AFTER COVID-19 QUALITY OF LIFE

Khusainova Munira Alisherovna
Assistant of Samarkand State Medical University

Izomiddinova Mohinur Kamoliddinovna
Student of Samarkand State Medical University

Otamurodova Khurshidabonu Baxtiyorovna
Student of Samarkand State Medical University

Ergasheva Nilufar Ikromovna
Student of Samarkand State Medical University

Jumanazarov Islom Faxriddinovich
Student of Samarkand State Medical University

ABSTRACT

Objective: to assess the quality of life of patients who have suffered from COVID-19 with a severe course of the disease, as a result of comprehensive rehabilitation measures.

Materials and Methods: The article presents the results of studying the quality of life of 30 patients (13 men and 17 women) who underwent COVID-19 with severe course after inpatient treatment. The average age was 49.8 ± 1.42 years. 28 age-matched patients who were not ill with COVID-19 were taken as a control group. The studies were conducted in the polyclinic day hospital The assessment of the quality of life (QOL) of patients was carried out using the SF-36 questionnaire (The Short Form-36) before and after rehabilitation measures. The questionnaire consists of 36 items on 8 scales. At the same time, numerical indicators of the sum of points close to 100 indicated a high quality of life, and closer to 0 – low.

Results and discussions: When analyzing the results of QOL in patients with COVID-19 on the SF-36 scale compared with the control group in patients with severe disease, we found a significant decrease in the overall indicator by 29.9%. At the same time, the average score for the physical component It was $35.4\pm4.0.3$ points, role functioning (RP) -39.5 ± 5.5, psychological status - 55.2 ± 1.94. Decrease in indicators by 45%, 33.5% and 20.2%, respectively ($p<0.05$). 2 weeks after the rehabilitation measures, when assessing the QL data, there was a significant improvement in all parameters ($p<0.05$), except for the aspect of "Role functioning (RP)" ($p\geq0.05$), which indicated a significant restriction of physical activity due to the physical condition of the patient.

Conclusion: The study of QOL in patients who underwent COVID-19 in severe form indicated that a significant decrease in all indicators. At the same time, these shifts were especially related to the physical component, mainly due to physical functioning (PF) and role functioning (RP). Evaluation of the results of the implementation of an individual rehabilitation plan aimed at lung recovery after COVID-19 showed an improvement in clinical condition and QOL, mainly due to indicators of physical

functioning. At the same time, the changes in the aspect of role functioning turned out to be insignificant.

Keywords: COVID-19, quality of life.

INTRODUCTION

Since the beginning of 2021, doctors no longer consider COVID-19 to be a disease
affecting only the respiratory system. According to scientists, once in the body, the virus interacts with receptors in many other organs and systems.

Therefore, it is important not only to cure the disease, but also to assess the impact of the virus on health in general. The emergence of COVID-19 in the world has set tasks for specialists of various health care profiles related not only to rapid diagnosis and treatment, but also to the provision of high-quality medical care, including rehabilitation activities after and during the transmission of coronavirus infection. The effectiveness of the methods used directly depends on the early start of rehabilitation actions directly in the hospital and continuation at home, with mandatory consideration of the stability of the patient's condition. Currently, information about epidemiology, clinical features and treatment is accumulated and discussed by specialists in real time. Information on primary, secondary prevention and medical rehabilitation of this disease is limited.

It is known that the most common clinical manifestation of a new variant of coronavirus infection is bilateral pneumonia. Most people carry COVID-19 in mild form or asymptomatically. Fewer diseases occur in moderate and severe form. Unfortunately, all patients, regardless of the severity of the disease, suffer from the effects of coronavirus. Each of them requires a rehabilitation period, depending on the course of the infection. But whatever the form of the disease, it can develop after it unpleasant symptoms persist for a long time.

The respiratory and cardiovascular systems suffer the most. A person will be disturbed by: shortness of breath, which increases with physical exertion; frequent dizziness; dry cough; chest pain; increasing weakness; decreased performance. On the part of the cardiovascular system, the heartbeat increases and the heart rhythm is disrupted. The severity of cardiovascular disease is often determined based on the severity of symptoms (pain, shortness of breath, weakness, palpitations) or objective data (frequency heart rate (HR), blood pressure, electrocardiogram and echocardiogram readings. However, all this does not give a complete picture of the effect of the disease on the patient's life. Aspects such as physical condition, emotional, psychological and social status have been combined into the concept of "quality of life" since the early 80s. The quality of life, as defined by WHO, is
a characteristic of physical, psychological, emotional and social functioning based on its subjective perception [6]. Quality of life indicators, as well as the characteristics of the disease picture, they change over time depending on the patient's condition, which makes it possible to monitor the treatment being carried out, and, if necessary, to correct it. Currently, the study of quality of life indicators has not only become a subject of scientific research, but is also a reliable, informative and economical method of assessing human health on the basis of individual and group levels. This can be explained by the increased interest of researchers in this problem — the problem of quality of life.

Goal: To assess the quality of life of patients who have suffered from COVID-19 with a severe course of the disease as a result of comprehensive rehabilitation measures.

MATERIALS AND METHODS

The study included 30 patients aged 23 to 73 years after inpatient treatment, hospitalized with a severe course of the disease and 28 with age-matched patients who did not have COVID-19. The average age of the examined persons was 49.8±1.42 years. There were 13 men (40.3%) and 17 women (50.6%). It should be noted that 40.5% of the examined individuals had cardiovascular diseases, including heart failure (7%), arterial hypertension (38%), and hemiparesis, the residual effects of acute cerebral circulatory disorders (ONMC), hemiplegia - 2%, COPD – 6.3%, diabetes - 18.3%, oncology - 2.5%, obesity - 9%, depression - 6%. All patients were diagnosed with bilateral pneumonia. Rehabilitation was carried out in a day hospital. The following parameters were taken into account:

 - the severity of the coronavirus infection;
 - the nature of viral pneumonia;
 - the degree of lung damage;
 - paul;
 - weight;
 - age;
 - concomitant diseases.

 The duration of rehabilitation was up to 2 weeks.

The individual rehabilitation plan included:

Free mode.

1. Physical therapy: breathing exercises to improve the drainage function of the bronchi and respiratory function of the lungs, therapeutic gymnastics in active

mode (individual, group) according to indications – 20-30 minutes, therapeutic gymnastics in passive mode – individual.

2. Massage (manual relaxing, toning,) for 10-20 minutes.

3. Physiotherapy (no more than 2-3 types of procedures during the course); individually, all procedures according to indications No. 7-10:

- electrical stimulation of the neuromuscular apparatus;
 - thermal procedures (applications of paraffin, ozokerite);
 - painkillers of electro-physiotherapy;
 - laser therapy;
 - magnetic therapy;
 - SMT currents;
 - electrophoresis (potassium iodide, magnesium sulfate, proserin, euphyllin);
 - ultrasound therapy.

4. Psychological correction. Conversations are group and individual meditation,

positive attitude – affirmations.

 Along with this, the quality of life before and after rehabilitation measures was assessed in patients undergoing rehabilitation in a day hospital.

Assessment of the quality of life (QOL) of patients was carried out using the SF-36 questionnaire (TheShortForm- 36) before and after rehabilitation measures. The control group consisted of 28 age-matched patients who were not ill with COVID-19 The questionnaire consists of 36 items on 8 scales: Physical Functioning (PF), Role-based functioning due to physical condition (Role-Physical Functioning - RP), Pain intensity (Bodily pain - BP), General health (General Health - GH), Vital Activity (Vitality - VT), Social Functioning (Social Functioning - SF), Role-based functioning due to an emotional state (RoleEmotional - RE), Mental Health (Mental Health - MH). All these scales can be divided into two large components: physical health and psychological health. Each component consists of 4 aspects, the physical component consists of such aspects as: physical functioning (PF), role
-playing activity (RP), bodily pain (BP) and general health (GH) The psychological component includes such aspects: vitality (VT), social functioning
(SF), emotional state (RE) and mental health (MH). The results for each question were expressed in points, which were enclosed in a scale with values from 0 to 100. At the same time, numerical indicators of the sum of points close to 100 indicated high quality of life, and closer to 0 – low. Statistical processing of the received data was performed on a personal computer using the Microsoft statistical software package Office Excel 2016, IBM SPSS Statistics 20, as well as using an online calculator designed to calculate the indicators of the SF 36 questionnaire scales. Distribution results they were represented in the form (M±m), where M is the arithmetic mean, m is the standard error of the average value.

RESEARCH RESULTS AND THEIR DISCUSSION
In the examined individuals, the priority complaints were: shortness of breath - 67%, cough - 55%, heart pain - 22%, headache - 22%, unstable or elevated blood pressure (BP) - 32%, general weakness - 64%, sleep disturbance - 40%, muscle pain - 30%. When analyzing the results of QOL in patients who underwent COVID-19, compared with age-comparable patients who did not have COVID-19,
it was found that in the group of patients with severe disease, a significant decrease in the total QOL index was revealed by 29.9%. Average score in physical education The component was 35.4 ± 4.3. The deterioration of QOL at the same time was due to a decrease in the physical component by 45.0%. In particular, such an aspect as physical functioning (PF). Mainly due to reduced physical activity,
self-service, walking, climbing stairs, lifting weights, as well as performing significant physical exertion. The assessment of the general state of health was also
reduced in comparison with the control. Physical condition significantly limits the daily daily activities of patients. As for this aspect As a role-based functioning (RP), the indicators were reduced by 33.5% and corresponded to 39.5 ± 5.5 points, due to a decrease in the performance of daily duties due to physical problems. The analysis of QOL by the psychological component revealed a deterioration in the QOL index by 20.88%, and corresponded to the values of 55.2± 1.94 due to the limitation of the viability aspect (VT), indicating fatigue of patients and a decrease in their vital activity. Patients' satisfaction with their social functioning significantly differed from the control group. in patients who underwent COVID-19, it was lower compared to the control group (57.46±2.95), and the physical and emotional state interfered with the performance of work, which determined normal social activity. Indicators of social functioning, role-based emotional functioning and mental health they were

significantly lower than in the control group. When assessing the data of the clinical condition, as a result of rehabilitation measures

, blood pressure normalization was observed after 2 weeks with a decrease in the intensity of the frequency of headaches (18%), heart pain (19%), shortness of breath (15%), normalization of sleep (23%), reduction of muscle pain (20%), reduction of cough (25%). When analyzing the parameters of QOL (Table 2), the improvement was mainly due to indicators in the aspects of physical functioning (PF) from 35±0.3 to 44.6±3.98 (p<0.011) and bodily pain (BP) from 51.36±3.2 to 61.84±3.22 (p <0.05), which indicated improving the ability of the subjects to perform physical activity during their normal day (self-care, walking, climbing stairs, etc.). At the same time, the insignificant positive dynamics of the role

functioning aspect (RP) turned out to be statistically unreliable (p≥0.05), which indicated a significant limitation of the patient's physical condition. Of the psychological component, the most significant were the parameters of viability (VT) - an increase in It was from 55.2±1.94 to 69.96± 2.0; p<0.001), which indicates an increase in vital activity.

CONCLUSION

Study of QOL in patients with severe COVID-19 It indicated a significant decrease in all indicators, while these shifts were especially related to the physical component, mainly due to physical functioning (PF) and role functioning (RP). Evaluation of the results of the implementation of an individual rehabilitation plan aimed at lung recovery after COVID-19 showed an improvement in clinical condition and quality of life, mainly due to indicators of physical functioning while changes in the aspect of role functioning turned out to be insignificant (RP) (p ≥0.05), which indicates the need for rehabilitation measures for a longer time.

LITERATURE

1. Akramovna, I. K., & Rustamovna, A. K. (2023, November). ULTRATOVUSH TEKHIRUV USULINING ERTA RIVOZHLANGAN OSTEOARTHROSIS KASALLIGIDAGI DIAGNOSTIC AHAMIYATI. In *International Conference on Medicine and Life Sciences* (pp. 72-75).
2. Akramovna, I. K., & Zaynobiddin o'g'li, F. J. (2023). RISK FACTORS OF EARLY DEVELOPED OSTEOARTHRITIS. *IMRAS*, *2*(1), 28-35.
3. Alexandrovna, I. O., Muxtorovna, E. M., & Shodikulova, G. Z. (2023). COMMUNITY-ACQUIRED PNEUMONIA AND CHRONIC HEART FAILURE. *Open Access Repository*, *4*(2), 744-754.
4. Alexandrovna, I. O., Shodikulova, G. Z., & Muxtorovna, E. M. (2023). QUALITY OF LIFE OF ELDERLY PATIENTS WITH OSTEOARTHRITIS. *Spectrum Journal of Innovation, Reforms and Development*, *12*, 145-155.
5. Alisherovna, K. M. (2021). DISORDERS OF KIDNEY AND LIVER FUNCTION IN HEART FAILURE. *POLISH SCIENCE JOURNAL*, 156.
6. Alisherovna, K. M. (2022). PSYCHOSOMATIC CHARACTERISTICS OF PATIENTS WITH RHEUMATOID ARTHRITIS AND GOUT. *Galaxy International Interdisciplinary Research Journal*, *10*(5), 665-671.

7. Alisherovna, K. M., & Xamroyevna, O. S. (2023). STUDY THE INFLUENCE OF CARDIOVASCULAR SYSTEM PATHOLOGY TO THE QUALITY OF LIFE. *Journal of new century innovations*, *36*(1), 148-155.

8. Alisherovna, K. M., Akramovna, I. K., Bakhtiyorovich, U. J., Nizamitdinovich, K. S., Jasurovna, J. S., Kairatovna, R. A., & Abdukholikovna, E. S. (2023). EXACERBATIONS OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND CORONARY ATHEROSCLEROSIS. *Journal of new century innovations*, *39*(1), 176-178.

9. Alisherovna, K. M., Alisherovich, B. Z., Ilyosxonovich, K. I., & Oybekovna, E. E. (2022). Changes In Hemodynamics Of The Cardiovascular System In Patients With Fibrosis Alveolitis. *Spectrum Journal of Innovation, Reforms and Development*, *4*, 203-209.

10. Alisherovna, K. M., Baxtiyorovich, Z. M., & Anvarovich, N. J. (2022). To Assess The Condition Of The Myocardium In Patients Chronic Heart Failure On The Background Of Rheumatoid Arthritis. *Spectrum Journal of Innovation, Reforms and Development*, *4*, 210-215.

11. Alisherovna, K. M., Boymamatovna, E. F., Tursunboyevna, I. K., & Mashrabovna, M. M. METABOLIC SYNDROME IN RHEUMATOID ARTHRITIS AS A CRITERION OF CARDIOVASCULAR RISK.

12. Alisherovna, K. M., Sherzodovna, M. D., Tursunboyevna, I. K., & Uktamovna, U. U. (2023). LEFT VENTRICULAR HYPERTROPHY IN PERSONS WITHOUT ARTERIAL HYPERTENSION: PSYCHOSOMATIC APPROACH TO THE STUDY OF THIS PHENOMENON.

13. Alisherovna, M. K. (2021). 24-Hour Abp Monitoring Of Blood Pressure In Patients With Chronic Heart Failure And The State Of Kidney Function. *Central Asian Journal of Medical and Natural Science*, *2*(1), 197-204.

14. Alisherovna, M. K. Stages Of Development Of Renal Dysfunction And Anemia In Patients With Chronic Heart Failure. *International Journal of Innovations in Engineering Research and Technology*, *8*(05), 50-53.

15. Islamova, K. A. (2022, November). Semizlik bor bemorlarda osteoartroz kasalligining klinik xususiyatlari. In *international conferences* (Vol. 1, No. 10, pp. 299-301).

16. Islamova, K. A., Olimdjanova, F. J. Q., Ziyadullaev, S. K., & Kamalov, Z. S. (2022). RISK FACTORS FOR EARLY DEVELOPMENT OF OSTEOARTHROSIS.

17. Khusainova, M. A. (2023). Comorbidity thyrotoxicosis with coronary heart disease. *Science and Education*, *4*(5), 205-213.

18. Khusainova, M. A. (2023). CYSTATIN C IS AN EARLY MARKER OF DECREASED KIDNEY FUNCTION. *Oriental renaissance: Innovative, educational, natural and social sciences*, *3*(1), 485-490.

19. Khusainova, M. A., Eshmamatova, F. B., Ismoilova, K. T., & Mamadiyorova, M. M. (2023). METABOLIC SYNDROME IN RHEUMATOID ARTHRITIS AS A CRITERION OF CARDIOVASCULAR RISK. *Oriental renaissance: Innovative, educational, natural and social sciences*, *3*(1), 331-339.

20. Khusainova, M. A., Vakhidov, J. J., Khayitov, S. M., & Mamadiyorova, M. M. (2023). Cardiac arrhythmias in patients with rheumatoid arthritis. *Science and Education*, *4*(2), 130-137.

21. O'G'Li, F. J. Z., & Akramovna, I. K. (2022). Qandli diabet kasalligi fonida yurak qon tomir tizimi kasalliklarining klinik kechuv xususiyatlari. *Talqin va tadqiqotlar ilmiy-uslubiy jurnali*, *1*(1), 108-111.

22. Zaynobiddin o'g'li, F. J., & Akramovna, I. K. QANDLI DIABET KASALLIGI FONIDA YURAK QON TOMIR TIZIMI KASALLIKLARINING KLINIK KECHUV XUSUSIYATLARI. *Talqin va tadqiqotlar*, 108.

23. Ибадова, О. А., Махматмурадова, Н. Н., & Курбанова, З. П. (2020). ПОТЕНЦИАЛЬНЫЕ ФАКТОРЫ РИСКА В РАЗВИТИИ И ПРОГРЕССИРОВАНИИ НЕСПЕЦИФИЧЕСКОЙ ИНТЕРСТИЦИАЛЬНОЙ ПНЕВМОНИИ. *Journal of cardiorespiratory research*, *1*(1), 72-76.

24. Исламова, К. А. (2023). Факторы Риска Раннего Развития Остеоартроза. *Journal of Science in Medicine and Life*, *1*(3), 1-7.

25. Исламова, К. А., & Карабаева, Г. Х. (2020). QANDLI DIABET KASALLIGI FONIDA YURAK QON TOMIR TIZIMI KASALLIKLARING KLINIK KECHUV XUSUSIYATLARI. *Журнал кардиореспираторных исследований*, *1*(3).

26. Исламова, К. А., & Тоиров, Э. С. (2019). EATURES OF CLINICAL CHARACTERISTICS OF OSTEOARTHROSIS ON THE BACKGROUND OF OBESITY. *Новый день в медицине*, (2), 167-170.

27. Исламова, К. А., & Тоиров, Э. С. (2019). Значение факторов риска на качество жизни больных остеоартрозом. In *Актуальные вопросы современной медицинской науки и здравоохранения: сборник статей IV Международной научно-практической конференции молодых учёных и студентов, IV Всероссийского форума медицинских и фармацевтических вузов «За качественное образование»,(Екатеринбург, 10-12 апреля 2019): в 3-х т.-Екатеринбург: УГМУ, CD-ROM..* Федеральное государственное бюджетное образовательное учреждение высшего образования «Уральский государственный медицинский университет» Министерства здравоохранения Российской Федерации.

28. Исламова, К. А., & Хамраева, Н. А. (2023). Факторы Риска И Качество Жизни Больных Остеартрозом. *Central Asian Journal of Medical and Natural Science*, *4*(6), 268-273.

29. Исламова, К., & Карабаева, Г. (2020). ОСОБЕННОСТИ КЛИНИЧЕСКОГО ТЕЧЕНИЯ ЗАБОЛЕВАНИЙ СЕРДЕЧНО-СОСУДИСТОЙ СИСТЕМЫ НА ФОНЕ САХАРНОГО ДИАБЕТА. *Журнал кардиореспираторных исследований*, *1*(3), 59-62.

30. Махматмурадова, Н. Н., Ибадова, О. А., & Закирьяева, П. А. (2020). ДИФФЕРЕНЦИАЛЬНАЯ ДИАГНОСТИКА НЕСПЕЦИФИЧЕСКОЙ ИНТЕРСТИЦИАЛЬНОЙ ПНЕВМОНИИ. *Journal of cardiorespiratory research*, *1*(2), 50-52.

31. Махматмурадова, Н. Н., Ибадова, О., & Шодиев, О. О. (2021). Факторы риска в развитии неспецифической интерстициальной пневмонии. *Вопросы науки и образования*, (13 (138)), 54-64.

32. Хусаинова, М. А. (2022). OZONETHERAPY IN RESTORATIVE TREATMENT PATIENTS WITH CORONARY HEART DISEASE. *Журнал кардиореспираторных исследований*, *3*(4).