

Horna V. A., a 1st year student, group MFRp-201
Scientific supervisor – **Chorna S. M.**, senior lecturer
Language supervisor - **Sikaliuk A. I.**, PhD, associate professor
Chernihiv Polytechnic National University (Chernihiv, Ukraine)

FEATURES OF PHYSICAL THERAPY OF PEOPLE WITH SPINAL CORD INJURY

Spinal cord injury rightly belongs to the category of the most severe traumatic injuries, due not only to the high mortality rate in complicated spinal cord injuries, but also the severity of medical, economic and social consequences of traumatic spinal cord injury, both for patients and their relatives and for society [1].

There are the following main forms of traumatic spinal cord injuries: concussion, contusion, hemorrhage, compression. The spinal cord suffers mainly in the case of vertebral fractures (compression, fragmentary), which lead to its compression, resulting in below the site of injury there are motor, sensory, trophic, pelvic disorders.

The higher the level of spinal cord injury, the more often the spinal cord is damaged. As a rule, patients with a long history of the disease, with severe and long-term pain, the presence of neurological disorders are admitted for surgical treatment. Of course, this complicates the rehabilitation in the postoperative period. Moreover, a number of authors believe that rehabilitation treatment should begin as early as possible [2].

Patients with spinal cord injuries are most advised to undergo rehabilitation in a specialized medical institution with the obligatory participation of a physical and occupational therapist. The task of a physical therapist is to restore physical qualities, ensure the functioning of the musculoskeletal system. The physical therapist, examining the patient, determines which motor disorders need correction or recovery, establishes the means, methods and forms of rehabilitation, plans and conducts individual or group classes. The occupational therapist must determine the level of motor skills, to teach injured people the skills of self-care and movement [3].

The first developers of motor therapy focused on: physical training; vertical posture training; learning basic techniques of walking technique. According to the method of V.A. Kachesova (2002), patients are divided into 3 groups: with complete restoration of CM conduction; with partial recovery; without recovery. In accordance with this, the tasks of rehabilitation treatment were formulated: 1) restoration of lost motor functions; 2) compensation for lost functions at the expense of preserved ones; 3) maintaining the functional state of the patient at a stable level, prevention of atrophy and secondary complications.

In spastic paraparesis, walking training was performed in fixation devices with a corset and immobilization of the hip, knee and ankle joints. As the strength of the muscles of the back, abdomen (the formation of the "muscular corset") and legs increased, the mechanical corsets were replaced by "semi-corsets" and the devices that fixed the joints were gradually removed. Arbitrary movements of the preserved legs were enhanced by training, namely walking and strength exercises. In parallel with the teaching and training of walking for such patients used exercises that reduce spastic syndrome and create the skill of "static management". For patients with flaccid paralysis or paresis at the beginning of training, devices and rigid corsets were also used to ensure the viability of the lower extremities.

A feature of the method was the early start of rehabilitation treatment - gymnastics classes were prescribed from the first week after surgery. In addition to intense gymnastic exercises to strengthen the muscular corset, special exercises were used - alternating tightening of the legs due to arbitrary contraction of the muscles of the abdomen, back, shoulder and pelvic girdle.

Subsequently, these exercises became the main and repeated complexes several times a day. After strengthening the main muscle groups due to intense physical exercises, they started learning the technique of walking, in several stages: mastering the initial elements of walking on bars; walking training in mobile arenas, with crutches or "walkers" with four support legs; walking with a support on "Canadian sticks" or a wheelchair on a flat surface; walking with additional support on the stairs.

The analysis of scientific sources shows a tendency to increase the number of patients with the consequences of spinal cord injuries, rehabilitation of which remains one of the most difficult and priority areas. The use of motor therapy helps to improve adaptive capacity, improve self-care skills, which allows people with spinal cord injury to be more independent in their life.

References

1. Kachesov V. A. Fundamentals of intensive rehabilitation. Spinal cord injury. book 1., Kyiv: Slovo, 2002. 188 p.
2. Polishchuk N., Korzh N., Fishchenko V. Damage to the spine and spinal cord. Kyiv : Book Plus, 2001. 388 p.
3. Klimov B. C., Shulev Y. A., Stepanenko V. V. Comparative evaluation of results, treatment of patients with spinal cord injury. Ufa : Ray, 2009. 125 p.

Гришно А. О., здобувачка вищої освіти 3 курсу, група Т-181
Науковий керівник – **Гагіна Н. В.**, к.пед.н., доцент
Національний університет «Чернігівська політехніка» (м. Чернігів, Україна)

THE IMPACT OF COVID-19 ON TOURISM AND TOURISTS

In the last few decades, the tourism sector has experienced and recovered from many crises, such as different terrorist attacks, the SARS outbreak, the West African Ebola, the Global Economic Crisis, etc [1]. However, the impact of COVID-19 on the tourism industry is different.

Tourism is one of the greatest economy sectors in the world. In 2019 it accounted for 7% of the world's trade, and it is the third largest export sector of the global economy. For some countries, it may be more than 20% of their GDP, and for some Small Island Developing States, tourism accounts for up to 80% of exports. It represents a significant share of the national economies of both developed and developing countries. Tourism also supports one in ten jobs and provides livelihoods for millions of people in all countries [2]. But in April 2020 when COVID-19 reached almost all countries, the world travel stopped because governments decided to restrict free movement in order to curb the infection.

The tourism industry has managed to lose more than US\$ 820 billion in revenue worldwide due to the COVID-19 pandemic. It is important to emphasize that the hospitality industry has suffered mainly due to the "stay at home" and social distancing policies imposed by most governments, as well as due to the cancellation of bookings, which can cost about US\$ 150 billion worldwide [3]. Moreover, lockdown and closed borders of some countries completely stopped outbound tourism, and this has had a very strong impact on the global economy. The economic decline is more profound than any recession since World War II [1].

UNWTO data also show that in 2020, due to the coronavirus epidemic worldwide, the number of international tourists decreased from 1.5 billion to 381 million [3].