Relationship of Family Support with Quality of Life (QOL) Heart Failure

Rizki Sari Utami[1], Siska Natalia[2], Widarti[3]
sariutami0784@gmail.com, siska.nats@gmail.com,
widarti.amri@gmail.com
STIKes Awal Bros Batam[1,2,3]

Abstract. Heart failure is a condition in which the heart organ is unable to pump blood throughout the body. This condition can cause shortness of breath, cough and fatigue, resulting in intolerance of activities that have an impact on quality of life. Family support is needed to help patients achieve a better condition. The phenomenon found in the BP Batam Hospital is that there is a shortness of breath and chest pain in the patient which disturbs the quality of life of the patient with heart failure. This research was conducted to determine the relationship Family Support with Quality of Life for Patients with Heart Failure at the BP Batam Hospital. Research methods with quantitative methods. The sample consisted of 37 respondents with a sampling technique, namely total sampling. The data were processed using the Spearman's rank test. Univariate analysis of family support in heart failure patients at the Hospital of the majority of BP Batam bad categorized by the number of 19 people (51.4%). Quality of life in patients failing heart in Rumah Sakit BP Batam majority categorized as poor by the number of 19 people (51.4%). Results Bivariate showed no relationship between support for families with a quality of heart failure patients at the Hospital of BP Batam (p value 0,000 <0,05) and has an attachment that is significant with a coefficient of correlation of 0.784. The results of this study are expected to be able to provide health education during visits to the hospital, provide a motivational boost given by medical personnel to families, will encourage families to be actively involved in caring for patients while at home, exchange information and share experiences obtained from other sufferers. can assist patients in maintaining the conditions are optimal.

Keywords: Support Family, Quality of Life, Heart Failure

1   Introduction

Heart failure is a collection of clinical symptoms caused by abnormalities of functional or structural cardiac causes impotence filling the ventricle and the ejection of blood to the entire body. The inability of the heart to pump blood around the body was marked with swollen limbs, during activity and sleep without a pillow occur shortness of breath. (Association of Physician Specialists Cardiovascular Indonesia, 2015)

Approximately 23 million the entire population of the world experienced a failure of heart and an estimated prevalence will continue to rise to 46% in 2030. In the studies that have been conducted for a period of 30 days, 1 year, and 5 years, cases of deaths after hospitalization for heart failure is equal to 10.4%, 22%, and 42.3%. In Indonesia death due to disease failed to heart based System Information Rumah Sakit (SIRS). Of the 10 major death disease is not infectious

in -patient stays home sick throughout Indonesia makes the disease failed to heart as a priority first control program in Control of Communicable Diseases Directorate of the Ministry of Health (MoH Pusdatin, 2013).

Results of data from medical records at the Hospital of BP Batam number of patients failing heart of the month January 2020 to September 2020 amounted to 486 patients with amount per month 35-50 patients. (RSBP, 2019)

The results of interviews on January 20, 2021 with 4 heart failure patients at the BP Batam Hospital, all patients (100%) said they had difficulty sleeping at night, tired quickly during activities, shortness of breath, 2 patients felt worried about their disease and needed help the others when doing activities by weight, further results from interviews with patients failing heart that 3 (75%) patients have a poor quality of life, then all patients (100%) of patients say is always accompanied by a family every time go see your doctor and patient hospitalization, receive financial support, transportation, and assistance in daily activities. Based on this phenomenon, researchers are interested in conducting research on the relationship between family support and quality of life in patients failing heart in Rumah Sakit BP Batam. This study aims to determine the relationship between family support and quality of life in patients with heart failure.

2 Methods

This study used a quantitative design with a *cross-sectional* approach with the *independent variable* in the study, namely family support. while *the dependent variable* is quality of life. Research is carried out in the month 10 Feberuari- 21 February in 2021. The research is the area Home Hospital BP Batam. The population and sample in this study were 37 patients who had been identified as heart failure at RSBP Batam. Instruments are used to study this is using the *Minnesota Living with Heart Failure Questionnaire* (MLHFQ) which is used to measure the level of quality of life in patients failing heart and questionnaires dukunga family were modified by the method of interview.

3 Results and Discussion

3.1 Univariate Analysis
a. Characteristics of Respondents by Age

Table 1. Distribution of Age Characteristics of Respondents

Age	Amount	Percentage (%)
26-35 years	1	2.7
36-44 years	3	8.1
45-59 years	21	56.8
60-74 years	8	21.6
75-90 years	4	10.8

b. Characteristics of Respondents by Type Sex

Table 2. Distribution Characteristics Type Sex

Type Sex	Amount	Percentage (%)
Man	23	62.2
Women	14	37.8
Total	**37**	**100.0**

c. Characteristics of Respondents Based on Education

Table 3. Distribution of Educational Characteristics

Education	Amount	Percentage (%)
Not going to school	5	13.5
SD	8	21.6
Junior High School	3	8.2
High school	15	40.5
University High	6	16.2
Total	**37**	**100.0**

d. Characteristics of Respondents by Occupation

Table 4. Distribution of Job Characteristics

Profession	Amount	Percentage (%)
Work	19	51.4
Not working	18	48.6
Total	**37**	**100.0**

e. Family Support Category for Heart Failure Patients

Table 5. Distribution of Family Support for Heart Failure Patients

Category	Amount	Percentage (%)
Good	18	48.6
Bad	19	51.4
Total	**37**	**100.0**

f. Category of Quality of Life for Heart Failure Patients

Table 6. Quality of Life for Heart Failure Patients

Category	Amount	Percentage (%)
Good	18	48.6
Bad	19	51.4
Total	**37**	**100.0**

3.2 Bivariate Analysis

a. Relationship between Family Support and Quality of Life for Heart Failure Patients.

The bivariate analysis carried out in this study aims to determine the relationship between the independent variable (family support) and the dependent variable (quality of life for heart failure patients). The statistical test used in this analysis is adjusted to the type of variable data. Before the bivariate analysis was carried out, the normality and homogeneity tests were first carried out due to the variables ordinal scale. The researcher conducted a normality test with *Shapriro Wilk* because the sample was less than 50 and the results of the data distribution were not normally distributed, namely the sig a: 0.000 > 0.05. In this study using *Spearman's Rank Correlation* analysis because the two variables are ordinal scale and the data distribution is not normal.

Table 7. The Relationship Between Family Support and Quality of Life for Heart Failure Patients at Bp Batam Hospital using the Spearman's Rank Correlation Test.

Work stress	Job Satisfaction		
	good N (%)	Poor N (%)	P *value*
good	16 (88.9%)	2 (10.5%)	0,000
bad	2 (11.1%)	17 (89.5%)	

Table 7 shows that there is a relationship between family support variables and the quality of life of heart failure patients who seek treatment at the BP Batam Hospital with a *p value of* 0.000 <0.05. The *spearman's rank* correlation coefficient is positive, namely 0.784, which means that when the X variable (family support) is higher, then the Y variable (quality of life) with the dependent variable Y (quality of life) has a value of r (correlation coefficient) of 0.784. This correlation value indicates that the relationship between the independent variable (family support) and the dependent variable (quality of life) has a strong correlation.

4   Discussion

4.1   Overview Support Families in patients Failing Heart at Home Hospital BP Batam.

The results of a study conducted on heart failure patients at the BP Batam Hospital showed that 19 patients (51.4%) had family support in the "bad" category and 18 patients (48.6%) were in the "good" category. Assumptions researchers obtained in heart failure patients at the Hospital of BP Batam is the support of the family were in the range of support that bad. Only the difference of one patient who is categorized as good supports the process of treating heart failure patients. Results obtained at the research that is done (the Goddess, 2018) were performed at Rumah Sakit Moewardi Solo that most have sufficient family support with 24 (50.1%) of patients with a failing heart.

This study found the dimensions of the award has a score that is the lowest compared to other dimensions, according to the assumptions of researchers that support the award of patients with heart failure is to give support and spirit of the patient give praise to the patient, involving patients in decision making and provide a positive response to the opinions or feelings of patients with pretty low score.

This is in line with the research conducted (Dewi, 2018), namely the support of appreciation functions to encourage patients, so that they are more enthusiastic in carrying out this support treatment which includes helping in solving problems faced by patients with congestive heart failure. Appreciative support where the family expresses a positive assessment of the patient. This support also means providing motivation. With the motivation of the desire within the patient to recover increases.

The researchers' assumptions and the findings of the researchers were that the instrumental dimension also had a low score. The majority of respondents give answers not ever in a statement that the family helped finance the treatment, providing facilities and find a shortage of facilities and equipment. Low income is associated with less family support. One of the functions of the family is the economy where the family is in charge of finding sources of income to meet the needs of family members. This research is in line with (Harmoko, 2012) in (Yani, 2019) explaining that good instrumental support can help patients with heart failure to get facilities, facilities and easy access to good health information so that they can help the treatment process.

4.2 Description of Quality of Life in patients Failing Heart at Home Hospital BP Batam.

The results of research conducted on heart failure patients at the BP Batam Hospital showed that 19 patients (51.4%) had a "bad" quality of life and 18 patients (48.6%) were categorized as "good", namely a picture of the quality of life including physical impacts. from heart failure (shortness of breath, swollen legs, difficulty exercising), psychological conditions such as anxiety, stress of heart failure, degree of discretion, social relationships and the relationship to their future desires.

The results were obtained together with the research that is carried out by (Hamzah, 2016), namely quality of life of patients failing heart at RS PKU Muhammadiyah Yogyakarta on this research is largely lacking (85%) and the rest is moderate (15%). Thus, there are no respondents who are known to have a good quality of life. Heart failure patients have a tendency to have a poor quality of life because the quality of life for heart failure patients will decrease along with an increase in heart attack recurrences. After the first heart attack, the patient's quality of life decreased by at least 33% and will continue to decline after the next heart attack.

Research previously by (Akhmad, 2018) showed that the quality of life of heart failure patients quality of life of respondents have less good as much as 63.2%. Peneitian This indicates that patients with a failing heart congestive will experience decreased the quality of life due in patients with congestive heart failure emerge feeling tired all the time and trouble to perform activities of daily. This is because the heart is unable to pump blood to meet the needs of the body's tissues. The body will divert blood from less important organs, especially the muscles in the legs and send it to the heart and brain. Congestive heart failure patients often find memory loss or feelings of disorientation. This is caused by changes the amount of certain substances in the blood, such as sodium, which can lead to a decrease in working impulses nerve (American Heart Association, 2012 in (Ikawati, 2015). It mentioned when the case is kept continuously will cause a decrease in quality of life.

The researchers' assumptions and the findings of the researchers showed that 19 people (51.4%) categorized poor quality of life with a high quality of life questionnaire score for heart failure patients, the worse the patient's quality of life. The results of the questionnaire patients with heart failure experienced the impact of physical symptoms of heart failure, such as shortness of breath, discomfort, swollen ankles, and difficulty sleeping. Assessment of mental and emotional functions of concentration and memory, worry, lose self-control and become a burden to others. This is in line with research (Haryati, 2020) with a low total score in this study, namely a score < 50 which indicates a poor quality of life, especially in the physical aspect and is related to the degree of the respondent's physical ability in carrying out daily activities.

4.3 Relationship between Family Support and Quality of Life for Heart Failure Patients.

To see the relationship between family support and quality of life of patients failing heart in Rumah Sakit Agency Concession Batam, used test nonparametric statistics that *Spearman's Rank Correlation,* since both variable ordinal scale, the distribution is not normal. Based on the analysis, it is known that the two variables have a relationship with a *p value of* $0.000 < 0.05$ with a correlation coefficient of 0.784. This correlation value indicates that the correlation is a close relationship.

Assumptions researchers when family support is bad, it affects the quality of life of patients failing heart is also bad, and so also conversely means that there is a relationship between support for families with a quality of life for heart failure patients who seek treatment at Hospital BP Batam. This is in line with research (Zulmi, 2018) which concluded that support families

most substantial in the category of good, namely 56.4%. Quality The lives of good and bad heart failure patients were equal, namely 50.0%. The correlation results show that there is a significant relationship between family support and quality of life in CHF patients at the Elang Installation of Dr. Kariadi Semarang with an r value of 0.437 and a p value of 0.000 ($p < 0.05$).

This study is also consistent with the results of research conducted by (Sulistyo, 2018) which can be concluded that the respondents who received the support of family higher then have a quality of life that is high, while respondents who have low family support quality of life is low. The results of the statistical test analysis showed that there was a relationship between family support and the quality of life of patients with congestive heart failure in the Cardiac Polyclinic at RSUD Sukoharjo Regency. The family is the main support system for a patient where the support that is given very influential to the improvement of quality of life. Support family is a process that occurs throughout the period of life, where the type and nature of the different support in different stages of the life cycle. Family support can be in the form of internal social support such as support from siblings from husbands and wives, or it can also be in the form of external family support for the nuclear family. Family support in the form of an attitude or action in the reception families of the members of the family who are always ready to support and provide help. Providing assistance enables families to improve health (Friedman, 2010, in Takukude, 2016).

The next researcher's assumption is that the components of family support such as emotional, informational, instrumental and reward support for heart failure patients are closely related to the domain of quality of life such as the dimensions of physical, psychological, social and environmental health. This study is in line with Zulmi, 2018 that there is a relationship between family support and the quality of life for heart failure patients. It is caused because of the support that is given by active by the family in the form of informational, assessment, instrumental and emotional support. Family support will help the patient improve and maintain the patient's condition, this condition will reduce anxiety and prevent the emergence of patient stress (Zulmi, 2018).

5   Conclusion

The majority of family support for heart failure patients at the BP Batam Hospital was in the bad category with 19 people (51.4%) and the difference of one number in the good category with 18 people (48.6%). Quality of life in heart failure patients in Rumah Sakit BP Batam majority categorized as poor by the number of 19 people (51.4%) and just one point difference categorized either by the number of 18 people (48.6%). Based on the results of the analysis, Ha is accepted and H0 is rejected (p value 0.000 <0.05) means that there is a relationship between family support and the quality of life of heart failure patients at BP Batam Hospital, with a correlation coefficient of 0.784. This correlation value indicates that the correlation is a close relationship. If family support is high, then the quality of life for heart failure patients is also high, meaning that there is a relationship between family support and quality of life for heart failure patients who seek treatment at BP Batam Hospital.

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