# Overview of the Quality of Life of Coronary Heart Patients at Dr.Bratanata Jambi Hospital

## Laudy Novia, Yosi Oktarina, Yusnilawati

Departement of Nursing Faculty of Medicine and Health Sciences, Universitas Jambi, Indonesia Corresponding: <u>laudynovia2000@gmail.com</u>

## **ABSTRACT**

Coronary heart disease is a disease caused by impaired heart function due to a lack of oxygen supply to the heart muscles. Healt status ini coronary heart is relateded to patient's quality of life. This study aims to determine the quality of life of coronary heart patient at hospital Dr. Bratanata Jambi. type of research uses a quantitative descriptive design. The population of all patient with coronary heart disease with a total sample of 76 respondents. Sampling using the accidental sampling method. Data analysis using univariate of frequency distribution. Based on the result of data analysis obtained in the physical domain has a higt quality of 65 people (85,5%), in the psychological domain have a hight quality of life 72 people (94,7%), in the social domain have a hight quality of life 65 people (85,5%) and the environmental domain has a hight quality of life 63 people (82,9%). Conclusion: Overview of the quality of life of coronary heart patients at hospital Dr. Bratanata Jambi mostly have a high quality of life.

# Keywords: Quality of life, Coronary Heart Disease

### INTRODUCTION

Cardiovascular disease is a non-communicable disease (NCD) that is the number one cause of death in the world and is always increasing every year. Cardiovascular disease is experienced by residents of both high-income and low-income countries. All cases of death caused by cardiovascular disease which occupies the first position is coronary heart disease.<sup>1</sup>

According to data from the World Health Organization (WHO), non-communicable diseases are increasing along with the development of an increasingly modern world. It can be seen from the increase in mortality that occurred in cardiovascular disease in 2016 reaching 17.9 million deaths. World statistics state that 45% of the 9.4 million deaths were caused by coronary heart disease. It is also predicted that the death rate will increase to 23.3 million in 2030. Research data from the Ministry of Health of the Republic of Indonesia shows that coronary heart disease in Indonesia has increased, especially coronary heart disease (CHD) from year to year. Riskesdas data in 2018 states that heart disease in the population of all ages is 1.5% or an estimated 1,017,290 people and of the total chronic diseases, the prevalence of heart disease above the national average in 2018 was 1.6% or an estimated 186,809 people. 4

Coronary heart disease is a disease caused by impaired heart function due to lack of oxygen supply to the heart muscles.<sup>5</sup> Patients with coronary heart disease experience narrowing of the walls of the coronary arteries which causes a buildup of cholesterol and fat so that the supply of oxygen and blood to the heart becomes disrupted or blocked.<sup>6</sup> The physical picture of health experienced by people with coronary heart disease includes shortness, fatigue, sexual disorders, and chest pain.<sup>7</sup> While the psychological health problems most commonly experienced by coronary heart disease patients are stress, depression, chronic work stress, and low job control.<sup>7</sup> While the psychological health problems most commonly experienced by coronary heart disease patients are stress, depression, chronic work stress, low job control.<sup>1</sup> Health status in coronary heart patients can be interpreted as a state of health, physical body function, perceived health status, subjective health, perceptions of health, symptoms, need satisfaction, functional disability, psychiatric disorders and

well-being related to quality of life.<sup>5</sup>

According to the World Health Organization Quality of Life (WHOQOL), quality of life is an individual's perception of his existence in life related to culture and value systems in the environment with goals, expectations, standards, and other interesting things. The Quality of Life domain according to WHOQOL is the domain of Physical health domain which includes daily activities, medical assistance, energy, fatigue, mobility, pain and discomfort, rest and work capacity. The psychological domain is related to body image and appearance, negative and positive feelings, self-esteem, spirituality or personal beliefs, memory and concentration. The social domain includes personal relationships, social and social support and sexual activity. The environmental domain relates to financial resources, freedom, physical safety and security, health care, opportunities for recreation or leisure, and transportation. Some factors that affect the quality of life of coronary heart disease include working, being married, being physically active, age, income, and revascularization, income and work can also add to the quality of life of coronary heart patients to be better.

A good quality of life in patients with coronary heart disease is needed so that patients get their best health status, maintain their function or physical ability as optimally as possible and as long as possible. <sup>10</sup> If the quality of life of coronary heart disease patients is poor, it can trigger disease and symptoms to worsen, allowing a poor perception of the disease, and low satisfaction with treatment. <sup>7</sup> The existence of physiological changes and chronic conditions on health greatly affects changes in a person's quality of life. <sup>6</sup>

A good quality of life in patients with coronary heart disease plays an important role in assessing the management and progression of the disease in the lives of sufferers. Quality of life also has an impact on social well-being and is one of the factors in determining a person's quality of life, quality of life is associated with a standard of perfection related to the quality of life. Quality of life can be used to assess the effects of treatment from the patient's perspective, help patients decide on different treatment steps, provide information to patients about the effects of treatment that often occur, monitor the progress of treatment. If a person can achieve a high quality of life, then the individual's life leads to a state of well-being, otherwise if a person achieves a low quality of life, then the individual's life leads to a state of not well-being. To conduct research on "Overview of the quality of life of coronary heart patients at Dr.Bratanata Jambi Hospital".

#### **METHODS**

This study uses a quantitative descriptive design intended to obtain a complete description of the quality of life of coronary heart patients with 4 domains, namely physical, psychological, social and environmental. After conducting a preliminary study, it was determined that the place where the research would be carried out was at Dr. Bratanata Hospital, Jambi City. Researchers chose this place because it was easier to get the information and data that researchers needed for the smooth running of this research. Dr. Bratanata hospital in Jambi city is a hospital that has a high prevalence of patients with coronary heart disease.

This study was conducted at the heart clinic of Dr. Bratanata Jambi Hospital in January 2022. The population in this study were patients with coronary heart disease who came to the Cardiac Poly of Dr. Bratana Jambi Hospital in 2022 as many as 2992 people.

The tool used in assessing quality of life is the WHOQOL BREF questionnaire. This questionnaire consists of 26 questions with two general questions about quality of life and life satisfaction that are not included in the quality of life scoring and 24 other questions that concern the four domains of quality of life. Quality of life was assessed using a five-point Likert scale ranging from 1-5. Aspects and distribution of quality of life questionnaire items can be seen in the appendix.

Each question item was given a score of 1, 2, 3, 4 and 5 and is described as follows:

1. In question items number 3 and 4 are unfavorable questions with a score of 1 = in excessive amounts, 2 = very often, 3 = in moderation, 4 = a little and 5 = not at all, while for question items 5 to 9 are favorable questions 1 = not at all, 2 = not at all, 2 = not at all, and 5 = not at all. 5 to 9 are favorable questions 1 = not at all, 2 = little, 3 = in moderation, 4 = very often and 5 = in excessive amounts.

- 2. On question items 10 to 14 are favorable questions with a score of 1 = not at all, 2 = a little, 3 = moderate, 4 = often and 5 = fully experienced.
- 3. Question item number 15 is a favorable question with a score of 1 = very bad, 2 = bad, 3 = mediocre, 4 = good and 5 = very good.
- 4. Question items number 16 to 25 are favorable questions with a score of 1 = very unsatisfactory, 2 = unsatisfactory, 3 = mediocre, 4 = satisfactory, 5 = very satisfactory.
- 5. Question item number 26 is an unfavorable question with a score of 1 = always, 2 = very often, 3 = sometimes, 4 = rarely and 5 = never.

Quality of life data is described based on the accumulated score from filling out the WHOQOL BREF questionnaire. To be able to achieve the accumulated score, the score obtained must go through several stages, namely determining the final score for each domain and score transformation. The results of the score transformation from each quality of life domain are then accumulated into 4 value categories, as follows:

Scores < 33 are included in the low quality of life category.

Scores = 33 and < 67 are included in the moderate quality of life category.

Score = 67 is included in the high quality of life category.(14)

The results of the validity test of the quality of life instrument of 26 questions in coronary heart patients were declared valid because there were no questions whose value was lower than the r table (r = 0.6319). Where all have the value of r results (Corrected item-Total Correlation) is above the value of r table. so it can be concluded that the 26 questions are valid. Reliability test results for the quality of life instrument the r Alpha value (0.982) is greater than the r table value (0.6319), so the 26 statements above are declared reliable.

#### **RESULTS**

Table 1. Distribution of Quality of Life of Coronary Heart Patients at Dr. Bratanata Jambi Hospital

Categories	f	%	
Low	0	0	
Moderate	5	6.6	
High	71	93.4	
Total	76	100	

Based on the research results in the table above of 76 respondents, it was found that most respondents had a high quality of life, as many as 71 people (93.4%).

Table 2. Distribution of Physical Domain Quality of Life of Coronary Heart Patients at Dr. Bratanata Jambi Hospital

Categories Domain Physical	f	%	
Low	0	0	
Moderate	11	14.5	
High	65	85.5	
Total	76	100	

Based on the research results in the table above of 76 respondents, it was found that in the physical domain most respondents had a high quality of life, as many as 65 people (85.5%).

Table 3. Distribution of Psychological Domain Quality of Life of Coronary Heart Patients at Dr. Bratanata Jambi Hospital

Dialana	ata Janioi m	ospitai	
Kategori	f	(%)	
Domain			
<b>Psikologis</b>			
Low	0	0	
Moderate	4	5.3	
High	72	94.7	
Total	76	100	

In the psychological domain, most of them have a high quality of life, namely 72 people (94.7%).

Table 4. Distribution of Social Domain Quality of Life of Coronary Heart Patients at Dr. Bratanata

	Janioi Hospitai	
categories	f	(%)
Domain Social		
Low	0	0
Moderate	11	14.5
High	65	85.5
Total	76	100

In the social domain, most respondents have a high quality of life, namely 65 people (85.5%).

Table 5. Distribution of Environmental Domain Quality of Life of Coronary Heart Patients at Dr.

Bratanata Jambi Hospital			
Categories	$\mathbf{f}$	(%)	
Domain			
Life			
Low	0	0	
Moderate	13	17.1	
<u>High</u>	_ 63	82.9	
Total	76	100	

In the environmental domain, most also have a high quality of life, namely 63 people (82.9%).

## **DISCUSSION**

# **Univariate Analysis**

Based on the results of research on respondents at Dr. Bratanata Jambi Hospital from 76 respondents, it was found that most respondents had a high quality of life, namely 71 people (93.4%). Respondents' statements from each domain both from the physical domain, The environmental domain shows that the quality of life of coronary heart patients is high.

This is in line with research conducted by Rahmat 2020 <sup>15</sup> on "Overview of the Quality of Life of Coronary Heart Disease Patients After a Heart Attack" this study was conducted at the Mataram City Hospital which found that most respondents had a good quality of life, namely 46 people (52.9%). This is in line with the opinion of Grace in 2020 which states that quality of life is an individual's perception and individual satisfaction with everything in life. Many factors affect quality of life such as work, marriage, being physically active, age, income, and revascularization according to Azhar (2020)<sup>16</sup>

The results of married research can add to the patient's quality of life for the better, marriage makes a person not feel alone, there is someone who encourages them. Married makes someone not feel alone, there is someone to encourage and someone to discuss to deal with coronary heart disease. The results of this study are in line with Nuraeni's research (2016) <sup>17</sup> on "Factors Affecting the Quality of Life of Patients with Coronary Heart Disease" this study was conducted at Dr. Hasan Sadikin Bandung Hospital which states that being married, working, being physically active and revascularization is one of the factors that make quality of life good.

This study is also in line with research conducted by Purnama in 2020 <sup>17</sup> on "Education Can Improve the Quality of Life of Patients Diagnosed with Coronary Heart Disease" which states that age affects the quality of life to be good. In the study, it was found that most of the respondents were 48 years old, namely as many as 8 people (10.5%) where this age is an age that is still classified as productive so that it can affect the quality of life of respondents with coronary heart disease. In this study it was also found that most of the respondents were male, namely 51 people (61.7%).

The results showed that most of the respondents were male (61.7%), where gender is a factor that shows differences in physical and biological characteristics and individual functions.

In this study, it was found that most respondents had a high school education, namely 35 people (46.1%), this is what can affect the quality of life of coronary heart patients in respondents at Dr. Bratanata Jambi Hospital. The level of education can also increase the level of quality of life in coronary heart patients better, the results of this study are supported by previous research from Tsalissavrina (2018) <sup>1</sup> on "Overview of Quality of Life in Coronary Heart Patients" this research was conducted at UNS Hospital, the results of which were that a person's level of education would affect his quality of life, the higher the education, the higher the quality of life and vice versa the lower the education, the lower the quality of life.

Based on the results of this study, respondents at Dr. Bratanata Jambi Hospital out of 76 respondents obtained the results that in the physical domain most of the respondents had a high quality of life, as many as 65 people (85.5%). From the analysis obtained from the respondent's statement about pain prevention in activities as needed, the average answer was often, respondents also said that they needed medical therapy to be able to function in daily life, and respondents also said they had enough vitality to do daily activities. This shows that the quality of life of Coronary heart patients from the physical domain is high.

This is in line with research conducted by Ronny Iswahyudi et al (2020) on "The Effect of Phase I Cardiac Rehabilitation on the Quality of Life of Coronary Heart Disease Patients" this research was conducted at Malang General Hospital and the results obtained that most respondents who were carried out phase 1 cardiac rehabilitation had an average score of high physical role, namely 82.25%. In theory, due to the decline in the function of various organs due to the aging or degenerative process, physically dependent and can no longer carry out their own daily activities as usual and will be increasingly helpless (Christy & Banim, 2020). <sup>15</sup>

This is evidenced by the results of the physical domain research, namely it was found that respondents with high physical pain as many as 65 people (85.5%) caused activity interference.

Based on the results of this study, respondents at Dr. Bratanata Jambi Hospital out of 76 respondents obtained the following results that in the psychological domain most of them have a high quality of life, namely 72 people (94.7%). From the analysis obtained from the respondent's statement about how far to enjoy life, feel meaningful and be able to concentrate, the average respondent answered often, the respondent could also accept his body appearance and feel satisfied with himself even though some respondents had negative feelings such as 'feeling blue' (loneliness), hopelessness, anxiety and depression. This shows that the quality of life of Coronary heart patients from the psychological domain is high.

Based on the results of research on respondents at Dr. Bratanata Jambi Hospital from 76 respondents, it was found that in the psychological domain most of them had a high quality of life, namely 72 people (94.7%). A study that states that the occurrence of physical disorders that cause medical problems in a person will cause psychological disorders, especially in an elderly person (Bratanata Hospital, Jambi) psychological disorders, especially in an elderly person (Van, 2018).<sup>5</sup>

Based on the results of research on respondents at Dr. Bratanata Jambi Hospital from 76 respondents, it was found that in the Social domain most respondents had a high quality of life, namely 65 people (85.5%). From the analysis obtained from the respondent's statement about personal / social relationships and support obtained from friends, the average respondent answered satisfactorily. This shows that the quality of life of Coronary heart patients from the social domain is high.

According to Ekasari et al (2018)<sup>19</sup> the social domain includes several items, namely personal relationships, social support and sexual activity. Coronary heart patients who have good social interactions in their environment including the workplace will not feel lonely in their lives and this can certainly improve their quality of life including the health status. (Utomo, 2019).<sup>5</sup> Social relations are a system of social life and livelihood, both meterial and spiritual, which is covered by a sense of safety, decency, and inner and outer peace that allows each individual to fulfill physical, spiritual, and social needs as well as possible for themselves, families, and society by upholding human rights and obligations (Risdianto, 2009).<sup>12</sup>

Based on the results of research on respondents at Dr. Bratanata Jambi Hospital from 76 respondents, it was found that in the environmental domain most of them also had a high quality of life, namely 63 people (82.9%). From the analysis obtained from respondents' statements about a sense of security, a healthy environment, information obtained, recreation, having enough money, satisfaction with living conditions, satisfaction with access to health services and satisfaction with transportation undertaken. This shows that the quality of life of patients with Coronary heart patients from the environmental domain are high.

This is also reinforced by the opinion of Ekasari (2018)<sup>19</sup> which states that improving the environmental domain includes feeling safe, environmental health, having enough money, availability of information, opportunities for fun or recreation, satisfaction with living conditions, satisfaction with access to health services and satisfaction with transportation undertaken. In the elderly in Brazil, this domain is quite high because the elderly more often access health services which previously only once a week when controlling their illness (Gomes et al., 2014).<sup>5</sup>

# **CONCLUSIONS**

Data obtained from the results of research on the Quality of Life of Coronary Heart Patients at Dr. Bratanata Jambi Hospital, can be concluded as follows:

- 1. The results showed that the characteristics of respondents in this study had the highest age range, respondents aged  $\leq 55$  years, as many as 47 people (61.8%). The gender of the respondents was mostly male (61.7%). The highest education of respondents is high school (45.1%). Respondents who are married (100%), the income of respondents is 1-3 million rupiah, namely (63.2%). The length of coronary heart disease suffered by respondents is  $\geq 3$  months (86.8%).
- 2. Quality of Life of Coronary Heart Patients at Dr. Bratanata Jambi Hospital is categorized with a high quality of life.
- 3. Quality of Life of Coronary Heart Patients at Dr. Bratanata Jambi Hospital from the physical domain is categorized with a high quality of life. This includes activities of daily living, requiring medical therapy and having sufficient vitality to carry out daily activities.

- 4. Quality of Life of Coronary Heart Patients at Dr. Bratanata Jambi Hospital from the psychological domain is categorized with a high quality of life. high quality of life. This includes how much they enjoy life, feel meaningful, can concentrate, can accept their body appearance and feel satisfied with themselves.
- 5. Quality of Life of Coronary Heart Patients at Dr. Bratanata Jambi Hospital from the social domain is categorized with high quality of life. This includes personal / social relationships and support obtained from friends Quality of Life of Coronary Heart Patients at Dr. Bratanata Jambi Hospital from the environmental domain is categorized with a high quality of life. This includes a sense of security, a healthy environment, information obtained, recreation, having enough money, satisfaction with living conditions, satisfaction with access to health services and satisfaction with transportation.

#### REFERENCES

- 1. Miftah Amarullah F nur rosyid. Gambaran Kualitas Hidup Pada Pasien Penyakit Jantung Koroner. 2021;1–7.
- 2. WHO. (2018). Noncommunicable Diseases Country Profiles 2018. In World Health Organization. https://doi.org/16/j.jad.2010.09.007.
- 3. WHO. (2013). About cardiovascular diseases. Retrieved from https://www.who.int/cardiovascular\_diseases/about\_cvd/en/.
- 4. Riset Kesehatan Dasar (Riskesdas). (2018). Badan Penelitian dan Pengembangan Kesehatan Kementerian RI tahun 2018.
- 5. Angriani S. Gambaran Kualitas Hidup Lansia Dengan Penyakit Jantung Koroner di Poli Jantung RSUP dr. M.Djamil Padang Tahun 2019. Vol. 3. Universitas Andalas; 2021.
- 6. Saputri D. Faktor-Faktor Yang Mempengaruhi Kualitas Hidup Penderita Jantung Koroner Di Poli Klinik Jantung RSU Bahteramas. Politek Kesehat Kemenkes Kendari Jur Keperawatan. 2017;1–81.
- 7. Nuraeni A, Mirwanti R, Anna A, Prawesti A, Emaliyawati E. Faktor yang Memengaruhi Kualitas Hidup Pasien dengan Penyakit Jantung Koroner Factors Influenced the Quality of Life among Patients Diagnosed with Coronary Heart Disease. J Keperawatan Univ Padjadjaran. 2016;4(2):107–16
- 8. Anggraini D, Andani TZ. Kualitas Hidup Pasien Pasca-Percutaneous Coronary Intervention (Pci). J Keperawatan Komprehensif (Comprehensive Nurs Journal). 2018;4(2):98–105.
- 9. Azizah R, Hartanti RD. Hubungan Antara Tingkat Stress Dengan Kualitas Hidup Lansia Hipertensi Di Wilayah Kerja Puskesmas Wonopringgo Pekalongan. J Universyty Reseach Coloquium. 2016:261–78.
- 10. Pratiwi Asti, Maulana Ali FHM. Edukasi Kesehatan Terstruktur Terhadap Kualitas Hidup Pasien Penyakit Jantung Koroner (pjk). 2018;47.
- 11. Rahmat B, Priyambodo S, Sari DP, Susani YP, Agung A. Gambaran Kualitas Hidup Penderita Penyakit Jantung Koroner Pasca Serangan Jantung. J Kedokt. 2020;9(2):90–9.
- 12. Rohmah AIN, Purwaningsih, Bariyah K. Quality of Life Elderly. 2012;120–32.
- 13. Notoatmodjo S. (2012). Promosi Kesehatan dan Perilaku Kesehatan. Jakarta: PT Rineka Cipta.
- 14. Kathiravellu, S. C. K. (2016). Hubungan Status Depresi terhadap Kualitas Hidup Lansia di Wilayah Kerja Puskesmas Petang II Kabupaten Badung Bali Tahun 2015. Intisar Sains Medis, 6(1), 92–101. https://doi.org/10.15562/ism.v6i.24.
- 15. Rahmat, B., Priyambodo, S., Sari, D. P., Susani, Y. P., & Agung, A. (2020). Gambaran Kualitas Hidup Penderita Penyakit Jantung Koroner Pasca Serangan Jantung. Jurnal Kedokteran 2020,9(2):90-99 ISSN 2301-5977, e- ISSN 2527-7154 9(2), 90–99 (Azhar., 2020).

- Muttaqien, F., & Marisa, D. (2020). Perbedaan Kualitas Hidup Antara Pasien Penyakit Jantung Koroner Yang Rutin dan Tidak Rutin melakukan Senam Jantung Sehat. 147–153. Homeostasis, Vol. 3 No. 1, April 2020: 147-152.
- 17. Nuraeni, A., Mirwanti, R., Anna, A., Prawesti, A., Emaliyawati, E., & 2016. (n.d.). Faktor yang Memengaruhi Kualitas Hidup Pasien dengan Penyakit Jantung Koroner Factors Influenced the Quality of Life among Patients Diagnosed with Coronary Heart Disease.
- 18. Purnama, A. (2020). Edukasi Dapat Meningkatkan Kualitas Hidup Pasien yang Terdiagnosa Penyakit Jantung Koroner. Jurnal Kesehatan Indonesia, X(2), 66–71.
- 19. Ekasari MF, Riasmini NM, Hartini T. (2018).Meningkatkan Kualitas Hidup Lansia: Konsep dan Berbagai Strategi Intervensi. Malang: Wineka Media.