The impact of adaptive sports on the social adaptation of disabled people

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Abstract

Adaptive physical education is one of the constituent parts of culture, which is intended for people who, as a result of disease, injury, anatomical or mental defect, have strong and sharp morphological disorders of body functions and organs. It aims to develop the individual's functional, and psychological abilities and, if necessary, compensatory mechanisms, which enable a person to achieve self-reliance (depend only on himself) and lead an active lifestyle. The main goal of disabled people's participation in adaptive sports is to restore lost contact with the surrounding world, to create the necessary conditions for restoring relations with society and joining it, to participate in socially useful activities, and to self-participate in the rehabilitation of one's own health.

Keywords

adaptive sports, physical and social rehabilitation, compensatory mechanisms, corrective and rehabilitation movement.

Introduction

Disability is a world problem. In total, 650 million people with disabilities are officially registered in the world. According to the International Health Organization, people with disabilities make up 10% of the world's population. Despite the development of medicine, the number of disabled people, especially children with deviations in physical development, is steadily increasing. For example, 54 million (19%) in the USA, and 60 million (5%) in China. There are no such official statistics in Georgia. It is known that 8,000 children in Georgia belong to the disabled category.

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Main text

Physical education and sports for disabled people are aimed at stimulating body systems and physiological processes and developing knowledge of necessary, self-correcting movements, behavioral manifestations, skills, and basic physical qualities. It should also ensure the normalization of the body's vital functions, adaptation to environmental conditions, and overall development and perfection of personal qualities.

Human activity has always been, is, and will be a necessary condition for the normal functioning and development of the body. According to Aristotle [1, 14]: "Nothing wears out and destroys the human body like long-term physical inactivity. This means that the complete cessation of movement or a sharp restriction of movement will have a disastrous effect on the human body."

Muscular work in turn strengthens the social status of a person. Many researchers and scientists confirm that hypokinesia (lack of movement activity) significantly weakens the protective-compensatory mechanisms of the human body, the psychophysical resistance of the body to harmful factors becomes labile, and the susceptibility to the occurrence of various diseases increases sharply. i.e. It is an important risk factor in terms of health disorders.

Adaptive sports represent the most mass recovery and corrective-rehabilitation movement for people with different categories of disabilities, although it should be taken into account that not all athletes can participate in high-achieving adaptive (para) sports competitions.

Adaptive high-achievement sports are the prerogative of "healthy disabled people" in a conventional sense. The term "healthy disabled person" was introduced in 1975 by German doctor U. Sunder (U. Sunder 1975). "We are coming out of the situation - he wrote - that regardless of whether people with disabilities suffer from this or that injury, they are not essentially sick people. They have only physical impairment/retardation due to various birth defects, illnesses, or congenital or acquired injuries. These injuries of the body, after a certain period of time, should be considered permanently unchanged defects, the treatment of which is not subject to drug therapy. However, if the rest of the body parts are practically healthy and the disabled person can withstand the physical load in the

chosen sport, then he is obliged to train more physicians in order to be able to show the good compensatory properties of different parts of the body and organs to develop a methodological approach to the indications and contraindications of sports training for children with cerebral palsy (paralyzes) and other nosological groups of the international sports-medical classification.

Adaptive sports training is a teaching-pedagogical and rehabilitation process and has its own specific planning, which should be based on medical control and the principles of optimizing annual training. During regular training in adaptive sports, psychological stability should be mobilized, which in turn should contribute to raising the quality of willpower. This allows the realization of the individual's abilities and the manifestation of movement and creative skills.

In Kinesio correction and kinesiotherapy, stimulating, trophic and compensatory action mechanisms are distinguished (R. Svanishvili). The stimulating effects of physical exercises are related to the breakdown of energy-containing biochemical structures and the release of energy, as well as the restoration of energy potential, the positive transformation of the functional schemes of the blood circulation and respiratory systems, the normalization of the rhythm of homeostasis, internal organs, and other processes.

The stimulating effect of physical training has a positive value even in the chronic course of the disease. As for the acute stage of the disease, in this case, physical training is a contraindication, since the already excited central and autonomic nervous system is more excited by the proprioceptor impulse generated by the physical load.

In the case of chronic pathological processes, the central nervous system is present in the so-called in restrained state, due to which the functional state of internal organs and endocrine systems decreases in the body. In this case, physical exercise is one of the best biological stimulants that can increase the body's functional capacity and improve its physiological performance. The stimulating effect of physical exercises depends on the mass of the muscles and the intensity of the work performed by them. The stimulating effect of physical exercises is enhanced by the positive emotions experienced by the exercisers. It is also acceptable to take into account that static breathing exercises, muscle relaxation exercises, and exercises performed at a slow pace decrease the overall tone of the body, which is also necessary when conducting classes with adaptive physical exercises. It is known that alternating stimulating and relaxing physical exercises have a positive effect on the stability of the functioning of the central nervous system and improve it.

During trophic action, the processes of regeneration and repair in the internal organs are strengthened, the resorption of inflammatory exudate is accelerated, and the inflammatory processes as a whole undergo reverse development. The influence of the nervous system on the activation of blood circulation leads to the strengthening of oxidation-regenerative processes. Activation of trophic processes also changes the capacity for strengthening, which in turn leads to functional muscle hypertrophy and increased strength.

As a result of muscular work, blood circulation is strengthened, and the nutrition of tissues is improved, which is manifested, first of all, by the assimilation of plastic material and acceleration of regeneration processes. Physical training significantly contributes to the early formation of a scar (cord) and the development of compensatory hypertrophy.

Physical training resists the deepening of atrophic processes caused by hypodynamic, and the activation of trophic processes significantly improves the physiological processes in the body, which significantly hinders the healing processes, which significantly hinders the development of healing processes, etc.

Compensatory action is manifested in the strengthening or transformation of adaptive mechanisms aimed at replacing lost or changed functions (temporarily or permanently). In addition, physical exercises help to make the targeted compensation faster when the pathological process occurs and ensure the vitality of the damaged systems. In this case, the formation of the organism's compensation proceeds according to biological regularities, and the vitality of the organism significantly depends on it. When the compensatory abilities are disturbed during the disease, one of the leading roles is assigned to the complete or partial restoration of the body's functional abilities during the treatment process, and the regulation of the compensatory function is carried out by nerve-reflex mechanisms.

The development of compensatory skills through physical exercises can be temporary or permanent. Temporary compensation can be generated in a relatively short time, e. i. In the period when the disease is going on, where the organs and systems need compensation. Permanent compensation is related to the permanent production of compensatory ability (function) after the transfer of this or that disease (trauma) so that the body or its separate organ systems can function purposefully, both temporarily and permanently. As a result of systematic physical training, activation of physiological processes is much easier.

The normalization of the disturbed functions takes place in the musculoskeletal system and physiological systems in a time mode that ensures effective muscle work and is manifested by the normalization of the functions of the body systems and the improvement of the interaction of their individual functional indicators. All of this contributes to overall coordination, the interaction of cardiovascular, respiratory, and digestive systems and excretory organs, an increase in functional reserves, formation of useful compensations. It is worth noting that under the influence of physical exercises, pathological reflexes are reversed, compensatory reactions are formed and recovery processes are stimulated.

It is also important that as a result of systematic training, the excess of parasympathetic innervation is strengthened, which is manifested by a decrease in blood pressure, deepening and rarefaction of heart contractions, and economy of energy processes that ensure the functional activity of the body's organs and systems, as a result of which the liability of the neuromuscular apparatus increases. Also, neurophysiological mechanisms are fully activated, and the function of analyzers is activated, which helps to improve the interaction between the body and the environment.

Conclusion

The normalization of functions is activated as a result of medical treatment, but for the final recovery it is necessary to perfect movement processes, which can be achieved only through adaptive physical education and the use of sports. The function of the diseased organism is completely normalized when the patient fully or partially regains his ability to work, and it is better under the influence of physical exercises.

Physical exercises contribute to the elimination of movement disorders, inhibition of pathological reflexes arising during the disease, gradual restoration of limited movement (contracture), and restoration of normal reflexes, through which the process of compensatory realization of the body takes place.

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