

## FACTORS AFFECTING QUALITY OF LIFE OF PEOPLE WITH CORONARY HEART DISEASE AT PUSKESMAS SIKUMANA KUPANG CITY

Gadur Blasius, Fransiskus Salesius Onggang, Aben BYH Romana, Olvian Maraweli, Antonia Helena Hamu  
Poltekkes Kemenkes Kupang, Indonesia  
Email: gadurblasius73@gmail.com, fransiskussalesiusonggang@gmail.com, abenromana@gmail.com, olvianmaraweli@gmail.com

### ABSTRACT

Coronary heart disease is a disease caused by flak that accumulates in the arteries which reduces the supply of oxygen throughout the body, especially the heart muscle. A good quality of life in patients with coronary heart disease is needed to maintain that patients are able to get the best health status, optimally and for as long as possible. The study aims to find out the Factors Affecting the Quality of Life of Patients with Coronary Heart Disease at the Sikumana Health Center. A quantitative descriptive research method using a cross sectional approach. The results of the 3 variables showed that depression had a significant relationship to quality of life  $p$ -value = 0.028, coping had no effect on the quality of life of heart sufferers  $p$ -value = 0.078 and family support no effect on the quality of life of people with heart disease with  $p$ -value = 0.101, multiple multivariate analysis with the backward LR method, it can be seen that the R Square value is 0.335 meaning that coping and family support variables explain the quality of life of heart patients by 33.5% while the rest is explained by other variables not examined in this study. based on the beta coefficient, the independent variable that has the greatest beta coefficient value is family support (coef. beta = -1.867). It can be concluded that the independent variable that has the most influence on the quality of life of heart sufferers is family support.

**KEYWORDS** coronary heart disease; quality of life; patients



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### INTRODUCTION

**How to cite:** Blasius, G. et al (2023). Factors Affecting Quality of Life of People with Coronary Heart Disease at Puskesmas Sikumana Kupang City. Journal Eduvest. 3 (4): 706-718  
**E-ISSN:** 2775-3727  
**Published by:** <https://greenpublisher.id/>

Cardiovascular disease is currently a disease that is a global threat, where this disease ranks first as the most common cause of death in the world. One of the most common cardiovascular diseases is coronary heart disease. Coronary Heart Disease (CHD) is a disease caused by plaque buildup in the coronary arteries which reduces the supply of oxygen to the heart muscle. Good quality of life in patients with coronary heart disease is very necessary to maintain that patients are able to get the best health status and maintain their function or physical abilities as optimally as possible and as long as possible. Patients with coronary heart disease often experience problems especially those related to changes in strength or ability to perform daily activities. Heart disease is the main cause of physical limitations in addition to musculoskeletal disorders and arthritis. Patients often complain of being easily tired, shortness of breath or chest pain when doing even light activities, thereby reducing their usual activities (Rochmayanti, 2017).

Based on this concept, quality of life is seen from the cultural context and environmental value systems such as the home environment where you live or work environment. In addition, the concept of quality of life also has something to do with goals, expectations, or other values that are believed by the patient. Optimal patient quality of life plays an important role in patient management considerations, so it must be considered by health workers, both nurses and doctors (Grace et al., 2020).

According to data from the World Health Organization around 17.9 million people worldwide die from cardiovascular disease, where stroke and coronary heart disease (CHD) contribute 85% of deaths from cardiovascular disease (Torawoba et al., 2021). In 2017, CHD in Indonesia was ranked as the second leading cause of death after stroke with a mortality rate of 12.9% (Pusdatin Ministry of Health, 2017). The highest prevalence of cases reported came from the province. The results of the 2018 Riskesdas showed that the prevalence for cardiovascular disease in Indonesia had increased to 1.5 %. CHD is in second place out of the top 10 heart diseases in the heart polyclinic at Prof. Hospital. Dr. WZ Johannes Kupang. The number of CHD cases registered at the cardiac polyclinic (outpatient) in 2017 was 355 people, in 2018 there were 465 people and in 2019 there were 327 people (Naomi et al., 2021).

Based on data obtained from the Kupang City Health Office, in 2019 there were 905 people with coronary heart disease. And the data obtained from the Sikumana Health Center as a research location in 2021, namely in April-June, totaled 30 people. There are several modifiable risk factors for heart and blood vessel disease including smoking habits, cholesterol, high blood pressure, overweight, and diabetes. While risk factors for heart disease and blood vessels that cannot be modified include family history of heart disease, diabetes, age, gender, and ethnicity. In general, risk factors that contribute to the incidence of heart and blood vessel disease include socioeconomic status, mental health, diet, overweight, obesity, lack of activity, globalisation and urbanization (Umara et al., 2020). Many previous studies examined the factors that affect the quality of life in patients. Thus, the study aims to find out the Factors Affecting the Quality of Life of Patients with Coronary Heart Disease at the Sikumana Health Center

## RESEARCH METHOD

This type of research is a quantitative descriptive study using a cross sectional approach. The sampling technique used the total sampling technique (Adiputra et al., 2021). The sample used was 30 respondents with inclusion criteria for coronary heart disease patients, patients aged 30–70 years, willing to be respondents in the study. Exclusion criteria were patients not having coronary heart disease, not willing to be respondents in the study. The independent variables in this study are depression, coping, family support, while the dependent variable is quality of life. The research was conducted at the Sikumana Health Center, Kupang City, June-July 2021. The instrument in this study used questionnaires for Depression, Coping, Family Support and Quality of Life. Data analysis used univariate, bivariate, and multivariate analysis to see the relationship between Depression, Coping, Family Support and Quality of Life using the Chi Square test.

## RESULT AND DISCUSSION

### General Data

**Table 1**  
**Characteristics of Respondents in the Work Area of the Sikumana Health Center, Kupang City, July 2021**

Characteristics Respondents	Amount (n)	Frequency
<b>Age</b>		
30-42 years	2	6.7
43-55 years	11	36.7
56-70 years	17	56.7
<b>Gender</b>		
Man	14	46.7
Woman	16	53.3
<b>Education</b>		
Has not attend the school	0	00.0
Elementary School	6	20.0
Junior High School	0	00.0
Senior High School	24	66.7
D3/S1/S2/S3	4	13.3
<b>Work</b>		
Doesn't work	0	00.0
IRT	14	46.7
Farmers / traders / laborers	11	36.7
PNS/TNI/Polri	3	10.0
Retired	2	6.7
<b>Income</b>		
< 1,000,000	20	66.7
1,000,000-3,000,000	9	30.3
>3,000,000	1	3.3
<b>Marital status</b>		
Married/married	24	80.0
Widow widower	6	20.0
Not married yet	0	00.0
<b>Total</b>	<b>30</b>	<b>100.00</b>

Primary Data Source Vian, 2021

Based on table 1 data it can be concluded that there were 17 respondents aged 56-70 (56.7%) followed by the lowest 30-42 with 2 (6.7%), female sex 16 people (53.3) while men 14 people (46.7) , high school education 24 people (66.7%) while D3/S1/S2/S3 as many as 4 people (13.5%), IRT jobs 16 people (46.7%) while Pensioners 2 people (6.7%), Income < 1,000,000 as many as 20 people (66.7%) while > 3,000,000 as many as 1 person (3.3%), marital status Married/Married as many as 24 people (80.0%) while none were unmarried.

### Specific Data

*Identifying the factors that affect the quality of life of patients with coronary heart disease.*

**Table 2**  
**Univariate results of Coronary Heart Disease Patients in June – July 2021**

Factors	Amount (n)	(%)
<b>Depression</b>		
Mild depression	8	26.7
Moderate depression	15	50.0
Deep depression	7	23.3
<b>Total</b>	<b>30</b>	<b>100%</b>
<b>coping</b>		
Adaptive Mall	10	33.3
Adaptive	20	66.7
<b>Total</b>	<b>30</b>	<b>100%</b>
<b>Family support</b>		
Good	14	46.7
Very good	16	53.3
<b>Total</b>	<b>30</b>	<b>100%</b>

Primary Data Source Vian, 2021

From the table it can be concluded that for the depression factor in patients with coronary heart disease, the average respondent with moderate depression was 15 respondents (50.0%) while mild depression was 8 respondents (26.7%) and severe depression was 7 respondents (23.3%). the average coping factor for Adaptive Coping was 20 respondents (66.7%) and Adaptive Mal Coping was 10 respondents (33.3%). and the family support factor, the average respondent has very good family support for as many as 16 respondents (53.3%) and good family support for 14 respondents (46.7%).

*The influence of depressive factors that affect the quality of life of patients with coronary heart disease*

**Table 3**  
**Results of the Depression Bivariate Test in Patients with Coronary Heart Disease in June – July 2021**

Depression	Quality of Life		Total	P
	Enough	Good		
Deep depression	1	6	7	0.028
Moderate depression	2	13	15	
depression	5	3	8	

Depression	Quality of Life		Total	P
	Enough	Good		
Mild depression				
<b>Total</b>	<b>8</b>	<b>22</b>	<b>30</b>	<b>0.028</b>

Primary Data Source Vian, 2021

Based on table 3 above, it shows that of the 15 respondents with moderate depression the majority of respondents (86.7%) had good quality of life, of the 8 respondents with mild depression the majority of respondents (62.5%) also had an adequate quality of life while 7 respondents with severe depression the majority of respondents (85.7%) have a good quality of life. the results of the bivariate test obtained the value of  $p = 0.028$  so that at  $\alpha = 0.05$   $p =$  value smaller than alpha, it can be concluded that there is an effect of depression on the quality of life of people with heart disease.

*The influence of coping factors that affect the quality of life of patients with coronary heart disease*

**Table 4**  
**Results of the bivariety coping test for Coronary Heart Disease Patients in June – July 2021**

Coping Factor	Quality of Life		Total	P
	Enough	Good		
Adaptive	5	5	10	0.078
Maladaptive	3	17	20	
<b>Total</b>	<b>8</b>	<b>22</b>	<b>30</b>	

Primary Data Source Vian, 2021

Based on table 4 above, it shows that the results showed that based on 20 adaptive respondents, the majority of respondents (85.0%) had good quality, from maladaptive, the majority of respondents (50.0%) also had adequate quality of life, while the results of the bivariate test obtained values  $p = 0.078$  so that at  $\alpha = 0.05$   $p =$  value is greater than alpha, it can be concluded that there is no effect of coping on the quality of life of people with heart disease.

*The influence of family support factors that affect the quality of life of patients with coronary heart disease*

**Table 5**  
**Support of Families with Coronary Heart Disease in June-July 2021**

Family Support Factor	quality of life		Total	P
	Enough	Good		
Good	6	8	14	0.101
Very good	2	14	16	
<b>Total</b>	<b>8</b>	<b>22</b>	<b>30</b>	<b>0.101</b>

Primary Data Source Vian, 2021

Based on table 5 above, it shows that of the 15 respondents with good family support, the majority of respondents (60.0%) had good quality of life, of the 14 respondents with very good family support, the majority of respondents (92.9%) also had a good quality of life, while 1 respondent with sufficient family support the majority of respondents (100.0%). The results of the bivariate test obtained the value of  $p = 0.101$  so that at  $\alpha = 0.05$   $p =$  value greater than  $\alpha$ , it can be concluded that there is no effect of family support on the quality of life of people with heart disease.

***Analysis of the factors that affect the quality of life of patients with coronary heart disease at the elbow health center***

The analysis was carried out using multivariate analysis of multiple logistic regression tests with the backward method. because of the independent variables and the dependent variable. This multivariate analysis serves to select the independent variables that are most related to the dependent variable. The multivariate analysis went through several stages, including bivariate selection, multiple logistic regression tests and drawing results.

**Table 6**  
**Results of Bivariate Selection Using the Chi-Square Test Factors Affecting Patients with Coronary Heart Disease at the Sikumana Health Center, Kupang City**

Variable	P-values
Depression- Quality of Life	0.028
Coping- Quality of Life	0.078
Family Support- Quality	0.101

Source: Vian Primary Data, 2021

The results of the bivariate selection show that 1 independent variable has a  $p$  value  $<0.25$ , namely the variable Depression, so that only 1 independent variable is eligible to be included in the multiple logistic regression test, namely Depression. However, based on the theory of coping variables and family support are also variables that affect quality of life, then the researcher also included this variable in the multiple logistic regression test.

**Table 7**  
**Results of multivariate selection using the Chi-Square test. Factors that affect patients with coronary heart disease at the Sikumana Health Center, Kupang City**

Variable	Constant	standardized	Adjusted R square
coping	2,872	-1,939	0.335
Family support		-1,867	

Primary Data Source Vian, 2021

Based on table 5 it is known that the R Square value is 0.335 meaning that the coping and family support variables explain the quality of life of heart patients by 33.5% while the rest is explained by other variables not examined in this study. Based on the beta coefficient, the independent variable that has the greatest beta coefficient value is family support (coef. beta = -1.867) so it can be concluded that

the independent variable that has the most influence on the quality of life of sufferers is family support.

## **DISCUSSION**

### **Characteristics of respondents**

The results of this study were found in patients with most heart disease who were in the age range of 56-70 years or early elderly. years and over have coronary heart disease. In theory according to Pratiwi (2019) said that one of the factors that cannot be changed in coronary heart disease, with increasing age, atherosclerotic events occur more easily, because the older a person is, the level of elasticity of blood vessels will decrease which will result in easy hardening and accumulation in the vessels. Supporting research is research by Lubna (2018) that middle age such as middle-aged men and women (between 40-65) show a greater risk of developing CHD than those who are younger, but less than older counterparts, due to a higher incidence. greater than comorbidities such as hypertension and diabetes.

According to researchers, as people get older, they will be more likely to get heart disease because the older a person, the working system of the human organs decreases and the immune system decreases so that they are very susceptible to disease, especially heart disease.

The results of this study obtained that the majority of respondents who suffered from heart disease were female (53.3%). This is in accordance with the theory put forward by Anissa (2020) that women from the results of the study with a total of 42 respondents, there were 26 respondents (62%) who were female with coronary heart disease. research that supports by (Umara et al., 2020) that most of the respondents are women (62%). A different study by (Rahmat, 2020) said that in the November-December 2019 period, 30 subjects met the criteria and it was taken consecutively that most of the subjects were men. The results of a different study by Minarti (2018) said that at age  $\leq 50$  years, the most dominant factor related to the incidence of CHD was male with a value of  $r = 7.202$ . Men have a greater risk of having a heart attack and it occurs earlier than women. The morbidity of CHD in men is two times greater than in women and this condition occurs almost 10 years earlier in men than in women.

According to researchers, women have a level of risk that is most susceptible to heart disease because it is caused by hormonal changes at the age of menopause, thereby increasing the risk of coronary heart disease

The results of this study obtained that most respondents were not working/housewives. this is contrary to research (Apers et al., 2016) which states that the most jobs in people with heart disease are civil servants/ private. Patients who have higher education will find it easier to get information regarding the conditions that are being experienced, as well as preventing those that will arise, as well as how to treat themselves with these conditions (Pudiarifanti et al., 2015).

According to researchers, the work of civil servants is very influential on the vulnerability to heart disease because doing busy work in the office makes patients pay less attention to the disease so that the disease cannot be prevented.

The results of research on marital status are that most respondents are married. This is in line with research conducted by (Wikananda, 2015) results in

older people with married status tending to have a better quality of life so they don't feel lonely.

According to researchers, marriage is very influential on heart disease patients because having a partner can support sufferers in undergoing treatment.

The results of the educational research that has been conducted show that most of the patients with coronary heart disease at the Sikumana Health Center have high school education who have a poor quality of life. theoretically according to [Winda \(2020\)](#) shows that people with higher levels of education have better awareness of health so that they can reduce the risk of getting CHD. However, the results of this study indicate that more respondents with higher education suffer from coronary heart disease than respondents with lower education. Education has an impact on a person's health such as influencing a healthier lifestyle, better working conditions and access to better health services.

According to researchers, higher education greatly affects the health of patients where the higher the level of education the patient will more easily understand and prevent the factors that influence the occurrence of coronary heart disease.

### **Factors that affect the quality of life of patients with coronary heart disease**

#### ***Effect of Depression on quality of life***

The results showed that of the 15 respondents with moderate depression the majority of respondents (86.7%) had good quality of life, of the 8 respondents with mild depression the majority of respondents (62.5%) also had an adequate quality of life while of the 7 respondents with severe depression the majority of respondents (85.7%) have a good quality of life. the results of the bivariate test obtained a value of  $p = 0.028$  so that at  $\alpha = 0.05$   $p =$  value smaller than  $\alpha$ , it can be concluded that there is an effect of depression on the quality of life of people with heart disease. According to [Dirgayunita \(2016\)](#) depression is an emotional disorder or bad mood which is often characterized by prolonged sadness, hopelessness, feelings of guilt and meaninglessness. so that all mental processes (thinking, feeling and behaving) can influence our motivation to do activities in daily life as well as in interpersonal relationships. if the patient has not severe depression then the patient's quality of life will be better which says that depression is an emotional condition that is usually characterized by extreme sadness, feelings of meaninglessness and guilt (withdrawal, unable to sleep, loss of appetite, interest in daily activities) Today, depression is a mood disorder, a prolonged emotional condition that colors a person's entire mental process (thinking, feeling and behaving). In general, the dominant mood that appears is feelings of helplessness and loss of hope. interest in daily activities, depression is a mood disorder, a prolonged emotional state that colors all mental processes (thinking, feeling and behaving) a person. In general, the dominant mood that appears is a feeling of helplessness and loss of hope. interest in daily activities, depression is a mood disorder, a prolonged emotional state that colors all mental processes (thinking, feeling and behaving) a person. In general, the dominant mood that appears is a feeling of helplessness and loss of hope.



According to researchers, depression has a close relationship with the quality of life of people with heart disease because someone who has heart disease if they experience severe depression can worsen the patient's condition starting from the physical, social and psychological aspects.

This is in accordance with research (Rochmayanti, 2017) with the results of further analysis of the relationship between depression and quality of life, a p value = 0.05 was obtained which indicated that there was a significant relationship between depression in CHD patients and quality of life. Another research conducted by (Panthee & Kritpracha, 2011) said depression hindered treatment activities and patients with advanced depression often did not attend therapy and activities so that it could affect quality of life. Quality of life in heart failure patients is influenced by physical condition, and one of the factors that significantly affects physical condition is depression. Furthermore, another study found that heart failure patients with depression had a 1.36 times greater risk of death than those with diastolic. however, in heart failure patients with normal or decreased ejection fraction, the same limitation of physical activity is still found, according to the patient's NYHA degree (Izzuddin et al., 2020).

#### ***The effect of coping on the quality of life of heart disease***

The results showed that based on 20 adaptive respondents the majority of respondents (85.0%) had good quality, from maladaptive the majority of respondents (50.0%) also had an adequate quality of life while the results of the bivariate test obtained a value of  $p = 0.078$  so that at  $\alpha = 0.05$   $p =$  value greater than alpha, it can be concluded that there is no effect of coping on the quality of life of people with heart disease. This is in line with the results of research conducted by (Rochmayanti, 2017) that the average CHD patient has coping of 18.63. further analysis obtained p value = 0.041 which indicated that there was a significant relationship between coping in CHD patients and quality of life with an r of 0.205 indicating that there was a weak relationship with a positive correlation meaning that the higher the coping the better the quality of life. Research that is in line says that the factors that determine coping strategies commonly used by individuals are problem solving focused coping where individuals actively seek solutions to problems to eliminate conditions or situations that cause stress and emotion focus coping where individuals involve efforts to regulate emotions and adjust themselves with the impact that will be caused by a stressful condition (Saputri & Atoy, 2017).

According to Mandila (2017) coping mechanisms are any efforts aimed at managing stress, including direct problem solving efforts and ego defense mechanisms used to protect oneself. Coping mechanisms are also ways that are carried out by individuals in threatening situations. This individual effort can be in the form of cognitive, changes that are faced. Behavior and environmental changes that aim to resolve stress.

According to researchers that a person suffering from heart disease if they have adaptive coping can get a good quality of life because they can resolve or overcome situations and conditions that are felt even though it threatens their body physically and psychologically through thoughts and actions. To improve good

coping mechanisms, family support is needed in providing emotional support, encouragement and suggestions regarding good alternative strategies based on previous experience and inviting others to focus on more positive aspects to avoid maladaptive coping. Wilkinson (2016) who said that apart from family support there were other efforts made to develop coping with activities such as providing information related to diagnosis, treatment and care; identification of the patient's view of his condition; evaluation of the patient's ability to make decisions; exploration of the methods the patient uses in dealing with his or her problems; help the patient identify available support systems; support the patient to use appropriate coping mechanisms; encourage patient to express feelings, perceptions, and fears.

***The effect of family support on the quality of people with heart disease***

Based on the results of the study above that of the 15 respondents with good family support the majority of respondents (60.0%) had good quality of life, of the 14 respondents with very good family support the majority of respondents (92.9%) also had a good quality of life while 1 respondent with sufficient family support for the majority of respondents (100.0%). The results of the bivariate test obtained the value of  $p = 0.10$  so that at  $\alpha = 0.05$   $p = \text{value greater than } \alpha$ , it can be concluded that there is no effect of family support on the quality of life of people with heart disease.

The results of different studies are theories which state that social support can help heart disease patients to be able to recover from this disease, reduce distress and cure symptoms of coronary heart disease, especially when sufferers are in hospital (Rochmayanti, 2017).

The results of other different studies show that family support is the main factor determining family compliance. This opinion is in accordance with the opinion that family support can determine individual health beliefs and values and can also find out about treatment programs that they can receive. The family also provides support and makes decisions regarding the self-care of sick family members. Family support is considered important because the family cannot be separated in standard nursing actions between interventions or implementation of clients and their families (Widyastuti, 2019).

According to Tselebis (2020) states that family support refers to a sense of support that is felt from the family environment. Family support is an important part of social support. The role of family support is likely to become more important in situations where individuals are under strict quarantine. Family support has an important role to play in moderating stress levels by reducing perceptions of the threat of stressful events and the inappropriate physiological and behavioral responses that result from stress.

According to researchers, family support is needed by people with heart disease because the support system from the family is very important and helps sufferers to control eating patterns and diets and motivates patients to have regular health checks every month and also with family support, patients will be increasingly strengthened to face the disease and accept it so that from there the sufferer's quality of life will always be good. This is supported by research which states that treatment planning must include family members and other significant

social supports so that they can support and encourage patients to overcome problems in everyday life. Other researchers say that religion, family and friends are strength and medicine for CHD patients, social support is an important intervention for recovery planning (Rochmayanti, 2017).

### **Analyzing the factors that affect the quality of life of patients with coronary heart disease**

The 5% while the rest is explained by other variables not examined in this study. Based on the beta coefficient, the independent variable that has the greatest beta coefficient value is family support (coef. beta = -1.867) so it can be concluded that the independent variable that has the most influence on the quality of life of heart sufferers is family support.

## **CONCLUSION**

From the results of research conducted at the Sikumana Health Center, Kupang City, it can be concluded that; (1) there is an influence on the quality of life of people with coronary heart disease, namely depression with a p-value =  $0.028 \leq \alpha 0.05$ , (2) there is no effect of coping on the quality of life of patients with coronary heart disease at the Sikumana Health Center with a p-value =  $0.078 \geq \alpha 0.05$ , (3) there is no effect of family support on the quality of life of patients with coronary heart disease at Sikumana Health Center with p-value =  $0.101 \geq \alpha 0.05$ , and (4) from the bivariate test, the three variables that have an influence are depression variables. However, based on the theory of coping variables and family support, they are also variables that affect quality of life, so the researchers also included these variables in the multivariate multiple logistic regression test using the backward LR method. So the results obtained are the R Square value of 0.335, meaning that the coping and family support variables explain the quality of life of heart patients by 33.5%, while the rest is explained by other variables not examined in this study. based on the beta coefficient, the independent variable that has the greatest beta coefficient value is family support (coef. beta = -1.867) so it can be concluded that the independent variable that has the most influence on the quality of life of heart sufferers is family support

## **REFERENCES**

- Adiputra, I. M. S., Trisnadewi, N. W., Oktaviani, N. P. W., Munthe, S. A., Hulu, V. T., Budiastutik, I., Faridi, A., Ramdany, R., Fitriani, R. J., & Tania, P. O. A. (2021). *Metodologi Penelitian Kesehatan*. Yayasan Kita Menulis.
- Apers, S., Kovacs, A. H., Luyckx, K., Thomet, C., Budts, W., Enomoto, J., Sluman, M. A., Wang, J.-K., Jackson, J. L., & Khairy, P. (2016). Quality of life of adults with congenital heart disease in 15 countries: evaluating country-specific characteristics. *Journal of the American College of Cardiology*, 67(19), 2237–2245.
- Izzuddin, A., Dinianty, S. F., & Nazaahah, Z. (2020). Studi Literatur: Faktor-Faktor

- Yang Mempengaruhi Kualitas Hidup Pasien Penderita Gagal Jantung Di Indonesia. *J. Ilmu Kedokt. Dan Kesehat*, 7(1), 381–392.
- Mandila, Y. P. Y. (2017). Gambaran mekanisme coping warga binaan remaja di lapas kelas IIA maros dan lapas kelas I Makassar (Skripsi). *Universitas Hasanudin, Makasar*.
- Naomi, W. S., Picauly, I., & Toy, S. M. (2021). Faktor Risiko Kejadian Penyakit Jantung Koroner. *Media Kesehatan Masyarakat*, 3(1), 99–107.
- Panthee, B., & Kritpracha, C. (2011). Anxiety and Quality of life in Patients with Myocardial Infarction. *Nurse Media Journal of Nursing*, 1(1), 105–115.
- Pratiwi, A. (2019). Edukasi Kesehatan Terstruktur Terhadap Kualitas Hidup Pasien Penyakit Jantung Koroner (PJK). *ProNers*, 4(1).
- Pudiarifanti, N., Pramantara, I. D., & Ikawati, Z. (2015). Faktor-faktor yang Mempengaruhi Kualitas Hidup Pasien Gagal Jantung Kronik. *Jurnal Manajemen Dan Pelayanan Farmasi (Journal of Management and Pharmacy Practice)*, 5(4), 259–266.
- Rahmat, B., Priyambodo, S., Sari, D. P., Susani, Y. P., Agung, A., & Putra, S. M. M. (2020). Gambaran Kualitas Hidup Penderita Penyakit Jantung Koroner Pasca Serangan Jantung. 10. *Jurnal Kedokteran*, 9(2), 90–99.
- Rochmayanti, R. (2017). Analisis Faktor-Faktor Yang Mempengaruhi Kualitas Hidup Pasien Penyakit Jantung Koroner Di Rumah Sakit Pelni Jakarta 2011. *Jurnal Ilmiah Widya*, 1(1).
- Saputri, D., & Atoy, L. (2017). *Faktor–Faktor Yang Mempengaruhi Kualitas Hidup Penderita Penyakit Jantung Koroner Di Poli Klinik Jantung RSUD Bahteramam*. Poltekkes Kemenkes Kendari.
- Torawoba, O. R., Nelwan, J. E., & Asrifuddin, A. (2021). Diabetes Melitus Dan Penyakit Jantung Koroner Pada Pasien Rawat Jalan Rumah Sakit. *KESMAS*, 10(4).
- Tselebis, A., Lekka, D., Sikaras, C., Tsomaka, E., Tassopoulos, A., Ilias, I., Bratis, D., & Pachi, A. (2020). Insomnia, perceived stress, and family support among nursing staff during the pandemic crisis. *Healthcare*, 8(4), 434.
- Umara, A. F., Nuraini, N., Ahmad, S. N. A., Habibi, A., Nainar, A. A. A., Kartini, H. H., Purnamasari, E., Yoyoh, I., Irawati, P., & Latipah, S. (2020). Deteksi Dini Penyakit Jantung dan Pembuluh Darah Pegawai. *Media Karya Kesehatan*, 3(2).
- Widyastuti, P. (2019). Hubungan dukungan keluarga dan penerimaan diri dengan tingkat kecemasan pada pasien penyakit jantung koroner (pjk) di poli jantung rumah sakit biomedika mataram. *PrimA: Jurnal Ilmiah Ilmu Kesehatan*, 5(1).
- Wikananda, G. (2015). *Hubungan Kualitas Hidup Dan Faktor Resiko Pada Lanjut Di Wilayah Kerja Puskesmas Tampaksiring 1 Kabupaten Gianyar Bali*.