

Analysis Adherence Of Hypertension Controlling Blood Pressure In Patients At Puskesmas Pegandon

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Abstract

Hypertension is persistent blood pressure where systolic blood pressure ≥ 140 mmHg and diastolic blood pressure ≥ 90 mmHg. Obedience comes from the rude word obey which means discipline and obedience. The purpose of this research is to determine the relationship between compliance of hypertensive patients in controlling blood pressure in patients at the Brangsong I Health Center. This type of research is quantitative research with a cross sectional approach. Measurement of the level of relationship with compliance using the chi square statistical test with $\alpha = 0.05$. The relationship between medication adherence rates using the Morisky Medication Adherence Scale (MMAS-8) questionnaire. Based on the results of measuring the level of compliance from 50 respondents, there were 36 respondents (72%) had a level of compliance, 14 respondents (28%) had a level of compliance that was less compliant. The relationship between blood pressure control from 50 respondents was 14 respondents (28%) had mild blood pressure, 25 respondents (50%) had moderate blood pressure while 11 respondents (22%) had severe blood pressure. The relationship between adherence to taking medication in controlling the blood pressure of patients at the Brangsong I Health Center is the relationship between adherence to taking medication and blood pressure. There is a relationship between compliance of hypertensive patients in controlling blood pressure in patients at Brangsong I Health Center.

Keywords: Hypertensive Patients, Adherence to Taking Medication, Blood Pressure

INTRODUCTION

Hypertension is a disease that can attack anyone, hypertension is now a global problem because its prevalence continues to increase in line with lifestyle changes (Wijoyo, 2011). According to (Baroroh, 2017), in 2025 the number of people with hypertension is predicted to increase by around 60%. Based on the results of Riskesdas (2018), the prevalence of hypertension at the age of ≥ 18 years in Indonesia is 34.1%. The number of hypertensive patients in Indonesia, only about 48% can control the disease for a long time. According to (WHO, 2012), hypertension has attacked 22% of the world's population and has reached 36% of the incidence of hypertension in Southeast Asia, besides that in the group of hypertension aged over 45 years, cardiovascular disease is the main disease that can cause death. According to (Tatisina, 2020), around 12 million people in the world die every year. This depends on various factors of the patient's hypertension therapy, including the patient's willingness to seek treatment and socioeconomic factors (Dewi et al., 2019).

Hypertensive disease can be influenced by internal factors and external factors, where internal factors include gender, age and genetic factors while external factors such as diet, exercise habits, and others (Sartik et al., 2017). Hypertension or high blood pressure is a condition in which an increase in systolic blood pressure ≥ 140 mmHg and diastolic blood pressure ≥ 90 mmHg with two measurements at intervals of five minutes in a calm or well-rested state. According to (Ministry of Health RI, 2013), an increase in blood pressure that lasts for a long time (persistent) can cause damage to the kidneys (kidney failure), heart (coronary heart disease) and brain (cause stroke) if not detected early and get adequate treatment, to avoid the occurrence of hypertension can be done by adhering to taking medication. According to (WHO, 2003), medication adherence is the biggest factor affecting blood pressure control. Adherence to taking medication in patients with hypertension is very important because by taking antihypertensive drugs regularly can control blood pressure in people with hypertension, so that in the long term the risk of damage to organs such as

the heart, kidneys and brain can be reduced (Dinkes, 2015). According to (WHO, 2003), it is estimated that the average adherence range of taking antihypertensive drugs is 50-70%.

RESEARCH METHODS

The research method carried out is a quantitative method with a type of *cross-sectional* research at the Pegandon Health Center, where to study the dynamics of the correlation between factors and risks with effects, by approaching, observing or collecting data simultaneously at one time.

In this study, the sample method used is a *non-probability sampling* method with the selection of samples taken determined by *the Purposive Sampling* technique. Purposive sampling technique is a data collection technique by determining samples that have been considered. Sample determination using *the slovin* formula.

The population in this study is all hypertensive patients who seek treatment at the Brangsong I Health Center in May-June 2023 as many as 101. The samples in this study were some hypertensive patients at the Brangsong I Health Center. The number of samples can be calculated using the *Slovin* formula can be seen in equation 1, as follows:

$$n = \frac{N}{1+N(d^2)} \dots\dots\dots \text{Equation 1}$$

Information:

n = sample size/number of respondents

N = total population

d = Significant level (10%)

Based on this formula, the calculation of the number of samples in equation 2, as follows:

$$n = \frac{N}{1+N(d^2)} \dots\dots\dots \text{Equation 2}$$

$$n = \frac{101}{1 + 101(d^2)}$$

$$n = \frac{101}{1+101(0,01)}$$

$$n = \frac{101}{2,01}$$

$$n = 50,24$$

The number of samples determined was 50 respondents. The drug adherence data collection technique in this study used the MMAS-8 questionnaire.

RESULTS AND DISCUSSION

a. Characteristics of Respondents

Table 1. Characteristics of respondents by age

Age	N=50	%
31-39 Years	2	4
40-49 Years	10	20
50-59 Years	18	36
>60 Years	20	40
Total	50	100

Based on table 1. showed the age of hypertension patients at the Pegandon Health Center the most at the age of >60 years as many as 20 respondents (40%).

Table 2. Characteristics of respondents by gender

Gender	N=50	%
Man	10	20
Woman	40	80
Total	50	100

Based on table 2. showed gender in hypertensive patients at Pegandon Health Center, the most were female gender with 40 respondents (80%).

Table 3. Characteristics of respondents based on education

Education	N=50	%
No School	2	4
SD	21	42
JUNIOR	20	40
SMA	7	14
College	0	0
Total	50	100

Based on table 3. showed the last education in hypertensive patients at the Pegandon Health Center, the most were in the elementary school category with 21 respondents (42%).

b. Blood Pressure of Hypertensive Patients

Table 4. Blood Pressure of Hypertensive Patients

Blood pressure	Frequency (People)	%
Light	14	28
Keep	25	50
Heavy	11	22
Total	50	100

Based on table 4. showed blood pressure in hypertensive patients at the Pegandon Health Center, the most were in the medium category, amounting to 25 respondents (50%).

c. Suitability of Drugs received by Hypertension Patients

Table 5. Suitability of accepted Drugs

Received drugs	Frequency	%
Captopril	22	44
Amlodipine	28	56
Total	50	100

Based on table 5. showed the suitability of drugs received in hypertensive patients at the Pegandon Health Center, which was most commonly found in amlodipine drugs amounting to 28 respondents (56%).

d. Adherence to Taking Medication

Table 6. Adherence to taking medication

Adherence to taking medication	Frequency (People)	%
Obedient	36	72
Less compliant	14	28
Disobedient	0	0
Total	50	100

Based on table 6. showed adherence to taking antihypertensive drugs at the Pegandon Health Center, the most of which was in the compliance category amounting to 36 respondents (72%).

e. Bivariate Analysis Results

Table 7. The Relationship of Adherence to Taking Medication on Blood Pressure Control in Hypertensive Patients

Adherence to taking medication	Blood pressure						Total	%
	Light weight (%)		Medium (%)		Weight (%)			
	F	%	F	%	F	%		
Obedient	11	22	16	32	9	18	36	72
Less Compliant	3	6	9	18	2	4	14	28
Total	14	28	25	50	11	22	50	100
<i>p-value</i>	0,000							

Based on table 7. The above shows that respondents with adherent category have mild category blood pressure totaling 11 respondents (22%), medium category blood pressure totaling 16 respondents (32%), and heavy category blood pressure totaling 9 respondents (18%), respondents with less compliant compliance have mild category blood pressure totaling 3 respondents (6%), medium category blood pressure totaling 9 respondents (18%), and heavy category blood pressure totaling 2 respondents (4%).

Statistical tests with *chi-square* obtained a *p-value* of 0.000 ($p < 0.05$) showed a relationship between adherence to taking antihypertensive drugs with blood pressure in patients with hypertension

CONCLUSION

From this study, it can be concluded that most patients at the Pegandon Health Center have adherence to taking adherence to taking adherence to taking adherence to taking antihypertensive drugs with blood pressure of hypertensive patients. This is in accordance with statistical tests that state there is a significant relationship between adherence to taking antihypertensive drugs and blood pressure of hypertensive patients, namely with a *p-value* of 0.000 ($p < 0.05$).

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