



## Self Efficacy On Self Care In Coronary Heart Patients

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### Abstract

*Non-communicable diseases are the leading cause of death in the world, one of the non-communicable diseases is coronary heart disease. Self-efficacy in people with heart disease is defined as confidence in the patient's ability to perform physical activity that can be affected by symptoms or complications of cardiovascular disease. Rehospitalization is not only due to the progression of the disease, but can also be caused by indifference to medication and poor self-care. Self-care is the process of maintaining health through practices that promote health, and manage diseases and symptoms. The study aims to improve the relationship between self-efficiency and self-care in coronary heart patients. The research method used in this study includes quantitative research with a sectional coss study design using a chi-square test with a sample of 70 patients suffering from coronary heart disease in the Hospital Cinere Diagram. Based on the results of the chi-square test that has been carried out obtain a p value of 0.007 or  $& < 0.05$  where this indicates that there is a relationship between self-efficiency and self-care. The conclusion is that self-efficacy has a significant relationship with self-care in patients with coronary heart in Hospital Diagram Cinere*

**Keywords:** *Coronary Heart, Self Care, Self Efficacy*

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## 1. Introduction

Non-communicable diseases are the main cause of death in the world, one of which is cardiovascular disease. One of the non-communicable diseases is Coronary Heart Disease<sup>1</sup>. Heart disease is very difficult to detect, causing many people to die suddenly without realizing that someone has heart disease or has had a heart attack<sup>2</sup>.

Coronary Heart Disease is a heart disease caused by reduced oxygen supply to the heart due to narrowing or blockage of the coronary arteries from the process of atherosclerosis, spasm, or a combination of both<sup>3</sup>. The occurrence of atherosclerosis is caused by the presence of plaque which causes hardening, thickening of the walls of blood vessels and slows or stops blood flow which results in the tissue that is supplied by the arteries experiencing a lack of oxygen and nutrients<sup>1</sup>. Currently, coronary heart disease is a disease that is being faced by various countries in the world, both developed and developing countries<sup>4</sup>.

According to data from WHO (2022), cardiovascular disease claims around 17.9 million lives every year<sup>5</sup>. In the United States alone, cardiovascular disease is the leading cause of death, namely 836,456 deaths and 43.8% of them are caused by coronary heart disease, then in Southeast Asia cardiovascular disease contributes around 25% of the death rate and is increasing<sup>6</sup>. Meanwhile, in Indonesia, according to Riskesdas data, the prevalence of cardiovascular disease, coronary heart disease, remains at 1.5% (2018)<sup>7</sup>, with the highest prevalence in North Kalimantan Province at 2.2%, DIY at 2%, Gorontalo at 2%, and the incidence rate in Java. west of (1.6%)<sup>8</sup>.

Coronary heart disease usually hampers the sufferers activities, their movement becomes limited and they have to deal with treatment, this greatly affects a person's journey in finding the meaning of their life<sup>2</sup>. Increasing life expectancy and quality of life can be influenced by individual perceptions related to life goals, hopes and standards that become the individual's own beliefs (self efficacy)<sup>9</sup>.

Self-efficacy in heart disease sufferers is defined as confidence in the patient's ability to carry out physical activities which is influenced by symptoms or complications





of cardiovascular disease<sup>10</sup>. A study found that self-efficacy is a determinant in motivating people with coronary heart disease to do physical activity, thereby reducing the possibility of recurrence of symptoms of the disease<sup>11</sup>. Rehospitalization is not only caused by disease progression, but can also be triggered by non-adherence to treatment and poor self-care<sup>12</sup>. Self-care is defined as the process of maintaining health through practices that promote health and manage disease and symptoms<sup>13</sup>.

A previous study found that 47.4% of patients with coronary heart disease showed poor self-management<sup>14</sup>. The results of previous research on heart failure patients concluded that self-efficacy influences self-care. Low self-efficacy is associated with poor self-care behaviors, self-care maintenance, and suboptimal self-care management<sup>12</sup>.

Based on previous research, a significant relationship has been found between self-efficacy and self-care in heart failure patients. Therefore, in this study, researchers aimed to expand previous research by evaluating the level of relationship between self-efficacy and self-care in coronary heart disease patients at Diagram Cinere Heart Hospital. This study aims to determine whether self-efficacy also has a relationship with self-care in coronary heart disease, similar to the relationship found in heart failure patients.

## 2. Research Method

The research method used in this research is quantitative with a cross-sectional research design. The research was conducted at Diagram Cinere Heart Hospital in December 2023. The study population consisted of 70 patients who had coronary heart disease. The sampling technique applied was total sampling, where the entire population was sampled as many as 70 people. The research instrument consists of a self-efficacy questionnaire and a self-care compliance questionnaire. Statistical analysis uses the chi-square test.

## 3. Results And Discussions

### a. Result

Table 1. Frequency Distribution of Respondents

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Frequency Distribution	Frequency	Percentage
<b>Gender:</b>		
Male	38	54,3
Female	32	45,7
<b>Age:</b>		
<45 Years	5	7,1
>45 Years	65	92,9
<b>Marital Status:</b>		
Married	49	70
Divorced	20	28,6
Single	1	1,4
<b>Education Status:</b>		
Elementary/Middle School	24	34,3
High School/Vocational School	24	34,3
Diploma	7	10
Bachelor	13	18,6
Postgraduate	2	2,9
<b>Employment Status:</b>		
Working	39	55,7
Doesn't Work	31	44,3

Based on table 1, it shows that the distribution of respondents' gender characteristics shows that there are 38 men (54.3%) and 32 women (45.7%), then the distribution of respondent characteristics based on age of respondents aged >45 years is 65 people. (92.9%), then for <45 years there were 5 people (7.1%), then for the distribution of respondents' marital status characteristics, it was found that 49 respondents were married (70%) and 20 people were divorced (28.6%). %) and single children as many as 1 person (1.4%), then the distribution of educational status characteristics found that respondents with elementary/middle school education were 24 people (34.3%), SMA/SMK were 24 people (34.3%), 7 people had diplomas (10%), 13 people had degrees (18.6%) and 2 people had postgraduates (2.9%), and the distribution of job status characteristics showed that 39 people had working status (55.7%) "while for those who don't work there are 31 people (44.3%).

Table 2. Frequency Distribution of Self Efficacy





Self Efficacy	Frequency	Percentage
Good	41	58,6
Bad	29	40,4
Total	70	100

Based on the data in table t, the frequency distribution of respondents' self-efficacy can be seen. A total of 41 people (58.6%) were categorized as having good self-efficacy, while 29 people (41.4%) were categorized as having poor self-efficacy.

Table 3. Frequency Distribution of Self Care

Self Care	Frequency	Percentage
Good	42	60
Bad	28	40
Total	70	100

Based on the data in table 3, the frequency distribution of respondents' self-care can be seen. A total of 42 people (60%) were categorized as having good self-care, while 28 people (40%) were categorized as having poor self-care.

Table 4. Relationship between Self-Efficacy and Self-Care in Coronary Heart Patients

Self Efficacy	Self Care				Total	p-value	
	Good		Bad				
	F	%	F	%			
Bad	12	41,4	17	58,6	29	100	0,007
Good	30	73.2	11	26,8	41	100	

Based on the data in table 4, it can be seen that 30 people (73.2%) have good self-efficacy and also carry out good self-care. A total of 11 people (26.8%) had good self-efficacy but had poor self-care. Furthermore, there were 12 people (41.4%) with poor self-efficacy but had good self-care, while 17 people (58.6%) with poor self-efficacy also had





poor self-care. The chi-square test results show a p value of 0.007, indicating a significant relationship between self-efficacy and self-care in coronary heart patients

## b. Discussion

Based on the research results, the gender characteristics of respondents showed that the majority of respondents were 38 people (54.3%), 65 respondents aged >45 years (92.9%), the marital status of most respondents was married. 49 people (70%), 24 respondents had elementary/middle school education (34.3%) and 24 people had high school education (34.3%). Previous research suggests that women are at lower risk of developing heart disease compared to men, but when women reach menopause, women's death rates from heart disease are greater than men's<sup>15</sup>. Age is a risk factor for Coronary Heart Disease. The older you get, the greater the amount of plaque that sticks to the walls and causes disruption in blood flow through them<sup>16</sup>.

The connection with research is that gender characteristics can influence the perception and implementation of self-efficacy and self-care in coronary heart patients<sup>17</sup>. There can be differences in self-care approaches between men and women. Coronary heart patients tend to be more likely to be in the older age group. Age can influence the level of self-confidence and self-care patterns in coronary heart patients<sup>18</sup>. Marital status can influence the patient's social and environmental support in carrying out self-care. Support from a partner can play an important role in increasing self-efficacy<sup>19</sup>. Education can influence patients' understanding and ability to carry out self-care. Low levels of education may require a different approach in providing information and support regarding self-care<sup>20</sup>.

The research results showed that the majority, 58.6%, had a good level of self-efficacy, while 41.4% had a poor level of self-efficacy. Meanwhile, in terms of self-care, as many as 60% of respondents were categorized as having good self-care, while the other 40% were categorized as having poor self-care. This shows that the majority of respondents have a good level of self-efficacy and self-care, but there are also some





who still need more attention in this aspect. Based on the results of the chi-square test that was carried out, a p value of 0.007 was obtained, which shows that there is a significant relationship between self-efficacy and self-care in coronary heart patients. This is in line with research that has been conducted previously, where previous research argued that self-efficacy influences self-care<sup>12</sup>.

Individuals with high self-efficacy tend to have strong self-confidence in their ability to overcome the barriers and obstacles they may face in carrying out self-care<sup>21</sup>. Coronary Heart Disease patients with a high socioeconomic level will have good disease management, improved psychological well-being and quality of life, and compliance in rehabilitation. Conversely, if Coronary Heart Disease patients have a low socioeconomic level, they will have poor self-care<sup>22</sup>. Economic stress, such as financial hardship, can cause high levels of stress. This stress can affect self-efficacy and self-care, because a person may be less able to focus on self-care when faced with financial burdens<sup>23</sup>.

Self-care maintenance includes medication adherence and healthy behaviors for example, taking medication, exercising, and following a diet that limits salt consumption<sup>24</sup>. Previous research also explains that someone who has high self-efficacy will be more likely to have confidence and ability to achieve their desires according to their goals. The high level of self-efficacy in an individual cannot be separated from the factors that influence it<sup>25</sup>.

Increasing self-efficacy in heart disease patients can help them manage their health conditions more effectively. Providing clear and in-depth information about heart disease, management of the condition, and preventive measures can give patients the knowledge necessary to plan their own care<sup>26</sup>. Encouraging social support from family, friends, or support groups can increase a patient's self-confidence. Getting support and validation from the people around him can help overcome fears and worries<sup>27</sup>.





Providing positive feedback and reinforcing patient achievements in undergoing self-care can increase self-efficacy. Giving appreciation to their efforts can motivate them to continue taking positive actions<sup>28</sup>. Teaching stress management techniques, such as meditation, relaxation, or light exercise, can help patients deal with stress that can affect self-efficacy<sup>29</sup>. Encouraging patients' active participation in making decisions regarding their care can give them a sense of control and increase self-confidence<sup>30</sup>.

Providing self-monitoring tools, such as symptom logging, blood pressure measurement, or diet logging, can help patients monitor their own progress and increase self-confidence<sup>31</sup>. Actively involving patients in their care and providing appropriate support can help improve self-efficacy, which in turn can contribute to better outcomes in the management of heart disease<sup>32</sup>.

Researchers assume that the higher the self-efficacy of coronary heart patients, the higher the level of patient compliance in carrying out self-care. High self-efficacy describes an understanding or assessment of the high potential of an individual's abilities and the patient's desire to be far away from the symptoms and bad risks that could befall him. This research found a significant relationship between self-efficacy and compliance with self-care in coronary heart patients, so it is important to increase the self-efficacy of coronary heart patients in order to create a good quality of life.

#### 4. Conclusion

Based on the results of research at Diagram Cinere Hospital, it was found that self-efficacy has a significant relationship with self-care in Coronary Heart Disease patients. The chi-square test results show a p value of 0.007 (<0.05), indicating the significance of this relationship. The distribution of respondent characteristics involves the variables age, gender, educational status, marital status and employment status.

#### 5. Compliance with ethical standards

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#### **Disclosure of conflict of interest**

This research activity is a positive thing for all researchers so that conflicts, problems, etc. do not become a problem for all authors.

#### **Statement of informed consent**

Every action we take as authors is a mutual agreement or consent.

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