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# RELATIONSHIP BETWEEN LEVELS OF KNOWLEDGE AND ATTITUDE WITH DRUG COMPLIANCE AMONG PATIENT WITH HYPERTENSION

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## ABSTRACT

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## Keywords:

Knowledge; Drug-taking attitudes; Hypertension. Hypertension or high blood pressure itself can be described as the force of circulating blood against the walls of the body's arteries which are the main blood vessels. The amount of pressure that occurs depends on the resistance of the blood vessels and how intense the heart is to work. To determine the relationship between the level of knowledge and attitudes with medication adherence in patients with hypertension at the Paseh Health Center in 2022. This type of research used a quantitative study with a cross sectional design with a sample of 100 people using accidental sampling. This study shows that knowledge of hypertension sufferers is in the good category, namely 60.0%, the attitude of hypertension sufferers is in the good category, namely 49.0% and compliance with hypertension sufferers is in the obedient category, namely 50.0%. By using the Chi square statistical test where the degree of confidence used is 95% and = 0.05, the p value for knowledge is 0.000 and the P value for attitude is 0.008. So that the null hypothesis is rejected or in other words it is statistically proven. Conclusions and suggestions: the relationship between knowledge and attitudes with medication adherence. Suggestions in this study are expected health workers to continue to carry out outreach activities regarding adherence to taking medication in patients with hypertension.



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### 1. INTRODUCTION

Health is a very basic need for everyone. However, health is often the impact of various problems experienced by individuals and the surrounding environment. but in fact most of them have unhealthy lifestyles such as smoking habits, lack of exercise, lack of activity, obesity, stress and unhealthy eating patterns: consumption of foods high in salt, consumption of foods high in fat. From this unhealthy lifestyle, it will become a source of disease that is often underestimated by the millennial generation, one example is hypertension. Hypertension or high blood pressure is a disease characterized by an increase in blood pressure above normal, with a systolic value >140 mmHg and diastolic >90 mmHg (Ramaiah, 2018).

The percentage of people with hypertension is currently the highest in developing countries. Data from the Global Status Report on Noncommunicable Disease 2010 from WHO states that 40% of hypertension

sufferers are in developing countries, while in developed countries only 35% suffer from hypertension. WHO 2015 data shows that around 1.13 billion people in the world suffer from hypertension. The number of people with hypertension continues to increase every year, it is estimated that by 2025 there will be 1.5 billion people affected by hypertension. The World Health Organization (WHO) estimates that the number of people with hypertension will continue to increase along with the increasing population and cause global public health problems that contribute to the burden of heart disease, stroke, kidney failure, disability and premature death. Hypertension causes about 9.4 million deaths worldwide each year (WHO, 2018).

At Paseh Health Center the prevalence of hypertension sufferers in 2020 is 4453 30.2% in 2021 is 7047 40.7%. After conducting interviews with Hypertension field officers that there are hypertensive patients who have less knowledge about what Hypertension (High Blood Pressure) is, then what are the symptoms and causes. For those who have a low attitude, the support and motivation of the family is very important for their recovery. There are hypertension patients who do not comply with taking medication, they say they are lazy to take medication because the treatment time is so long.

## 2. METHOD

This type of research is an analytical description research with a cross sectional approach. This research design is used to examine an event at the same time or at one time. The dependent an independent variables in this research design were assessed simultaneously (Nursalam, 2017). This study involved 100 respondents. Data collected using questionnaire. Data analyzed by uni-variate and bi-variate analysis using chi-square statistical test.

## 3. RESULT AND DISCUSSION

Total

#### 3.1. Result

## Table 1. Respondent's Knowledge

Knowledge	Frequency (f)	Percentage (%)
Less	9	9
Enough	21	21
Good	60	60
Total	100	100

Based on table 1. about the level of knowledge of respondents at the Puskesmas in 2022, it shows that most of the patients have good knowledge, as many as 60 people (60%).

Motivation	Frequency	Percentage (%)
Low	9	9
Currently	42	42
High	49	49

Table 2. Respondent's Motivation

100

100

Based on table 2. about the attitude of respondents at the Paseh Health Center in 2022, it shows that most of the people with hypertension have good attitudes, namely 49 people (49%).

Table 3. Hypertension of Respondent's Medication Compliance	Table 3.	Hypertension	of Respondent's	Medication	Compliance
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Medication Adherence	Frequency (f)	Percentage (%)
Not obey	21	21
Less obedient	29	29
Obedient	50	50
Total	100	100

Based on table 3. regarding drug adherence in patients with hypertension at the Paseh Community Health Center in 2022, it shows that the majority of hypertension patients are drug compliant as many as 50 people (50%).

- b. Bivariate Analysis
  - 1. The relationship between knowledge and adherence to taking hypertension medication

	Medication Adherence								
Motivation	Not obey		Less obedient		Obedient		Total		P value
	f	%	f	%	f	%	f	%	
Not enough	5	8,3%	0	71,4%	0	0%	9	100%	
enough	7	22,6%	19	61,3%	17	16,1%	31	100%	0,000
Good	9	100%	10	16,7%	52	75,0%	60	100%	
Total	21	21,0%	29	29,0%	50	50%	100	100%	

Table 4. Relationship between knowledge and adherence to taking hypertension medication

Cross tabulation between the level of knowledge and adherence to medication in patients with hypertension at the Paseh Public Health Center in 2022 it can be concluded that from 60 people who have good knowledge, 45 people (75%) are obedient to taking medication, while 10 people (16.7%) are less compliant to take medication. medication, and 5 people (8.3%) did not comply.

By using the Chi square statistical test where the degree of confidence used is 95% and = 0.05, the p value is 0.000 where the p value is < 0.05. So that the null hypothesis is rejected or in other words statistically it means that there is a significant relationship between the level of knowledge and adherence to taking medication in patients with hypertension.

Table 5. Relationship between attitude and adherence to taking hypertension medication

		М	edication						
Motivation	Motivation Not obey		Less obedient		Obedient		Total		P value
	f	%	f	%	f	%	f	%	
Low	2	22,2%	2	22,2%	5	55,6%	9	100%	
Currently	11	26,2%	11	26,2%	20	47,6%	42	100%	0,008
High	8	16,3%	16	32,7%	25	51,0%	49	100%	
Total	21	21,0%	29	29,0%	50	50,0%	100	100	

Cross tabulation between the attitude of adherence to taking medication for hypertension sufferers at the Paseh Health Center in 2022, it can be concluded that of the 49 people who have a good attitude of being obedient to taking hypertension medication, 25 people (51.0%), while 16 people (32.7%) are less compliant with taking medication. medication, and 8 people (16.3%) did not comply with taking hypertension medication.

By using the Chi square statistical test where the degree of confidence used is 95% and = 0.05, the p value is 0.008 where the p value is < 0.05. So that the null hypothesis is rejected or in other words statistically it means that there is a significant relationship between attitudes and adherence to taking hypertension medication.

#### 3.2 Discussion

The results of this study indicate that most of the respondents at the Paseh Health Center have good knowledge, namely 45 respondents, it is known that 75.0% are obedient to taking medication. Knowledge of drugs which includes knowing the meaning of hypertension, classification of hypertension, signs and symptoms of hypertension, prevention of hypertension, how to treat hypertension.

Knowledge is the entire ability of individuals to think in a directed and effective manner, so that people who have high knowledge will easily absorb information, suggestions, and advice. The results of this study are also in line with the theory in Notoatmodjo (2010), which states that the tendency of someone who is highly knowledgeable will tend to have good behavior in terms of health in this case to comply with taking hypertension medication.

The results of this study are also in line with research conducted by Rahayu Khairiah (2018), from 64 respondents it is known that 82.8% of people with hypertension have good knowledge about hypertension. The results of this study are also supported by the research of Taufik Haldi (2021), out of 76 conscientious respondents, the highest level of knowledge is 45 respondents (59%).

Based on the researchers in this study, the knowledge of hypertension patients regarding medication adherence at the Paseh Health Center was good. Patients are able to answer and know what hypertension is,

signs and symptoms of hypertension, prevention of hypertension and treatment of hypertension. Good knowledge can affect compliance in taking medication. Generally someone who has good knowledge will tend to have a good mindset and upbringing so that the patient will be obedient in taking medication. This is also influenced by the education level of hypertensive patients, most of whom graduated from elementary school, so that it will affect the level of knowledge of a patient in terms of understanding and receiving information given regarding medication adherence. The results of this study indicate that 25 sufferers (51.0%) in the Paseh Health Center area have a good attitude towards medication adherence. This good attitude is due to good knowledge about medication adherence so that respondents are aware of the importance of being obedient to taking medication.

Attitude is a readiness to react to an object in a certain way, attitude is an evaluation response to the experience of cognition, reaction, affection, will and past behavior and humans are not born with certain views or feelings, but attitudes are formed throughout their development. The results of this study are in line with Azwar's theory (2011), which states that there is a tendency for someone who has a good attitude about medication adherence, the greater the awareness to comply with taking medication.

The results of this study are in line with research conducted by Isra Miharti (2020), which shows the results of the study with 36 respondents (67%) having a good attitude about medication adherence and 18 respondents 21.9%

who is lacking. The results of this study are also in line with the results of research conducted by Agustina Ratna et al (2021), which explains that 10 respondents (76.9%) have a good attitude and 3 respondents (23.1%) have a bad attitude.

Based on the researcher's assumption, it is very closely related to the use of hypertension medication, attitude is one of the factors in shaping behavior. The attitude of obedience is based on various factors. These factors can be influenced by internal and external factors, internal factors include personality, awareness, understanding, and self-control. Attitude is a behavior shown by someone to fulfill the orders of others. Attitude is behavior that is in accordance with orders to comply with regulations. Supportive attitudes towards the use of hypertension drugs as the level of patients carrying out treatment methods and behaviors suggested by doctors or other people.

The results showed that almost all of the patients in the Paseh Health Center area who had complied with taking hypertension medication, as many as 50 people (50.0%) were obedient to taking medication, measured according to filling out a questionnaire to determine the compliance of a patient with hypertension.

In general, compliance or obedience is defined as someone who gets treatment, carries out a diet, and carries out a lifestyle in accordance with the recommendations for providing health services (WHO, 2013). One of the requirements to improve the patient's quality of life and achieve therapeutic effectiveness is compliance, while one of the causes of treatment therapy failure is patient non-compliance (Gwaadary, 2013).

The results of this study are in accordance with research conducted by Candra Triwahyudi (2017), which states that of the 173 respondents, most of them are compliant with taking medication as many as 111 respondents (64.2%) and the rest are not compliant with taking medication as many as 62 respondents (35.8%). The results of this study are also in line with research conducted by Maryanti (2017) which obtained results from 27 respondents, 25 people (92.6%) were obedient in taking hypertension medication.

Based on the researcher's assumption in this study, out of 100 hypertensive patients aged 56-65 years at the Paseh Patuh Health Center took medication. This is because it is supported by good patient knowledge and attitudes regarding adherence to taking hypertension medication.

The results of this study indicate that most of the respondents at the Paseh Health Center have good knowledge, namely from 60 people who have good knowledge, 45 people (75%) are obedient to taking medication, while 10 people (16.7%) are less compliant with taking medication, and 5 people (8.3%) did not comply. By using the Chi square statistical test where the degree of confidence used is 95% and = 0.05, the p value is 0.000 where the p value is < 0.05. So that the null hypothesis is rejected or in other words statistically it means that there is a significant relationship between the level of knowledge and adherence to taking medication in patients with hypertension.

Knowledge is curiosity through sensory processes, especially in the eyes and ears of certain objects. Knowledge is an important domain in the formation of one's behavior (Donsu, 2017). The results of this study are in line with the theory, namely the respondent's knowledge of medication adherence.

The results of this study are in line with research by Kamal and Afriani (2014) which showed that there was a significant relationship between patient knowledge and adherence to taking hypertension medication (p value 0.000 < 0.05). The results of this study are also in line with research conducted by Hardyani Presticasari (2017) which states that there is a relationship between knowledge about hypertension and adherence to taking antihypertensive drugs at the Gondokusuman 1 Public Health Center with a value (P value of 0.000).

Based on the assumption of the researcher, someone who has knowledge about hypertension, such as the consequences of the disease, if he does not comply with taking medication or does not control blood pressure regularly, it will lead to complications of the disease so they take the time to control blood pressure.

The results of this study indicate that from 49 people who have a good attitude, 25 people (51.0%) are obedient to taking hypertension medication, while 16 people (32.7%) are less compliant with taking medication, and 8 people (16.3%) are not. taking hypertension medication. By using the Chi square statistical test where the degree of confidence used is 95% and = 0.05, the p value is 0.008 where p value < 0.05. So that the null hypothesis is rejected or in other words statistically it means that there is a significant relationship between attitudes and adherence to taking hypertension medication. Based on Bloom's concept, attitude is the second most important factor after the environment that will affect a person's health status. Alport in Notoatmodjo (2010), explains that the attitude has three main components, one of which is the tendency to act, these three components together form a complete attitude (total attitude). In determining this attitude, knowledge, thinking, beliefs, and emotions play an important role. For example in this study, respondents who know adherence to taking hypertension medication will bring respondents to think and try to be obedient to taking medication. The results of this study are in line with the theory, namely the attitude of respondents about adherence to taking medication in patients with hypertension.

The results of the study are in line with research from the Polyclinic of the UKI Hospital with a total of 64 respondents, it is known that the majority of respondents are taking medication with a positive attitude as many as 48 people. The results of statistical tests showed that there was a significant (significant) relationship between respondents' attitudes and medication adherence in hypertension patients at the UKI General Hospital, East Jakarta, which was indicated by a probability value (p-value). The results of this study are also in line with research conducted by Fitrayeni (2021) which states that the results of the chi-square statistical test are known to have p value = 0.034 (<0.5) then H0 is rejected, which means that in this study it can be concluded that there is a relationship between attitudes towards compliance take medicine.

Based on the assumption of the researcher in this study that attitude is related to medication adherence in patients with hypertension at the Paseh Health Center, which means that the better the attitude of the patient, the tendency of the patient to comply with taking medication. Attitude is a readiness or willingness to act, and describes the likes or dislikes of an object. Attitudes will be followed by someone on the basis of liking or disliking something. If a sufferer supports this, then he will behave to carry out something he supports.

#### 4. CONCLUSION

From the results of research conducted at the Paseh Health Center regarding the Relationship between Knowledge and Attitude Levels with Compliance with Taking Drugs in Hypertension Patients at Paseh Health Center in 2022, it can be concluded:

- 1. There is a relationship between knowledge and medication adherence in patients with hypertension with a P value of 0.000.
- 2. There is a relationship between attitude and adherence to medication in patients with hypertension with a P value of 0.008.

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