

DEVELOPMENT OF PROFESSIONAL PHYSICAL CULTURE OF MEDICAL STUDENTS

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The article focuses on the solution to the actual problem of development of professional physical culture in a medical University student. Theoretical analysis of pedagogical ideas helped to give a more precise description of the structure of the concept under study (motor, knowledge, practice, value components) and the criteria for its formation completeness: the individual's value orientation to the professional physical culture; motivation-based involvement in activities; a fairly high level of development of vital motor skills; person's need for self-development in the chosen type of professional activity. As part of a pedagogical experiment, a systematic modernization of educational activities was performed at the Department of physical culture of Orenburg State Medical University, Orenburg. The statistical data confirmed the usefulness of the socio-cultural and educational potential of a modern medical University that integrates open educational resources.

Keywords: *professional formation of a person; professional physical culture; speciality-related values, specialized physical education.*

The relevance of the study of the professional formation problem lies in the fact that radical changes taking place in the sphere of industrial relations (the growth of the professional activities registry; integration and differentiation of labour; the introduction of new operations and the increasing complexity of technological processes) cause an urgent need for society of modernization of the higher education system. Currently, professional development of an individual is reduced to the acquisition of professional knowledge, job operations training, with no development of universal characteristics of the individual, one's cultural potential, which affect prospects for professional growth and qualitative social changes in real life.

The purpose and the tasks. Determining the formation of applied physical culture of the future specialist as the main purpose, we define the main task as the professional development of the individual, one's readiness and ability to constantly improve their professional level in order to correspond to the modern social "portrait of a specialist" in the field of medicine.

In this regard, it is the cultural paradigm, as one of the priorities in education, that implements the content of various models of educational systems and will allow the student to become a subject of active consumption of cultural values, creative transformation and their subsequent translation both in personal life and professional activity.

It is necessary to focus on the rational use of sufficient resource potential of medical education for

the formation of professional physical culture (PFC) of future specialists in the field of medicine. Integration of innovative educational resources, simulation technologies in training; appropriate scientific and pedagogical personnel; specialized physical education related to the work practice — this is the basis, which is the socio-cultural and educational potential of a modern medical University, which determines the success of the formation of the PFC of the future specialists.

Materials and methods of research. The system of scientific knowledge in the field of theory and methods of teaching physical culture has made a significant contribution to the study of its content and value potential [1; 4]. At the same time, there is a real need in the development of a concept of pedagogical support that would contribute to the formation of professional physical culture in the medical education system based on a cultural approach, taking into account the requirements of the new educational standard. Thus, the FSES HE 3++ for an enlarged category of specialties "public health and medical science" establish the need of development of a competence that involves readiness for self-organization and self-development, ensuring the student's ability to maintain the proper level of physical fitness for full-fledged social and professional activities [6; 9].

Organizational and methodological guidelines made for a number of professions and specialties and aimed at the implementation of professional and applied physical training appeared more than five decades ago [8]. In the updated state programs

on physical education for a number of special educational institutions, the task was to detail professional and applied physical training for certain industries, to determine the substantive aspects, and it was also recommended to take into account the speciality of graduates when organizing mass sports activities, to form students' physical qualities and skills necessary for future work in the speciality.

In this regard, it is of interest for a number of specialists to consider professional and applied physical training as a means of purposeful improvement of the biological nature of a person in a specific professional activity [5; 8].

In scientific works (L. V. Burok, V. A. Kabachkova, T. M. Pankratovich et al.) shows that the practice of specialised physical exercises, taking into account the specifics of the profession being mastered, allows to achieve significant results in a shorter time, both in physical and professional training [2; 3].

Thus, the modern theory of physical education needs to be rethought in connection with the consideration of the results obtained from the standpoint of a cultural approach. Based on the point of view of S. S. Korovin and V. A. Kabachkova on the priority of the value of physical culture, we can conclude that they have a complex impact on the person at each stage of continuing education. Therefore, we can consider physical culture as a purposeful work "...mostly with the psychic component of the personality, and not so much with the biological" [3, p. 4].

The results of the study and their discussion.

Considering PFC as an integral quality of personality allows us to purposefully use the speciality-related values for the formation of professional competence of future specialists.

The implementation of the PFC determined the achievement of socially significant results:

- versatility as a quality of personality: the development of diverse interests, abilities that ensure readiness for effective work;
- ability to be balanced as a dynamic characteristic of a person: the optimal ratio of professional abilities, personal orientation and motivation for professional activity;
- psychophysical readiness of the individual for successful educational and professional activities.

Theoretical studies have allowed us to determine the components of the PFC structure:

- physical (motor): psycho-physical development, functional and motor readiness;
- cognitive (knowledge): theoretical training,

technological knowledge, intellectual development;

- operational (practice): technical readiness, technological activity;
- axiological (value): values and value orientations as an internal component of a person's self-consciousness that determines the motives, interests, attitudes, and needs of a person in the field of physical culture and sports.

We have adopted criteria for the formation of PFC:

- value orientation of the individual on the PFC;
- motivation of the student for professional physical culture improvement, rationalization of life activity;
- the vastness and complexity of motor skills based on the optimal state of the analyzer systems and mental processes; motor coordination abilities;
- balanced morphological and functional development;
- conscious choice of profession; need for self-improvement.

The results of the survey under experimental conditions (students of the Orenburg State Medical University of the Ministry of Health of the Russian Federation, 1—2 courses) showed that the respondents have an awareness of the role of physical culture in their future professional activities. Statistics confirm that University graduates who were actively engaged in physical culture and sports during their studies are successfully working in the conditions of modern economic relations.

It should be noted that students with poor health and chronic diseases should have special knowledge on methods of physical exercises application and intensity of the loads on the organism, the possibility of their complex use in order to influence on various organs and systems, development of physical qualities, posture correction and defects in body constitution. And if we are talking about the work in the field of surgery and traumatology, it is clear that "...professional skills in medicine is determined by the overall and static endurance, by the strength of major muscle groups, the precision and quickness of motor reaction, the fidelity of the amplitudinous and temporal characteristics of movements, emotional stability, the ability to switching and distribution of attention..." [2, p. 56]. It follows that one of the main purposes in the implementation of the physical education process is the training of medical specialists of a new format with PFC, which integrates readiness for professional adaptation, creative activity, the ability to self-organize (the ability to set goals, plan, treat

health responsibly, fully use personal resources) [7].

The Department of physical culture acts as an effective center for preserving and strengthening health, healthy lifestyle and sports lifestyle.

In this regard, the basis for the practical implementation of the concept of PFC formation in a medical University is:

- first, the creation of socio-cultural conditions for strengthening and maintenance of students' health through development of sports infrastructure (sports center "Hippocrates", skiing facilities, sports camp "Medic"), promotion of mass sports (participation in intra-University and inter-University competitions, city and regional events, annual participation in the Sports Festival of students of medical and pharmaceutical universities of Russia "Physical culture and sport — doctor's second profession", All-Russian campaigns such as "Ski-track of Russia", "Cross of Nations", "Walking day", etc.) and engage students to systematic physical education and sport (in the framework of elective courses in physical culture and sports implemented at the Department of physical culture of the "OSMU" of the Ministry of health of Russia: "Multiathlon", "Sports games", "Fitness", "General physical training", "Adaptive physical culture and sports for handicapped people", » Health and educational training»);
- secondly, the design of the forming process of PFC as a set of specialized physical education, special applied sports, physical culture, recreation and rehabilitation activities that meet the social and personal needs of students in the development of professionally important motor skills, professional and personal qualities [5].

Modernization of educational activities at the Department of physical culture consists in:

1. Improving the quality of the educational process (regular filling in the electronic "journal of assessments and performance of work"; information transparency of the system monitoring student progress based on the University's point-rating system for evaluating educational achievements; testing system (centralized according to the schedule, the creation of independent judging teams, a schedule of reserve time for passing tests for those who could not pass tests on time); availability of consultation hours for lagging students on a special schedule.
2. Improving the quality and effectiveness of training sessions: optimization of forms, methods and methodological approaches for the formation of PFC; development and implementation of pedagogi-

cal technologies in the field of physical culture and sports, as well as affordable, safe and effective practices in the field of health maintenance; student-centered interaction "student — teacher — group» based on positive interpersonal relationships; development of multi-level additional educational programs that allow students to study and improve in their chosen sport (swimming, athletics, volleyball, basketball, mini-football, handball, table tennis, fitness aerobics, tourism, all-around, martial arts, badminton, etc.).

A set of measures used for updating physical culture and sports work:

1. Improving the quality of training and conducting physical culture and sports events: analysis of students' motivation to participate in competitions at various levels in individual sports (volleyball, basketball, mini-football, athletics, table tennis, tourism, swimming, etc.); a variety of organized events from intra-University to individual sports, such as "First-year's Cross", "Autumn racket", "Mini-football in the snow» "Cross-country skiing", "From the ASSC credit to the RLD insignia", "Joyful starts", etc.; encouragement of students who show high sporting achievements (diplomas, certificates, honor boards, sports scholarships); cooperation with city and regional federations in sports (Orenburg regional basketball Federation, Orenburg region sports tourism Federation, Orenburg region weight lifting Federation, Orenburg region table tennis Federation, Orenburg region athletics Federation, Orenburg region chess Federation, etc.), Organization of volunteer movement among medical students who are on duty during sports events, involvement of students in organizing Sports and mass and Physical fitness events in various capacities (judge, assistant judge, volunteer, photojournalist, entertainer of the event); organization and holding of open tournaments in sports (Darts, badminton, table tennis, swimming, skiing) with the involvement of students from other universities in the city and region.

2. Implementation of measures complex on development of the student sports movement: organization and functioning of sports clubs with the volume of training load of at least 6 hours per week with the goal of training teams of OSMU of sports to participate in competitions at various levels, as well as the selection of candidates in members of the national teams OSMU sports (sport games, athletics, swimming, badminton, darts, chess, table tennis, tourism, skiing, etc.); creating conditions for improving sports skills of students; organization of health sections work with the purpose of formation of health maintenance educational space of the University, promote a healthy lifestyle.

3. Improving the quality and effectiveness of physical culture and sports promotion, including through the Internet (OSMU website pages of the Department of physical culture, sports club, student sports club, group in the social network Vkontakte); organization and holding of sports events and festivals ("Youth + health = future", "Joyful starts", "Seeing off the winter", "Football in the snow", etc.); production and placement of social banners.

4. Activities for the all-Russian sports complex "Ready for labor and defense» promotion. Advisory work for the students and teaching personnel and staff on issues of preparation for the implementation of standards of ASC RLD; conduct additional sessions with the students regarding the implementation of standards of ASC RLD, including "Open classes of ASC RLD"; producing information booths ASC RLD; the organization of the ceremonial presentation of the insignia of ASC RLD at the meeting of the Academic Council of FSBEI "OSMU» Ministry of health of Russia.

5. Improving the research work of the Department of physical culture, including the organization of the student scientific society. Organization of monothematic conferences of various levels (Intercollegiate, all-Russian, international), increasing the publication activity of students and employees in publications indexed in the RSCI database, included in the VAK; increasing the citation level of the teaching staff of the Department.

6. Development of personnel potential of the Department. Improvement of professional competences level, systematic training on the field of the Department's study, including in the field of information and distance technologies; flexible scheduling of academic load of the teaching staff of the Department to allow for the redistribution of the working time of teachers in favour of one or the other activity depending on the priorities of the Department and specific teachers; the creation of conditions for integration of research activities of teachers in the Department through the development of flexible scientific-educational project teams, able to quickly adapt to changing conditions; promoting the activities of the teaching staff of the Department on development of relevant and popular in the market educational services and products (additional educational programs, physical fitness activities).

7. Improvement of physical culture and recreation and sports infrastructure of FSBEI of Higher Education "OSMU» of the Ministry of Health of Russia. Timely repair of sports facilities, monitoring of students' interest in various sports; promotion of the range of additional sports and recreation services.

8. Development of the system of interaction of the Department with other structural departments of "OSMU", student self-governed organisations, student associations, the administration of Orenburg and the Orenburg region, city and regional sports Federations, sports clubs of higher education institutions of Orenburg, schools, graduates of "OSMU".

Dynamics of the main components indicators of professional physical culture of medical students reflects the effectiveness of its formation at the University.

As a result of our research, we have obtained generalized indicators of changes in the previously identified components of professional physical culture of the individual:

- the physical (motor) component in the experimental groups showed a significant increase in relation to the control groups — by 21.8 % at $p < 0.05$. This confirms the statement that a higher professional and applied training of students is a crucial factor in the development of professional motor abilities specialized for medical workers;
- cognitive (knowledge) component: theoretical competence of students in experimental groups is higher than this indicator in comparison with control groups by 18.2 % at $p < 0.05$; technological knowledge and intellectual development in experimental groups of students were higher by 11.8 % at $p < 0.05$ and 19.5 % at $p < 0.05$, respectively, than in control groups;
- the operational (practice) component also showed a significant increase, due to the systematic modernization of educational activities at the Department of physical culture: technical readiness of students in experimental groups is 12.5 % higher than in control groups at $p < 0.05$; technological activity in experimental groups is 34.7 % higher at $p < 0.05$ in comparison with control groups;
- the integral indicator of the formation of the axiological (value) component of professional physical culture of the individual in the experimental groups in comparison with the control groups was higher by 33.2 % at $p < 0.05$.

Conclusions. The analysis of theoretical sources, practical experience and our own research shows that under certain conditions, a modern University can effectively use its socio-cultural and educational potential to form a PFC. It is obvious that professional physical culture as an element of professional culture is one of the main characteristics of a specialist's personality.

The concept of PFC formation at the stage of professional education of students has the goal of promoting professional formation of the individual on the basis of development, improvement and maintenance of professionally important personal qualities and motor abilities at a level that satisfies the individual and society. This creates prerequisites for the formation of a system of value orientations and self-improvement in the further professional activities of a University graduate.

References

1. Ibraeva R.Zh. *Formirovanie sotsialno znachimyykh tsennostey u studentov nefizkulturnykh vuzov v protsesse fizicheskogo vospitaniya* [Formation of socially significant values among students of non-physical education institutions in the process of physical education]. Thesis. Chelyabinsk, 2009. 199 p. (In Russ.).
2. Korovin S.S., Kabachkov V.A. *Professionalnaya fizicheskaya kultura i formirovanie lichnosti* [Professional physical culture and formation of personality]. Orenburg, 1998. 259 p. (In Russ.).
3. Korovin S.S., Pankratovich T.M. *Tsennostnyy potentsial fizicheskoy kultury v vospitanii lichnosti* [the Value potential of physical culture in the education of the individual]. Orenburg, 2018. 212 p. (In Russ.).
4. Kulikov L.M., Ryibakov V.V., Yarushin S.A. Modernizatsiya pedagogicheskoy sistemy aktivnogo zdoroveformirovaniya podrastayushchego pokoleniya [Modernization of the pedagogical system of active health formation of the younger generation]. *Teoriya i praktika fizicheskoy kultury* [Theory and practice of physical culture], 2010, no. 1, pp. 60—64. (In Russ.).
5. Mandrikov V.B. *Metodologiya profilirovaniya fizicheskogo vospitaniya studentov v meditsinskikh vuzakh : dis. ... d-ra ped. nauk* [Methodology of profiling physical education of students in medical universities]. Volgograd, 2002. 110 p. (In Russ.).
6. Ob utverzhdenii polozheniy o federalnykh uchebno-metodicheskikh ob'edineniyakh v sisteme vysshego obrazovaniya po ukрупnennym gruppam spetsialnostey i napravleniy podgotovki, otnosyashchimsya k oblasti obrazovaniya "Zdravoohraneniye i meditsinskie nauki" [On approval of the regulations on Federal educational and methodical associations in the system of higher education for enlarged groups of specialties and training areas related to the field of education] Health and medical Sciences]. Available at: <http://www.garant.ru/products/ipo/prime/doc/71378922/#ixzz5iDawHuU8>. (In Russ.).
7. Sharapov A.A. Kompetentsii v oblasti zdorovogo obraza zhizni v sisteme podgotovki bakalavrov pedagogicheskogo obrazovaniya po bezopasnosti zhiznedeyatel'nosti [Competence in the field of healthy lifestyle in the system of training bachelors of pedagogical education in life safety]. *Molodoy uchenyy* [Young scientist], 2016, no. 6.1, pp. 91—94. (In Russ.).
8. Schurov A.G., Buchenkov K.V., A.S. Mitryukov A.S., Popadin V.V. O napravlenosti professionalno-prikladnoy fizicheskoy podgotovki studentov meditsinskikh vuzov [On the direction of professional and applied physical training of medical students]. *Uchenyye zapiski universiteta imeni P.F. Lesgafta* [Scientific notes of the P.F. Lesgaft University], 2019, no. 1(167), pp. 341—346. (In Russ.).
9. Yarushin S.A. Realizatsiya zdoroveformiruyushchey kompetentnosti studencheskoy molodezhi [Implementation of health-forming competence of students]. *Problemy fizkulturnogo obrazovaniya: kontseptualnyye osnovy i nauchnyye innovatsii. Vyp. 5* [Problems of physical education: conceptual foundations and scientific innovations. Iss. 5]. Saki, 2018. Pp. 102—106. (In Russ.).

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Формирование профессиональной физической культуры студентов медицинских вузов

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Статья посвящена решению актуальной проблемы формирования у студента медицинского вуза профессиональной физической культуры. **Теоретический анализ** педагогических идей способствовал уточнению структуры исследуемого понятия (двигательный, знаниевый, деятельностный, ценностный) и критериальных показателей ее сформированности: ценностная направленность личности на профессиональную физическую культуру; мотивационная включенность в деятельность; достаточно высокий уровень освоения жизненно необходимых двигательных умений и навыков; потребность в самосовершенствовании в выбранном виде профессиональной деятельности. В рамках **педагогического эксперимента** проведена системная модернизация образовательной деятельности на кафедре физической культуры Оренбургский государственный медицинский университет. **Результаты статистических данных** подтвердили целесообразность использования социокультурного и образовательного потенциала современного медицинского вуза, интегрирующего открытые образовательные ресурсы.

Ключевые слова: профессиональное становление; профессиональная физическая культура; профилированные ценности, профилированное физическое воспитание.

Список литературы

1. Ибраева, Р. Ж. Формирование социально значимых ценностей у студентов нефизкультурных вузов в процессе физического воспитания : дис. ... канд. пед. наук / Р. Ж. Ибраева. — Челябинск : УралГУФК, 2009. — 199 с.
2. Коровин, С. С. Профессиональная физическая культура и формирование личности: монография / С. С. Коровин, В. А. Кабачков. — Оренбург : Изд-во ОГПУ, 1998. — 259 с.
3. Коровин, С. С. Ценностный потенциал физической культуры в воспитании личности / С. С. Коровин, Т. М. Панкратович. — Оренбург : Изд-во ОГПУ, 2018. — 212с.
4. Куликов, Л. М. Модернизация педагогической системы активного здоровьесформирования подрастающего поколения / Л. М. Куликов, В. В. Рыбаков, С. А. Ярушин // Теория и практика физической культуры. — 2010. — № 1. — С. 60—64.
5. Мандриков, В. Б. Методология профилирования физического воспитания студентов в медицинских вузах : дис. ... д-ра пед. наук / В. Б. Мандриков. — Волгоград, 2002. — 110 с.
6. Об утверждении положений о федеральных учебно-методических объединениях в системе

высшего образования по укрупненным группам специальностей и направлений подготовки, относящимся к области образования «Здравоохранение и медицинские науки» : Приказ Министерства образования и науки РФ от 19 августа 2016 г. № 108. — URL <http://www.garant.ru/products/ipo/prime/doc/71378922/#ixzz5iDawHuU8>.

7. Шарапов, А. А. Компетенции в области здорового образа жизни в системе подготовки бакалавров педагогического образования по безопасности жизнедеятельности / А. А. Шарапов // Молодой ученый. — 2016. — № 6.1. — С. 91—94.

8. Щуров, А. Г. О направленности профессионально-прикладной физической подготовки студентов медицинских вузов / А. Г. Щуров, К. В. Бученков, А. С. Митрюков, В. В. Попадьин // Ученые записки университета имени П. Ф. Лесгафта. — 2019. — № 1(167). — С. 341—346.

9. Ярушин, С. А. Реализация здоровьесформирующей компетентности студенческой молодежи / С. А. Ярушин // Проблемы физкультурного образования: концептуальные основы и научные инновации : сб. науч. тр. V Междунар. науч. конгресс. Вып. 5. — Саки : ИП Бровко А.А., 2018. — С. 102—106.

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