Theoretical and practical bases of optimization of educational and practical processes of development of paralympic sports

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Abstract
Purpose: The article analyzes Uzbekistan's experience in the development of Paralympic sports, the importance of organizing the training process based on an individual approach and the use of modern technologies.
Results: When implementing an individual approach, training programs are tailored to the needs of each athlete. For example, an athlete with a spinal cord injury will focus on strengthening their upper body, while wheelchair athletes will focus on developing skills specific to their sport. Periodization (dividing training into three phases) is also an important factor in the successful implementation of programs, which ensures that the athlete achieves maximum efficiency and prevents overloads. Special equipment for Paralympians is also an important part of the training process. Some athletes may require special prosthetics, such as a "running blade" for running or special wheelchairs for wheelchair athletes. For athletes with visual impairments, tactile or auditory assistive technologies are used to effectively conduct training. Technology also helps in the development of customized training programs. For example, wearable devices allow you to track your heart rate or speed in real time. Virtual reality (VR) technologies allow athletes to simulate competition conditions in a safe environment, which enhances an athlete's strategic and psychological training.
Conlcusion: An individual approach to each athlete is the key to success. Through individual assessment, individual training programs, appropriate equipment, psychological support, constant monitoring and effective teamwork, Paralympic athletes can achieve their goals. The role of innovative prosthetics, specialized equipment and rehabilitation technologies is crucial for Paralympic athletes. Such approaches not only enhance their athletic potential, but also serve as a source of hope for people with disabilities in society.
Keywords: Paralympic sports, optimization of training processes, individual approach, innovative technologies, training programs, rehabilitation of athletes, psychological support, adapted infrastructure, Paralympic Games, sports potential, experience of Uzbekistan, modern prostheses, biomechanical analysis, rehabilitation technologies, development of physical capabilities.

Introduction

Paralympic sports include all sports included in the program of the summer and Winter Paralympic Games. As of 2020, the Summer Paralympic Games include 22 sports and 539 competitions, while the Winter Paralympic Games include 5 sports and about 80 competitions. The Summer Paralympic Games have been held regularly since 1960, and the Winter Paralympic Games have been held since 1976. It is noteworthy that since 1988, these competitions have been held in the same sports arenas where the Olympic Games were held. The National Paralympic Association of Uzbekistan has been active since 2007. Representatives of Uzbekistan participated in the Paralympic Games in Beijing for the first time in 2008.

Results and discussion

Paralympic sports are international sports competitions organized for athletes with disabilities (with the exception of people with hearing loss). Initially, the word "pair" came from the word "paralyze" and meant the inability to move a certain part of the body due to spinal problems, but later, as the number of competitors increased, it began to be interpreted as a reference to the first part of the word "parallel", that is, to refer to competitions held in parallel with the main Olympic Games. The Governing Council of the International Paralympic Committee (IPC) has approved the inclusion of 22 sports in the program of the 2028 Summer Paralympic Games in Los Angeles: para badminton, boccia, soccer for the blind, goalball, para judo, para canoeing, para-equestrian, para-table tennis, wheelchair tennis, wheelchair fencing, wheelchair basketball, Paralympic archery, Paralympic athletics, Paralympic powerlifting, Paralympic volleyball, Paralympic swimming, Paralympic rowing, Paralympic shooting, Paralympic taekwondo, Paralympic triathlon, wheelchair rugby, Paralympic cycling. Each sport helps athletes reach their potential, promotes integration into society, and equalizes opportunities. The Paralympic Games test not only the limits of physical abilities, but also the will and spiritual strength of the participants.

The decree of the President of the Republic of Uzbekistan provides for the participation of our country's Paralympic athletes in 476 Paralympic Games programs and obtaining a total of 105 licenses in 12 sports, including bocce, table tennis, and archery, and a couple-cycling. _The Uzbek delegation successfully competed at the 2024 Summer Paralympics, 65 athletes from 9 sports won 113 tickets. Table 6 below provides information on the number of athletes and programs who have qualified to participate in the Paralympic Games.

The total number of medals won by Uzbek athletes at the 2024 Summer Paralympics is 26. Of these, 10 gold, 9 silver and 7 bronze medals, which placed them in 13th place overall. Taking into account the above achievements, we can say that although our Paralympians achieved a result higher than planned, winning 113 permits instead of 105, established by Presidential Decree, but in sports they did not reach, obtaining 9 instead of 12. In particular, the poor results in table tennis and badminton noted in the decision can be assessed as unsatisfactory. Of the 22 sports included in the program of the Paralympic Games, 13: pair badminton, bocce, football for the blind, goalball, pair Equestrian, pair table tennis, wheelchair tennis, wheelchair fencing, wheelchair basketball, pair archery, pair volleyball, pair triathlon, wheelchair rugby showed unsatisfactory results. The results of these sports show that training in these types requires a fundamental reform of the quality of practical training.

Uzbekistan also attaches great importance to the Winter Paralympic Games. The National Paralympic Association of Uzbekistan was established in 2007. Based on the Decree of the President of the Republic of Uzbekistan "On additional measures for the development of the Paralympic movement" dated May 18, 2021, the National Paralympic Committee of Uzbekistan was established on the basis of the National Paralympic Association of Uzbekistan. Winter Paralympic sports include: alpine skiing, Paralympic biathlon, Paralympic skiing, Paralympic hockey, Paralympic snowboarding and wheelchair curling. This list of sports also changes from year to year. For example, at a meeting in Madrid (Spain) on September 10-11, 2018, the IPC Executive Board announced that the parabobsleigh did not meet certain evaluation criteria and would not be included in the official program of the 2022 Winter Paralympic Games. Uzbekistan has sent a delegation to participate in the 2014 Winter Paralympic Games in Sochi, Russia, from March 7 to 16. It was the first time in the country's history that it participated in the Winter Paralympic Games. The delegation included two skiers— Evgeny Slepov and Ramil Gayazov.

Uzbekistan sent a representative to the 2018 Winter Paralympic Games in Pyeongchang, South Korea. Only one skier from Uzbekistan was selected to participate in the competition. Daryo.uz It is reported that Yakutkhan Kholbekova (Uzbek: Yakutkhon Kholbekova) intends to participate in the

Fig . Information is provided on the number of athletes and programs that have qualified for Paralympic Games

Sport	Men	Women	Total sports-person	Total competetions
Academic rowing	1	1	2	2
Judo	5	3	8	8
Paracanoe	3	3	6	6
Shooting sports	1	1	2	4
Powerlifting	3	5	8	8
Swimming	5	2	7	25
Taekwondo	3	2	5	5
Cycling	2	0	2	8
Athletics	13	12	25	47
Total	36	29	65	113

Paralympic ski racing competitions. From this, it can be concluded that, as at the Winter Olympic Games, the country's athletes showed unsatisfactory results at the Winter Paralympic Games.

Uzbek athletes will face a serious stage of preparation for the XIV Winter Paralympic Games in 2026, which will be held in the Italian cities of Milan and Cortina. This places a huge responsibility on the athletes of our country. The development of Paralympic sports requires the organization of high-quality training and practical training based on an individual approach. This process should be aimed at developing the physical capabilities of athletes, as well as meeting their special needs.

Medical care and rehabilitation processes play an important role in the training of Paralympic athletes. Regular monitoring of athletes' health helps prevent injury. It is also necessary to ensure the physical recovery of athletes through rehabilitation centers and physiotherapy services. The training load should be selected taking into account the individual capabilities of each athlete and contribute to the maximum disclosure of his potential. The process of mental preparation is just as important as physical preparation. Psychologists should develop special programs to motivate athletes, manage stress, and increase self-confidence. In this process, relaxation exercises and concentration methods help to increase the mental stability of athletes. The nutrition plan plays a key role in enhancing the physical abilities of Paralympic athletes. Individual nutrition programs should be developed to meet their energy needs and enriched with dietary supplements rich in vitamins and minerals. This not only improves the physical condition of athletes, but also helps them stay healthy and resilient.

During the preparation for the competition, it is necessary to organize sparring and control competitions that will help athletes adapt to real conditions. This process enhances technical and tactical training, as well as develops the ability to adapt to a competitive environment. The qualifications of coaches and support staff are an important aspect of the training of Paralympic athletes. Qualified coaches should identify the strengths and weaknesses of athletes and develop suitable training plans for them. In addition to trainers, the complexity of the training process is ensured by the teamwork of specialist doctors, psychologists, physiotherapists and nutrition consultants. Scientific research and innovation play a special role in the development of Paralympic sports. The use of modern technologies and advanced methods helps to increase the effectiveness of training and improve the results of athletes. For example, biomechanical analysis is a useful tool for improving movement, helping to boost athletes' potential. The provision of financial and technical assistance by the State to Paralympic sports also creates opportunities for the development of international cooperation, the use of best practices and technologies. The trainings and practical exercises organized in this way make it possible to maximize the potential of athletes. As a result, Paralympic athletes not only achieve success in sports, but also become a source of inspiration and motivating role models in society.

An individual approach to training in Paralympic sports is crucial for athletes to achieve maximum results and ensure their safety. The development of Paralympic sports in Uzbekistan has increased significantly in recent years, while the training process is also organized individually, in accordance with the specific needs and goals of each athlete. An individual approach to the organization of practical exercises is of great importance in the training of Paralympic athletes. This approach ensures the development of training programs that take into account the physical and psychological characteristics of each athlete, and plays an effective role in ensuring that athletes achieve high results. The first stage of the training process is to assess the athlete's capabilities and needs. The assessment takes into account the athlete's physical capabilities, mobility, strength, endurance, range of motion, and disability level. For example, athletes with visual impairments may need orientation and navigation training, while athletes with mobility limitations should pay special attention to strengthening the upper body. Based on this analysis, it is important for coaches to develop a training program that is individual for each athlete.

It is very important to regularly evaluate the achievements and physical condition of athletes during the training process. This will help them organize effective training sessions. In addition, the data collected in real time allows you to evaluate the athlete's results and make the necessary adjustments. The team system is also important for the successful training of Paralympic athletes. The athlete's

family, friends, team and medical staff support him. In Uzbekistan, government agencies, national Paralympic committees and sports organizations are working to provide not only physical, but also psychological and social support to Paralympic athletes. Thanks to an individual approach, individual training programs can be developed for each athlete, which significantly increases their chances of success. Uzbekistan is creating all the opportunities to achieve high results in the training of Paralympic athletes. Thanks to programs tailored to the needs of each athlete, special equipment, psychological support, monitoring, and effective teamwork, they can achieve their goals.

Conclusion

In conclusion, it should be noted that the Olympic and Paralympic sports training centers of Uzbekistan are the foundation of the country's sports potential. They play an important role not only in achieving success in the international arena, but also in developing sports culture and attracting the younger generation to a healthy lifestyle. Preparation for Paralympic sports requires an individual approach, and training programs are developed taking into account the specific needs and goals of each athlete. This approach increases the physical and psychological fitness of athletes, ensures their safety and helps them achieve high results in competitions. In the future, innovations based on technology and science will help make this approach more effective and comprehensive, opening up new opportunities for Uzbek Paralympic sports. An individual approach to the organization of practical training for Paralympic athletes ensures that physical, psychological and technical aspects are taken into account.

References

Decree of the President of the Republic of Uzbekistan, dated 05.11.2021, No. PP-5281 *On the comprehensive preparation of athletes of Uzbekistan for the XXXIII Summer Olympic and XVII Paralympic Games held in Paris* (France) in 2024.

Bondarchuk A.P. (2007) *Upravleniye trenrovchnim prossesom sporsmenov visokogo klassa* [Managing the training process of high-class athletes] Moscow: Olimpia press, 2007; 148.

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