The relationship between knowledge and self-care behavior of acute coronary syndrome patients at the Heart Polyclinic of PKU Muhammadiyah Gamping Hospital

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Abstract
Acute Coronary syndrome (ACS) is an acute manifestation of Coronary Heart Disease (CHD), which remains a leading cause of morbidity and mortality worldwide, including in Indonesia. The implementation of self-care behavior is essential for ACS patients to prevent recurrence and improve quality of life. Knowledge is a key factor influencing self-care behavior among ACS patients at the Cardiology Clinic of PKU Muhammadiyah Gamping Hospital in Yogyakarta. This research method used a quantitative correlation design with a cross-sectional approach. A total of 86 respondents were selected using purposive sampling. The instruments used were the HDFQ and SC-CHDI questionnaires. The results showed that some respondents had good knowledge (39.5%), but the majority demonstrated suboptimal self-care behavior (62.8%). The results of the Spearman rank test revealed a significant positive correlation between knowledge and self-care behavior (p=0.001, r=0.425). This study suggests that continuous education is necessary to improve patient knowledge, thus enhancing optimal self-care behavior.

Keywords: acute coronary syndrome; education; knowledge; self-care

1. Introduction
Cardiovascular disease (CVD) is the leading cause of death in the world, more than half a billion people worldwide suffer from cardiovascular disease and accounted for 20.5 million deaths in 2021. Nearly one-third of all global deaths and represents an overall increase compared to the previous estimate of 12.1 million cardiovascular deaths. As many as 80% of premature deaths caused by heart attacks and strokes can actually be prevented with advances in medical tools and science. Most deaths occur in low- and middle-income countries, while advances in cardiovascular health are increasingly concentrated in developed countries, indicating health inequalities that must be addressed urgently (WHO, 2023). In Indonesia, the prevalence of heart disease increased from 0.5% (2013) to 1.5% (2018) with the highest rate in Yogyakarta Province reaching 1.67% (Ministry of Health, 2023). Acute coronary syndrome (CKS) is one of the leading causes of hospitalization and death (PERKI, 2024) .

The results of a preliminary study at the Heart Polyclinic of PKU Muhammadiyah Gamping Hospital showed a low understanding and application of self-care behavior in SKA patients after the attack. Proper self-care can reduce recurrence rates, improve quality of life and lower mortality rates (Araújo-Soares et al., 2019). In addition, patient knowledge is also an important factor that can affect a person's self-care behavior (Pahria et al., 2022).

Risk factors for Acute Coronary Syndrome (CKS) are divided into two, namely modifiable risk factors such as smoking, dyslipidemia, DM, stress, diet, lack of activity and obesity. Meanwhile, risk factors that cannot be modified are age, gender, and family history with heart disease (Aisyah et al., 2022). These risk factors can be avoided with good self-management. Self-management is the process of individuals directing changes in their behavior through therapeutic strategies (Yuni & Aprianti, 2020). Self-care is an activity carried out by a person with the initiative to reduce the adverse impact of a disease, maintain health and well-being (Rokayah et al., 2021).

Good knowledge is the basis for shaping a person's attitude, the better the knowledge, the more likely the individual is to be better in the application of self-care. Knowledge has an effect on making patients aware so that patients can control self-care by preventing risk factors such as understanding knowledge about diet, exercise and quitting smoking (Awi et al., 2021). Therefore, this study aims to determine the relationship between the level of knowledge and self-care behavior in patients with Acute Coronary Syndrome at the Heart Polyclinic of PKU Muhammadiyah Gamping Hospital.

2. Methods

This study used a quantitative descriptive design with a cross-sectional approach conducted at the Heart Polyclinic of PKU Muhammadiyah Gamping Hospital from May to June 2025. The population in this study were all patients diagnosed with Acute Coronary Syndrome (ACS) based on a diagnosis from a cardiologist. The sampling technique used purposive sampling with a total of 86 respondents who met the inclusion and exclusion criteria. Data were collected using standard HDFQ and SC-CHDI questionnaires that had been tested for validity and reliability with the HDFQ test results obtained r table = 0.515 and r count between 0.721-0.904 and SC-CHDI r table = 0.33 with r count between 0.424-0.692. Data were analyzed univariately to see the frequency distribution and bivariately to determine the relationship between knowledge and self-care behavior with the Spearman Rank Test via SPSS version 27. This study has received Ethics Committee Approval from the Ethics Committee of PKU Muhammadiyah Gamping Hospital with No. 142/KEP-PKU/V/2025.

3. Results and Discussion

3.1. Results

This study examined six respondent characteristics: age, gender, education, occupation, patient companion during treatment, and patient medical diagnosis. These characteristics are outlined in the following table:

Table 1. Overview of Respondent Characteristics

Respondent Characteristics	Frequency (n)	Percentage (%)
Age		
Late Adulthood 36-45 years	7	8.1
Early Elderly 46-55 years	18	20.9
Late Elderly 56-65 years	40	46.5
Seniors >65 years	21	24.4
Gender		
Man	71	82.6
Woman	15	17.4
Education		
No school	2	2.3
Elementary School	18	20.9
JUNIOR HIGH SCHOOL	9	10.5
SENIOR HIGH SCHOOL	27	31.4
College	30	34.9
Work		
Work	43	50
Doesn't work	43	50
Patient Companion		
Husband and wife	40	46.5
Child	27	31.4
Alone	19	22.1
Medical Diagnosis		
STEMI	36	41.9
NSTEMI	28	32.6
STEAM	22	25.6
Total	**86**	**100**

Based on Table 1.0, 46.5% of respondents were in the late elderly category (56-65 years), followed by the elderly age group (>65 years) at 24.4%. This indicates that the majority of Acute Coronary Syndrome (ACS) patients are in the elderly age group, who are physiologically more susceptible to cardiovascular disorders due to degenerative processes and changes in blood vessel structure.

The early elderly age group (46-55 years) was also quite large, at 20.9%, indicating that coronary heart disease begins to increase in the later stages of productive life. The smallest proportion occurred in late adulthood (36-45 years), at 8.1%. The majority of respondents in this study were male (71 respondents (82.6%), while 15 respondents (17.4 %) were female.

The majority of respondents in this study had a college education background of 30 respondents (34.9%), followed by a high school education background of 27 people (31.4%), then 18 respondents (20.9%) had an elementary school education background, the remaining 9 respondents (10.5%) had a junior high school education background and 2 respondents (2.3%) did not receive formal education.

A balanced proportion is shown in the characteristics of respondents who are still working and those who are not working, each showing a value of 50% (43 respondents). Based on this data, it can also be concluded that respondents who are accompanied by a partner (husband/wife) number 40 respondents (46.5%), followed by respondents who are accompanied by children 27 respondents (31.4%). However, there are 19 respondents (22.1%) who come to the polyclinic alone without being accompanied by family.

This study shows that most of the respondents experienced STEMI (ST-Elevation Myocardial Infarction) as many as 36 respondents (41.9%), while respondents with a diagnosis of NSTEMI (Non-ST-Elevation Myocardial Infarction) were 28 respondents (32.6%) and the remaining respondents with a diagnosis of UAP (Unstable Angina Pectoris) were 22 respondents (25.6%).

Table 2. Overview of Knowledge of Acute Coronary Syndrome (ACS) Patients

Level of Knowledge	Frequency (n)	Percentage (%)
Good	34	39.5
Enough	26	30.2
Not enough	26	30.2
Total	**86**	**100.0**

Based on Table 2, 34 respondents (39.5%) had a good level of knowledge, 26 respondents (30.2%) had a sufficient level of knowledge and 26 respondents (30.2%) had a poor level of knowledge.

Table 3. Description of Self-Care Behavior of Patients with Acute Coronary Syndrome (ACS)

Self-Care Level	Frequency (n)	Percentage (%)
Optimal	32	37.2
Not Optimal	54	62.8
Total	**86**	**100.0**

32 respondents (37.2%) had optimal levels of self-care and 54 respondents (62.8%) had non-optimal levels of self-care.

Table 4. Cross-Table of Relationship between Knowledge and Self-Care Behavior

Knowledge	Self-care				Total N	(%)	P value	Correlation Coefficient
	Optimal	(%)	Not Optimal	(%)				
Good	18	20.9%	16	18.6%	34	39.5%	0.001	0.425
Enough	8	9.3%	18	20.9%	26	30.2%		
Not enough	6	7%	20	30.2%	26	30.2%		
Amount	**32**	**37.2%**	**54**	**62.8%**	**86**	**100%**		

Based on the results of the cross-tabulation analysis in table 4.3, it shows that of the 34 respondents (39.5%) who had good knowledge, 18 respondents (20.9%) had optimal self-care behavior and 16 respondents (18.6%) had suboptimal self-care behavior. Respondents with sufficient knowledge mostly had suboptimal self-care as many as 18 respondents (20.9%) and the remaining 8 respondents (9.3%) had optimal self-care behavior . Respondents with less knowledge mostly also had suboptimal self-care behavior at 20 respondents (30.2%) and the remaining only 6 respondents (7%) had optimal self-care behavior .

3.2. Discussion

3.2.1. Overview of Knowledge of Acute Coronary Syndrome Patients at the Heart Polyclinic of PKU Muhammadiyah Gamping Hospital

This study shows that the majority of respondents have a good level of knowledge, namely 34 respondents (39.5%), and respondents with sufficient and insufficient knowledge have the same proportion, namely 26 respondents (30.2%) of the total number. This is in line with research conducted by Kurniastining Fiqriyah & Hudiyawati (2023) entitled The Relationship Between Level of Knowledge and Illness Perception in Coronary Heart Disease Patients at Dr. Moewardi Regional Hospital on 131 respondents, which stated that as many as 83 people (63.36%) had knowledge in the good category.

Another study that aligns with this research is the study conducted by (Awi et al., 2021) entitled "Knowledge of Risk Factors in Coronary Heart Disease Patients at UD Dr. Zainoel Abidin Hospital, Banda Aceh," which included 117 respondents. It noted that 79.5% of respondents had good knowledge. Good knowledge is crucial in raising patient awareness of the risks, enabling them to control their risk factors for coronary heart disease, such as diet, exercise, and smoking cessation, which can reduce the risk of developing coronary heart disease.

However, this study is not in line with the study conducted by Haulia Diana Fitri (2024) entitled Overview of Knowledge About Heart Disease Prevention Aged 15-34 Years Among Gymnastics Participants at the Indonesian Heart Foundation in Pekanbaru City which stated that out of 51 respondents, the highest level of knowledge was less than 43 respondents (84.3%). Research by Tarawan et al., (2020) entitled Overview of Knowledge About Coronary Heart Disease Prevention Among Residents of Hamlet III, Mekarmanik Village, Cimenyan District, Bandung Regency also stated that the highest level of knowledge was less than 45 respondents (64.28%) and 12 respondents (17.14%) respondents had a sufficient level of knowledge. Another study (Eny Puspita & Miftahus Shomad, 2018) with the title related to coronary heart disease patient knowledge regarding medication adherence showed that the sufficient level of knowledge was more dominant with a value of 63.3%.

This difference is possible due to several factors that influence knowledge, such as age and education level (Ammouri et al., 2018) . Other studies have stated that factors that influence the level of knowledge are health education or counseling conducted by health workers. The results of a study entitled The Effect of Health Education on the Knowledge of Coronary Heart Disease Patients in 42 respondents showed that the average score of patients before health education was 17.33 and after health education was 19.69 (Suratun et al., 2022) . This study is also in line with research conducted at the Air Saga Community Health Center, which showed that after education related to self-care and coronary heart disease, patient knowledge increased as seen from the percentage score between before and after the test (Ade Sukarna et al., 2022).

Another factor influencing a person's level of knowledge is illness perception , which guides individuals in determining disease control strategies, one of which is self-management. CHD patients often perceive their chest pain as a symptom of a common cold, so they are not immediately taken to a hospital or other healthcare facility (Oktarina et al., 2021) .

3.2.2. Self-Care Overview of Acute Coronary Syndrome Patients at the Heart Clinic of PKU Muhammadiyah Gamping Hospital

This study shows that the majority of respondents have suboptimal self-care levels of 54 (62.8%). This study is in line with research conducted by (Sun et.al., 2021) which stated that self-care behavior in CHD patients was suboptimal in 52 respondents. This is in line with research conducted at Cipto Mangunkusumo National Hospital by (Kristiani & Irawati, 2019) entitled Factors Associated with Self-Management in Acute Coronary Syndrome Patients Post Percutaneous Coronary Intervention in the Integrated Heart Service Polyclinic on 58 respondents who stated that 32 respondents (55.2%) had suboptimal self-management.

Another study that is in line with this study is a study conducted by (Ade Sukarna et al., 2022) entitled Self-Care Counseling for Coronary Heart Disease Patients in the Air Saga Community Health Center, Belitung Regency, which stated that of the 25 respondents at the Air Saga Community Health Center, Belitung Regency who were evaluated for self-care, 15 respondents (60%) of them had a less/less than optimal level of self-care . This study is supported by another study by (Yekti Widadi et al., 2024) at the Dr. Slamet Regional General Hospital, Regency, with a total of 86 respondents, showing that the criteria for self-care were poor with the majority of respondents (67.6%).

However, this study disagrees with another study entitled "Self-Care Overview of Patients with Coronary Heart Disease After Cardiac Catheterization," which stated that 169 out of 219 respondents at Prof. IGNG Ngoerah General Hospital were in the optimal category (77.2%). Self-care profiles were also influenced by respondent characteristics such as age, gender, education, and duration of illness (Arianca et al., 2024).

Self -care for heart patients includes taking medication regularly, reducing salt intake, engaging in regular physical activity or exercise, and routinely monitoring symptoms (Riegel et al., 2024) . Programs and guidelines related to self-care for coronary heart disease patients have been shown to reduce rehospitalization rates. Some studies report that coronary heart disease patients do not carry out self-care appropriately, such as rarely taking medication and not recognizing early symptoms and signs of heart disease. This is evidenced by a study conducted by Tama et al., 2024 at Dr. H. Moch. Ansari Saleh Hospital in Banjarmasin, which included 30 respondents, which stated that 66.7% of respondents were non-compliant with medication and experienced recurrent attacks.

Risk factors for recurrent heart attacks occur due to suboptimal self-care such as continuing to smoke, not maintaining blood pressure, dyslipidemia, uncontrolled diabetes, stress, lack of physical activity, not adhering to recommended diets such as low-fat diets, not maintaining body weight/obesity and poor compliance with taking medication (Lukitaningtyas & Cahyono, 2023) .

3.2.3. The Relationship Between Knowledge and Self-Care Behavior of Acute Coronary Syndrome Patients at the Heart Polyclinic of PKU Muhammadiyah Gamping Hospital

The results of the study showed that 34 respondents (39.5%) had good knowledge, 18 respondents (20.9%) had optimal self-care behavior and 16 respondents (18.6%) had suboptimal self-care behavior. The difference in numbers between the two categories is relatively small, around 2%, indicating that good knowledge is not fully proportional to optimal self-care behavior. Indicators representing respondents with a good level of knowledge but have suboptimal self-care behavior include understanding of general recommendations for heart patients, signs and symptoms of heart disease and actions taken on heart patients. The results showed that the general recommendation indicator is indicated by the still lack of implementation of a low-fat diet. Meanwhile, in the indicators of signs and symptoms of heart disease, the inability of respondents to recognize symptoms is the main feature . The results also showed that the indicators of actions taken on heart patients tend to be low, especially in non-compliance in taking medication (aspirin) as recommended by the doctor. This occurs because the change in respondent behavior has only reached the second stage, namely interest , but has not yet continued to the change process stage (Notoatmojo (2010) in (Susanti et al., 2018).

Findings regarding these indicators can be used as a basis for designing targeted educational programs tailored to patient needs. Several relevant programs to be implemented at the PKU Muhammadiyah Gamping Hospital Heart Clinic include collaboration with nutritionists to provide dietary education for heart patients, provided at least once every three months. Another program related to recognizing heart disease symptoms can be provided through electronic media, such as playing short educational videos in the patient waiting room or via WhatsApp. This effectiveness is evidenced by research conducted by Fernalia et al., 2019, which found a significant difference in the average self-management of the intervention group after audiovisual education was conducted on 38 respondents. The study stated that self-management will increase after audiovisual education and is controlled by knowledge. Meanwhile, to address the problem of non-adherence to medication consumption, a telehealth- based medication reminder program , such as text messaging (SMS), can be implemented to improve patient adherence to recommended therapy. This program has been proven effective in improving adherence in heart patients (Hasbullah, 2024).

The statistical test results using Spearman Rank showed a p-value of 0.001 (<0.05), indicating a significant relationship between knowledge and self-care behavior . These results also showed a correlation coefficient of 0.425 (sufficient category), indicating that the higher a person's level of knowledge, the higher their tendency to perform optimal self-care.

This study is in line with research (Kristiani & Irawati, 2019) at Dr. Cipto Mangunkusumo National Hospital which showed data that respondents with good knowledge with good self-management (self-care) numbered 14 respondents (63.6%). Meanwhile, respondents with poor knowledge with good self-management numbered 12 respondents (33.3%) and respondents with poor

self-management numbered 24 (66.6%). From these results it can be concluded that respondents with poor knowledge and poor self-management numbered 24 respondents with a frequency of 66.6%. According to the results of the statistical test, a p-value of 0.048 was obtained, so there is a significant relationship between knowledge and self-management in patients with ACS (Acute Coronary Syndrome) post PCI. The study also explained that the OR value = 3500, which means that patients with poor knowledge have a 3.5 times risk of experiencing poor self-management compared to patients with a good level of knowledge.

One of the factors influencing a person's knowledge is their level of education. This is explained in research (Handayani & Nasution, 2024) , which states that there is a significant relationship between education level and coronary heart disease patients' knowledge of risk factors for coronary heart disease, with an outcome value of 0.000 ($p<0.05$). According to Notoatmojo (2010), behavior is a determinant of health that is targeted and promoted. Several factors can influence a patient's ability to self-care for coronary heart disease, one of which is knowledge. The higher a person's level of education, the better their behavior toward their disease.

Another study that is not in line with this research is research by (Susanti et al., 2018) at the Mintoharjo Naval Hospital in Jakarta on 95 respondents with the title The Relationship of Knowledge to Self-Management in Coronary Heart Disease Patients showed that 35.8% had good knowledge and therefore self-management. However, statistically with Chi Square correlation showed the opposite result, namely there was no significant relationship between knowledge and self-management. This is explained that the factors that influence a person's management behavior are influenced by the environment and culture. A person's behavior will be formed if supported by three factors: predisposing, supporting, and driving factors. Predisposing factors can include knowledge, attitudes, beliefs or beliefs. Meanwhile, supporting factors are the availability of health facilities or facilities such as community health centers or hospitals and medicines. Driving factors that influence are the attitudes and behavior of health workers and other groups who are used as examples in their behavior in the community.

Self-care for patients with chronic illnesses such as cardiovascular and vascular disorders is a crucial factor in managing their health. Self-care implementation is based on basic conditioning factors to meet self-care needs. Other factors influencing self-care implementation in individuals, as mentioned by Pahria et al. (2022) , include knowledge, experience, skills , motivation, habits, functional and cognitive abilities, self-efficacy , support systems , and culture .

4. Conclusion

Based on the results of research conducted on 86 respondents, it can be concluded that the majority of patients at the Heart Polyclinic of PKU Muhammadiyah Gamping Hospital have a sufficient to good level of knowledge, but some respondents have not shown optimal self-care behavior. The results of the analysis show a significant relationship between knowledge and self-care behavior of ACS patients, which is indicated by a moderate positive correlation value, which means that the higher a person's level of knowledge, the better their chances of implementing self-care behavior.

Based on these findings, it is hoped that healthcare workers, especially nurses in the ICCU and Heart Polyclinic at PKU Muhammadiyah Gamping Hospital, will be more active in providing ongoing health education to improve patient understanding of the importance of self-care. One of the planned programs to be implemented is providing education to ICCU inpatients using leaflets . Furthermore, patients are expected to play an active role in seeking information and consistently implementing healthy lifestyle behaviors. Future researchers are advised to explore other factors that influence self-care, such as motivation, family support, and disease duration, to develop more effective interventions.

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References

Ade Sukarna, R., Nazliansyah, & Alinda, N. (2022). Penyuluhan Perawatan Diri (Self Care) Penderita Penyakit Jantung Koroner di Wilayah Puskesmas Air Saga Kabupaten Belitung. *Jurnal Pengabdian Masyarakat Bestari*, *1*(5), 391–400. https://doi.org/10.55927/jpmb.v1i5.1086

Aisyah, A., Hardy, F. R., Pristya, T. Y. R., & Karima, U. Q. (2022). Kejadian Penyakit Jantung Koroner pada Pasien di RSUD Pasar Rebo. *HIGEIA (Journal of Public Health Research and Development)*, *6*(4), 250–260. https://doi.org/10.15294/higeia.v6i4.48650

Ammouri, A. A., Abu Raddaha, A. H., Tailakh, A., Kamanyire, J., Achora, S., & Isac, C. (2018). Risk knowledge and awareness of coronary heart disease, and health promotion behaviors among adults in Oman. *Research and Theory for Nursing Practice*, *32*(1), 46–62. https://doi.org/10.1891/0000-000Y.32.1.46

Araújo-Soares, V., Hankonen, N., Presseau, J., Rodrigues, A., & Sniehotta, F. F. (2019). Developing Behavior Change Interventions for Self-Management in Chronic Illness: An Integrative Overview. *European Psychologist*, *24*(1), 7–25. https://doi.org/10.1027/1016-9040/a000330

Arianca, I. N., Intan Saraswati, N. L. G., Satya Laksmi, I. G. A. P., & Yuni Lestari, N. K. (2024). Gambaran Self-Care Pasien dengan Penyakit Jantung Koroner Pasca Kateterisasi Jantung. *Jurnal Gema Keperawatan*, *17*(1), 79–90. https://doi.org/10.33992/jgk.v17i1.3270

Awi, T., Darlina, D., & Ahyana. (2021). Pengetahuan Tentang Faktor Risiko Pada Pasien Penyakit Jantung Koroner. *JIM FKep Volume V No. 1 2021*, *V*(1), 162–167.

Cesare, M. D., Bixby, H., Gaziano, T., Hadeed, L., Kabudula, C., McGhie, D. V., Mwangi, J., Pervan, B., Perel, P., Piñeiro, D., Taylor, S., & Pinto, F. (2023). World Heart Report 2023: Confronting the World's Number One Killer. *World Heart Federation*, 1–52. https://world-heart-federation.org/wp-content/uploads/World-Heart-Report-2023.pdf

Eny Puspita, & Miftahus Shomad. (2018). Hubungan Pengetahuan Pasien Tentang Penyakit JantungKoroner Dengan Kepatuhan Minum Obat. *Jurnal Keperawatan Dan Kebidanan*, 16–20.

Fernalia, Busjra, & Jumaiyah, W. (2019). Efektivitas Metode Edukasi Audiovisual terhadap Self Management pada Pasien Hipertensi. *Jurnal Keperawatan Silampari*, *4*(1), 75–84.

Handayani, A., & Nasution, R. W. (2024). Hubungan Tingkat Pendidikan Dan Status Sosial Ekonomi Terhadap Tingkat Pengetahuan Tentang Faktor Risiko Penyakit Jantung Koroner Pada Pasien Penyakit Jantung Koroner. *Jurnal Pandu Husada*, *5*(1), 27–34. https://jurnal.umsu.ac.id/index.php/JPH

Hasbullah, S. P. (2024). *Effectiveness of Telehealth in Improving Patient Adherence to Cardiovascular Disease Management in Indonesia : A Literature Review Effectiveness of Telehealth in Improving Patient Adherence to Cardiovascular Disease Management in Indonesia : A Literature Review Efektivitas Penggunaan Telehealth Dalam Upaya Peningkatan Kepatuhan Pasien Syahrani Tri Buwana Putri Kusumawardani Fakultas Kesehatan Masyarakat , Universitas Indonesia*. *December*.

Haulia Diana Fitri, A. (2024). *Gambaran pengetahuan tentang pencegahan penyakit jantung usia 15-34 tahun pada peserta senam di Yayasan Jantung Indonesia Kota Pekanbaru*. *15*(1), 37–48. http://repository.pkr.ac.id/id/eprint/4802

Kemenkes. (2023). *Survey Kesehatan Indonesia (SKI)*.

Kristiani, & Irawati, D. (2019). *Faktor-Faktor Yang Berhubungan Dengan Self Management Pada Pasien Sindrom Koroner Akut Post Percutaneous Coronary Intervention Di Poliklinik Pelayanan Jantung Program Studi Keperawatan Fakultas Ilmu Keperawatan Universitas Muhammadiyah Jakarta Email : Kri*. *002*, 1–16.

Kurniastining Fiqriyah, I., & Hudiyawati, D. (2023). Hubungan Antara Tingkat Pengetahuan dan Illness Perception pada Pasien Penyakit Jantung Koroner. *Professional Health Journal*, *4*(2), 189–197. https://doi.org/10.54832/phj.v4i2.400

Lukitaningtyas, D., & Cahyono, E. A. (2023). Hipertensi; Artikel Review. *Pengembangan Ilmu Dan Praktik Kesehatan*, *2*(2), 100–117. https://doi.org/10.56586/pipk.v2i2.272

Oktarina, Y., Yusnilawati, Y., Aryani, T., & Hayani, L. (2021). Analisis Kebutuhan Belajar Pasien Penyakit Jantung Koroner Berdasarkan Persepsi Pasien dan Perawat di RSUD Raden Mattaher Provinsi Jambi. *Dunia Keperawatan: Jurnal Keperawatan Dan Kesehatan*, *9*(3), 465. https://doi.org/10.20527/dk.v9i3.9459

Pahria, T., Pitora, T., & Afirmasari, Ek. (2022). Faktor-Faktor yang mempengaruhi self-care pada pasien Heart Failure. *Jurnal Penelitian Kesehatan Suara Forikes*, *13*(4), 886–893.

PERKI. (2024). *Pedoman Tata Laksana Sindrom Koroner Akut Edisi-5*.

Riegel, B., De Maria, M., Barbaranelli, C., Luciani, M., Ausili, D., Dickson, V. V., Jaarsma, T., Matarese, M., Stromberg, A., & Vellone, E. (2024). Measuring Self-Care: A Description of the Family of Disease-Specific and Generic Instruments Based on the Theory of Self-Care of Chronic Illness. *Journal of Cardiovascular Nursing*, *40*(2), 103–113. https://doi.org/10.1097/JCN.0000000000001146

Rokayah, M., Dimanik, C., Rining, M. K., & Sholichin. (2021). Dependency Care Pada Pasien Gagal Jantung Selama Perawatan di Rumah Sakit. *Jurnal*, *15 September*, 23–59.

Suratun, Wahyudi, J. T., & Yulianti, I. E. (2022). Pengaruh Pendidikan Kesehatan terhadap Pengetahuan Pasien Penyakit Jantung Koroner. *Jurnal Ilmiah Kesehatan Pencerah (JIKP)*, *11*(2), 151–160. https://itkesmu-sidrap.e-journal.id/JIKP

Susanti, D., Lastriyanti, & Haryono, S. (2018). Dampak Pengetahuan Terhadap Manajemen Diri Pada Penderita Penyakit Jantung Koroner. *Nucleic Acids Research*, *6*(1), 1–7. http://dx.doi.org/10.1016/j.gde.2016.09.008%0Ahttp://dx.doi.org/10.1007/s00412-015-0543-8%0Ahttp://dx.doi.org/10.1038/nature08473%0Ahttp://dx.doi.org/10.1016/j.jmb.2009.01.007%0Ahttp://dx.doi.org/10.1016/j.jmb.2012.10.008%0Ahttp://dx.doi.org/10.1038/s4159

Tama, F. J., Santoso, B. R., Mahmudah, R., & Mohtar, M. S. (2024). *Kepatuhan minum obat terhadap kejadian serangan berulang penyakit jantung koroner 1*. *12*(4), 883–892.

Tarawan, V. M., Lesmana, R., Gunawan, H., & Gunadi, J. W. (2020). Gambaran Pengetahuan Pencegahan Penyakit Jantung Koroner pada Warga Dusun III Desa Mekarmanik Kecamatan Cimenyan Kabupaten Bandung. *Jurnal Pengabdian Kepada Masyarakat*, *4*(1), 10–14.

Yekti Widadi, S., Taobah Ramdani, H., & Yusuf Ibrahim, D. (2024). Gambaran Kualitas Hidup dan Perawatan Diri Pada Pasien Gagal Jantung Kongestif Rawat Inap Di Rumah Sakit dr Slamet Garut. *Innovative: Journal Of Social Science Research*, *4*(3), 5739–5763. https://j-innovative.org/index.php/Innovative/article/view/11067

Yuni, S., & Aprianti, M. (2020). Literatur Review: Self Manajemen Penderita Jantung Koroner. *Media Keperawatan: Politeknik Kesehatan Makassar*, *11*(2), 118. https://doi.org/10.32382/jmk.v11i2.1703