

**FEATURES OF COGNITIVE VIOLATIONS AND QUALITY OF LIFE OF PATIENTS WITH CHRONIC HEART FAILURE**

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**ABSTRACT:** The problem of chronic heart failure (CHF) in modern society remains of medical and social relevance due to its significant prevalence, high level of disability and mortality. The research results indicate insufficient secondary prevention of CHF both at the population level and among people with a high risk of its development. Among the reasons for this situation, a special place is given to the insufficient adherence of patients to drug and non-drug therapy. Adherence to medical prescriptions is the most important component of treatment programs in the older age group and in recent years has been regarded as an independent risk factor for the progression of CHF. Patients often assess a doctor's competence by his level of communication and responsiveness to a medical problem, rather than by his clinical skills. Insufficiently correct behavior of the doctor may contribute to the patient's non-commitment to treatment, and the lack of clear information when prescribing therapy may reduce adherence in the most motivated patients. 53 elderly and senile patients with chronic heart failure II FC (NYHA) were examined, of which 17 patients were diagnosed with moderate cognitive deficits, 16 patients with vascular dementia and 17 with anxiety and depressive disorders. According to the study, the lowest rates of treatment adherence and quality of life according to the SF-36 questionnaire and According to the Minnesota questionnaire, they were noted in patients with anxiety and depressive disorders. **Keywords:** cognitive impairment, anxiety and depressive disorders, elderly and senile age, chronic heart failure, SF-36 questionnaire, Minnesota Quality of Life Questionnaire

**INTRODUCTION**

The key to high adherence to treatment is timely detection of the disease, properly developed patient management tactics and constant monitoring. Unfortunately, there are difficulties in detecting CHF in the elderly at the outpatient stage. Firstly, elderly patients tend to "downplay the symptoms" and do not always consult a doctor, because they consider their condition to be an integral part of aging. Secondly, patients often seek help from a therapist, not a cardiologist, because they do not know that they may have CHF. Thirdly, the outpatient therapist often does not recognize the symptoms of CHF, especially at the early stages of its development, due to the polymorbidity and atypical clinical picture. Often, in old age, the symptoms of CHF are masked as fatigue, which makes it difficult to identify them in a timely manner. Aging of the body is associated with a number of clinical geriatric conditions: senile asthenia, cognitive disorders, urinary incontinence, dizziness, osteoporosis, falls, etc. In daily clinical practice, the physician is not pays dosta-the exact attention to geriatric conditions, although it is shown that senile asthenia and cognitive impairment are factors of nepreverenih to non-pharmacological and medical treatment and affect the course of the disease, frequency of hospitalizations and life expectancy of elderly patients with CHF. Patient education is not is crucial in determining commitment to treatment, the less patients can only the case to be committed to therapy when them there although minimum level of knowledge regarding the disease and compliance regime. About 50% of patients diagnosed with "heart failure" refuse to

take angiotensin converting enzyme (ACE) inhibitors, beta-blockers, spironolactone, statins for the next 5 years. The first month after the appointment of therapy for CHF is critical for the formation of commitment in the future. In this regard, it is important at this stage to inform the patient in an accessible way about CHF, the goals of its treatment, methods of self-control and self-help. Good drug tolerance, simplicity, convenience of the therapy regimen, selection of effective treatment in a short period of time are factors determining adherence to treatment, especially in the elderly. The purpose of this study is to study adherence to therapy and the quality of life of elderly and senile patients with chronic heart failure, comorbid affective and cognitive impairments.

## MATERIALS AND METHODS OF RESEARCH

The study included 53 patients from 65 to 85 years old (average age  $74.5 \pm 6.1$  years), 23 men (average age  $72.9 \pm 7.4$  years), 30 women (average age  $76.9 \pm 5.8$ ) with coronary artery disease complicated by chronic heart failure of II–III functional class, cognitive impairment and anxiety-depressive disorders, selected by random sampling from the total number of patients with these syndromes. Among the examined patients there were 30 women and 23 men. Criteria exceptions from the study: unstable angina pectoris, myocardial infarction or stroke during the last 2 months, uncontrolled hypertension, brain tumors, severe concomitant pathology. After the initial examination, the patients were divided into 3 groups: Group 1 included 17 patients (9 women and 8 men) with CHF and moderate cognitive deficits (UCD); Group 2 – 18 patients (11 women and 7 men) with CHF and dementia (D). In Group 3 17 people were included (10 women and 7 men) with CHF and anxiety-depressive disorders (TDD). Examination of patients with an established diagnosis of CHF included: assessment of the clinical condition according to the R. Cody scale modified by V.Y. Mareev (SHOKS, 2000), 6-minute walk test (SHH), ECHO-KG (Vivid 7 Dimension Pro, Germany). The assessment of cognitive functions was carried out using a short mental health assessment test (MMSE). The diagnosis of depression was established by a psychotherapist using the method of clinical conversation and clinical observation and met the criteria of a depressive episode and recurrent depressive disorder according to ICD-10. All patients with dementia were examined a neurologist. In this study, the Beck, Hamilton, and Spielberger–Hanin scales were used. A shortened adapted questionnaire of the Minnesota Methodology for Multilateral Personality Research (MMPI), the RESIN test (an Abbreviated Multifactorial Questionnaire for Personality Research) was used. Treatment adherence was studied using a questionnaire to assess the adherence of patients with CHF to the basic elements of self-medication and self-control and the adherence index: the percentage of the number of doses taken to the number prescribed. The assessment of the quality of life was carried out using The Minnesota Quality of Life Questionnaire (MLHFQ), recommended for the examination of patients with this pathology. Due to the fact that MLHFQ does not allow assessing all components of quality of life, the SF-36 questionnaire, which is generally accepted in international practice, is also used in this study. The data obtained in the course of the study were processed using a software system STATISTICA for Windows (version 6.0). We considered the standard value of  $p < 0.05$  in medicine to be the criterion of statistical reliability of the conclusions.

## THE RESULTS AND THEIR DISCUSSION

All the examined patients suffered from coronary heart disease (CHD) for many years. The prescription of CHF for them was  $5.2 \pm 2.6$  years (95% CI 4.7–5.7): in patients Group 1 –  $5.1 \pm 2.4$  (95% CI 4.4–6.1), in patients of group 2 –  $5.3 \pm 3.1$  years (95% CI 4.3–6.4), in patients of group 3 -  $4.9 \pm 2.1$  years (95% CI 4.2–5.6). There was no significant difference between the groups ( $p > 0.05$ ). In all the examined patients, the number of points on the clinical condition assessment scale (SHOCK) corresponded to functional class II–III CHF. The walking distance according to the results of TSHC in all examined patients was lower than the value generally accepted for this functional class, which is due to the concomitant pathology inherent in this age category of patients. In all examined patients, an ultrasound examination of the heart revealed a violation of systolic function (LV ejection fraction  $<45\%$ ) and diastolic dysfunction. Age-related changes in cognitive functions were detected in all examined patients due to the involution processes: a decrease in the level of attention, a slowdown in the speed of reaction, forgetfulness, associated mainly with a decrease in the activity of memorization and reproduction, while the events of the past years of their lives were remembered well by patients. The number of MMSE scores was  $26.1 \pm 1.1$  (95) in group 1 patients% DI 25.8–26.5). Mild and moderate dementia was detected in patients of the 2nd group, the number of points was  $17.2 \pm 3.1$  (95% CI 16,2–22,8). Reducing the number of points for compared with group 1, it reached a level of significant significance ( $p < 0.01$ ). In patients Group 3 also had an age-related memory decline. The number of MMSE scores was  $28.4 \pm 0.7$  (95% CI 26.2–28.6). A significant difference between the 2nd and 3rd groups was revealed ( $p < 0,001$ ). In patients with anxiety and depressive disorders, there was a significant difference in the results on the Hamilton scale compared with the other two groups ( $p < 0.001$ ). The number of points in patients of this group corresponded to mild to moderate depression and amounted to  $19.7 \pm 4.1$  (95% CI 16.2–21.1). Similar changes were obtained by the Beck test. Significant differences between the groups according to the MMPI/RESIN test were revealed. According to the depression scale, the number of points in patients of group 3 was significantly higher compared to the other two groups and amounted to  $82.6 \pm 6.7$  (95% CI 78-87). In patients of this group, there was an increase in scales of the neurotic triad (scales of hypochondria, depression and conversion hysteria), indicating the blockade of motivated behavior in a certain situation. Adherence to the therapy was average in patients with moderate cognitive deficits and low in patients of the other two groups, whereas the need for continuous therapy is obvious and dictated by the prevention of fatal complications. In patients of group 1, the number of points on the questionnaire to assess the adherence of patients with CHF to the basic elements of self-medication and self-control was  $17.6 \pm 1.8$  (95% CI 16.9–19.3). In patients of group 2,  $13.1 \pm 2.1$  (95% CI 12.4–13.8), in patients of the 3rd group -  $12.1 \pm 3.2$  (95% CI 11.1–13.2). A significant difference was revealed between patients of groups 1-2 ( $p < 0.001$ ) and groups 1-3 ( $p < 0.001$ ). There was no significant difference between the 2-3 groups ( $p = 0,25$ ). When assessing the quality of life, the number of MLHFQ scores in patients of all studied groups exceeded the value generally accepted for these functional classes, which indicated a worse quality of life compared to the general population. The structure of this questionnaire is such that the higher the score on the scale, the worse the quality of life. In group 1 patients, the number of MLHFQ scores was  $53.8 \pm 4.5$  (95% CI 51-57), in patients 2 -  $65.3 \pm 1.8$  (95% CI 58.4–67.3), with a significant difference between the groups ( $p < 0.05$ ). In patients of group 3 with anxiety-depressive disorder, the number of points was  $71.2 \pm 2.6$  (95% CI 67.2-72.5) – a significant difference compared with group 1 ( $p < 0.01$ ), indicating a worse quality of life for patients with affective disorders. Compared with the patients of the 2nd group, the number of points was higher, but without statistically There was a significant difference ( $p >$

0.05). All quality of life parameters studied using the SF-36 questionnaire were the lowest in patients with anxiety and depressive disorders. In these patients, to a greater extent than in patients of the other two groups, all 3 components suffered: physical, psychological and social functioning. To the greatest extent there was a decrease according to the scales of role-based physical functioning, role-based emotional functioning and mental health. There were low indicators on the scale of social functioning –  $18.3 \pm 2.3$  (95% CI 16.1–19.2). The difference compared to the 1st and 2nd groups was significant ( $p < 0.001$  and  $p < 0.05$ , respectively). Patients with dementia had the most pronounced decrease compared to group 1 on the scales of role-based physical functioning, role-based emotional functioning and mental health. Quantity scores on the social functioning scale were also significantly lower and amounted to  $36.4 \pm 4.5$  (95% CI 35.6–37.9).

## CONCLUSIONS

Thus, cognitive and affective disorders have a pronounced negative effect on adherence to therapy and the quality of life of elderly and senile patients with chronic heart failure, which in turn leads to a deterioration in their clinical condition. Adherence decreases most significantly in patients with anxiety and depressive disorders. Of particular importance is the violation of social functioning in connection with the violation of the integration of patients into society.

## LITERATURE:

1. Khabibovna, Y. S., & Abdukodirovna, A. S. (2021). Changes in the diastolic function of the right ventricle in arterial hypertension.
2. Khabibovna, Y. S. (2020). Оценка Признаков Диастолической Дисфункции Правого Желудочка У Больных С Артериальной Гипертензией. *Journal of cardiorespiratory research*, 1(2), 88-92.
3. Yarmukhamedova, S. K., Normatov, M. B., & Amirova, S. A. (2021). Modification of structural and functional indicators of the heart in diabetes mellitus patients with diastolic heart failure. *Journal of Advanced Medical and Dental Sciences Research*, 9(5), 1-4.
4. Yarmukhamedova, S. K., & Gafforov, X. X. (2024). Indicators of daily blood pressure monitoring in patients with osteoarthritis with cardiovascular disorders in case of metabolic syndrome. *Science and Education*, 5(4), 50-55.
5. Khabibovna, Y. S., Alisherovna, K. M., Totlibayevich, Y. S., & Davranovna, M. K. (2023). PAINLESS CARDIAC ISCHEMIA AND RHEUMATOID ARTHRIT. *Journal of new century innovations*, 29(1), 98-105.
6. Khabibovna, Y. S., Alisherovna, K. M., Nizamitdinovich, K. S., & Totlibayevich, Y. S. (2023). Features of heart failure in patients with thyrotoxicosis. *Journal of new century innovations*, 29(1), 89-97.
7. Khabibovna, Y. S., Alisherovna, K. M., Tashtemirovna, E. M. M., Totlibayevich, Y. S., Nizamitdinovich, K. S., & Baxtiyorovich, U. J. (2023). DIAGNOSTIC VALUE OF CYSTATIN C IN PATIENTS WITH HYPERTENSION AND OBESITY. *World Bulletin of Public Health*, 22, 55-59.
8. Khabibovna, Y. S., Alisherovna, K. M., Nizamitdinovich, K. S., Tashtemirovna, E. M. M., Abdukadirovna, A. S., & Jasurovna, J. S. (2023). DEPRESSION, ANXIETY AND

- QUALITY OF LIFE IN PATIENTS WITH ATRIAL FIBRILLATION. *Journal of new century innovations*, 39(1), 185-189.
9. Khabibovna, Y. S., Alisherovna, K. M., Tashtemirovna, E. M. M., & Baxtiyorovich, U. J. (2023). THE EFFECTIVENESS OF THYROSTATICS IN THE TREATMENT OF. *Journal of new century innovations*, 29(1), 79-88.
  10. Khabibovna, Y. S., & Alisherovna, K. M. (2024). STRESS TESTING IN PATIENTS WITH CORONARY HEART DISEASE. *Journal of new century innovations*, 45(3), 28-33.
  11. Tashtemirovna, E. M. M., Khabibovna, Y. S., Alisherovna, K. M., & Erkinovna, K. Z. (2023). Angiopathy in Rheumatoid Arthritis. *Miasto Przyszłości*, 40, 418-425.
  12. Alisherovna, K. M., Khabibovna, Y. S., Nizamitdinovich, K. S., & Bakhtiyorovich, U. J. (2023). CYSTATIN and KIDNEY FUNCTION. *Journal of new century innovations*, 38(2), 220-225.
  13. Nizamitdinovich, K. S., Khabibovna, Y. S., Alisherovna, K. M., & Tashtemirovna, E. M. M. (2023). Spinal Injury for Rheumatoid Arthritis. *Miasto Przyszłości*, 40, 426-432.
  14. Khabibovna, Y. S., Alisherovna, K. M., Erkinovna, K. Z., & Djamshedovna, K. D. (2023). Gender Characteristics of the Course of Rheumatoid Arthritis. *Miasto Przyszłości*, 40, 438-442.
  15. Khabibovna, Y. S., Alisherovna, K. M., Tashtemirovna, E. M. M., Nizamitdinovich, K. S., & Abdukadirovna, A. S. (2023). ANTITHROMBOTIC THERAPY IN CARDIOLOGICAL PATIENTS. *Journal of new century innovations*, 39(1), 169-171.
  16. Erkinovna, K. Z., Khabibovna, Y. S., & Abrorovna, V. N. (2023). MONITORING OF QUALITY OF LIFE IN PATIENTS WITH ARTERIAL HYPERTENSION OF OLDER AGE GROUPS. *Academia Science Repository*, 4(5), 276-285.
  17. Yarmukhamedova, S. K., Alisherovna, K. M., Tashtemirovna, E. M. M., & Nizamitdinovich, K. S. (2023). The Effectiveness of Trimetazidine in Arrhythmias. *Miasto Przyszłości*, 33, 215-221.
  18. Хамраева, Н. А., Султонов, И. И., & Хасанов, Ф. Ш. У. (2019). Кожные проявления у больных системной красной волчанкой. *Вопросы науки и образования*, (28 (77)), 128-131.
  19. Sulstonov, I. I., Kh, Z. S., Ruzybakieva, M. R., Kireev, V. V., Aripova, T. U., & Suyarov, A. A. (2021). Pharmacogenetic Aspects of Drug Resistance in Rheumatoid Arthritis. *Annals of the Romanian Society for Cell Biology*, 4147-4150.
  20. Тоиров, А. Э., Султонов, И. И., & Тоиров, Э. С. (2020). ЗНАЧЕНИЕ ДИСФУНКЦИИ ПОЧЕК У БОЛЬНЫХ ОСТРЫМ ИНФАРКТОМ МИОКАРДА НА ФОНЕ САХАРНОГО ДИАБЕТА 2-ГО ТИПА. *Вестник науки и образования*, (9-3 (87)), 86-91.
  21. Kireev, V. V., & Sulstonov, I. I. (2021). Genetic Engineered Preparations-An Innovative Approach in the Treatment of Rheumatoid Arthritis. *Annals of the Romanian Society for Cell Biology*, 4114-4119.
  22. Namraeva, N. A., Sulstonov, I. I., & Hasanov, F. S. (2020). Systemic lupus erythematosus treatment strategy. *Journal of Critical Reviews*, 7(9), 269-270.
  23. Иргашева, У. З., Султонов, И. И., & Тоиров, Д. Р. (2013). Признаки дебюта системной красной волчанки. *Академический журнал Западной Сибири*, 9(1), 15-15.
  24. Sulstonov, I. I., Xasanov, F. S., Eshmuratov, S., Uralov, R. S., Shukurova, D., & Ziyadullayev, S. X. Predictors of Systemic Lupus Erythematosus: A Case-control Study. *International journal of health sciences*, 6(S10), 175-182.

25. Sulstonov, I. I., Khamrayev, X. X., & Xasanov, F. SYSTEMIC LUPUS ERYTHEMATOSUS AND CARDIOVASCULAR PATHOLOGY: WHERE WE AT?.
26. Ziyadullaev, S. K., Sulstonov, I. I., Dushanova, G. A., & Akbarovna, K. S. (2021). The Effectiveness Of Pharmacotherapy For Dmards With Ra Depending On The C3435T Polymorphism Of The Mdr1 Gene. *Int. J. of Aquatic Science*, 12(3), 2908-2916.
27. Islomovich, S. I., Alisherovna, K. M., & Djamshedovna, K. D. (2024). FACTORS OF OSTEOPOROSIS IN PATIENTS WITH CORONARY HEART DISEASE IN COMBINATION WITH RHEUMATOID ARTHRITIS. *Ta'lim innovatsiyasi va integratsiyasi*, 31(2), 132-138.
28. Islomovich, S. I. (2024). FEATURES OF THE COURSE OF PREGNANCY IN RHEUMATOID ARTHRITIS. *International journal of medical sciences*, 4(10), 77-84.
29. Alisherovna, K. M., Nizamitdinovich, K. S., & Islomovich, S. I. (2024). THERAPY OF RHEUMATOID ARTHRITIS DURING PREGNANCYTHE. *Ta'lim innovatsiyasi va integratsiyasi*, 31(2), 172-180.
30. Ilkhom, S. (2023). CAJAM–VOLUME 1. ISSUE 1. 2023. *Central Asian Journal of Advanced Medicine*, 1(01), 16-19.
31. Islomovich, S. I. (2024). GENDER CHARACTERISTICS OF THE CURRENT RHEUMATOID ARTHRITIS. *International journal of medical sciences*, 4(10), 3-8.
32. Djamshedovna, K. D., Alisherovna, K. M., & Islomovich, S. I. (2024). ARTERIAL HYPERTENSION IN RHEUMATOID ARTHRITIS. *Ta'lim innovatsiyasi va integratsiyasi*, 31(2), 139-145.
33. Nizamitdinovich, K. S., Alisherovna, K. M., & Islomovich, S. I. (2024). CLINICAL COURSE OF BRONCHIAL ASTHMA IN PATIENTS WITH THYROID DISEASES. *Ta'lim innovatsiyasi va integratsiyasi*, 31(2), 181-187.
34. Alisherovna, K. M., Nizamitdinovich, K. S., & Islomovich, S. I. (2024). FEATURES OF BONE MINERAL DENSITY IN PATIENTS WITH DISEASES OF THE DIGESTIVE SYSTEM. *Ta'lim innovatsiyasi va integratsiyasi*, 31(2), 162-171.
35. Alisherovna, K. M., Islomovich, S. I., & Djamshedovna, K. D. (2024). PSYCHOEMOTIONAL STATE AND QUALITY OF LIFE IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS. *Ta'lim innovatsiyasi va integratsiyasi*, 31(2), 124-131.