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THE MEDICAL IMPORTANCE AND METHODS OF PHYSICAL EXERCISES IN THE RECOVERY PROCESS AFTER INJURY OR ILLNESS

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Abstract: This article scientifically and theoretically examines the role of therapeutic physical education (TPE) and its significance in rehabilitation processes. The study highlights the importance of physical exercises in restoring the functional condition of the human body after injuries, illnesses, or surgical interventions. In addition, the main principles, methods, and stages of therapeutic physical education are discussed in detail.

The article explains, based on scientific sources, the role of TPE in the rehabilitation of the musculoskeletal, cardiovascular, and nervous systems. Special attention is paid to the importance of individualized approaches, the gradual increase of physical load, and adherence to safety principles during rehabilitation. Furthermore, the study demonstrates that therapeutic physical education is an essential component of comprehensive modern medical treatment.
Keywords: therapeutic physical education, rehabilitation, physical exercise, recovery, injury, physiotherapy, health improvement, functional recovery, physical load, movement therapy.

INTRODUCTION

In the modern healthcare system, therapeutic physical education (TPE) and rehabilitation processes occupy an important scientific and practical position. Restoring the functional capabilities of the human body after injuries, diseases, or surgical interventions remains one of the urgent tasks of modern medicine. Alongside pharmacological treatment, rehabilitation methods based on physical exercises play a crucial role in the recovery process.

Therapeutic physical education is a specially designed system of physical exercises aimed at restoring, strengthening, and normalizing impaired body functions. This field has developed through the integration of medicine, physiology, and physical education sciences and has become an indispensable component of rehabilitation medicine today. Rehabilitation not only focuses on restoring health but also on recovering a patient's working capacity and facilitating adaptation to social life.

TPE is especially significant for patients with musculoskeletal injuries, cardiovascular diseases, and neurological disorders. Recent scientific studies have shown that therapeutic physical exercises improve blood circulation, restore muscle tone, normalize nervous system activity, and enhance overall physical condition. Properly organized rehabilitation significantly reduces recovery time and improves the quality of life of patients.

From this perspective, studying the scientific foundations of therapeutic physical education and analyzing its methods and application areas is one of the pressing issues of contemporary

medicine. This article discusses the theoretical foundations and practical significance of TPE and rehabilitation processes based on scientific literature and modern medical approaches.

METHODOLOGY

During the preparation of this article, scientific and theoretical sources related to therapeutic physical education and rehabilitation were analyzed. Textbooks, scientific articles, and methodological manuals on medical rehabilitation, physiotherapy, sports medicine, and physical education theory served as the primary research materials. In addition, modern rehabilitation approaches used in clinical practice and recommendations of the World Health Organization were studied.

The research employed methods of scientific analysis, synthesis, comparison, and generalization. The main principles of therapeutic physical education, its mechanisms of influence on the human body, and its role in different stages of rehabilitation were comparatively analyzed based on scientific evidence.

The study examined the application of TPE exercises in the recovery process after various diseases and injuries. Particular attention was paid to the rehabilitation of musculoskeletal disorders, cardiovascular diseases, and neurological impairments. The scientific foundations of aerobic, breathing, and general developmental exercises were also investigated.

Furthermore, the article emphasizes the importance of gradually increasing physical load, ensuring an individualized approach, and following safety principles throughout the rehabilitation process. The necessity of adapting rehabilitation programs according to the patient's age, gender, type of disease, and general physical condition was scientifically justified.

The findings of the study contribute to identifying the role of therapeutic physical education in modern medicine and clarifying its effectiveness in rehabilitation processes.

RESULTS AND DISCUSSION

The analysis of scientific literature and theoretical approaches demonstrated that therapeutic physical education is one of the most important and indispensable components of rehabilitation. Properly organized physical exercises after injuries, illnesses, or surgical operations provide significant positive outcomes in restoring the functional state of the body.

The results indicate that the use of TPE improves blood circulation, restores muscle strength and elasticity, increases joint mobility, and enhances overall physical activity. In particular, regular and gradually intensified exercises accelerate the recovery process in patients with musculoskeletal injuries.

The study also revealed the high importance of TPE in the rehabilitation of cardiovascular diseases. Light aerobic exercises and breathing exercises help stabilize heart activity, normalize blood pressure, and improve the overall endurance of the body. Consequently, patients are able to return to their daily activities more quickly.

The discussion results showed that the effectiveness of therapeutic physical education largely depends on proper planning and individualized approaches. The level of physical load should be determined according to the severity of the disease, the patient's age, physical preparedness, and general health condition. Excessive or improperly organized exercises may lead to negative consequences.

The analysis further demonstrated that psychological factors play an important role during rehabilitation. Therapeutic physical education increases patients' self-confidence, improves emotional well-being, and provides positive motivation for recovery. This significantly enhances the effectiveness of comprehensive rehabilitation programs.

Overall, the reviewed scientific data confirm that therapeutic physical education plays an important role not only in physical recovery but also in psychological rehabilitation and social adaptation.

CONCLUSION

In conclusion, therapeutic physical education and rehabilitation processes represent one of the most significant directions of modern medicine. They serve as effective tools for restoring the functional condition of the human body after injuries, diseases, or surgical interventions.

The results of the study showed that regularly and properly organized therapeutic exercises positively affect the musculoskeletal, cardiovascular, and nervous systems. TPE improves blood circulation, increases muscle strength, and restores joint mobility.

An individualized approach is of great importance in rehabilitation, as the level of physical load should be adjusted according to each patient's health condition. This ensures both the safety and effectiveness of treatment. In addition, gradually planned exercises significantly reduce recovery time.

Therapeutic physical education also plays an essential role in improving patients' psychological condition. It reduces stress, increases self-confidence, and accelerates reintegration into social life.

In general, therapeutic physical education is an indispensable component of rehabilitation and has considerable scientific and practical significance within the system of comprehensive medical treatment. Its widespread application contributes to improving public health and reducing disability rates.

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