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# The Effect of the Nurse's Role as an Educator on Adherence to Taking Medication for Hypertensive Patients at RSU Imelda Pekerja Indonesia in 2023

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Keywords: Hypertension ,

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Email: aliasmanharahap99@gmail.co Hypertension is Wrong One disease No contagious that can cause death . Disease This as the silent disease because sufferer No know that himself currently caught symptom hypertension . one \_ condition absolute For can reach effectiveness therapy And increase quality life patient is compliance, meanwhile Disobedient patient in consuming drug is Wrong One factor main reason failure therapy . Role nurse as educator help patient increase knowledge about maintenance And action medical so that patient get information For increase obedience drug to hypertension . Objective in study This is analyze influence role nurse as educator to obedience drink drug on patient hypertension .Method study This is method quantitative with approach cross- sectional conducted pafa 73 respondents sufferer Hypertension at RSU Imelda Pekerja Indonesia. Method study This use Technique data collection is carried out with method provide instruments in the form of questionnaire role nurse And obedience drink drugs that are then tested use Mann-Whitney test . Results study This show role nurse as Educator at Home Sick General Imeld Medan Indonesian workers are good as many as 49 respondents (67.1%), and obedience drink drug on patient Hypertension at RSU Imelda Pekerja Indonesia Medan respondent the most obedience while 60 respondents (82.2%). From the results study This between role nurse with

obedience drink drug on patient with hypertension is there is influence with value (p=0.002). Can concluded that there is influence between role nurse as educator with obedience drink medicine . So the more Good role nurse as educator the more

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#### **INTRODUCTION**

obey patient in drink medicine

Hypertension is one of the non-communicable diseases that can cause death. Word Health Organization (WHO) categorizes this disease as the silent disease because sufferers do not know they have hypertension before checking their blood pressure (Ministry of Health, 2018). One of the absolute requirements to be able to achieve therapeutic effectiveness and improve the quality of life of patients is adherence, while patient non-compliance in taking drugs is one of the main factors causing therapy failure (Sinuraya, 2018). Adherence to medication is the biggest factor affecting blood pressure control. Non-compliance can also be caused by nurses in providing detailed recontrol education, nurses only explain the medications that must be taken, re-control of patients, and symptoms that establish or do not go away. Non-compliance can also occur when individual or group conditions are willing to obey, but there are a number of factors that hinder compliance with the advice or education of health workers provided by health workers, one of which is nurses in running educators (Carpenito, 2019).

The prevalence of hypertension continues to increase from year to year. According to Word Health Organization (WHO) data worldwide around 972 million people or 26.4% of people worldwide suffer from hypertension, this figure is likely to increase to 29.2% in 2025 (Zaenurrohman et al., 2017). As many as 972 million people with hypertension, 333 million are in developed countries

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and the national prevalence of hypertension based on the 2018 Riskesdas states based on the measurement results in the population aged 18 years of 34.1%, the highest in Kalimantan (44.1%), while the lowest in Papua is (22.2%). The number of hypertension cases in Indonesia is 63,309,620 people, while the death rate in Indonesia due to hypertension is 427,218 deaths (Riskesdas, 2018).

In Indonesia, the prevalence of hypertension in Indonesia obtained through a doctor's diagnosis in the population aged 18 years and over is 8.4%. Based on the proportion of history of taking medication and reasons for not taking medication in hypertensive populations based on a doctor's diagnosis or taking medication in 2018 was 54.4% routinely taking medication, 32.3% not routinely taking medication and 13.3% not taking antihypertensive drugs (Riskesdas, 2018).

Adherence to taking medication in hypertensive patients is very important because by taking antihypertensive drugs regularly can control blood pressure in people with hypertension, so that in the long run the risk of damage to organs such as the heart, kidneys, and brain can be reduced. Adherence to treatment of patients with hypertension is important because hypertension is a disease that cannot be cured but must always be controlled so that complications do not occur that lead to death.

According to research by Erni Djibu, et al, 2021 about the effect of the role of nurses on medication adherence of hypertensive patients is (P-value = 0.000) where the results are below 0.005. Of the 60 respondents, 34 people chose nurse roles with both moderate adherence (71.7%) and high adherence (11.7%). While the role of nurses is poor as many as 26 people with low compliance (16.7%). It can be concluded that there is an influence between the role of nurses as educators and adherence to taking medication. So the better the role of nurses as educators, the more obedient patients are in taking medicine at Stikes Widyagama Husada Malang, this is in line with the research of Bhanu Juniarti, et al, 2023 where it was found that the frequency distribution of the level of knowledge of people with hypertension in Talang Jawa Baturaja Village had good knowledge, namely 42 people (54.5%) and a moderate compliance rate of 38 people (49.4%). The results of statistical analysis using the chi square test showed a significant relationship between the level of adherence to taking medication in patients with hyporetention in Talang Village, Java Baturaja (p-value = 0.01). This research can be an input for nurses to be able to continue to educate hypertensive patients to continue to take drugs regularly considering that knowledge can affect drug adherence.

Based on the description above, it can be seen that hypertension is often called the silent killer often without symptoms. Hypertension is a disease that has the highest incidence rate and increases from year to year, the main reason for the increase in hypertension is due to lack of adherence to treatment. Adherence to the treatment of hypertensive patients is important because hypertension is a disease that cannot be cured but must always be controlled so that complications do not occur that lead to death. Non-compliance can be caused by several things, including care in providing education, lack of detailed control, nurses only explain the medicines that must be taken, re-control of patients. Based on the results of a temporary survey conducted by researchers obtained from medical record data at the RSU Imelda Pekerja Indonesia Medan, it was found that 269 patients with inpatient hypertension per January 2022 - May 2023, while for outpatient patients 171 patients. For data on the number of people with hypertension per January 2023 - May 2023, there are 440 patients.

#### **METHOD**

The type of research used in this study is quantitative with a cross-sectional approach to research methods that study the dynamics of correlation between risk factors and effects, using an observational approach or data collection at one time. The subjects used were all patients with hypertension at the RSU Imelda Pekerja Indonesia Medan. The study will be conducted from June to August 2023. This research starts from the initial survey letter out to the preparation of the report.



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The population used in this study was all hypertensive patients treated in the inpatient room of the RSU Imelda Pekerja Indonesia, starting from January 2022 to May 2023, as many as 269 patients and a sample of 73 respondents.

The data collection procedure used in this study was pimer and secondary data collection. Primary data were taken by providing data on the role of nurses as educators and adherence to taking antihypertensive drugs. Secondary data is taken by taking medical record data techniques owned by patients. The independent variable in this study is the role of nurses as educators. The dependent variable in this study was medication adherence in hypertensive patients.

The instrument used in this study, namely the questionnaire, was used in determining the adherence of pharmacological therapies that have been proven validity and reliability have been tested with numerical test results. Univariate analysis is used to describe the characteristics of the subject. The characteristics of the subjects described in this study were name, age, gender, recent education, occupation and duration of treatment of hypertension, type of medication consumed. Bivariate analysis is the relationship between the independent variable and the dependent variable. The purpose of this bivariate analysis is to see the strength of influence between variables.

#### **RESULTS AND DISCUSSION**

#### Analisa Univariat

In univariate analysis, a description of the characteristics of respondents was carried out which included age, gender, recent education, occupation, length of suffering from hypertension, the role of nurses and adherence to taking medication.

**Table 1.** Characteristics of Respondents Based on the Age of Hypertensive Patients at RSU Imelda Pekeria Indonesia Medan in August 2023 (n=73).

Age	Frequency (n)	Percentage %	
20-30 Years	5	6.8	
31-40 Years	9	12.3	
41-50 Years	14	19.2	
51-60 Years	22	30.1	
61-70 Years	23	31.5	
Total	73	100.0	

Table 1 shows the age of the most respondent patients in hypertension at the RSU Imelda Pekerja Indonesia Medan is the age range of 61-70 years as many as 23 respondents (31.5%).

**Table 2.** Characteristics of Respondents Based on Gender of Hypertensive Patients at RSU Imelda Pekerja Indonesia in August 2023 (n=73)

Sex	Frequency (n)	Percentage %	
Man	25	34,2	
Woman	48	65,8	
Total	73	100,0	

Table 2 shows that the gender of the most respondents suffering from hypertension at the RSU Imelda Pekerja Indonesia Medan is the female gender as many as 48 respondents (65.8%).



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**Table 3.** Respondent Characteristics Based on the Last Education of Hypertensive Patients at RSU Imelda Pekeria Indonesia in August 2023 (n=73)

Education	Frequency (n)	Percentage %	
SD	24	32,9	
SMP	25	34,2	
SMA/SMK	22	30,1	
BACHELOR	2	2,7	
Total	73	100,0	

Table 3 shows the last education of the most respondents suffering from hypertension at the RSU Imelda Pekerja Indonesia Medan was junior high school education as many as 25 respondents (34.2%).

**Table 4.** Characteristics of respondents based on the occupation of Hypertensive Patients RSU Imelda Pekerja Indonesia Medan in August (n = 73)

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Work	Frequency ( n)	Percentage %
Housewives	28	38,4
Farmer	34	46,6
Wiraswasta	11	15,1
Total	73	100,0

Table 4 shows the employment of the most respondents suffering from hypertension at RSU Imelda Pekerja Indonesia respondents who work as farmers as many as 34 respondents (46.6%).

**Table 5.** Characteristics of Respondents Based on the Length of Suffering from Hypertension of Hypertensive Patients at RSU Imelda Pekerja Indonesia Medan in August 2023 (n=73)

Long Suffering	Frequency (n)	Percentage %	
1 Year	40	54,8	
2 Years	27	37,0	
3 Years	6	8,2	
Total	73	100,0	

Table 5 shows the length of suffering from hypertension in RSU Imelda Pekerja Indonesia Medan in a span of 1 year there were 40 respondents (54.8%).

**Table 6** Characteristics of Respondents Based on the Role of Nurses as Educators of Hypertensive Patients in <u>Public Houses RSU Imelda Pekerja Indonesia Medan in August 2023 (n=73)</u>

The Role of the Nurse	Frequency (n)	Percentage %	
Always	13	17,8	
Often	36	49,3	
Sometimes	20	27,4	
Never	4	5,5	
Total	73	100,0	

Table 6 shows the role of nurses as educators at RSU Imelda Pekerja Indonesia Medan as many as 36 respondents (49.3).



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**Table 7.** Characteristics of Respondents Based on Adherence to Taking Medication for Hypertensive Patients at RSU Imelda Pekerja Indonesia in August 2023 (n=73)

Adherence to taking medication Low Keep	Frequency (n)	cy (n) Percentage %	
Low	13	17,8	
Keep	60	82,2	
Total	73	100,0	

Table 7 shows medication adherence in hypertensive patients at RSU Imelda Pekerja Indonesia respondents with the most moderate adherence 60 respondents (82.2%).

#### **Bivariat Analysis**

The purpose of this bivariate is to look at the strength of influence between variables. There is an influence between the Independent variable and the Dependent variable using the MannWhitney test. This test was conducted to determine whether there is an influence of the nurse's role as an educator on medication adherence presented through the following table summary.

#### **Bivariat Mann-Whitney Analyzes**

**Table 8**. Cross-influence of the nurse's role as an educator on medication adherence

The Role Of The		Compliance		Total	
Nurse		Low	Keep	- Total	P Value
Often	Count	3	10	13	
	% within nurse roles	23,1%	76,9%	100,0%	
	% within nurse roles	23,1%	16,7%	17,8%	
	% of Total	4,1%	13,7%	17,8%	
Always	Count	5	31	36	
	% within nurse roles	13,9%	86,1%	100,0%	0,002
	% within nurse roles	38,5%	51,7%	49,3%	
	% of Total	6,8%	42,5%	49,3%	
Sometimes	Count	4	16	20	
	% within nurse roles	20,0%	80,0%	100,0%	
	% within nurse roles	30,8%	26,7%	27,4%	
	% of Total	5,5%	21,9%	27,4%	
Never	Count	1	3	4	
	% within nurse roles	25,0%	75,0%	100,0%	
	% within nurse roles	7,7%	5,0%	5,5%	
	% of Total	1,4%	4,1%	5,5%	
	Count	13	60	73	
	% within nurse roles	17,8%	82,2%	100,0%	
	% within nurse roles	100,0%	100,0%	100,0%	
	% of Total	17,8%	82,2%	100,0%	

Based on the results of the Statistics test output, it is known that the value of Asymp. Sig is 0.002 where the result is below 0.005. So it can be concluded that the hypothesis is accepted, thus it can be said that the role of nurses as educators affects medication adherence.

# Discussion

#### **Interpretation and Discussion of Research Results**

The role of nurses as educators for hypertensive patients at RSU Imelda Pekerja Indonesia Medan The independent role of nurses is the role that nurses play in providing nursing care to patients and nurses are fully responsible for the care provided independently (Priharj, 2015). One of

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the independent roles that can be done by nurses as educators can be influenced by many factors, namely age, education, length of work, knowledge, and attitudes taking an important part that can affect the implementation of the nurse's role as an educator in the hospital (Hartatik, 2012).

Based on the results of the study, there was a relationship between the role of nurses as educators for hypertensive patients, it was found that 49 respondents chose good and bad 24 respondents. Based on the results of the study, there was a relationship between the role of nurses as educators against hypertension. The role of nurses as educators, nurses have carried out their duties as educators and provide explanations about hypertension suffered. Researchers argue that respondents who choose the role of nurses are bad because of the influence of several factors such as age, gender, last education and long suffering from hypertension. Patients with a low level of education affect the level of patient knowledge of the disease they are experiencing, so respondents who think the role of nurses is bad because the higher a person's education level, the better his knowledge.

# Adherence Rate of Taking Medication to Hypertensive Patients at RSU Imelda Pekerja Indonesia Medan

Adherence to taking the patient's medication affects the level of success rate of therapy, so patient awareness is needed in carrying out treatment to support the success of therapy and can prevent unwanted effects. Hypertensive disease will not be cured but we can control it obediently in taking medication and maintaining diet. Adherence to taking medication is defined as the behavior of patients who obey all advice and instructions recommended by medical personnel in taking drugs. Based on the results of the study, there is a relationship between the ability to take medication and hypertension. This study was found with 60 respondents with moderate compliance and 13 respondents with low compliance.

#### **Research Limitations**

In data collection in a study conducted at the RSU Imelda Pekerja Indonesia Medan, at the time of giving imformed consent there were several respondents who refused to be respondents. Respondents who refuse to be respondents have reasons because they do not want to be interviewed and do not want to be bothered.

#### **CONCLUSION**

From the research that has been done, it was found that the role of nurses as educators for patients with hypertension at the RSU Imelda Pekerja Indonesia Medan found the role of nurses as good educators. In research that has been conducted, it was found that the level of adherence to taking medication for patients with hypertension at the RSU Imelda Pekerja Indonesia Medan was found to be moderate. The results of statistical tests using the Mann-Whitney test between the role of nurses as educators on medication adherence in patients with hypertension at the RSU Imelda Pekerja Indonesia there was a significant relationship with a value of 0.002 below 0.005 between the role of nurses as educators and medication adherence.

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