wjpmr, 2021,7(1), 212-216

SJIF Impact Factor: 5.922

WORLD JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.wjpmr.com

Research Article

ISSN 2455-3301

WJPMR

EFFICIENCY OF THE TRAINING PROGRAM FOR SELF-TREATMENT AND SELF-CONTROL IN FEMALE PATIENTS WITH CHRONIC HEART FAILURE

Dilnavoz R. Adizova*[1] and G. M. Tulabaeva[2]

[1]MD, PhD, Bukhara State Medical Institute. Bukhara, Uzbekistan.
[2]MD, PhD, Tashkent Institute for Advanced Training of Doctors. Tashkent, Uzbekistan.

***Corresponding Author: Dilnavoz R. Adizova**
MD, PhD, Bukhara State Medical Institute. Bukhara, Uzbekistan.
DOI: https://doi.org/10.17605/OSF.IO/9JGYN

Article Received on 20/11/2020 **Article Revised on 10/12/2020** **Article Accepted on 30/12/2020**

ABSTRACT

Purpose. To study the effectiveness of teaching "self-care" and "self-control" in elderly and senile patients with chronic heart failure. *Methods.* The study included 107 patients with chronic heart failure. The training program was attended by 54 patients who made up the study group. 53 untrained patients made up the control group. These sessions were conducted with patients for 7 days, 1 hour per day. To assess the effectiveness of the training program, adherence to treatment was assessed using the Morisky-Green scale and the quality of life was assessed using the Minnesota questionnaire on the quality of life of patients. *Results.* During 1 year of follow-up, feedback was interrupted with 17 patients (15,8%) due to various reasons. Out of 90 subjects of observation, only 6 patients (6,7%) died due to the deterioration of their condition and the development of associated conditions. The assessment of the number of visits by patients to family polyclinics showed a generally satisfactory level of clinical examination in the study group - the average rate of planned visits was 3,2. In the control group, the average number of visits was 2,5 per year. There was a statistically significantly lower number of unplanned visits to the study group compared to patients from the control group. As a result, there was a significant decrease in the number of unplanned visits in the intervention group as a whole. *Conclusion.* The program of training elderly and senile patients on the aspects of self-medication and self-control in chronic heart failure is effective in improving the control of their adherence to therapy and the prognosis of the disease.

KEYWORDS: Chronic heart failure; training; self-care; self-control; elderly age.

INTRODUCTION

Despite the significant advances in modern medicine in the treatment of cardiovascular diseases (CVD), the prevalence of chronic heart failure (CHF) is not only not decreasing, but is also growing steadily.[1,2]

Concepts such as "self» (self-care , self-management) and self-control (self-monitoring) at the beginning of the 21st century have become an integral part of the treatment programs, patients with various chronic infectious diseases, including heart failure.[3,4] Various types of outpatient management programs for patients with CHF are becoming increasingly relevant for modern medicine. The main goal of these programs is secondary prevention, that is, to prevent further deterioration of the patient's condition. Programs include a number of measures to enhance information awareness of CHF patients and their relatives about the state of their health, ways of improving the quality of life, methods self-help and monitoring the status of their health on their own.[5,6,7]

The main task of self-medication and self-control in CHF is to maintain the clinical stability of patients. This concept includes the absence of clinical signs of circulatory stagnation in the form of orthopnea, peripheral edema of cardiac origin, rapid weight gain, the need to take diuretics, and increased pressure in the jugular veins.[8,9]

Studies have shown that patients with functional class (FC) IV CHF who successfully control symptoms of congestion have the best survival rates, which are approximately equal to those of patients with FC III.[10,11]

In this regard, the development of new programs for patient management or adaptation of existing programs with their further implementation in order to improve the quality of life of patients and reduce the mortality rate is urgent.

Purpose of the study. To evaluate the effectiveness of teaching "self" and "self-control" patients elderly and senile age with chronic heart failure with the use of

innovative technologies and the identification factors affecting their efficiency.

MATERIAL AND RESEARCH METHODS

The study included 107 patients with CHF FC II-III who were admitted to the hospital. The average age of the patients was 71.4 ± 7.7 years.

All patients received inpatient treatment in a cardiology or therapy department for a duration of 10 to 12 days. Drug therapy included the basic treatment of CHF with the inclusion of drugs from the group of diuretics, angiotensin converting enzyme (ACE) inhibitors, beta-blockers, if necessary, and cardiac glycosides in various combinations with supplementation in the form of drugs from other groups, depending on the individual characteristics of the course of CHF in patients (National recommendations of All-Russian Scientific Society of Cardiology (ARSSC) and Society of Heart Failure Specialists (SHFS) for the diagnosis and treatment of CHF (third revision)). During this time, all patients underwent training in the aspects of self- healing and self-control in the form of individual or group sessions.

Taking into account the peculiarities of the age, mentality, lifestyle, and marital status of patients in this sample, the content of the lessons was adapted taking into account the specifics of each. Table 1 details the topics of patient education sessions and their content. The patient education course content and lesson plan were drawn up by the authors.

The training program was attended by 54 patients who made up the main group. 53 patients who did not undergo training made up the control group (Table 2). These sessions were conducted with patients for 7 days, 1 hour per day. Patients were handed out detailed materials in the form of booklets, brochures. During the training, it was required to keep a notebook and briefly write down the content of the classes.

Table 1: The name of the topics and their content.

No.	Lesson topic	Contents
one	General information about CHF	Simplified explanation of the mechanisms of CHF development to the patient.
2	Body weight control	Explaining to the patient about the need for daily weighing in the morning (before breakfast in the same clothes and on the same scales) and the need to report an increase in body weight by 1.5 kg to the doctor, provided that there are no changes in the diet.
3	Diet	Patient education in the knowledge and skills to recognize low and high salt diets. Clarification of the need to keep a journal with daily records of food intake in order to subsequently correct the diet.
4	CHF symptoms	Teaching patients to identify the most significant symptoms of CHF: weight gain, shortness of breath, decreased exercise tolerance, edema, increased fatigue, severity in the right hypochondrium. Explaining to the patient the need for timely notification of the attending physician about the symptoms of increased CHF.
5	Drug therapy	Establishing all prescribed medications. A simplified explanation and discussion of the need to prescribe each of them and the side effects associated with their use.
6	Drug therapy	Clarification and discussion of adequate doses of drugs and the need to take them exactly as prescribed by the doctor. Keeping a special individual diary of medication intake.
7	Monitoring physical activity	Teaching patients to establish their own level of tolerated physical activity in the form of the number of steps or distance in meters that he is able to overcome without exacerbating the symptoms of CHF.

To assess the effectiveness of the training program, adherence to treatment was assessed according to the Morisky-Green school and the quality of life was assessed using the Minnesota Questionnaire for the Quality of Life of Patients with CHF (MLHFQ).

After the patients were discharged from the hospital, their control was carried out through unstructured phone contacts, interactive contact through mobile messengers. For data analysis were used the results obtained at the beginning and at the end of research. As the first point of observation, the case of hospitalization for compensation of CHF was chosen, and the second point was a routine examination after 1 year. At the same time were taken into account the number of visits to the doctor according to individual plans of dispensary observation (IPDO) in a family clinic or SVP cases of ambulance calls and (Ambulance Station) and the number of unplanned physician visits in connection with the increase with symptoms of CHF. The study did not take into account the attendance of patients in medical organizations outside the IPDO, not associated with compensation of CHF, including those caused by the

need to prescribe prescriptions for drugs under the additional drug provision program.

The data obtained in the study were subjected to statistical processing on a Pentium- IV personal computer using the Microsoft Office Excel-2012 software package, including the use of built-in statistical processing functions.

RESULTS

During 1 year of follow-up, feedback was interrupted with 17 patients (15.8%), 8 patients of the main group and 9 patients of the control group, due to various reasons (refusal to participate, territorial factor, lack of communication means). In this regard, the results of the study were analyzed in the remaining 90 patients. Analysis of the distribution of patients by FC CHF after 1 year of observation showed that only 6 patients (6.7%) of 90 subjects of observation died due to deterioration of their condition and the development of associated conditions (Fig. 1). The largest proportion of deaths occurred in elderly patients (n = 5), among elderly patients - 1. In all deceased patients, CHF corresponded to FC 3. At the same time, the number of cases of the transition from FC 2 CHF to FC 3 CHF in the two groups differed significantly, especially in the elderly group.

Thus, among elderly patients who were trained, there was 1 case of FC transition to a higher level, while among untrained patients, the number of cases of FC change to a higher level was 2 . Among patients undergoing training senile 2 deaths observed the FC was accordingly 3. Among the untrained, there were 3 deaths and 4 cases of changes in the FC of CHF.

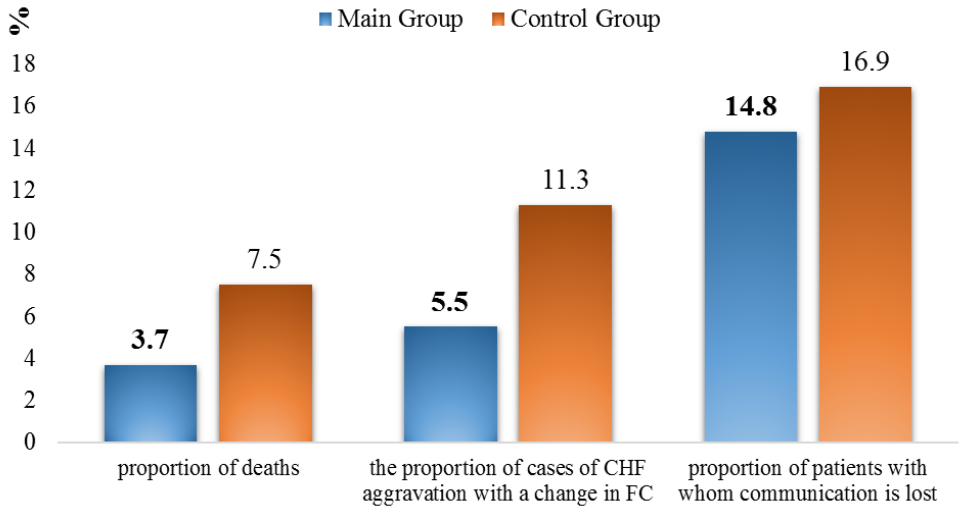

Figure 1: Comparative analysis of the effectiveness of training in patients in the study groups.

The results of the observation showed that compared with the control (n = 40) in the study group (n = 44) in duration of 1 year observation was detected significantly fewer elderly patients who were hospitalized and accessed in Ambulance (Fig. 2).

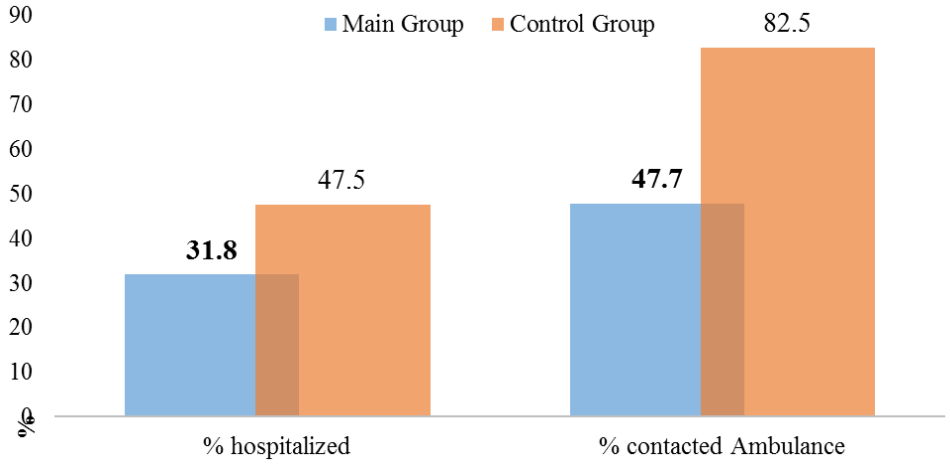

Figure 2: The percentage of elderly patients hospitalized and contacted the Ambulance Station because of CHF for 1 year.

The assessment of the number of visits to patients with CHF according to the IPDO in Ambulance showed a generally satisfactory level of clinical examination in the main group - on average, the indicator of planned visits was 3.2 (according to the standard, the number of visits for CHF should be 4) . In the control group, the average number of visits was 2.5 per year (Fig. 3).

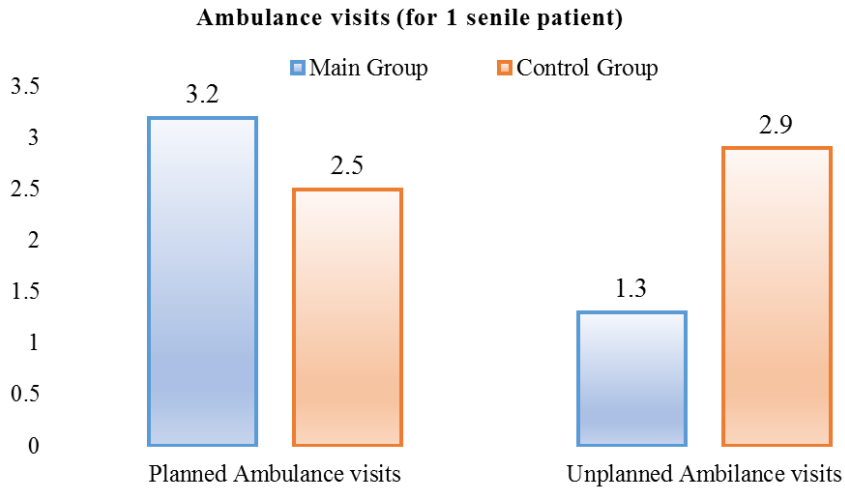

Figure 3: The number of visits to the family polyclinic (for 1 elderly patient) within 1 year.

At the same time, significant variability was revealed in the number of unscheduled visits of patients due to an increase in CHF symptoms. There was a statistically significant lower number of unscheduled visits to the main group compared with patients from the control group. As a result, there was a significant decrease in the total number of unscheduled visits in the intervention group.

Figure 4 shows the dynamics of indicators of the quality of life of patients in the course of one-year follow-ups. The graph shows that the indicator significantly improved in the main group, while in the control group it underwent insignificant changes or negative dynamics was observed.

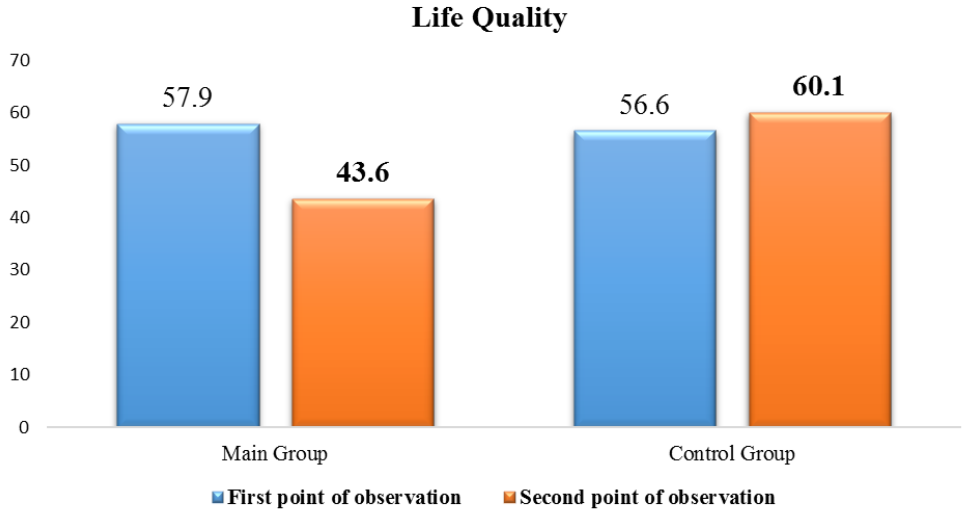

Figure 4: Data of quality of life assessment by MLHFQ in elderly patients of the compared groups within 1 year.

DISCUSSION

The need to improve the system of management and control of treatment of patients with CHF in the older age group is due to the fact that the highest rate of readmission among patients was noted in the group over 65, where it is 40-57%.[12,13] At the same time, the frequency of early readmission to hospital (within 3-6 months after discharge from hospital) among the elderly reaches 25-45%.[14,15] All of the above causes high financial costs for the treatment of CHF. In particular, in the USA, where the number of hospitalizations due to CHF is about 1 million per year, the costs amount to 1-2% of all health care costs.[6,8]

After the participation of patients with CHF in the training program, some significant differences were

revealed between the compared groups in the frequency of reaching secondary points, manifested in a decrease in patients' need for emergency services, a decrease in the number of unscheduled visits to the joint venture for decompensation of CHF. In the course of the study, it was determined that in the control group among women, significantly worse results of dispensary observation and treatment were revealed compared to the main group. At the same time, the participation of women in the training program reduced the need for hospitalizations for decompensation of CHF during 1 year of observation and treatment.

In a study by foreign authors,[10] it was demonstrated that the gender of elderly patients is an important factor influencing the effectiveness of the health school, since the use of training in the main group in women turned out to be a less effective means of secondary prevention of CHF than in men. All of the foregoing may serve be evidence of efficiency of the training of elderly patients with chronic heart failure aspects of self and self-control.

CONCLUSION

Thus, the program of teaching elderly and senile patients about the aspects of self- treatment and self-control in chronic heart failure is effective in improving the control of their adherence to therapy and the prognosis of the disease. At the same time, the proposed technique is economically low-cost and easily feasible in modern realities thanks to communication means. In this regard, offered training program in patients with chronic heart failure can be adapted and put into practice as an outpatient primary care and the practice of inpatient facilities etc. to improve the treatment of this pathology.

REFERENCES

1. Adamo M, Lombardi CM, Metra M. November at a glance. Chronic and acute heart failure: from epidemiology to treatment. European Jo urnal of Heart Failure. Wiley; 2019; 21(11): 1297–8.
2. Vinogradova NG. City Center for the Treatment of Chronic Heart Failure: the organiza-tion of work and the effectiveness of treatment of patients with chronic heart failure. Kardiologiia. APO Society of Specia lists in Heart Failure, 2019; 59(2S): 31-9.
3. Garganeeva AA, Bauehr VA, Borel 'KN. The pandemic of the twenty - first century: chronic heart failure is a burden on modern society. Epidemiological aspects (literature review), 2014; 3: 8-13.
4. Mareev VY, Ageev FT, Arutyunov GP. National guidelines PRAS cardiology and internal medicine on the diagnosis and treatment of chronic heart failure. 2013; 7: 380-1.
5. Svetyj LI, Lopuhova VA, Tarasenko IV. Analysis of the main causes of decompensation of pain CNS at the prehospital stage of treatment, 2014; 4: 229-30.
6. Stein GY, Kremer A, Shochat T et al. The diversity of heart failure in a hospitalized population: the role of age // J Card Fail, 2012; 18: 645-653.
7. Takada T., Sakata Y., Miyata S. et al. Impact of elevated heart rate on clinical outcomes in patients with heart failure with reduced and preserved ejection fraction -A report from the CHART-2 Study // Eur. J. Heart Fail, 2014; 16: 309-316.
8. Tseng CH Clinical features of heart failure hospitalization in younger and elderly patients in Taiwan // European Journal of Clinical Investigation, 2010; 41(6): 597-604.
9. Hwang SL, Liao WC, Huang TY Predictors of quality of life in patients with heart failure // Jpn. J. Nurs Sci., 2014; 11(4): 290-298.
10. Lam CSP, Carson PE, Anand IS, Sex differences in clinical characteristics and outcomes in elderly patients with heart failure and preserved ejection fraction: The I-PRESERVE Trial // Circ. Heart Fail, 2012; 5: 571-578.
11. Lazzarini V., Mentz RJ, Fiuzat M. et al. Heart failure in elderly patients: distinctive features and unresolved issues // Eur J Heart Fail, 2013; 15: 717-723.
12. Shimokawa H., Miura M., Nochioka K. et al. Heart failure as a general pandemic in Asia // Eur. J. Heart Fail, 2015; 17: 884-894.
13. Shreyaswi Sathyanath M. Proportion of Depression Among the Elderly Population in A Rural Health Care Setting // J. Clin . Diagn Res., 2014: 8(1): 137-139.
14. Bots SH, Groepenhoff F., Eikendal ALM et al. Adverse Drug Reactions to Guideline-Recommended Heart Failure Drugs in Women // JACC: Heart Failure, 2019; 7(3): 258-266.
15. Byszewski A., Azad N., Molnar FJ et al. Clinical pathways: adherence issues in complex older female patients with heart failure (HF) // Arch Gerontol Geriatr, 2010; 50: 165-170.