
THE RELATIONSHIP OF FAMILY ROLE AND COMPLIANCE WITH HYPERTENSION MEDICATION IN THE ELDERLY IN THE WORKING AREA OF THE BATU AJI HEALTH CENTER BATAM CITY 2024

Ernalis¹, Nurhafizah Nasution², Ika Novita Sari³

*ernalis1981@gmail.com*¹, *nurhafizah.nst@univbatam.ac.id*², *ikanovitasari@univbatam.ac.id*³
^{1,2,3}*Department of Nursing Science, Faculty of Medicines, Universitas Batam, Kepulauan Riau, Batam 29464, Indonesia.*

**Corresponding Author :*

Ernalis

Email: ernalis1981@gmail.com

Abstract

Based on the results of a preliminary data survey conducted on May 15 2024 in the Batu Aji Community Health Center working area on 20 elderly patients who came to have their health checked and elderly who were taking hypertension medication, 17 out of 20 elderly said they forgot to take their medication. Compliance with taking hypertension medication is an individual behavior. To take medicines according to therapy and health recommendations. Compliance is important because hypertension is an incurable disease and can lead to death if not controlled. This research aims to determine the relationship between the role of the family and compliance with taking hypertension medication in the elderly in the working area of Batu Aji Health Center, Batam City, Province in 2024. The design of this research is quantitative with a cross-sectional approach, the sample population was 32 respondents with a sampling technique using consecutive sampling. The research results showed that of the 32 respondents studied, the frequency of good family roles in taking hypertension medication was 23 respondents (74.2), and 2 respondents (3.9%) were not complying with taking hypertension medication. Meanwhile, 2 respondents (3.9) were less likely to comply with taking hypertension medication, and 5 respondents (18.0%) were less likely to comply with taking hypertension medication. Based on statistical tests, it is known that H_a is accepted and H_o is rejected, where there is a significant relationship between the role of the family and compliance with taking hypertension medication in the elderly in the working area of the Batu Aji Community Health Center, Batam City with a p-value of 0.002 (0.05). The conclusion of the research is the role of the family. Good practice can increase compliance with taking hypertension medication in the elderly. Suggestions are expected from the Batu Aji Community Health Center, Batam City, to provide health promotions about the importance of taking antihypertensive medicines to improve the health and well-being of hypertensive patients, thereby increasing the cure rate.

Keywords: Role of the Family, Compliance with Hypertension Treatment in the Elderly

INTRODUCTION

Hypertension is a fairly high health problem in the world. Two out of five adults worldwide have high blood pressure (Chacko & Jeemon, 2020). In 2015, there were 1.13 billion adults with hypertension, up from 594 million in 1975 (World Health Organization/WHO, 2021). National Indicator Survey findings show a 34.1% increase in the number of people with hypertension. According to the 34.1% prevalence of hypertension, 8.8% of people with the condition, 13.3% of those with the diagnosis do not take medication, and 32.3% do not take medication regularly (Ministry of Health of the Republic of Indonesia, 2023).

The results of the Riskesdas for the Riau Islands Province found that the prevalence of hypertension based on a doctor's diagnosis for elderly people with hypertension aged 60-74 years was 23.31%. Prevalence of Hypertension based on the proportion of regularly measuring blood pressure in the elderly according to the Riau Islands Province, which is routinely 5.5%, sometimes 51.1%, and never 43.5%. Based on initial data collection in the Batu Aji Community Health Center working area, Batam City, targeting the elderly. In the Batu Aji Community Health Center working area of 100 people, hypertension cases in the elderly increased from 60 patients in 2022 to 85 patients in 2023. Meanwhile in 2024 from January-July there were 109 patients (Riskesdas 2024).

The role of the family in compliance with taking medication among family members who have hypertension, namely that after being given education, the number has increased significantly. Continuous education is carried out to remind family members that hypertension is a chronic disease that causes complications and requires

lifelong medication. Conditions that still have quite high morbidity and mortality rates due to non-compliance in taking medication which results in serious complications such as heart failure, kidney failure, and stroke require special attention in preventive efforts involving all elements of society, one of which is strengthening the role of the family (Laili, et al 2022).

Based on the results of a preliminary data survey conducted on May 15 2024 in the Batu Aji Community Health Center working area on 20 elderly patients who came to have their health checked and elderly people who were taking hypertension medication, 17 out of 20 elderly people said they forgot to take their medication, this was because the family, namely children or the grandson did not remind the elderly to take his medicine. The elderly said that the family often takes them to the health center and also tells the elderly what food or drink must be limited so that it does not increase. The elderly said that the family pays attention in the form of reminding them to take their medicine, but sometimes the elderly still forget if they are not reminded to take their medicine and the family also listens to the elderly's complaints when they feel sick and when the elderly have problems in their lives. Another elderly person said that he stopped taking his medicine because he thought that if he continued taking the medicine his kidneys would be damaged.

Based on the description above, researchers are interested in researching the relationship between the role of the family and compliance with taking hypertension medication in the elderly in the working area of the Batu Aji Community Health Center, Batam City, Riau Islands Province in 2024.

MATERIALS AND METHODS

This research was carried out at the Batu Aji Community Health Center, Batam City, Riau Islands Province in 2024 using the Consecutive Sampling method. The respondents for this research were 32 families in the Batu Aji Community Health Center working area. The study was conducted in June 2024. The data collection tool used a questionnaire filled out by respondents, with data analysis using univariate analysis to determine the distribution frequency of independent or dependent variables and bivariate analysis to see the relationship between independent and dependent variable.

RESULTS AND DISCUSSION

1. Research Results

Based on the results of research entitled "The relationship between the role of the family and compliance with taking hypertension medication in the elderly in the working area of the Batu Aji Community Health Center, Batam City, Riau Islands Province in 2024". Respondent frequency distribution data was obtained based on research results, as follows:

a. Univariate Analysis

In this study, there were two characteristics of respondents, namely the role of the family and compliance with taking hypertension medication in the elderly, as shown in the following table:

Table 1 Frequency Distribution Based on family roles in the Batu Aji Community Health Center working area, Batam City N=32

Family Role	Frequency	%
Good	25	78.1
not enough	7	21.9
Total	32	100.0

Based on table 1, it shows that of the 32 respondents studied, the frequency

of respondents with a good family role was 25 respondents (78.1%), while there were 7 respondents (21.9%) with a poor family role.

Table 2 Frequency Distribution Based on compliance with taking hypertension medication among the elderly in the Batu Aji Community Health Center working area Batam City N=32

Compliance with Taking Hypertension Medication	Frequency	%
Obedient	25	78.1
not obey	7	21.9
Total	32	100.0

Based on table 2, it shows that of the 32 respondents studied, the frequency of respondents who adhered to taking hypertension medication was 25 respondents (78.1%), while the number of respondents who did not comply with taking hypertension medication was 7 respondents (21.9%).

b. Bivariate Analysis

Bivariate analysis is an analysis carried out to determine the relationship between 2 variables. In this analysis, two measurements are taken for each observation. In bivariate analysis, the samples used can be paired or independent according to the treatment. Bivariate analysis is a type of analysis that is used according to the condition of many variables. This seemingly simple analysis can produce very useful tests. The bivariate analysis in this study aims to determine the relationship between the role of the family and compliance with taking hypertension medication among the elderly in the work area of the Batu Aji Community Health Center, Batam City, Riau Islands Province in 2024.

The statistical test used is the chi-square test.

Table 3 Relationship between the role of the family and compliance with taking hypertension medication among the elderly in the Batu Community Health Center working area Aji Batam City

Family Role	adherence to taking hypertension medication						value
	Obedient		Not obey		Total		
	F	%	F	%	F	%	
Good	23	74.2	2	3.9	25	78.1	0.002
not enough	2	3.9	5	18.0	7	21.9	
Total	25	78.1	7	21.9	32	100	

Based on table 3, it shows that of the 32 respondents studied, the frequency of good family roles in taking hypertension medication was 23 respondents (74.2), 2 respondents were not complying with taking hypertension medication (3.9%). Meanwhile, 2 respondents (3.9) did not comply with taking hypertension medication, 5 respondents (18.0%) did not comply with taking hypertension medication.

The test results using chi-square showed a p value = 0.002. Because the significance value is $0.002 < (0.05)$, H_a is accepted, which means that there is a relationship between the role of the family and compliance with taking hypertension medication in the elderly in the Batu Aji Community Health Center working area, Batam City.

DISCUSSION

a. The Role of the Family in the Batu Aji Health Center Working Area, Batam City.

Friedman (1998) said that family roles are not carried out separately by each family member but are shared by members of a

group/family. However, sometimes, the role changes with conditions and situations. This can be known if a family member is sick. The role of the family during health and illness is a primary role, namely being a nurse.

Based on the research results, it was found that of the 32 respondents studied, the frequency of respondents with a good family role was 25 respondents (78.1%), while there were 7 respondents (21.9%) with a poor family role. A good family war provides support by taking family members to health services, helping them pay for treatment, and reminding them to take medication (Laila, et al. 2024). Meanwhile, the role of the family is said to be lacking if the family does not provide a good example. The family's role in adherence to hypertension medication must be supported by education, knowledge, and work. It can be said that the role of the family is very important in influencing behavior and attitudes regarding adherence to taking medication (Safita Arum, V. 2022). Family has a big influence on the health of family members. Hypertension is a chronic disease that requires continuous and lifelong medication. Those who live with their families will get social support or good support from their families to help them form obedient habits in taking daily medication, for example serving low-salt foods, reducing fatty foods, reminding them of their medication-taking schedule according to doctor's recommendations despite signs and symptoms. Symptoms do not appear

and encourages immediate control if the drug runs out. The family has a role in providing care and health maintenance for family members. Family members can recognize if there is a disturbance in the health development of other family members, one of which is the symptom of hypertension. Families can make the right decisions regarding health service actions, take them to health services, help with the costs of taking medication, remind them to take medication and provide and maintain a home atmosphere that is always conducive to health and emotional development. Family members can provide support and a caring attitude to other members who suffer from hypertension. (Taher, et, al, 2016; E. Puspita, 2017).

Individual prevention and control of blood pressure starts from the desires and awareness of hypertension sufferers. Prevention and control of hypertension can be done individually by changing healthy patterns, avoiding high-fat foods, limiting salt consumption, adhering to the recommended diet, doing regular exercise, and having regular blood pressure checks (Kadir, 2019).

b. Compliance with Taking Hypertension Medication in the Elderly

Compliance with taking hypertension medication in the elderly is the behavior of the elderly in taking medication according to the recommended schedule and dosage. Elderly people are considered compliant if they take medication according to the rules

and at the right time. Compliance with taking medication is very important for hypertensive elderly people to control blood pressure and prevent complications. Hypertension in the elderly can trigger heart attacks, strokes, kidney failure, blood vessel damage, blindness, impaired cognitive function, impaired quality of life, and decreased life expectancy (Ulfa, N. M., & Nugroho, I. 2021).

Based on the research results, it was found that of the 32 respondents studied, the frequency of respondents who adhered to taking hypertension medication was 25 respondents (78.1%), while the number of respondents who did not comply with taking hypertension medication was 7 respondents (21.9%). One of the factors behind the incidence of non-compliance with drug consumption patterns is the presence of incorrect information about drugs, either due to communication factors between health workers and patients and families, inadequate explanations, or differences of opinion between health workers and patients. Compliance is the patient's ability to take medication according to the recommendations set by health workers. Compliance can be measured and observed directly. Health care literature states that compliance is directly proportional to the goal of taking medication achieved according to the Putri program (2015).

Compliance with taking medication for hypertension is very necessary. Hypertension sufferers must control their blood pressure regularly and

take medication to maintain optimal blood pressure targets. Pharmacological therapy is considered to be the main factor in the overall reduction in morbidity and mortality associated with hypertension because it can help reduce 30-40% of the incidence of stroke, 20-25% of the incidence of myocardial infarction, and more than 50% of the incidence of congestive heart failure (Yudanari, 2015). This is a challenge for patients and families to be able to maintain motivation to adhere to taking medication for many years. The family plays an important role in the treatment and prevention of disease to improve the health of other family members. Patients who have support from family show improved care than those who do not receive support from family (Efendi & Larasati, 2017).

Respondents with higher education will have broader knowledge than respondents with lower education levels. The level of education can influence a person's ability and knowledge to implement healthy living behavior, especially preventing hypertension. The higher the level of education, the higher a person's ability to maintain a healthy lifestyle (Febiyuni, et al, 2023).

c. Relationship between family roles and adherence to taking hypertension medication in the elderly

Research results (Koyongian, et al 2015). Statistical analysis using the chi-square test obtained a p-value = 0.000, which means the p-value is smaller than α (0.05) so that H_0 is rejected, so it can be concluded that

there is a relationship between the role of the family and compliance with treatment for hypertension patients in Batu Village, South Likupang District, Minahasa Regency. North. Based on the results of research conducted on hypertensive patients in Batu Village, South Likupang District, North Minahasa Regency, it was found that the majority of family roles were not good and were categorized as not complying with treatment, there were 19 respondents (29.7%), whose family roles were not good and were categorized as not complying with treatment. There were 4 respondents (6.2%), while there were 6 respondents (9.4%) who had a good family role and were not obedient to treatment, and 35 respondents (54.7%) had a good family role and were obedient to treatment.

Of the 32 respondents studied, for the frequency of good family roles in complying with taking hypertension medication, there were 23 respondents (74.2), and 2 respondents (3.9%) who did not comply with taking hypertension medication. Respondents thought that the patient felt bored with taking medication, but the results were not there. Meanwhile, 2 respondents (3.9) did not comply with taking hypertension medication, and 5 respondents (18.0%) believed that taking too many medicines would cause kidney damage. The test results using chi-square showed a p-value = 0.002. Because the significance value was $0.002 < (0.05)$, H_a was accepted, which means that there is a relationship

between the role of the family and compliance with taking hypertension medication in the elderly in the working area of the Batu Aji City Health Center. Batam. The results of this research are in line with those conducted by Koyongian, et al (2015) in North Minahasa, Hastuti, et al (2016) in Tangerang, and Susanto (2015), in South Kalimantan). The three researchers concluded that there was a significant relationship between the role of the family and compliance with taking medication for hypertension sufferers.

Family social in the form of caring, attention, affection, enthusiasm, and being a good listener can influence compliance with treatment for hypertension sufferers. The existence of family social support given to hypertension sufferers will help hypertension sufferers comply with taking their medication. Family social support is the first social support received by hypertension sufferers with health problems where the family has a very strong influence on the health development of family members who experience hypertension. The family is also the people closest to hypertension sufferers in paying attention to the entire health of hypertension sufferers in taking medication. Wahyuni, S., & Utami, S. (2024).

CONCLUSIONS AND RECOMMENDATIONS

1. Conclusion

Based on the results of research conducted regarding "the relationship between the role of the family and the presence of taking

hypertension medication among the elderly in the working area of the Batu Aji Health Center, Batam City in 2022" it can be concluded that:

- a. Good frequency distribution of family roles was found for 25 respondents (78.1%).
- b. Obtained a frequency distribution of 25 respondents (78.1%) who adhered to taking hypertension medication.
- c. There is a relationship between the role of the family and the presence of hypertension medication for the elderly in the working area of Batu Aji Health Center, Batam City. with a p-value of $0.002 < 0.05$.

2. Recommendations

- a. For the Batu Aji Community Health Center

To further increase hypertension sufferers' ability to take medication and adopt a healthy lifestyle by providing education about hypertension and its treatment, and working together with the patient's family and appointing a family member to be the supervisor of taking antihypertensive medication.

- b. For Hypertension Sufferers

It is recommended that hypertension sufferers increase compliance with taking medication to avoid increased blood pressure or complications.

- c. For Uniba

It is hoped that the results of this research can be used as knowledge and reference material in the teaching and learning process in the field of death science, especially

including drinking deaths in hypertension sufferers.

d. For further research

This research can be used as reference material for future researchers regarding the relationship between the role of the family and the presence of taking hypertension medication in the elderly and it is recommended that future researchers use other variables such as age, education, work, length of suffering, motivation and family support which can influence drinking compliance medication for hypertensive patients.

REFERENCE

- Efendi, H., & Larasati, T. (2017). Dukungan Keluarga Dalam Manajemen Penyakit Hipertensi. *Jurnal Majority*, 6(1), 34-40.
- Febiyuni, N., Waluyo, K. O., & Minarti, M. (2023). Kepatuhan Minum Obat Pada Klien Hipertensi Di Wilayah Kerja Puskesmas Wonokusumo Surabaya. *Jurnal Keperawatan*, 17(1), 20-29.
- Hastuti, Dkk (2016). *Hubungan Dukungan Keluarga Dan Pengetahuan Pasien Dengan Kepatuhan Minum obat Pasien Hipertensi Di Puskesmas Pegirian Surabaya* (Doctoral Dissertation, Universitas Airlangga).
- Kadir, S. (2019). Pola Makan Dan Kejadian Hipertensi. *Jambura Health And Sport Journal*, 1(2), 56-60.
- Koyongian, A. S., Kundre, R., & Lolong, J. (2015). Hubungan Peran Keluarga Dengan Kepatuhan Berobat Pasien Hipertensi Di Desa Batu Kecamatan Likupang Selatan Kabupaten Minahasa Utara. *Jurnal Keperawatan*, 3(3).
- Kurniapuri Dan Supadmi, (2017). Hubungan Pelayanan Informasi Obat Terhadap Kepatuhan Minum Obat Pasien Hipertensi Di Rsud Penajam Paser Utara. *Jurnal Ilmiah Manuntung*, 3(1), 7-13.
- Laili, N., Lestari, N., & Heni, S. (2022). Peran Keluarga terhadap Kepatuhan Mengkonsumsi Obat Anti Hipertensi pada Pasien Hipertensi. *Jurnal Abdi Masyarakat ERAU*, 1(1), 7-18.
- Mursiany Et Al., (2013). Gambaran Tingkat Kepatuhan Minum Obat Pasien Hipertensi Lansia Di Puskesmas Alalak Selatan Banjarmasin. [Http://Www. Akfar-Isfibjm. Ac. Id](http://www.akfar-isfibjm.ac.id).
- Puspita, E., Oktaviarini, E., & Santik, Y. D. P. (2017). Peran Keluarga Dan Petugas Kesehatan Dalam Kepatuhan Minum obat Penderita Hipertensi Di Puskesmas Gunungpati Kota Semarang. *Jurnal Kesehatan Masyarakat Indonesia*, 12(2), 25-32.
- Putri, Q. R., Raharjo, B. B., & Ningrum, D. N. A. (2015). Faktor-Faktor Yang Berhubungan Dengan Kepatuhan Minum obat Pada Penderita Hipertensi Diwilayah Kerja Puskesmas Kedungmundu Kota Semarang. *Ujph* 4 (3).
- Safita Arum, V. (2022). *Asuhan Keperawatan Keluarga Pada Ny. I Dengan Terapi Kompres Air Hangat Untuk Mengurangi Nyeri Kepala Pada Penderita Hipertensi* (Doctoral dissertation, Politeknik Yakpermas Banyumas).

- Susanto, Y. (2015). Hubungan Dukungan Keluarga Dengan Kepatuhan Minum Obat Pasien Hipertensi Lansia Di Wilayah Kerja Puskesmas Sungai Cuka Kabupaten Tanah Laut. *Jurnal Ilmiah Manuntung*, 1(1), 62-67.
- Ulfa, N. M., & Nugroho, I. (2021). *Metode Medication Picture Kombinasi Pill Count Dalam Meningkatkan Kepatuhan Minum Obat Oral Antidiabetes Dan Oral Antihipertensi Pada Pasien Lansia*. Penerbit Graniti.
- Wahyuni, S., & Utami, S. (2024). Hubungan Tingkat Pengetahuan Keluarga Dengan Keptuhan Minum Obat Pada Pasien Skizofrenia Di Rumah Sakit Umum Daerah Sumbawa. *Jurnal Kesehatan Samawa*, 9(1), 1-13.