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## **ISSUES OF REHABILITATION IN THE POST-COVID PERIOD**

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**Summary.** Coronavirus infection is a dangerous and very insidious disease that can cause serious complications even for those who have been asymptomatic. Medical statistics show that up to 60% of people who have had this disease need measures to restore their health.

**Goal: research** on the awareness of students and teachers about the meaning and importance of rehabilitation after COVID-19.

**Materials and methods of research:** questioning of 4th and 5th year students, as well as teachers of the Bukhara State Medical Institute. The survey involved 60 voluntary students and 20 teachers of the therapeutic department who had a history of COVID-19.

**Conclusions:** With any rehabilitation intervention, it is necessary to take into account the severity of the disease and the degree of damage to other organs and systems, the presence of asthenic syndrome and concomitant diseases.

**Keywords:** COVID-19, rehabilitation, post-COVID syndrome

**Relevance:** The virus harms all organs and tissues of the body. The first symptoms appear on the 2-10th day. As a rule, this is a fever above 37.5, loss of smell, dry (unproductive) cough, apathy and headache. On the 7-10th day after the appearance of the first symptoms, chest pains, increased coughing may begin to bother. These are indicative symptoms that indicate lung damage and require additional examination: computed tomography of the lungs, fluorography, measurement of blood oxygen saturation (saturation).

The pathological condition after suffering a coronavirus is called post-covid syndrome, accompanied by various symptoms. Most often, patients complain of: increased weakness and fatigue; prolonged headaches; shortness of breath and pain in the chest; muscle pain throughout the body and pain of a neurological nature; prolonged cough; decreased concentration and memory; the appearance of anxiety, depression; sleep disorders; loss of appetite; complete or partial loss of smell; severe hair loss.

These symptoms are the most common for people who have been ill with covid. In addition, there are individual violations of certain functions of the body. In most cases, this is due to the presence of chronic diseases in patients.

Coronavirus infection negatively affects all human systems and organs. The lungs and the cardiovascular system are most at risk. The virus causes pneumonia. One of the features of this disease is the rapid damage to the lungs. The insidiousness of this complication lies in its asymptomatic onset, which

subsequently manifests itself in a dry cough, chest pain, difficulty breathing, dizziness from a lack of oxygen.

In addition, post-covid syndrome often manifests itself in disruption of the gastrointestinal tract, adrenal glands, and genitourinary system. As for the cardiovascular system: this can be explained by the fact that the virus has a detrimental effect on myocardial cells and affects blood clotting, which ultimately leads to impaired blood circulation and causes cell hypoxia. The body's fight against the virus weakens the heart muscle and reduces the elasticity of the walls of blood vessels, resulting in the development of hypertension, thrombosis, and stroke.

Timely treatment using effective techniques helps to recognize the first signs of impaired functioning of the body, prevent or minimize their development.

Lungs after covid-19 may lose elasticity. The affected areas of the lung tissue are replaced by connective tissue (scars), fibrosis occurs. Fibrotic changes in the lungs disrupt the gas exchange function of the lung tissue. Inflammation may no longer be present, but respiratory failure persists. If timely measures are not taken, pathological changes in the lungs can persist throughout life - shortness of breath that occurs with increased physical activity, dizziness, unproductive cough, chest pain, increased weakness, decreased performance. To prevent such serious problems, it is necessary to carry out rehabilitation measures.

Medical rehabilitation (from Latin *rehabilitatio*, restoration) is a complex of medical, pedagogical, psychological and other types of measures aimed at the maximum possible restoration or compensation of normal mental and physiological functions of the human body that have been impaired or completely lost as a result of illness or injury.

The most important thing that Covid-19 patients need to know is not to miss the recovery period. The doctor's advice should be taken seriously. Rehabilitation begins 20-25 days after the onset of the disease, sometimes in a hospital. When the acute process passes, the body temperature returns to normal, diagnostics are carried out. The kidneys, heart, blood vessels, and other organs are examined to determine if they are functioning properly. The purpose of rehabilitation is to restore the function of external respiration, transport and use oxygen for the functioning of tissues and organs, maintain optimal functioning of the cardiovascular system, reduce the risk of cardiovascular complications and improve the quality of life. It is important to normalize the psychological state and resume daily activities.

**Goal:** a study of the awareness of students and teachers about the meaning and importance of rehabilitation after COVID-19.

**Materials and methods of research:** questioning of students of 4th and 5th courses, as well as teachers of BukhSMI. The survey involved 60 voluntary students and 20 teachers of the therapeutic department who had a history of COVID-19.

**Results:** The majority of respondents (90%) confirmed that after a disease a person feels weakness, fatigue, irritability, apathy and other typical signs of post-

COVID syndrome, this is a signal showing that it is necessary to undergo rehabilitation, which will take into account specific problems and draw up an individual program for restoration of vitality and health. 18% of the students, who mostly suffered from the disease asymptotically, did not feel the general malaise of the body after recovery, while the remaining 82% after the disease found it difficult to immediately return to a full life and therefore they agreed with the importance of rehabilitation. One of the leading rehabilitation measures, especially after pneumonia, is breathing exercises. According to the results of the survey, 74% included her in rehabilitation after illness. The main part of the respondents (86%) used physiotherapeutic procedures, therapeutic massage and restorative procedures in their recovery and confirms their importance in rehabilitation. Recovery from COVID-19 involves a gradual increase in physical activity. Students believe that at first it will be enough to walk in the fresh air, and later it is necessary to choose exercises for the main muscle groups, 72% of the respondents adhered to this method of recovery. 66% agree on the importance of providing psychological assistance to patients with COVID-19. Another important element of the rehabilitation program is dietary adjustment. Subsequently, the body spends a large amount of energy on recovery, therefore 93% of respondents still adhere to a balanced diet with the necessary content of vitamins,

**Conclusions:** With any rehabilitation intervention, it is necessary to take into account the severity of the disease and the degree of damage to other organs and systems, the presence of asthenic syndrome and concomitant diseases.

A comprehensive recovery program, which includes a proper and balanced diet, regular exercise and breathing exercises, will help to cope with the consequences of the disease.

The program of pulmonary rehabilitation should be developed individually. The duration of recovery is from 2 weeks to a year. It can go continuously, or in courses of 10-14 days at intervals of 5-6 days. With minimal changes, respiratory gymnastics, physiotherapy exercises, inhalations, massage, physiotherapy are prescribed. You should pay attention to the observance of the regime of the day, a full eight-hour sleep. Moderate physical activity is recommended (3000-5000 steps per day will be enough to start, for example, walking in the park in dry and warm weather). Almost all people with coronavirus infection need psychological help. If necessary, treatment of anxiety and depressive disorders should also be carried out.

An important point in the rehabilitation of patients with covid-19 at all stages is teaching them a healthy lifestyle (creating incentives to give up bad habits, teaching the principles of healthy eating, increasing stress resistance). In addition, it is important to explain the importance of following the recommendations of the doctor, the use of supportive drug therapy, active and conscious participation in the rehabilitation program.



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