



PEDAGOGICAL SIGNIFICANCE OF THE SPORTS MEDICINE APPROACH TO THE EDUCATIONAL PROCESS

Akbarova D. R.

Senior Lecturer of the National Pedagogical University of Uzbekistan

Abstract

The article details the pedagogical significance of the approach to sports medicine in the field of physical education in terms of improving the professional training of the teacher and the main concepts and foundations of sports medicine.

Keywords: Physical education teacher, sports medicine, concept, diagnosis, rehabilitation, criterion, athlete, pedagogical yondshuv, social, psychological, health.

Introduction

TA'LIM JARAYONIGA SPORT TIBBIYOTI YONDASHUVINING PEDAGOGIK AHAMIYATI

Akbarova D. R.

O'zbekiston milliy pedagogika universiteti katta o'qituvchisi

Annotatsiya

Maqolada jismoniy tarbiya sohasida o'qituvchining kasbiy tayyorgarligini takomillashtirish borasida sport tibbiyotining yondashuvi pedagogik ahamiyati va sport tibbiyotining asosiy kontsepsiyalari va asoslari batafsil yoritilgan.

Kalit so'zlar: jismoniy tarbiya o'qituvchisi, sport tibbiyoti, kontsepsiya, diagnostika, reabilitatsiya, mezon, sportchi, pedagogik yondshuv, ijtimoiy, psixologik, salomatlik.

The Integrated Role of Physical Education and Sports in the Health and Development of the Younger Generation: A Medical-Pedagogical Perspective

The growing social significance of physical education and sports as active tools for the holistic development, health maintenance, and biological activity of the developing youth organism is becoming an increasingly important issue in the healthcare system of the Republic of Uzbekistan. A medical approach to sports within the educational process is of critical importance. Especially in the field of physical education, the integration of sports medicine has unparalleled pedagogical significance in improving the professional training of teachers. The pedagogical foundation plays a vital role in the formation of highly qualified physical education teachers; it can be confidently stated that skilled educators are one of the most crucial factors for young professionals to enter their careers effectively [1].

It is well known that physical development is one of the leading indicators used to assess the health status of the growing generation. Its level is closely related to environmental factors and reflects, in the most accurate way, the social, economic, and hygienic living conditions, as well as changes in lifestyle, including engagement in sports (Chubirko M. I. et al., 1997; Mokeyeva M.M., Setko N.P., 2002; Zaytsev A.G., 2004; Kuchma V.R. et al., 2011) [2].

Sports Medicine is a comprehensive field of medical services related to sports, aimed at preserving athletes' health, preventing injuries, enabling rehabilitation, and resolving problems that may arise during athletic activity [3].

Integrated Medical Approach of Physical Education Teachers in Health Promotion

In contemporary pedagogical practice, the physical education teacher is no longer seen merely as someone who teaches physical exercises, but rather as a responsible specialist in preserving and enhancing students' health. From this standpoint, it is vital for educators working in the field of physical education and sports to possess medical knowledge and be familiar with health-oriented technologies. Especially in ensuring the health and physical development of the younger generation, an integrated approach has become a necessity.

The integration between medicine and pedagogy primarily enables a deeper understanding of the biological foundations of physical activity and allows for designing exercise plans that consider the individual physiological capabilities of students of different ages. For instance, physiological parameters such as



cardiovascular function, respiratory capacity, and muscular development can be used to determine exercise loads, which helps prevent overexertion, injuries, or other health complications.

Rehabilitation techniques, diagnostic methods, and preventive strategies widely used in sports medicine can also be applied at the school and college levels of physical education. A physical education teacher should maintain individual health records for students, continuously monitor their condition, and develop tailored health-improving exercise programs. In this context, collaboration between the teacher and school nurse or medical personnel plays a critical role.

Moreover, internationally popular models like the “school nurse – physical educator” model introduce extracurricular health-focused activities in schools, such as “healthy breaks,” “sport breaks,” and “active rest sessions.” This further positions the physical education teacher as a promoter of a healthy lifestyle.

Within the framework of Uzbekistan’s state programs such as “Strengthening Youth Health and Promoting a Healthy Lifestyle,” including the 2022–2026 New Uzbekistan Development Strategy, systematic efforts are underway to prevent chronic diseases and enhance physical activity among schoolchildren. Therefore, integrating medical knowledge into the professional development programs for physical education teachers is highly relevant, especially through courses on sports medicine, health psychology, nutrition hygiene, and preventive pedagogy. Practical Implementation of the Integrated Approach in Physical Education Lessons May Include:

- Brief pre-class medical assessments (skin color, breathing rate, complaints) and evaluation of readiness for exercise;
- Monitoring of signs such as heart rate and sweating during the session;
- Preparation of alternative exercises for students with injuries or health restrictions;
- Inclusion of short medical-pedagogical lectures on hygiene and healthy living during lessons;
- Organization of health weeks, sports festivals, and wellness-oriented projects.

Application of Global Sports Medicine Practices in Uzbekistan

In today’s world, the field of sports medicine has achieved significant progress globally, and the advanced practices in this domain play a crucial role in maintaining athletes' health, increasing physical activity, and ensuring the continuity of professional performance. The Republic of Uzbekistan has also begun to utilize international experiences to develop its own sports medicine system. In particular, advanced scientific and practical approaches from countries



such as the United States, Germany, Japan, and Russia are being adapted to local conditions in Uzbekistan.

In the United States, preventive care and personalized rehabilitation programs occupy a central place in the sports medicine system. An individual health profile is created for each athlete, and based on this profile, the intensity of training and the recovery processes are determined. In the school sports system, brief medical screenings before classes and monitoring of heart rate and blood pressure enable instructors to conduct physical activities under medical supervision.

In Japan, sports medicine places special emphasis on hygienic practices and psycho-emotional stability. Along with promoting physical activity among students, attention is also given to stress levels and emotional well-being. Through this approach, sports serve not only as a means of physical development but also as a tool for strengthening mental health. This model could be beneficial for Uzbekistan's education system, especially during periods when psychological stress is observed among students.

In Germany, sports medicine is closely integrated with scientific research. There is a strong collaboration between healthcare institutions, universities, and sports federations. Modern sports halls, rehabilitation zones, and health-improvement technologies are widely introduced in school sports. In addition, joint professional development programs are organized for both medical personnel and physical education teachers. This model opens the possibility for Uzbekistan's pedagogical universities to implement sports medicine as an interdisciplinary course.

The Role of Sports Medicine in Russia and Its Adaptation in Uzbekistan

In Russia, the sports medicine system is an integral part of state policy. Through the "School Sports and Health" program, each student's level of physical development is analyzed, their health group is identified through specialized assessments, and appropriate training plans are designed accordingly. If this experience is applied in Uzbekistan's regional sports schools, it would allow for the development of differentiated health-promotion programs tailored to individual needs.

In recent years, special attention has been given to sports medicine in Uzbekistan. In 2023, as part of the "Healthy Child – Happy Future" program implemented jointly by the Ministry of Health, the Ministry of Public Education, and the Ministry of Sports, elements of medical supervision were introduced into general

education schools. For example, some schools began to implement active breaks, morning physical exercises, mini-diagnostics, and wellness clubs.

In conclusion, the role of physical education teachers in the healthcare system is not limited to conducting sports activities. It also includes medical-pedagogical supervision, preventive measures, and active participation in shaping students' lifestyles. Therefore, knowledge, skills, and methodologies related to sports medicine must be regarded as essential components of the physical education discipline.

Sports training, physical education, and physical preparedness represent a socio-pedagogical process in which the coach and teacher play a leading role. However, the subject of this process is a person with all the complexity of their psyche, bodily functions, and interactions with the surrounding environment. In this regard, the effectiveness of the pedagogical process largely depends on the extent to which the tools and methods used correspond to the health, functional capabilities, age, and individual characteristics of each student. Any error by the instructor may result in serious consequences [4].

According to literature analysis, the key concepts of sports medicine are as follows:

- **Injury prevention:** Developing specific training and techniques to minimize the risk of injury among athletes [5];
- **Diagnosis:** Using modern diagnostic methods to detect sports-related injuries and illnesses;
- **Rehabilitation:** Designing rehabilitation programs and applying physical therapy and medical treatments for injured athletes;
- **Physical conditioning:** Enhancing athletes' physical performance and efficiency;
- **Nutrition:** Providing dietary guidance and nutrition plans for athletes;
- **Psychological support:** Monitoring athletes' mental health and offering psychological assistance when needed;
- **Research and innovation:** Conducting new research and implementing innovative methods in the field of sports medicine.

The Concept of Occupational Health in Sports Medicine

Within the framework of sports medicine, the concept of occupational health refers to the conditions related to a person's professional activity, including factors that may influence professional integration and the work environment.

According to research analyses, the concept of occupational health encompasses medical, psychological, and social aspects. The key elements included in this concept are as follows:

- Physical health: The physical condition of workers, including work-related injuries and illnesses specific to certain professions;
- Psychological health: The impact of mental states such as anxiety, stress, and depression on work performance;
- Social health: Relationships within the workplace, social support, and interpersonal connections;
- Ergonomics: The adaptation of the work environment to the physical needs of the person, which includes creating a comfortable and safe workspace.

To ensure occupational health, it is essential for organizations to implement high-level management practices, provide specialized training for employees, and conduct comprehensive medical examinations.

Sports medicine plays a crucial role in maintaining the health and enhancing the efficiency of future physical education teachers, and it is a key contributor to success in professional sports [6].

In conclusion, the field of sports medicine incorporates modern pedagogical technologies, methods, tools, and formats, as well as medical examination techniques, to monitor and assess the health and functional condition of athletes. New physical performance tests and functional assessments are being used to evaluate the physical capacity and endurance of individuals engaged in physical education and sports. In this diagnostic process, the role of pedagogical methods is invaluable and irreplaceable.

REFERENCES:

1. Акбарова, Д. Р. (2016). Адаптив ҳаракатга келтирувчи рекреация ва реабилитация шакллари. Дефектологиянинг долзарб масалалари, 1(1), 51-53.
2. Akbarova, D. (2023). The importance of types of medical supervision of a doctor in the development of medical knowledge of future teachers of physical culture. *Science and innovation*, 2(B4), 402-407.
3. Акбарова, Д. Р. (2022). Спорт тиббиётида функционал тестларнинг аҳамияти. Илий ахборотлари илмий журнали, 1(1), 50-57.
5. Акбарова, Д. Р. (2022). Антропометрия жисмоний ривожланганликни текшириш



- методлари ва усуллари мажмуи сифатида. Илий ахборотлари илмий журналлари, 1(7), 47-50.
4. Каталомова Л. Л., Словарь. М.: Дрофа, 2007.- 61с
 5. Shukurov I. B. Jaхon ta'lim standartlari asosida sog'liqni saqlash tizimini tubdan takomillashtirishning asosiy omillari. www. oriens. uz.2023.-03(3)-364 -bet
 6. Akbarova, D. R. (2016). Place of physical exercises in the schedule. International Conference on European Science and Technology, 86(1), 75-78.
 7. Arzikbaev, A., & Akbarova, D. (2016). Features of anatomic and psychophysiological development of juvenile school students. Influence of knowledge and public practice on the development of creative potential and personal success in life, 38-38.
 8. Арзибаев, Қ. О., & Акбарова, Д. Р. (2016). Проблема здорового образа жизни в исследованиях. Наука и Мир, 3(3), 77-78.
 9. Акбарова, Д. Р. (2015). Соғлом бўлай десангиз. Педагог газетаси, 2(951), 1-2.
 10. Пономарев Н. И. Некоторые проблемы функционирования и развития теории физической культуры // Теория и практика физической культуры.1996. – №5. – 55-58 с
 11. Ачкасов Е.Е., Руненко С.Д., Султанова О.А., Машковский Е.В. Врачебный контроль в физической культуре.
 12. Павлов, С. Е., Павлова Т. Н. Функциональный контроль в современном спорте и спортивной медицине / Олимпийский бюллетень № 13 / Сост. Мельникова Н. Ю., Эйнуллаев А. Ю., Трескин А. В., Леонтьева Н. С., Никифорова А. Ю. – М.: Сойпроект, 2012.–С.265-271.