



ANALYSIS OF FACTORS RELATED TO SELF CARE MANAGEMENT IN HEART FAILURE PATIENTS SCOPING REVIEW

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ABSTRAK

Prevalensi gagal jantung di Indonesia terus meningkat, salah satu upaya dalam pencegahan kekambuhan dan perburukan kondisi pada pasien gagal jantung dengan melakukan self care namun diduga ada beberapa faktor yang mempengaruhi self care. Tujuan dari scoping ini adalah untuk mengidentifikasi faktor-faktor yang berhubungan dengan self care pada pasien dengan gagal jantung. Review artikel ini menggunakan pendekatan Scoping, dalam

penelitian ini peneliti menggunakan format PEO dalam pencarian literature, database online yang digunakan adalah Science Direct, PubMed dan Scopus. Terdapat 12 artikel yang dianggap memenuhi syarat dan kriteria. Setelah di lakukan Scoping terdapat 7 tema besar mengenai faktor-faktor yang mempengaruhi self care pada pasien gagal jantung yaitu rendahnya pengetahuan, masalah psikologis, harapan motivasi, informasi komunikasi, dukungan sosial, spiritual dan ekonomi. Pasien dengan gagal jantung besar kemungkinan mengalami depresi yang membuat pasien tidak mampu merawat diri mereka sendiri, sehingga pasien harus di berikan pengetahuan, informasi yang penting dari tim medis kepada pasien gagal jantung mengenai perawatan diri, harapan , spiritual yang kuat, ekonomi, dan dukungan keluarga yang merupakan kunci untuk kesembuhan pada pasien dengan gagal jantung.

Kata Kunci : Faktor-faktor, Gagal jantung, Self care management

ABSTRACT

The prevalence of heart failure in Indonesia continues to increase, one of the efforts to prevent recurrence and worsening of the condition in heart failure patients is by carrying out self-care, but it is suspected that there are several factors that influence self-care. The aim of this scoping is to identify factors related to self-care in patients with heart failure. This review article uses a scoping approach. In this study, researchers used the PEO format in literature searches. The online databases used were Science Direct, PubMed and Scopus. There are 12 articles that are considered to meet the requirements and criteria. After scoping, there were 7 major themes regarding factors that influence self-care in heart failure patients, namely low knowledge, psychological problems, motivational expectations, communication information, social, spiritual and economic support. Patients with heart failure are likely to experience depression which makes patients unable to care for themselves, so patients must be given knowledge, important information from the medical team to heart failure patients regarding self-care, hope, strong spiritual, economic, and family support. which is the key to healing in patients with heart failure.

Keywords: Factors, Heart failure, Self care management

INTRODUCTION

Heart failure is a cardiovascular disorder with high morbidity and mortality rates in various countries (Taupikurrahman & Sagiran, 2021), Basic Health Research Data in 2018, states that in Indonesia there are around 2,784,064 individuals suffering from heart disease and every year this number will continue to increase (Efendi et al., 2023). This disease can affect the quality of life due to anatomical and physiological changes in the heart causing physical limitations, decreased social roles, and also psychological disorders in the patient (Basuki Rachmat & I Made Kariasa, 2021). Heart failure itself is a disease that requires monitoring (Amatiria et al., 2023), Apart from monitoring, heart failure patients also need self-care so as not to worsen the patient's condition.

Self-care has an important role in the success of medical treatment for heart failure and can have an impact on improving signs of heart failure. Self care includes actions aimed at maintaining physical stability, avoiding bad behavior and finding early symptoms of heart failure (Anggraheni, Astantika, 2019). Self care can be used as a problem solving technique in relation to improving the quality of life (Hendrawan & Noeraini, 2019). Research conducted by Prihatiningsih & Sudyasih (2018) showed that patients who reported that they did not carry out proper self-care as taught by the medical team, resulted in their symptoms becoming more severe, increasing the risk of exacerbations, and being the cause of patients undergoing hospitalization, similar to research Prasetyawati & Prihatiningsih (2021) explained that rehospitalization is not only caused by disease progression, but is more often caused by non-compliance with treatment and poor self-care. Self-care for heart failure patients is needed for successful management and control of this chronic disease.

Self-care management is a person's activity to be able to control the symptoms resulting from the disease they are suffering from, take care of their body and soul and make changes to a healthier

lifestyle following the recommendations given by the medical team so that their quality of life becomes optimal (Kristina et al., 2023). Self-care management in heart failure patients is the patient's response to changes in their condition which consists of the patient recognizing signs and symptoms, evaluating changes in signs and symptoms, taking strategies to overcome changes, and identifying the social support needed (Permana, 2021)

Research conducted by Destiawan Eko Utomo et al (2019) explains self-care management that is carried out well in heart failure patients, makes patients motivated in the treatment and management of the conditions that patients experience, but there are several factors that influence self-care management and when researchers conducted scoping there were 7 factors that influenced self-care management in patients heart failure.

METHODS

This article review uses a Scoping Review approach. In this study, researchers used the format P (Population), E (Exposure), and O (Outcome) (PEO) in using literature search keywords. Where for PEO in this article review is P (Heart failure) E (factors) O (self care).

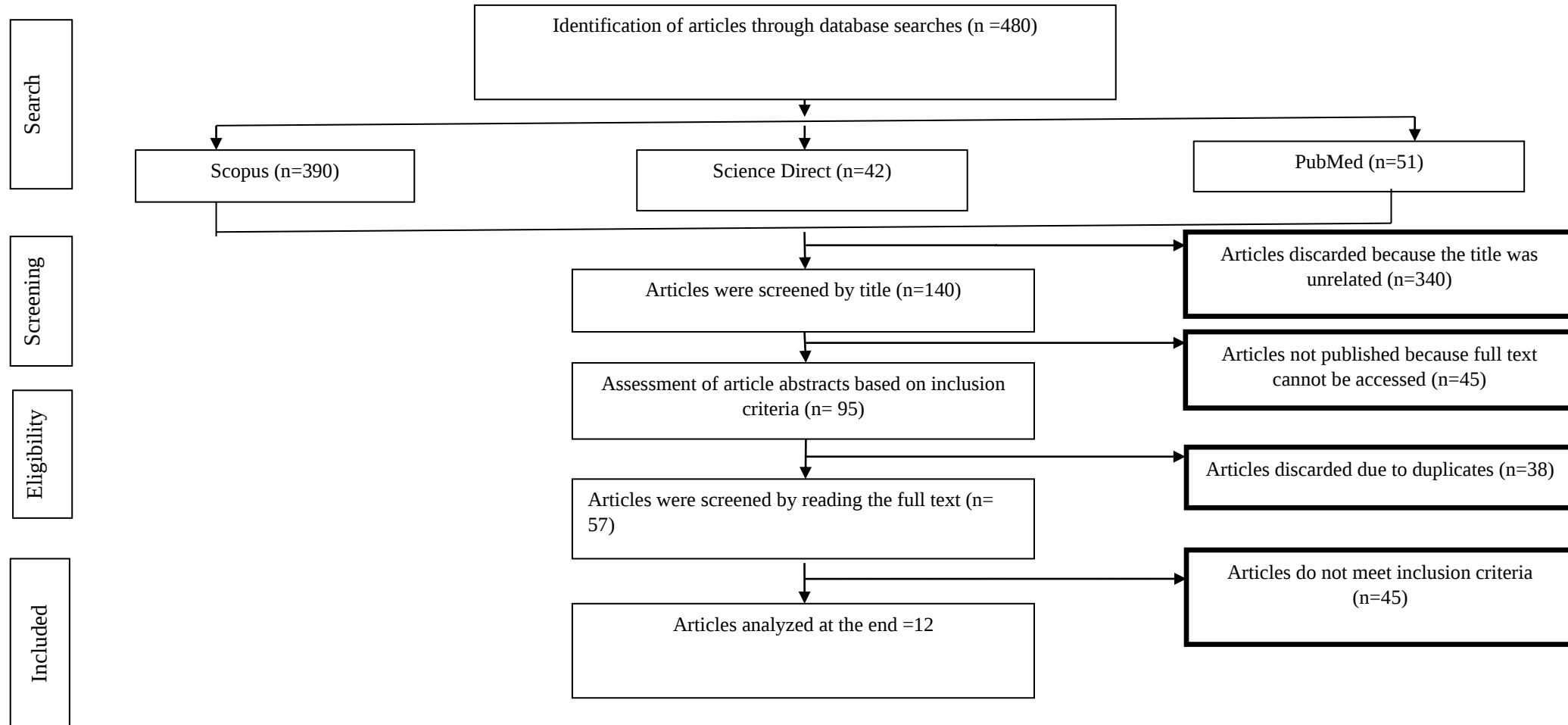
Search Strategy

Searches for topics related to the theme are searched through online database searches. The online databases used are Science Direct, PubMed and Scopus. The search filter used uses the keywords: Patient; Heart failure, factors, Self care management with boolean AND or OR. Inclusion criteria are articles in the form of research articles, complete manuscripts that can be accessed (free full text), year of publication of research articles between 2018-2023, articles written in English, and provision of interventions for patients with heart failure for all ages , the exclusion criteria are determined by articles in the form of preliminary studies (preliminary study or journal pre proof).

Article Selection

The electronic database search yielded 483 articles. Scopus database 390, ScienceDirect 42, and Pubmed 51 articles. There were 140 articles screened by title, 45 articles were not used because the full text could not be accessed, 95 articles were assessed from the abstract based on inclusion criteria, 38 articles were discarded because they were duplicates, 57 articles were screened by reading the full text. , 45 articles did not meet the inclusion criteria and only 12 articles were considered eligible and met the criteria. analyzed in this writing. The flow of writing the article can be seen in figure 1 below

Figure 1. Article Search Flow



RESULTS AND DISCUSSION

The results of data extraction that the writer got are:

No	Author And Year	Country	Title	Method	Sample	Results
1.	(Leonie et al., 2018)	Sweden	Self-efficacy Mediates the Relationship Between Motivation and Physical Activity in Patients With Heart Failure	cross-sectional.	n = 100	Half of heart patients (58%) were physically active for more than 60 minutes a week. Only 3 patients were not active at all, 11% were active less than 30 minutes a week (n = 11), 28% were active between 30 and 60 minutes a week (n = 28), 32% were active more than 1 and up to 3 hours a week (n = 32), and 26% were active more than 3 hours a week (n = 26).
2	(Lisa et al., 2018)	Sweden	“I was told that I would not die from heart failure”: Patient perceptions of prognosis communication	Group interviews	n = 15	Patients with heart failure explained that medical staff provided little or no information about the heart disease they were suffering from during their visits or treatment at the hospital. Others explained that they did not know that they were suffering from a chronic disease so they did not think about the prognosis of heart failure at all. At some point they asked about the

s3	(Mathew et al., 2018)	USA	Pilot testing of the effectiveness of nurse-guided, patient-centered heart failure education for older adults	Non-randomized quasi-experiment.	n = 26	condition of the disease they were suffering from, they received the right answer and they could understand it. The absence of information regarding prognosis makes some patients feel like they are missing important information. In meetings with professionals. The Wilcoxon signed rank test shows. The difference in A-HFKT was significant with $z = -4.203$, $P < 0.000$, and confidence ($z = -4.288$, $P < 0.000$) Which means that after being given the intervention the patient experienced a statistically significant increase in general knowledge of heart failure.
4	(Moon et al., 2018)	Korea	The Effect of a Telephone-Based Self-management Program Led by Nurses on Self-care Behavior, Biological Index for Cardiac Function, and Depression in Ambulatory Heart Failure Patients	Quasi-experiment in nonequivalent control group	Sample n = 38 18 (heart failure patients in the experimental group) 20 (heart failure patients in the control group).	There were no significant differences between the two groups in general characteristics and study variables. ($t = 8.22$, $p < .001$). Depression in the experimental group that implemented this telephone-based self-management

5	(Wang et al., 2018)	China	Walking with controlled breathing improves exercise tolerance, anxiety, and quality of life in heart failure patients: A randomized controlled trial	Randomized controlled	n = 90	program decreased statistically significantly compared with LV EF in the control group ($t = -3.49$, $P = .001$). The results showed that the 6-minute walking distance in the breathing walking group was significantly different over time ($P < 0.001$) compared with the control group at baseline. Oxygen saturation by pulse oximetry ($P = 0.04$). The Multidimensional Assessment of Interoceptive Awareness Scale ($P = 0.001$) was significantly and positively correlated with the 6-minute walking distance results. There were significant differences between groups at Week 12 in anxiety ($P = 0.03$) and quality of life ($P = 0.02$) but not depression ($P = 0.06$). There are 3 categories that become obstacles to self-care in heart failure patients, namely personal factors, burden of disease, and inefficient support systems. In each category there are three sub-
6	(Reza Negarandeh et al., 2021)	Iran	Barriers to Self-care Among Patients with Heart Failure: A Qualitative Study	Qualitative analysis	content n = 17 participants	

						categories, each of which are lack of understanding regarding self-care, negative emotions regarding heart failure, difficulty in changing lifestyle, decreased physical strength, comorbid conditions, financial conditions, inadequate social support, and limited access to health care providers.
7	(Kraai et al., 2018)	Dutch	Optimism and quality of life in patients with heart failure	Descriptive sectional.	cross- n = 86	The total score (mean $\pm$ SD) on the LOT-R was 14.6 ± 2.9 (theoretical range 0–24) and the scores on the optimism and pessimism subscales were 8.1 ± 1.9 and 5.5 , respectively ± 2.5 . Higher age was associated with more optimism ($r = 0.22$, $p < 0.05$)
8	(Hacıhasanoglu et al., 2018)	Türkiye	Determination of Hopelessness and Quality of Life in Patients with Heart Disease: An Example from Eastern Turkey	Descriptive study	n = 200	There was a significant relationship between income status and general health perception ($P < 0.05$). There is a negative correlation between the level of hopelessness of patients with heart disease status, general health perception, and quality of life.
9	(Audureau et al., 2018)	French	Development and Validation of a New Tool to Assess Burden of Dietary Sodium Restriction in	Cross-sectional study	n = 96	The developed scale demonstrated excellent internal consistency (Cronbach alpha = 0.912). Patients

		Patients with Chronic Heart Failure: The BIRD Questionnaire				with increased NYHA class had significantly higher global scores (global testP=0.055; trend testP=0.003). Statistics for higher scores were also found in patients with the most restricted diet (global testP=0.30; trend testP=0.06; (6 g) P=0.06). Significant positive correlations were found between the global burden score and the scores of the MLHF scale domains and the global score: rS= 0.37 (physical domain), 0.40 (mental domain), 0.45 (global score); all P<0.05.
10	(Wischer et al., 2018)	United States of America	Effects of iPad Video Education on Patient Knowledge, Satisfaction, and Cardiac Rehabilitation Attendance	Descriptive statistics	n= 224	The T-test results show a significant increase in knowledge between the pre-test (mean = 88.97) and post-test (mean = 96.62) percentages: T=-9.657, df=223, P<001. The majority of patients (86.3%, n = 183) were very satisfied with the educational video, and 98.1% (n = 208) stated that the video increased their knowledge and confidence in treating their heart disease.
11	(Yang et al., 2018)	Korea	Self-care model based on the theory of unpleasant symptoms in patients with heart failure	Model-testing design	n = 209	The model fit indices in the final model were $\chi^2 = 163.473$, Normed $\chi^2 = 1.796$, RMSEA = 0.054, IFI = .986, CFI = .986, GFI = 0.915, and

12	(Abbasi et al., 2018)	Iran	Effects of the self-management education program using the multi-method approach and multimedia on the quality of life of patients with chronic heart failure: A non-randomized controlled clinical trial	Non-randomized controlled	n =111 participants	AGFI = 0.873. The severity of illness and anxiety have indirect effects on self-care. There were significant differences between the multi-method and multimedia approach groups in terms of quality of life after the intervention compared to the control group ($P < 0.001$ and $P = 0.002$). Additionally, significant differences were found between the two intervention groups in terms of the dimensions of self-efficacy and knowledge ($P = 0.047$).
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The results of a scoping review of 12 articles related to the implementation of self-care management in heart failure patients found 7 themes. These themes are related to "Low knowledge, psychological problems, motivational expectations, communication information, social and family support, spiritual and economic".

1. Low knowledge is related to self-care management in heart failure patients

Lack of knowledge is closely related to self-care management in heart failure patients, but the knowledge/health education provided to patients with heart failure through video media and small discussions, increases heart failure patients' knowledge regarding self-care management of these patients, this has been proven by several studies in which patients experienced statistically significant improvements in general knowledge regarding heart failure disease, in addition patient-centered nurse-led heart failure education in the post-acute rehabilitation setting was effective in a variety of areas enabling patients to acquire relevant self-care skills and knowledge, improve the quality of life, which will save the lives of patients with heart failure. Self-care management education for heart failure patients is very effective because this intervention is simple and low cost.

(Mathew & Thukha, (2018),Dinh et al., (2018) Abbasi et al., (2018),Abbasi et al., (2018),Wischer et al., (2018)).

2. Psychological Problems Associated with Self Care Management in Heart Failure Patients

Psychological disorders such as depression will affect self-care management where heart disease is one of the diseases that most affects the patient's physical and psychological function, this is because the condition suffered by the patient can cause the patient to feel hopeless about the life the patient is living, this is a condition emotional where people do not have individual choices to solve problems or achieve what they want and become unable to use their energy to achieve goals, this is usually called depression.

Psychological problems in heart failure patients which, if not treated properly, will contribute to worsening clinical symptoms and have a higher risk of hospitalization. Patients suffering from heart failure often feel physical weakness and anxiety(Firstania & Khoiriyati, 2023)

One of the psychological disorders that often occurs in patients with heart failure is depression. Depression greatly affects self-care in heart failure patients, initially the patient will feel anxious due to unpleasant things about the disease suffered by the patient with heart failure, anxiety may appear at an early stage after being diagnosed with heart failure and depression may persist Manifestations depend on the progression of the disease suffered by the patient. This can cause someone to feel hopeless about the life the patient is living, this is very detrimental to heart failure patients because it will have a negative impact on the patient's self-care.

(Karakurt et al., (2018),Yang & Kang, (2018),IH et al., (2018),Moon et al., (2018),(Teng et al., 2018))

3. Hope and Motivation Are Associated with Self Care Management in Heart Failure Patients

Hope is felt as a power that exists within humans, making humans act to change the current situation and help create a better tomorrow for themselves and others. Hope for human life, is considered a healing and encouraging force that gives strength to overcome momentary difficulties and get rid of suffering. Hope has been recognized as an important theme that strengthens psychological and physiological defense mechanisms in patients with chronic illnesses. Apart from motivation expectations also greatly influence the patient's condition, internal motivation and self-efficacy beliefs are important when carrying out physical activity in people who experience heart failure. Higher levels of motivation lead heart failure patients to better levels of self-efficacy.

(Klompstra et al., (2018),Karakurt et al., (2018),Audureau et al., (2018))

4. Communication and health information from the medical team is related to self-care management in heart failure patients

Many patients with heart failure have a poor prognosis and often exhibit high levels of symptoms throughout their lives with heart failure, especially at the end of life. Improving communication about prognosis in heart failure care is increasingly considered important because it appears that only a small number of patients engage in meaningful discussions. help them plan their future conditions. In some studies, patients also described receiving information about their prognosis where the medical professional had “attuned” to the patient and provided information (positive or negative) in a way that the patient was ready to accept. Patients often want the medical team to be open and honest about their prognosis, helping them plan ahead and prepare for a worsening of their condition. (Hjelmfors et al., (2018), Moon et al., (2018)).

5. Social and Family Support is Associated with Self Care Management in Heart Failure Patients

Social support influences the self-care of heart failure patients, because patients who have chronic diseases, patients with heart failure also have higher levels of anxiety and depression, so that patients who receive lower levels of social support experience unpleasant symptoms such as dyspnea, fatigue, nausea, , and pain. Social support influences self-care management in heart failure patients. The results of the study explain that the level of hopelessness in those who live alone is higher and their quality of life is lower, compared to those who live with their partner, children and other family members. higher. (Yang & Kang, (2018), IH et al., (2018)).

6. Spirituality is Associated with Self Care Management in Heart Failure Patients

Spirituality is very important in heart failure patients. Spirituality is also able to improve the patient's quality of life. This is formed by values and beliefs as well as self-esteem, which are interrelated to overcome the ambiguity caused by disease and life.

7. Economics is Related to Self Care Management in Heart Failure Patients

The importance of hope is linked to financial capabilities, where it is noted that there is a significant difference between economic status and hopelessness, vitality, general health perception and quality of life, patients with poor/unsatisfactory economic status have high levels of hopelessness and low quality of life. Patients with heart failure require drug-related interventions and lifestyle changes, increasing self-management abilities makes heart failure patients actively involved in self-care management and treatment that requires financial support.

DISCUSSION

The review above explains self-care management in patients with heart failure. The 12 journals that were scoped after being filtered resulted in 7 major themes.

Heart failure patients are negatively impacted both physically and psychologically, resulting in reduced quality of life. Heart failure also results in a lower quality of life and thus increases the level of hopelessness of heart patients.

patients have high levels of depression, low levels of social support, and low financial levels, and cannot improve self-care properly. To improve self-care, patients must gain knowledge, information and implement nursing interventions that improve self-care. Some heart failure patients have a low quality of life, this could be due to a lack of information regarding discharge or patient education about how to manage their health at home. It is also related to how patients perceive their position in their lives in relation to their culture and system of values, goals, expectations, standards and anxieties. Quality of life, which is a broad term that combines physical health, psychological state, level of independence, social relationships, spirituality, expectations and specific characteristics of

the environment in a complex manner, will improve patient self-care both while being treated in hospital and after returning home after treatment. .

CONCLUSION

Patients with a diagnosis of heart failure have a great potential for despair and depression which makes the patient unable to care for themselves either when they are hospitalized or when the patient has gone home. Patients with heart failure must be provided with knowledge and information from the medical team regarding the disease they are experiencing. One of the important pieces of information for heart failure patients is self-care such as correct diet and routine treatment. This requires hope from the patient, strong spirituality, financial support and family support are the keys to providing recovery support to patients with heart failure. This will make the patient try to carry out his days by carrying out activities according to his needs and have better hopes for the future which will support the patient to live his day and be able to care for himself.

ETHICAL CONSIDERATION

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Conflict of Interest

The authors declare there are no conflicts of interest or financial conflict

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