THE RELATIONSHIP BETWEEN SELF CARE MANAGEMENT AND QUALITY OF LIFE IN PATIENTS WITH CONGESTIVE HEART FAILURE: STUDY OF LITERATURE

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ABSTRACT

The World Health Organization 2022 reveals that non-communicable diseases are the main cause of poor health worldwide. Among them Cardiovascular disease is the second cause of death with an estimated 27% in the world. Data from the Indonesian Ministry of Health's Basic Health Research /Riset Kesehatan Dasar (Riskesdas) in 2018 with a prevalence of heart failure (CHF) in Indonesia of 1.5%. An effort is needed to reduce the prevalence of CHF by increasing patient Self Care. Self-care in patients with heart failure includes taking medication regularly, reducing consumption of salt in the diet, exercising regularly, and monitoring symptoms regularly. Self care has been proven to improve the quality of life of CHF patients so that it is expected to have an impact on mortality from heart disease and CHF in particular. This type of research is a literature review using the Google Scholar, Pubmed and Science Direct databases, obtained 12 journals that discuss the Relationship between Self Care and Quality of Life in Heart Failure Patients. Almost all research results stated that there was a significant relationship between Self Care and the Quality of Life of heart patients, but 2 journals stated that there was a negative relationship. It is hoped that there will be efforts to increase Patient Self Care in certain aspects that will have a significant influence on improving the quality of life of patients.

Keywords: CHF, Quality of Life, Self Care Management

INTRODUCTION

Congestive Heart Failure (CHF) or heart failure is a chronic disease with a complex treatment program that takes a long time. Heart failure affects about 26 million people worldwide. In 2018, the prevalence of heart disease in Indonesia reached 1.5% or 1,017,290 people in all age groups (Kemenkes RI, 2018). Based on the 2019 Sample Registration System (SRS) survey, heart disease is the second highest cause of death after stroke, with a percentage of 12.9%. Heart failure can cause symptoms such as difficulty breathing, swelling, and a prolonged feeling of tiredness or exhaustion. These symptoms will affect the functional status and life of the patient (Saroinsong et al., 2021). The results of the study show that patients with congestive heart failure have a poor quality of life with a percentage of 80% ((Saida et al., 2020)). The main management of heart failure patients is to carry out self-care consistently (Maya Rokayah, chrisyen dimanik, marina, 2021)). Self-care in heart failure patients includes a person's belief that they are able to carry out self-care in their disease (Prihatiningsih & Sudyasih, 2018). Self care is a decision-making process that actively influences several aspects of heart failure patients (Simanjuntak, A. L. T., 2019).

Self Care in patients with cardiovascular disease is a condition where individuals can respond to the symptoms they experience (management). Self care management is the patient's ability

to recognize changes in symptoms or signs, evaluate changes to these signs and symptoms, make decisions for appropriate action, implement treatment strategies and evaluate actions taken. ((Lee et al., 2015)). According to (Nursita & Pratiwi, 2020) that there is an increase in the quality of life in heart failure patients who carry out self-care independently. Quality of life can be influenced by several factors, including age, gender, education, occupation, NYHA degree, and self-management.

In an effort to improve the success of the therapy given, risk factor control is needed, especially risk factors that can be modified, such as depression levels, family support, and self-care management. Quality of life is a person's perception of himself in relation to the value system in which he lives which can be influenced by many factors, such as the level of independence. The level of independence is directly proportional to the quality of life. A good level of independence can optimize quality of life, and prevent acute and chronic complications from CHF (Wang et al., 2011). Self-management affects the quality of life of heart failure patients, because self-management can improve coping to adjust and manage life, feelings of control over them, and improve quality of life ((Alihar, 2018)). Correlation between self-management and quality of life in heart failure patients. The results of his research found that there was a close relationship between quality of life and heart disease patients seen from management aspects, namely self-care and social support. (Fitriyan et al., 2019).

METHODOLOGY

The design used to compile this paper is a systematic review and uses Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) (Moher et al., 2009)To briefly describe the topic of discussion. Journals were searched using the PICO method (Patient/Population/Problem; Intervention; Comparison; Outcome) with the research question: "How is the Relationship of Self-Care to Quality of Life in Heart Failure Patients"

PICO in this research are:

- P: Patient/Population/Problem, namely the problem that will be analyzed according to the theme that has been determined in the Literature Review, the population in this study is heart failure patients.
- I: Intervention, namely an act of management of individual or community cases and presentation of study management in accordance with the theme specified in the Literature Review, intervention in this research is self-care.
- C: Comparison, namely intervention or other management that is used as a comparison, if there is no control group in the selected study, this study compares self-care and quality of life.
- O: Outcomes, namely the results or outcomes obtained in previous studies that are in accordance with the themes that have been determined in the Literature review, the outcomes in this study are the Relationship of Self-Care to Quality of Life in Heart Failure.

LITERATURE COLLECTION METHOD

The method used by researchers is to collect journals, reading titles and abstracts to find out whether the literature found meets the criteria for use as research material. The criteria used are: Research journals discussing self-care and quality of life in heart failure patients for the period 2011-2021. Journals in English and Indonesian, free full text that can be accessed as well as National Journals and International journals with ISSN/DOI listed, journal volume and year. Literature searches were conducted through electronic databases using PubMed

(<u>https://pubmed.ncbi.nlm.nih.gov</u>), Google Scholar (<u>https://scholargoogle.co.id/</u>), using keywords (relationship, Self-Care, quality of life, heart failure) and (self-care, quality of life, heart failure). The journals used are national journals and international journals.

Literature Analysis and Synthesis

The analysis used in this literature study is the literature review matrix method which combines research journals both nationally and internationally in the form of a matrix to describe the topic "Relationship of Self-Care to Quality of Life in Heart Failure Patients". The analytical method with a review matrix is the process of analyzing data or information by providing arguments through logical thinking and then drawing a conclusion. The literature review technique used is:

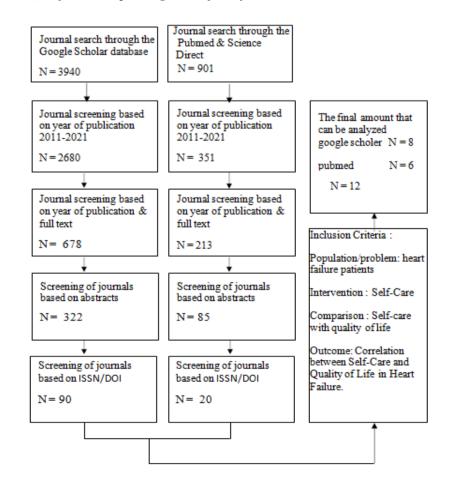
- a. Looking for similarities (Compare)

 The technique of conducting a review is by looking for similarities from some literature and conclusions are drawn
- b. Looking for differences (Contrast)

 The technique of conducting a review is by finding differences between several literatures and drawing conclusions.
- c. Provide views (Criticize)

 The technique of conducting a review by making your own opinion on the source that has been read.
- d. Summarize and review by rewriting the source in own words.

PRISMA chart (Preferred Reporting Items for Systematic Reviews and Meta-analyses)



RESULTS AND DISCUSSION

Based on a literature study using secondary data, namely journals obtained from the Google Scholar, Pubmed and Science Direct databases, 12 national and international journals were obtained which could be analyzed and which were the most relevant containing information related to research problems and meeting the inclusion criteria. To make it easier to do the analysis, a summary of various literature is made using a matrix table, by combining research journals both nationally and internationally.

No	Researcher/ Year	Country	Title	Sample	Variable	Method	Finding/ Result
1	(Seid, 2020)	Ethiopia	Health- related quality of life and extent of self-care practice among heart failure patients in Ethiopia	284 responden	Variabel Independen : self-care Variabel dependen: quality of life	Reseach Design: cross- sectional. Instrumetn: health- related quality of life (HRQOL). The Minnesota Living with Heart Failure Questionnair e (MLHFQ)	Correlation analysis showed that there was a significant negative relationship between HF patients' HRQOL scores and self-care practice scores (r = 0.127, P = 0.032). The majority of heart failure patients who come to this hospital have a poor quality of life and heart failure patients have poor self-care behavior towards regular exercise performance, monitoring weight and limiting fluid intake. Worse HRQOL has a statistical significance association with inadequate self-care practices and rural residence.
2	(Asadi et al., 2019)	Iran	Relationship between self- care, Behaviorr and quality of life in patients with heart failure		Variabel Independen : self-care Variabel dependen: quality of life	Design: descriptive- analytical method.	Spearman's correlation test showed no relationship between self-care and quality of life. However, there is a relationship between marital status and self-care ability which shows a higher score in people who have not

3	(Koirala et al., 2020)	Nepal	Heart failure self-care, factors influencing self- care and the relationship withhealth-related quality of life: A cross-sectional observational study	221 respoden	Variabel Independen :self-care Variabel dependen: quality of life	Reseach Design: cross- sectional observationa l study, descriptive statistics. Instrument: Self Care of Heart FailureIndex (SCHFI)	Heart failure patients in Nepal Limited self-care but are inversely associated with a better quality of life. This study identified various sociodemographic and clinical factors related to self-care,
4	Laksmi, I. A. A., Suprapta, M. A., & Surinten, N. W. (2020)	Indonesia	The	61 responden	Variabel Independen :Self-Care Variabel dependen: Kualitas Hidup	Research design: correlational analytic descriptive and using a cross-sectional design Instrument: Self care of heart index (SCHFI) and the Minnesota Living With Heart Failure Questionnair e (MLHFQ) quiz.	Self-care correlated significantly with the variable quality of life of heart failure patients at Badung Mangusada General Hospital with a fairly strong positive correlation with p = 0.000 and r = 0.506.
5	(Fitriyan et al., 2019)	Indonesia	The Relationship between Knowledge and Self Care with the Quality of Life of Heart Failure Patients in the Working Area of the Kemiling Inpatient Health Center in Bandar Lampung City	30 responden	Variabel Independen : Pengetahua n Dan Self Care Variabel dependen: Kualitas Hidup	Research design: quantitative cross-sectional. Sampling technique: analytical survey Instrument: demographic data and Indonesian language version of SF-36.	The results of statistical tests using the chisquare test obtained a p-value = 0.003 (<0.05), which means that there is a relationship between self care and the quality of life of heart failure patients.
6	(Hendrawan & Noeraini, 2019)	Indonesia	The Relationship re between Self Care and Quality of Life in Heart	84 espondents	Variabel Independen : Self Care Variabel dependen:	Research design: using a quantitative approach Cross-sectional.	The majority of patients with heart failure in Medan Haj Center General Hospital Adam Malik have a high quality of

			Failure Patients		Kualitas Hidup	Sampling technique: purposive sampling. the Minnesota Living With Heart Failure Questionnair e (MLHFQ) and Self care of heart index (SCHFI) instruments,	life. The results of the fisher exact test value p = 0.001 (p <0.05) means that there is a significant relationship between selfcare and the quality of life of heart failure patients at Adam Malik Haji Center General Hospital Medan
7	(Lee et al., 2015)		Trajectories of heart failure self-care management and changes in quality of life	146 Responden	Variabel Independen: Self Care Manageme nt Variabel dependen: Kualitas Hidup	prospective cohort study among adults with symptomatic heart failure was designed to measure changes in self-care management (Self-care of Heart Failure Index) and HRQOL (Kansas City Cardiomyop athy Questionnair e) over six months. Growth mixture modeling was used to identify unique trajectories of change in self-care management .	Two trajectories of self-care management were identified (entropy = 0.88). The larger trajectory (73.3%) was characterized by a significant decline in self-care management over time and no change in HRQOL. The smaller trajectory (26.7%) was characterized by marked improvements in self-care management and HRQOL. Changes in heart failure self-care management occurred in the absence of change in routine self-care maintenance behaviors, functional classification, and physical and psychological symptoms.
8	(Wang et al., 2011)	Taiwan	Effectiveness of a self-care program in improving symptom distress and quality of life in congestive heart failure			This study used a quasi- experimental design with a control group that received usual care and an intervention	After 3 months, there were significant differences in symptom distress (p G .01), 6-minute walk test results (p G .01), and quality of life (using Short Form

			patients: A preliminary study		group that received usual care plus the HFSC program. Twenty-seven participants were recruited from 2 cardiac general wards at 1 medical center in Taipei City, Taiwan, andwere randomized into intervention (n = 14) and control (n = 13) groups.	36, Taiwan version, p G .05) between the HFSC and control groups but no significant differ- ences in hospital readmission and emergency department visits
9	(MacAbasc o- O'Connell et al., 2011)	USA	Relationship between literacy, knowledge, self-care behaviors, and heart failure- related quality of life among patients with heart failure	605 responden	We recruited patients with symptomatic heart failure (HF) from four academic medical centers. Patients completed the short version of the Test of Functional Health Literacy in Adults (TOFHLA) and questions on HF-related knowledge, HF-related self-efficacy, and self-care behaviors. We assessed HFQOL with the Heart Failure Symptom	Patients with adequate literacy had higher general HF knowledge than those with low literacy (mean 6.6 vs. 5.5, adjusted difference 0.63, p< 0.01), higher self-efficacy (5.0 vs. 4.1, adjusted difference 0.99, p<0.01), and higher prevalence of key self-care behaviors (p<0.001). Those with adequate literacy had better HFQOL scores compared to those with low literacy (63.9 vs. 55.4, adjusted difference 7.20, p<0.01), but differences in knowledge, self-efficacy, and self-care did not mediate this

					Scale (HFSS)	difference in HFQOL.
					(range 0–	
					100), with	CONCLUSION:
					higher scores	Low literacy was
					denoting	associated with
					better quality	worse HFQOL
					of life. We	and lower HF-
					used	related
					bivariate (t-	knowledge, self-
					tests and chi-	efficacy, and self-
					square) and	care behaviors,
					multivariate	but differences in
					linear	knowledge, self-
					regression	efficacy and self-
					analyses to	care did not
					estimate the	explain the
					associations	relationship
					between	between low
					literacy	literacy and worse
					andHFknowl	HFQOL
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					literacy and	
1	(Izzuddin et	Indonesia	Literature		HFQOL The	In this literature
0	al., 2020)	maonesia	Study:		literature	study, it was found
Ü	a., 2020)		Factors		study	that research that
			Affecting the		method was	has been
			Quality of		done by	published over the
			Life of		searching	last 5 years in
			Patients with		published	Indonesia shows
			Heart Failure		articles on	that the quality of
			in Indonesia		MEDLINE,	life in heart failure
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				factors were further explored.	New York Heart Association class and health-related quality of life was non-significant in most of the studies. Associations with other factors were shown to be inconsistent or need to be further investigated as they were only addressed in single studies
1 2	(Liou et al., 2015)	Taipe, Taiwan	The Effects of A Self respondent Care Program on Patients with Heart Failure	A quasi- experimental design was used to investigate the effectiveness of a self-care program in HF patients. The patients were allocated into either the control group (usual care, n ¼ 75) or the experimental group (self-care program, n ¼ 56). The extent of patient knowledge about congestive HF (CHF) was tested at both the preand posteducatio n stages. We measured the self-care of HF index (SCHFI) and the New York Heart Association (NYHA) functional class a total	The experimental group showed a significantly higher mean score in the knowledge of CHF during posteducation testing than the control group. The results of the self-care evaluation also revealed significant differences between the two groups by repeated general linear model measurement analysis. Self-care maintenance, self-care management, and self-care confidence significantly improved after the self-care program was completed. The NYHA functional class in the experimental group showed a significant improvement after hospital discharge when compared
				Class a total	Teachingston Of

of four times	mortality rate
for each	between the two
participant.	groups
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DISCUSSION

The research equation relates to the relationship between self-care and quality of life in heart failure patients.

Based on the results of a literature review of 14 journals which have been discussed in the matrix table, it was found that 4 journals had significant results in common regarding the relationship between self-care and quality of life in heart failure patients. Among them are based on journals (Mohammed Assen Seid, 2020; Ida Ayu Agung Laksmi, Made Ani Suprapta, Ni Wayan Surinten 2020; Irma Fitriyan, Djunizar Djamaludin, Eka Yudha Chrisanto, 2020; Samfriati Sinurat, Mardiati Barus, Bunga Angelia Sirega 2021). It states that there is a relationship between self-care and quality of life in heart failure patients, that is, the better the self-care, the better the quality of life.

Self-care can improve the quality of life of clients with heart failure to effectively manage symptoms of heart failure. Quality of life includes a full set of factors that affect what we value in this life, beyond the material side. Every individual has a different quality of life depending on each individual in addressing the problems that occur within him. If you face it positively, your quality of life will also be good, but if you face it negatively, your quality of life will also be bad. The quality of life of heart failure sufferers is influenced by the patient's self care, good self care will affect a person's quality of life, and vice versa.

Other research also states that quality of life depends on the level of symptom burden and the level of involvement in self-care so that the better the self-care, the fewer physical and depressive symptoms that affect quality of life. Furthermore, knowing that self-care behaviors affect the relationship between HF symptoms and QoL differently depending on the severity of a patient's symptoms could inform strategies for teaching adherence and symptom monitoring skills that minimize negative impact on QoL (Carlton, n.d.). Differences in research related to the relationship of self-care to quality of life in heart failure patients.

Based on the results of a literature review of 14 journals which have been discussed in the matrix table, 1 journal was obtained according to (Asadi et al., 2019) having a difference, namely there is no relationship between self-care and quality of life in heart failure patients. these relevant research results are supported and strengthened by research results (Malara & Syarul, 2020)) which state that barriers to self-care among patients with heart failure are categorized into three main categories, namely personal factors, disease burden, and inefficient support systems .

The relationship between Self-care relationship and quality of life in heart failure patients. According to research conducted by (Fitriyan et al., 2019)) 16 respondents (53.3%) self-care in the poor category and 14 respondents (46.7%) self-care in the good category. Distribution of

quality of life in heart failure clients with poor category were 14 respondents (46.7%) and good category were 16 respondents (53.3%) Statistical test results using the chi square test obtained p-value = 0.003 (<0.05), which means there is the relationship between self-care and the quality of life of heart failure patients in the Working Area of the Bandar Lampung City Inpatient Health Center in 2020.

The results of other studies according to (Laksmi, 2020) show that the average self-care score is 45.25 and the average quality of life score is 60.67. Analysis using the Spearman Rank test obtained a value of p = 0.000 and r = 0.506. It can be concluded that self-care has a significant correlation. The higher the value of self-care, the higher the quality of life of patients with heart failure.

According to ((Fitriyan et al., 2019) the relationship between self care and the quality of life of heart failure patients at Adam Malik Haji Center General Hospital in Medan, the majority are good as many as 64 people (76.2%). quality of life of heart failure patients at the central general hospital Haji Adam Malik Medan 74 people (88.1%) have a high majority in 2021. The results of the Fisher's exact test value p = 0.001 (p < 0.05) means that there is a significant relationship between selfcare and the quality of life of heart failure patients in Adam Malik Medan Hajj Center General Hospital in 2021.

CONCLUSION

In the final part of this literature study, the researcher presents several conclusions and suggestions based on the findings of the literature review. In general, the researchers concluded that there was a significant relationship between self-care and quality of life in heart failure patients. More specifically, the researchers draw the following conclusions:

- a. Research equations related to the relationship of self-care to quality of life in heart failure patients. Based on the results of a literature review of 14 journals which have been discussed in the matrix table, it was found that 4 journals had significant results in common regarding the relationship between self-care and quality of life in heart failure patients.
- b. Differences in research regarding the relationship of self-care to quality of life in heart failure patients. Based on the results of a literature review of 14 journals which have been discussed in the matrix table, it was found that 1 journal did not have a relationship between self-care and quality of life in heart failure patients. The results of the Spearman correlation test show that there is no relationship between self-care and quality of life. However, there is a relationship between marital status and self-care ability which shows a higher score for unmarried people
- c. The relationship between self-care and quality of life in heart failure patients.
- d. From the results of a literature review of 12 journals, it can be concluded that there is a relationship between self-care and quality of life in heart failure patients. Several relevant studies have also proven and supported that self-care affects the quality of life of heart failure patients. Because the higher the value of self-care, the higher the quality of life for patients with heart failure.

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