



The Relationship between Knowledge and Attitude with Hypertension Control Behavior at Muara Bungo Subdistrict in Jambi

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Abstract. Background: According to the Indonesian Ministry of Health in 2019, the number of people with hypertension in the world continues to increase every year. The number of people with hypertension in the world continues to grow every year and it is predicted that by 2025 there will be 1.5 billion people with hypertension and it is estimated that every year 9.4 million people die from hypertension and its complications. According to Riskeudas data in 2023 shows the prevalence of hypertension in Jambi Province reached 28.9%.

Objective: The purpose of this study was to determine the knowledge, attitude with hypertension control behavior at Muara Bungo subdistrict Jambi.

Methods: The research is an analytic survey research using a cross sectional design. A sample of 30 respondents was taken by the accidental sampling method. Data analysis used univariate analysis and bivariate analysis.

Result: The results of the chi-square test analysis shows that knowledge level, attitudes with hypertension control behavior p value was 0.031 and 0.54.

Conclusion: The knowledge level with hypertension control behavior at Muara Bungo subdistrict in Jambi has a significant relationship. Meanwhile, attitudes with hypertension control behavior at Muara Bungo subdistrict in Jambi did not have a significant relationship.

Keywords: Knowledge, Attitude, Hypertension Control Behavior

1 Introduction

Hypertension is a serious disease that is widespread throughout the world. According to the World Health Organization (WHO), in 2012 no less than 1 billion people in the world suffered from hypertension.¹ Hypertension is defined when blood vessels have persistently high blood pressure. That is if on two days of measurement the diastolic blood pressure is ≥ 90 mmHg and/or the systolic blood pressure is ≥ 140 mmHg. The incidence of hypertension according to 2015 WHO information shows approxi-

mately 1.13 billion people in the world have hypertension or equivalent to 1 in 3 people in the world diagnosed with hypertension, there is an increase from 1975, which was 594 people diagnosed with hypertension. The number of people with hypertension in the world continues to grow every year and it is predicted that by 2025 there will be 1.5 billion people with hypertension. There is also an estimate that every year 9.4 million people experience death due to hypertension and its complications. (Ashari & Maria, 2021).

Data from the Indonesian Ministry of Health in 2009 showed that the prevalence of hypertension was 29.6% and increased to 34.1% in 2010. The Indonesian Ministry of Health reported that of the top 10 inpatient diseases in hospitals in 2010, hypertension ranked 7th with a total of 19,874 cases and CFR 4.81%. Of the top 10 hospital outpatient diseases in 2010, hypertension ranked 8th with 277,846 case visits and 80,615 new cases. Essential (primary) hypertension ranked 1st out of the top 10 non-communicable diseases (NCDs) causing hospitalization in Indonesian hospitals in 2009 and 2010 with proportions of 4.19% and 4.39%. Of the top 10 non-communicable diseases (NCDs) causing outpatient care in Indonesian hospitals in 2009 and 2010, essential hypertension (primary) ranked 4th with a proportion of 3.81% and 3.93% (Riskesdas, 2013).²(Hasballah & Tahlil, 2018)

Hypertension is often referred to as the silent killer because it can cause sudden death. If hypertension is not treated and controlled in the long term, it can lead to various complications such as damage to the retinal blood vessels which results in disruption of the visual system, then peripheral vascular disease, kidney failure, stroke, heart disease, and coronary heart disease. In dealing with health problems, one of them is preventive action. Prevention of hypertension can be done with various efforts, comprehensively promotive, preventive and holistic.⁴ To prevent recurrence of the disease or hypertension control must be carried out by all patients suffering from hypertension, so as to reduce the serious increase in blood pressure (BP). However, not all patients with hypertension can control the disease. Because each patient has an attitude and knowledge of hypertension that is not the same in controlling this disease.

Low knowledge of the community, patients and health workers, especially hypertensive patients, is the main cause of uncontrolled blood pressure. Individual knowledge about hypertension can help in efforts to control hypertension because with knowledge individuals will often visit doctors and adhere to treatment. Knowledge and attitudes of the community about hypertension are important factors in achieving blood pressure control.

Based on this study is to determine the relationship between the level of knowledge and attitude towards hypertension control behavior in Muara Bungo Market District, Jambi in 2023.

2 Methods

This type of research is quantitative research with cross sectional design. The research was conducted in the Muara Bungo market sub-district, Bungo City. The research time was conducted in July 2023. The population is the community in Muara Bungo Market District. The sampling method in this study was accidental sampling. The

population is around 20-75 years old. This study consists of variables of knowledge about hypertension. Knowledge is grouped into two parts, namely: low and high knowledge. Low knowledge if the correct answer from the respondent is ≤ 7 . High knowledge if the respondent's answer is > 7 . Attitude variables are grouped into two parts, namely negative attitude and positive attitude. Attitude is grouped into two categories, namely negative attitude and positive attitude. Low knowledge if the correct answer from the respondent with a score ≤ 60 . High knowledge if the respondent's answer with a score > 60 .

3 Results and Discussion

Table 1 Frequency Distribution of Respondent Characteristics

No.	Characteristics	f	%
1.	Age		
	Mature (20-44)	12	40
	Elderly (45-79)	18	60
	Total	30	100
2.	Gender		
	Male	11	36,7
	Female	19	63,3
3.	Education		
	SD	4	13,3
	SMP	11	36,7
	HIGH SCHOOL	11	36,7
	S1	4	13,3
	Total	30	100.0

Table 1 shows that the characteristics of respondents are mostly elderly (60%), for the gender category most of them are female (63.3%). Most respondents have junior and senior high school education. For the last elementary school education with poor control behavior (75%), for the last junior high school education with poor control behavior (81.8%), for the last high school education with good control behavior (63.6%) and for the education of S1 graduates with poor control behavior (100%).

Table 2. Frequency distribution of community knowledge level on hypertension control behavior

Knowledge	f	%
Low	25	83,3

High	5	16,7
Total	30	100.0

Table 2 shows that most people (83.3%) had low knowledge in the market sub-district of muara bungo, Jambi in 2023.

Table 3. Frequency distribution of community attitude towards hypertension control behavior

Attitude	f	%
Negative	2	6,7
Positive	28	93,3
Total	30	100.0

Table 3 shows that most people (93,3%) have a positive attitude in the market sub-district of muara bungo, Jambi in 2023.

Table 4. Relationship between Knowledge Level and Hypertension Control Behavior

knowledge	Behavior				Total		POR (95% CI)	p-value
	Not good		Good					
	f	%	f	%	f	%		
Low	19	76	1	20	20	66,7	12.667	
High	6	24	4	80	10	33,3	(1.177- 136.283)	0,031
Total	25	100	5	100	30	100		

Table 4 shows that the category of low knowledge level with poor control behavior is 19 people (76%) and there are 1 person (20%) with good control behavior. Whereas in the category of high knowledge level with poor control behavior as many as 6 (24%) and there are 4 people (80%) with good control behavior. The value of the Fisher Exact test is 0.031 which means $p < 0.05$ so it can be concluded that there is a significant relationship between knowledge and hypertension control behavior. And the prevalence ratio result is 12.667 with a lower limit of 1,177 and an upper limit of 136,283.

Table 5. Relationship between Attitude and Hypertension Control Behavior

Attitude	Behavior						POR (95% CI)	<i>p-value</i>
	Not good		Good		Total			
	f	%	f	%	f	%		
Negative	2	100	18	64,3	20	66,7	0.900	
Positive	0	0	10	35,7	10	33,3	(0.778- 1.042)	0,54
Total	2	100	28	100	30	100		

Table 5 shows that the negative attitude category with poor control behavior is 2 people (100%) and there are 18 people (64.3%) with good control behavior. Meanwhile, in the positive attitude category with poor control behavior, there were 0 (0%) and there were 10 people (35.7%) with good control behavior. The value of the Fisher Exact test is 0.54 which means $p > 0.05$ so it can be concluded that there is no significant relationship between attitude and hypertension control behavior. And the results of the prevalence ratio are 0.900 with a lower limit of 0.778 and an upper limit of 1.042.

Hypertension is a serious disease that is widespread throughout the world. Hypertension is often referred to as the silent killer because it can cause sudden death. According to the World Health Organization (WHO) in 2012 no less than 1 billion people in the world suffered from hypertension. Hypertension is defined when blood vessels have persistently high blood pressure. The incidence of hypertension according to 2015 WHO information shows approximately 1.13 billion people in the world have hypertension or the equivalent of 1 in 3 people in the world diagnosed with hypertension, there is an increase from 1975 which was 594 people diagnosed with hypertension. There is also an estimate that every year there are 9.4 million people experiencing death caused by hypertension and its complications. Hypertension in Jambi Province in 2018 had a prevalence of 13.07%. Hypertension ranks second out of ten most prevalent diseases in Jambi City.

Data from the Jambi City Health Office revealed that there was an increase in hypertension cases, from 35,468 cases in 2018 to 38,520 cases in 2019, with the most hypertension cases found in the Kebun Handil Health Center. In 2019, Kebun Handil Health Center had 28,160 cases of hypertension. If hypertension is not treated and controlled in the long term, it can lead to various complications such as damage to the retinal blood vessels which results in disruption of the vision system, then peripheral vascular disease, kidney failure, stroke, heart disease, and coronary heart disease. (Ashari et al., 2021). In dealing with health problems, one of them is preventive action. Prevention of hypertension can be done with various efforts, comprehensively promotive, preventive and holistic. To prevent recurrence of the disease or hypertension control must be carried out by all patients suffering from hypertension. In addi-

tion to the knowledge and attitude of patients in controlling hypertension, family support also has a role, this factor can be one of the strongest factors to encourage hypertension patients to control their disease. With the support of family members, it can increase self-confidence and provide motivation for patients to be able to face the problems that occur. Therefore, family support is needed by hypertension patients in long-term and continuous treatment. (Juharni, 2021).

Control behaviors to manage hypertension are managing a healthy diet, eating foods low in salt, low in saturated fat, and rich in fruits, vegetables, whole grains, and low-fat dairy products can help reduce the risk of hypertension. The DASH (*Dietary Approaches to Stop Hypertension*) diet is one of the recommended guidelines for people with hypertension, exercising regularly, regular physical activity, managing weight or reducing weight if excessive can help lower blood pressure and reduce the risk of hypertension, reduce salt consumption, avoid excessive alcohol consumption, manage stress, use relaxation techniques such as meditation, take medication as directed, monitor blood pressure regularly, stop smoking (Sutoni & Cahyati, 2011). (Sutoni & Cahyati, 2021).

This study concluded that people who have a low level of knowledge 83.3% and respondents who have a high level of knowledge 16.7%. In line with research conducted by (Es et al., 2020) most respondents had high knowledge (67.3%), poor knowledge was (32.7%). The results of this study explain that there is a significant relationship between the level of knowledge and hypertension control behavior. In line with research (Ashari, Yuliza & Maria Irma, 2021) the level of knowledge on hypertension control behavior has a significant relationship. According to research (Sunarti & Patimah, 2019) knowledge is a product of information. When information is analyzed, processed, and placed in its place, what is called knowledge emerges. Knowledge related to hypertension is a set of information designed related to hypertension itself including hypertension and its management. (Heriyandi et al., 2018) (Heriyandi et al., 2018) stated that the better the respondent's knowledge about hypertension, the better the respondent's efforts to control his hypertension, especially the problem of hypertension diet.

This study concluded that people who had a positive attitude of 93.3%, a negative attitude of 6.7% regarding hypertension had in line with research (Limbong et al., 2016) respondents with a good attitude were 52 people or 57.8%, and respondents who had an unfavorable attitude were only 38 people or 42.2, so it can be stated that most respondents had a good attitude about hypertension. The results of this study explain that there is no significant relationship between attitude and hypertension control behavior. In line with research (Ashari, Yuliza & Maria Irma, 2021) attitude towards hypertension control behavior has a significant relationship. This shows that the results of the study show that most respondents with a positive attitude, but did not carry out the implementation of hypertension diet therapy. According to Lawrence Green's theory, attitude is one of the predisposing factors that can influence a person's behavior. Attitude is a reaction to reject or accept information received by the mind so that if the information obtained can be understood, it does not necessarily mean that the information is carried out. (Sunarti & Patimah, 2019).

According to research (Daeli, 2017) states that hypertension management in an effort to prevent hypertension by controlling determinant factors. One way to overcome health problems is to prevent the occurrence of hypertension for the community in

general and prevent recurrence in hypertensive patients in particular. Prevention of recurrence or control of hypertension needs to be carried out by all people with hypertension so that there is no more severe increase in blood pressure.(Es et al., 2020).

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5 Conclusions

Based on the results of the study, it can be concluded that most people have low knowledge (83.3%). Most people have a positive attitude (93.3%). There is a significant relationship between the level of knowledge of the community and hypertension control behavior in muara market sub-district bungo, Jambi in 2023. There is no significant relationship between community attitudes and hypertension control behavior in muara bungo market sub-district, Jambi in 2023.

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