

Factors Related to the Level of Patient Adherence in Taking Hypertensive Medication at RSU Imelda Pekerja Indonesia Medan in 2022

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ABSTRACT

This article describes the factors related to the level of patient adherence in taking hypertension medication at RSU Imelda Pekerja Indonesia Medan. This study used quantitative methods with an analytical survey approach and the research design used in this study was Cross Sectional. The sample in this study was 35 people. The results of statistical test analysis using the Chi-Square statistical test where the results showed meaningful relationships for age variables (p value = 0.005), for sex variables (p value = 0.557), for knowledge variables (p value = 0.011), for officer role variables (p value = 0.007) and for family support variables (p value = 0.012).

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INTRODUCTION

Hypertension is a major risk factor for cardiovascular disease and stroke (Feigin VL et al., 2016). The prevalence of hypertension has increased over the past few decades and has become a major health problem due to treatment awareness and still very low levels of hypertension control. Based on Riskesdas data in 2018, the prevalence of hypertension in Indonesia based on measurement results in the population aged 18 years was 34.1%. Hypertension occurs in the age group of 31-44 years (31.6%), 45-54 years old (45.3%) and 55-64 years old (55.2%) (Kepmenkes, 2019). Based on the proportion of history of taking medication and reasons for not taking medication in 2018 was 54.4% routinely taking medication, 32.3% not taking medication regularly and 13.3% not taking antihypertensive drugs (Harahap et al., 2019).

The prevalence of hypertension in North Sumatra reaches 5.52% of the total population in North Sumatra. The prevalence of hypertension in Medan City is 4.97%. The number of patients with hypertension at the Teladan Health Center in 2019 was 842 people and in 2020 there were 1162 people. (Ministry of Health, 2020). Antihypertensive drugs play a role in reducing the incidence of complications caused by unstable blood pressure. Success in treatment in patients with hypertension is influenced by many factors, one of which is the patient's compliance factor in taking antihypertensive drugs (Anwar and Masnina, 2019). Based on medical record data from the RSU Imelda Pekerja Indonesia Medan, the number of patients with hypertension from 2020, 2021, January - May 2022 amounted to 1,309 people, with 678 men and 631 women. Patients aged 15-24 years as many as 13 people, aged 25-44 years as many as 178 people, aged 45-65 years as many as 826 people, and aged >65 years as many as 291 people.

Family support is needed by patients to control the disease. Family support can be in the form of attention about the disease or reminding to take hypertension medication (Efendi and Larasati, 2017). Individuals with high family support feel that others care and need the individual, so this can lead individuals to a healthy lifestyle (Susanto, 2015). Knowledge of hypertension is very influential on the attitude to comply with treatment. The higher the knowledge, the higher the desire to comply with treatment so that the complications caused can decrease. Motivation is a volitional drive that causes a person to do an action to achieve a certain goal (Hanum et al., 2019).

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Identifying factors related to hypertension treatment adherence is the first step in efforts to deal with the problem (Pratama and Ariastuti, 2016). Research conducted by (Rasajati et al., 2015), shows that factors related to hypertension treatment adherence are employment status, distance from home to health services, level of knowledge about hypertension management, motivation for treatment and family support. Many factors both internal factors cause hypertension such as gender, age, genetics and external factors such as diet, exercise habits and others (Sartik et al., 2017).

Research conducted by (Sukma et al., 2018), entitled "Factors Associated with Compliance of Hypertensive Patients in Conducting Therapy at the Pananaran Health Center in Semarang City, where the results of the study of variables related to the compliance of hypertensive patients in conducting therapy between the respondent's education level, respondent's knowledge, respondent's confidence, respondent's motivation and respondent's family support. Research conducted by (Pratiwi et al., 2020), entitled "Factors Associated with Adherence in Undergoing Treatment in Hypertensive Patients at the West Java GKI Pratama Clinic Central Jakarta", the results of the study were obtained in a relationship with the last level of education, socio-economic, level of knowledge about hypertension and motivation for treatment adherence to treatment.

From the many studies that have been conducted by previous researchers regarding factors related to adherence to hypertension patients, and considering the decrease in the number of treatment visits and checking themselves against hypertension status described in the background above, researchers want to conduct research on "factors related to the level of patient adherence in taking antihypertensive drugs". This study aims to identify what factors are related to patient compliance in taking hypertension medication at RSU Imelda Pekerja Indonesia Medan. The factors that will be examined in this study are the relationship of age with medication adherence in hypertensive patients, the relationship of sex with medication adherence in hypertensive patients, the relationship of knowledge with medication adherence in hypertensive patients, the relationship between the role of officers with medication adherence in hypertensive patients, and the relationship of family support with medication adherence in hypertensive patients.

METHOD

This study uses quantitative methods with an analytical survey approach and the research design used in this study is Cross Sectional which is a study to study the dynamics of correlation between age, sex, knowledge, the role of officers and family support dependent variables, namely the regularity of taking medication in patients with hypertension by approach, observation or data collection at once at a time (point time approach), This means that each research subject is only observed once and measurements are made on the character status or subject variables at the same time. The sample in this study was 35 people. The results of statistical test analysis using the Chi-Square statistical test where the results showed meaningful relationships for age variables (p value = 0.005), for sex variables (p value = 0.557), for knowledge variables (p value = 0.011), for officer role variables (p value = 0.007) and for family support variables (p value = 0.012). The research was carried out at RSU Imelda Pekerja Indonesia for 1 (one) month, from June 2022 to July 2022.

RESULTS AND DISCUSSION

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Table 1. The frequency distribution of respondents is based on medication adherence at the RSU Imelda Pekerja Indonesia.

No.	Adherence to taking medication	Total (n)	Percentage (%)
1.	Obedient	15	42.9
2.	Disobedient	20	57.1

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Total 35 100.0

Based on table 1 above, it can be concluded that respondents who are obedient to taking medication as many as 15 respondents (42.9%). While respondents who did not comply with taking medication as many as 20 respondents (57.1%).

Table 2 Frequency distribution of respondents based on age at RSU Imelda Pekerja Indonesia

No.	Age	Total (n)	Percentage (%)
1.	40-59	21	60.0
2.	60-75	14	40.0
Total	Total	35	100.0

Based on table 2 above, it can be concluded that respondents aged 40-59 years were 21 respondents (60.0%). While those aged 60-75 years as many as 14 respondents (40.0%). The results of statistical tests obtained p value = 0.005 can be concluded that there is a significant relationship between age and adherence to taking drugs at the RSU Imelda Pekerja Indonesia.

This study is not in line with the study (Pramana et al., 2019), entitled Factors Affecting Medication Adherence of Hypertensive Patients Prolanis Participants at the Pringapus Health Center, Semarang Regency, the results of the study obtained no age relationship with patient medication adherence (p value = 0.56). Based on the results of the study, it can be concluded that most of the respondents were aged 40-59 years. Hypertension can occur at the age of under 60 years. Many factors such as unhealthy behavior such as alcohol consumption. Smoking and obesity. Age is one of the factors associated with the incidence of hypertension, where the older a person gets older will affect the performance of the heart and circulatory system, many factors cause the decline resulting from a history of disease, and caused by behavior and habits of consumption of foods that contain a lot of fat so that fat accumulation in blood vessels (Fryar et al., 2019).

Table 3. Frequency distribution of respondents by gender at RSU Imelda Pekerja Indonesia

No.	Gender	Total (n)	Percentage (%)
1.	Man	16	45.7
2.	Woman	19	54.3
Total	Total	35	100.0

Based on table 3 above, it can be concluded that there were 16 respondents (45.7%) who were male. While the female sex was 19 respondents (54.3%). The results of the statistical test obtained p value = 0.557 can be concluded that there is no significant relationship between sex and adherence to taking hypertension medication at the RSU Imelda Pekerja Indonesia. This study is in line with research conducted by (Syamsi, 2019), with the title Behavioral Determinants Associated with Adherence to Taking Medication in Hypertensive Patients (Study in the Jagir Health Center Area of Surabaya City), the results of the study had no sex relationship with adherence to taking hypertension medication (p value = 0.309).

Based on the results of the study, it can be concluded that most of the respondents are female. Hypertension occurs in many women due to many factors that cause this, one of which is a decrease in estrogen levels. Gender is also not a parameter of the high incidence of hypertension in the community, because the increase in hypertension can be caused by many factors such as behavior, history of disease and irregularity in treatment (Abramson et al., 2018).

Table 4. The frequency distribution of respondents is based on knowledge at the RSU Imelda Pekerja Indonesia.

No.	Knowledge	Total (n)	Percentage (%)
1.	High knowledge	17	48.6
2.	Low knowledge	18	51.4
	Total	35	100.0

That based on table 4. Above, it can be concluded that respondents who have high knowledge as many as 17 respondents (48.6%). While respondents who have low knowledge as many as 18 respondents (51.4%). The results of the statistical test obtained p value = 0.001 can be concluded that there is a significant relationship between knowledge of medication adherence at RSU Imelda Pekerja Indonesia Medan. This research is in line with research conducted by (Harahap et al., 2019), entitled "Hubungan Pengetahuan Penderita Hipertensi tentang Hipertensi dengan Kepatuhan Minum Obat Antihipertensi di Wilayah Kerja Puskesmas Kampa Tahun 2019", The results of the study were that there was a relationship between knowledge and adherence to taking antihypertensive drugs (p value = 0.014).

Research by (Haldi et al., 2020), titled "Hubungan Pengetahuan dan Sikap Pasien Hipertensi Terhadap Kepatuhan Penggunaan Obat Amlodipin di Puskesmas Arjuno Kota Malang", The results of the study there was a relationship of knowledge to medication adherence (p value = 0.031). Knowledge can be provided by conducting health counseling that is carried out regularly. A person's knowledge of a hypertensive disease is important. By knowing about hypertension, people will understand how to prevent recurrence of hypertension. Increasing knowledge in the community also needs to be supported by related parties to convey information related to disease, through information media in the form of leaflets, posters and can be done with counseling.

Table 5. The frequency distribution of respondents is based on the role of officers at the RSU Imelda Pekerja Indonesia

No.	Role of the officer	Total (n)	Percentage (%)
1.	High	30	85.7
2.	Low	5	14.3
	Total	35	100.0

Based on table 5 above, it can be concluded that the role of officers is high as many as 30 respondents (85.7%). While the role of officers is low as many as 5 respondents (14.3%). The results of the statistical test obtained p value = 0.007 can be concluded that there is a significant relationship between the role of officers on adherence to taking medication at RSU Imelda Pekerja Indonesia Medan. This study is not in line with research conducted by (Muthmainnah et al., 2019), entitled the relationship between the role of family and the role of health workers in adherence to treatment of people with hypertension in the work area of the Sangurara Health Center in Palu City, the results of the study are that there is a relationship between the role of officers and treatment compliance obtained (p value = 0.038).

A role is the behavior expected of an individual occupying a particular social position or status. A role is a comprehensive pattern of behavior that is socially recognized, providing a means to identify and place individuals in society (Augustin, 2020). The role of health workers such as checking blood pressure, administering drugs and conducting health counseling. The role of officers is very important in efforts to prevent and manage hypertension. Efforts are made in the form of providing information on the recurrence of the disease, as well as the treatment provided. Patients with hypertension are given direction in treatment efforts considering that hypertension requires

routine treatment. And here sometimes people do not know it and assume hypertension is only treated once when the patient feels symptoms of hypertension.

Table 6. Frequency distribution of respondents based on Family Support at RSU Imelda Pekerja Indonesia

No.	Family support	Total (n)	Percentage (%)
1.	High	22	62.9
2.	Low	13	37.1
	Total	35	100.0

Based on table 6 above, it can be concluded that those who received high family support were 22 respondents (62.9%). Meanwhile, those who received low family support were 13 respondents (37.1%). The results of the statistical test obtained p value = 0.012 can be concluded that there is a significant relationship between family support for medication adherence at the RSU Imelda Pekerja Indonesia.

This study is in line with research conducted by (Nuratiqa et al., 2020), entitled "Factors Associated with Adherence to Taking Antihypertensive Drugs", the results of the study are related to family support with adherence to taking antihypertensive drugs (p value 0.021). Research conducted by (Ardiyantika, 2019) entitled "Factors Associated with Treatment Adherence of Hypertensive Patients at the PTM Posbindu in Sidorejo Village, Geneng District, Ngawi Regency", the results of the study are that there is a relationship between family support for Hypertension Treatment Adherence at the PTM Posbindu in Sidorejo Village, Geneng District, Ngawi Regency (p value 0.001).

The family is the smallest unit of the community. The family is an institution that concerns people's lives. From a healthy family will create a healthy community and vice versa. While a role is something that is expected normatively from a person in a particular social situation in order to meet expectations. Family roles are specific behaviors expected by a person in a family context (Padila, 2016).

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Table 7. The relationship between age and medication adherence at the RSU Imelda Pekerja Indonesia.

No	Age	Adherence to taking medication				Total	p Value
		Disobedient		Obedient			
		N	%	N	%	n	%
1.	40-59	8	38,1	13	61,9	21	100,0
2.	60-75	12	85,7	2	14,3	14	100,0
	Total	20	57,1	15	42,9	35	100,0

Based on table 7 above, it can be concluded that respondents aged 40-59 years with drinking adherence (compliance) as many as 13 respondents (61.9%) and medication adherence (non-compliance) as many as 8 respondents (38.1%). While respondents aged 60-75 years with adherence to taking medication (adherence) as many as 2 respondents (14.3%) and adherence to taking medication (non-adherence) as many as 12 respondents (85.7%). The results of statistical tests obtained p value = 0.005 can be concluded that there is a significant relationship between age and adherence to taking medication at the RSU Imelda Pekerja Indonesia Medan.

Table 8. Sex relationship with medication adherence at RSU Imelda Pekerja Indonesia

No	Gender	Adherence to taking medication				Total		P Value
		Disobedient		Obedient		N	%	
		N	%	n	%			
1.	Man	10	62,5	6	37,5	16	100,0	0,557
2.	Woman	10	52,6	9	47,4	19	100,0	
	Total	20	57,1	15	42,9	35	100,0	

Based on table 8 above, it can be concluded that respondents with male gender (non-compliant) took medicine as many as 10 respondents (62.5%), and respondents with male gender (obedient) took medicine as many as 6 respondents (37.5%). While respondents with female gender (non-compliant) took medicine as many as 10 respondents (52.6%) and respondents with female gender (obedient) took medicine as many as 9 respondents (42.9%). The results of the statistical test obtained p value = 0.557 can be concluded that there is no significant relationship between sex and adherence to taking medication at RSU Imelda Pekerja Indonesia Medan.

Table 9 Relationship of knowledge with medication adherence at RSU Imelda Pekerja Indonesia

No	Knowledge	Adherence to taking medication				Total		p Value
		Disobedient		Obedient		N	%	
		n	%	n	%			
1.	High knowledge	14	77,8	4	22,2	18	100,0	0,011
2.	Low knowledge	6	35,3	11	64,7	17	100,0	
	Total	20	57,1	15	42,9	35	100,0	

Based on table 9 above, it can be concluded that respondents with low knowledge (non-compliance) taking medication as many as 14 respondents (77.8%), and low knowledge (compliance) taking medication as many as 4 respondents (22.2%). While respondents with high knowledge (non-compliance) taking medicine as many as 6 respondents (35.3%) and high knowledge (obedient) taking oabat as many as 11 respondents (64.7%). The results of the statistical test obtained p value = 0.001 can be concluded that there is a significant relationship between knowledge of medication adherence at RSU Imelda Pekerja Indonesia Medan.

Table 10. The relationship between the role of officers and adherence to taking medication at the RSU Imelda Pekerja Indonesia.

No	Role of the officer	Adherence to taking medication				Total		P Value
		Disobedient		Obedient		N	%	
		n	%	n	%			
1.	High	8	80,0	3	20,0	11	100,0	0,007
2.	Low	6	46,7	18	53,3	24	100,0	
	Total	14	57,1	21	42,9	35	100,0	

Based on table 10 above, it can be concluded that respondents with a low officer role (non-compliant) took medicine as many as 4 respondents (80.0%) and respondents with a low officer role (obedient) took medicine as many as 1 respondent (20.0%), while respondents with a high officer role (non-compliant) took medicine as many as 14 respondents (46.7%) and respondents with a high officer role (obedient) took medicine as many as 16 respondents (53.3%). The results of the statistical test obtained p value = 0.007 can be concluded that there is a significant relationship between the role of officers on medication adherence at the RSU Imelda Pekerja Indonesia.

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Table 11. The relationship between family support and medication adherence at the RSU Imelda Pekerja Indonesia.

No	Family support	Adherence to taking medication				Total	p Value	
		Disobedient		Obedient				
		n	%	n	%			n
1.	High	11	84,6	2	15,4	13	100,0	0,012
2.	Low	9	40,9	13	59,1	22	100,0	
	Total	20	57,1	15	42,9	35	100,0	

Based on table 11 above, it can be concluded that respondents with low family support (non-adherence) took medication as many as 11 respondents (84.6%), and with low family support (adherent) took medication as many as 2 respondents (15.4%). While respondents with high family support (non-adherence) took medication as many as 9 respondents (40.9%) and with high family support (adherent) took medication as many as 13 respondents (59.1%). The results of the statistical test obtained p value = 0.012 then it was concluded that there was a significant relationship between family support for medication adherence at the RSU Imelda Pekerja Indonesia.

CONCLUSION

Based on the results of the study, it can be concluded that there is a significant relationship between age, knowledge, family support, the role of officers and family support on adherence to taking hypertension medication at the RSU Imelda Pekerja Indonesia Medan. The results of statistical test analysis using the Chi-Square statistical test where the results showed meaningful relationships for age variables (p value = 0.005), for sex variables (p value = 0.557), for knowledge variables (p value = 0.011), for officer role variables (p value = 0.007) and for family support variables (p value = 0.012).

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