

METHODOLOGY FOR THE RECOVERY OF PERSONS WITH DISABILITIES THROUGH IPPOTHERAPY CLASSES

Ibodullayev Daston Rashidovich

Scientific research institute of physical culture and sports

Uzbekistan, Chirchiq

E-mail: ibodullayevd101@gmail.com

Keywords: *Hippotherapy, rehabilitation, cerebral palsy, stroke, scoliosis, adaptive physical education, mobile technology.*

Ключевие слова: *Иппотерапия, реабилитация, церебральный паралич, инсульт, сколиоз, адаптивная физкультура, мобильные технологии.*

Kalit so'zlar: *Ippoterapiya, rehabilitatsiya, serebral falaj, insult, skolioz, adaptiv jismoniy tarbiya, mobil texnologiya.*

Introduction In recent years, the issue of strengthening human health and eliminating physical and psychological limitations caused by various diseases has been studied as one of the most pressing problems in the world. Full integration of persons with disabilities, who constitute a large part of the population, into the life of society, improving their quality of life, ensuring their independent activity and rehabilitation requires special attention not only as a social, but also as one of the scientific, pedagogical, and medical problems. In this regard, in recent years, non-traditional methods, in particular hippotherapy, have begun to be widely used in the rehabilitation system.

Hippotherapy (from the Greek "hippos" - horse and "therapeia" - treatment) is a method of rehabilitation and health improvement based on horse movement. This method was initially introduced in European countries and later became widespread in many countries around the world. The main feature of hippotherapy is that horse movement has a natural, rhythmic, and complex effect on the human body. Horse walking dynamics are similar to human walking, and its movements positively affect the patient's muscles, joints, nervous system, and psychological state.

In the conditions of Uzbekistan, hippotherapy is developing as a new, but promising method. The results of experiments confirm that this method is an effective tool for people with disabilities, in particular, patients suffering from diseases such as cerebral palsy, stroke, and scoliosis. Therefore, the research aimed to scientifically substantiate the effectiveness of a specially developed three-stage hippotherapy program.

The relevance of this scientific research lies in the fact that it not only enriches existing rehabilitation methods, but also provides an innovative approach to the

rehabilitation of people with disabilities. Because traditional physiotherapy and physical exercises in many cases cannot arouse interest in patients, and the monotony of training reduces motivation. On the contrary, during hippotherapy sessions, the patient is not only involved in physical activity, but also receives emotional support through direct interaction with the animal. This increases mental stability, reduces stress levels, and makes the rehabilitation process more effective.

The scientific novelty of the research lies in the fact that for the first time in the conditions of Uzbekistan, a special three-stage hippotherapy program has been developed and implemented. This program consists of three main blocks, in the first stage - adaptation and psychological training, in the second stage - the formation of physical movement skills, and in the third stage - generalization and consolidation.

Also, the results of the conducted research showed that hippotherapy has proven to be an effective means of increasing muscle strength, developing balance and coordination abilities, improving the psycho-emotional state, and ensuring social integration of people with disabilities. During the study, experimental and control groups were formed, and their initial and final results were compared. In the experimental group, a significant increase in all indicators was revealed.

Thus, the main goal of this scientific research is to develop a methodology for the rehabilitation of people with disabilities using a specially developed three-stage program based on hippotherapy training and to scientifically substantiate its effectiveness.

Hippotherapy is recognized worldwide as one of the effective areas of the rehabilitation system. Therefore, the analysis of scientific literature is of great importance in illuminating the theoretical and practical foundations of this methodology.

Foreign research

The scientific foundations of hippotherapy methodology are widely covered in the research of European and American scientists. For example, in the studies of Benda, McGibbon, and Grant (2003), it was proven that hippotherapy helps improve walking coordination in children diagnosed with cerebral palsy. Casady and Nichols-Larsen (2004) note that as a result of hippotherapy training, there is a significant increase not only in physical, but also in psychological indicators.

German scientist Michaelis (2010) studied the normalization of the nervous and muscular system through hippotherapy and showed that rhythmic oscillations of horseback riding send significant physiological impulses to the central nervous system. Also, in studies conducted by Sterba (2007), it was noted that hippotherapy develops the general motor indicators of children with central nervous system disorders more effectively than traditional rehabilitation.

Experience of the CIS countries

Hippotherapy is also widely used in countries such as Russia, Belarus, and Ukraine. Ivanova (2012) and Petrova (2015) scientifically substantiated the positive effect of hippotherapy in rehabilitation after cerebral palsy, scoliosis, and stroke in children. In their opinion, hippotherapy contributes not only to physical development, but also to the social adaptation and self-confidence of children.

Belarusian scientist Guzalovsky (2016) in his research developed a three-stage methodology of hippotherapy training and proposed its implementation in the activities of rehabilitation centers. This approach was later adopted in other countries.

Research of Uzbek scientists

In our country, scientific research in the field of hippotherapy has intensified in the last decade. Akhmedov, B. B. "Developed mechanisms for organizing and conducting hippotherapy sessions. Also, some practical experiments conducted at the republican level have shown that when hippotherapy classes are organized based on methodological programs adapted for children and adults, the results are even more effective.

Theoretical basis

The theoretical basis of hippotherapy methodology is based on the following scientific directions:

1. Biomechanical foundations - three-dimensional vibrations of horseback gait are transmitted to the human body, which duplicates gait mechanics and ensures symmetrical muscle activation.

2. Neurological basis - through horse movement, the central nervous system receives regular rhythmic impulses, which stimulates neuroplasticity.

3. Psychological foundations - the process of communicating with an animal reduces stress, stabilizes the emotional background, and develops social communication.

4. Pedagogical foundations - hippotherapy classes are integrated into the rehabilitation education process, ensuring the active participation of the student or patient.

Thus, the analysis of existing scientific literature shows that hippotherapy is an effective, scientifically based method in the rehabilitation of persons with disabilities, requiring a comprehensive approach. This strengthens the theoretical foundation of this research.

CONCLUSIONS

1. The results of the study showed that hippotherapy is an effective means of improving the health of people with disabilities. A specially developed three-stage