG girl students.
2. To work out a concept of integral approach to health related physical culture functioning of SHG girl students.
3. To work out and experimentally ground the model of adaptive-developing educational environment and recreational trainings for examination and vacation periods for girl students.

We examined health of HEE girl students, studied functional and psycho-physiological parameters, which

characterized girl students' individual adaptation state; the received experimental material was statistically processed. We developed programs of recreational trainings, analyzed indicators of many sides of fitness, determined effective control exercises, characterizing physical fitness's level.

In one-year experiment three groups participated: two control groups and one experimental (1-3rd year girl students). In first control group educational process was conducted in compliance with traditional curriculum; medical examination was carried out at the beginning and at the end of experiment. In second control and in experimental groups special attention was paid to pedagogic control, which was conducted at the beginning and at the end of every semester, there were introduced timely corrections in curriculum that motivated the trainees for improvement of organism's functional abilities and physical potential.

Optimal plan of health related physical loads in educational process of both groups was built according to module technology and worked out strategy, but with it in experimental group we practiced individual-differentiated approach on the base of adaptive state, with consideration of health related physical culture functioning and recreational trainings in vacation and examination periods..

Results of the researches

Basing on theoretical methodological grounds we developed the concept of integral approach to health related physical culture functioning (HRPCF) of SHG girl students; we also worked out model "Adaptive-developing educational environment of girl students with supporting motor system's problems".

The purpose of this model is creation of adaptive, health-preserving educational environment, based on integration of medical rehabilitation, psychological-pedagogic and cognitive-developing technologies of health related physical culture.

Conventionally, this model has three blocks, each of the oriented by their contents on improvement of educational process in discipline "Physical culture" for special health groups.

Block 1 – organizational pedagogic conditions of adaptive-developing environment. Block 2 – rehabilitation – corrective measures. Block 3 – Pedagogic technologies in the process of health related physical culture functioning of SHG girl students.

Pedagogic technologies of HRPCF stipulate implementation of cognitive-developing technologies, formation of health culture, style and way of life, optimization of physical load on the base of testing and semester control, application of rating system of teaching, considering recreational trainings.

On the base of methodic of integral approach we created module-rating system of monitoring of SHG girl students' educational process, which envisages educational components and realization of physical load by modules with gradual increasing of its scope and intensity as well as with using of pedagogic, medical-biologic and psycho-physiological controls.

Annual academic module consists of 44 weeks, including the first and the second halves of year. With it we considered rating system of evaluation of girl students' progress. The first half of year includes two modules, the second – three modules. Every module determined purposes, tasks and orientation of physical loads depending on individual's adaptive state, on diagnosis and level of physical fitness that ensures individual-differentiated approach.

Every module, in its turn, is divided into first and second modules of discipline and, depending on the tasks to be solved, has four periods: involving, bringing, basic and supporting.

Involving period is characterized by little total load, gradual adaptation of organism to specialized load, oriented on correction of supporting motor system. Bringing period envisages gradual increasing of total load and its intensity. Basic period contains main physical load with a set of means and methods, oriented on development of aerobic, general, special and speed-power endurance, power and other physical abilities. Depending on degree of disease correcting exercises are selected. Supporting period is planned for the period of examination session and vacations. Not high total physical load is applied independently with the help of means of active leisure.

Rating system is an integral evaluation of all kinds of students' educational functioning, expressed in points. Its purpose is to give complex evaluation of quality of girl students' academic work. Evaluation of quality in rating system is an accumulating one and is used for structuralizing of girl students' systemic work during all period of studying.

This system is based on application of pedagogic control technology and includes current, midterm and intermediate control.

Current control is a continuous monitoring of students progress during academic module, semester or academic year. It is carried out in the course of trainings in discipline.

Midterm examination is carried out for systemic testing and evaluation of academic material's mastering. It is fulfilled by a teacher, who conducts classes in the discipline.

Intermediate control – test in discipline – is fulfilled in the period of examination session after finishing of every semester and coincides with week of independent training.

Girl students are admitted to intermediate examinations only if they executed all works, stipulated by module-rating system, which evaluates quality of motion functioning and skills, and if they have not less than 30 points.

Teaching of discipline is finished with test, which is determined by quantity of points for every academic module. Total mark permits to determine the level of physical fitness and form theoretical knowledge on healthy life style and health preservation. In examination period classes are conducted by preliminary agreement in convenient for girl students time and, as a rule, are oriented on releasing from nervous-mental stress.

In period of summer vacations girl students improved the acquired skills independently in compliance with

individual programs. Self control was carried out in respect to initial units of measurements (quantity of times, meters, minutes and etc.).

During all period trainings were conducted in gym, outdoors and in swimming pool. Special attention was paid to training of special endurance in aerobic zone. Aerobic loads of equal intensity were controlled by HBR per load (120-140 b.p.m). Load with pulse of 110-120 b.p.m. was of aerobic-compensatory orientation for activation of recreational processes. In swimming pool, for development of resistance to hypoxia girl students fulfilled swimming exercises with holding of breathing. Basic period of the first half-year differed from the second one by the fact that share of specific, correcting exercises of selective action was gradually increased. It was possible owing to reducing of general exercises and scope of load for endurance in aerobic zone and increasing of load's intensity.

During all pedagogic experiment swimming was being paid special attention. In first half-year girl students mastered swimming on side, breast-stroke style and swimming on back. Swimming load was oriented on strengthening of nervous system, hardening, activation of positive emotions, improvement of general and special endurance. Exercises were fulfilled with low HBR intensity (110-120 b.p.m.).

Elements of psycho-physical training were applied nearly at every class. These trainings took 5-10 minutes, depending on the tasks to be solved. Psycho-physical training permitted not only to regulate physiological processes (breathing, muscular tonus), but also to increase sensitivity to development of mental (attention, concentration, perception) and psycho-motor functions.

For the period of examination session every girl student received task to maintain aerobic abilities at the achieved level.

Pedagogic experiment showed advantage of the offered module technology of SHG physical culture trainings in comparison with traditional system.

The trainings were conducted as per health related program, which included individual complexes of physical exercises not only in educational process but also in examination period and during vacations.

Health related program is of health related, correcting character and is oriented on ensuring of stability of adaptation-homeostatic nervous-mental releasing processes, on increasing of reserve and adaptation organism's abilities with the help of introduction in academic process of special physical exercises for muscular "corset", for development of back, abdomen and girdle muscles with static exercises. The offered complexes influence effectively on training of low mobile joints, contractions; they increase functional possibilities of cardio-respiratory system.

The program was corrected after every semester in compliance with results of computer diagnostics, orthopedist's opinion and intermediate examination.

With the help of recreational program girl students fulfilled annual training of health related orientation.

After finishing of the experiment we noticed increasing effect of trainings by this program in experimental group.

Girl students of experimental group improved their functional and adaptation abilities, level of physical fitness by results of all evaluating tests.

Conclusions:

We have proved effectiveness of recreational trainings in the period of test and examination sessions.

Pedagogic experiment showed effectiveness of integral approach to HRPCF in system of educational establishment.

Results of pedagogic experiment showed advantage of integral approach to health related physical culture functioning of girl students with supporting motor system's problems on the base of creation of adaptive-developing educational environment in educational space of HEE that permitted to increase the level of physical and functional fitness, to form firm demand in motion functioning, in healthy life style, in acquiring of social status in educational functioning.

Integral approach permitted, on the one hand, to satisfy educational demands of students with health problems and, on the other hand, to form cultural competences of personality in health preservation, in ability to adapt and successfully realize his (her) professional functioning.

For realization of individual-differentiated approach to students' health related physical culture functioning it is necessary to have current information about organism's functional state with application of computer technologies for this purpose. Alongside with it computerized systems for diagnostics of different states of special health group students are practically absent. The absence of current information makes difficult differentiation of physical load.

Analysis of theoretical researches elucidated contradictions between the following:

- demand in implementation of innovative technologies in educational process of SHG girl students and absence of reliable mechanisms, oriented on organization of educational process in discipline "Physical culture" in educational space of HEE;
- requirement to activate health related physical culture functioning of SHG girl students and absence of specialized recreational programs for examination and vacations periods, developed on the base of complex evaluation of adaptive state for every certain personality.

Health related physical culture functioning of students with health problems is an indicator of their adaptation to educational process degree. However, up to the present time there has been absent integral approach to this problem that proves the urgency of our research.

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