



Overview of medication compliance in hypertension patients at haji Adam Malik Hospital Medan 2022

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ABSTRACT

Hypertension is a disease or disorder in which the blood vessels experience a continuous increase in pressure. Due to an increase in blood pressure which is getting higher, the heart will work hard to pump blood, to avoid this from being bad for the heart and other organs, it is necessary to do treatment, namely by obediently taking the medicine that has been recommended by the doctor. Compliance with taking medication is the behavior of patients who obey all advice and instructions recommended by medical personnel, such as doctors and pharmacists regarding everything that must be done to achieve treatment goals. This type of research uses descriptive research methods. The sampling technique in this study was to use a purposive sampling technique with a total of 30 respondents. The research instrument used was a questionnaire Morisky Medical Adherence Scale (MMAS-8). The results of this study indicate that of the 30 respondents, 21 respondents (70.0%) took medication in the high category and the least moderate adherence was 9 respondents (30.0%). It is hoped that the results of this study can become material or learning material for nursing students to control blood pressure in hypertensive patients.

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1. INTRODUCTION

Hypertension is a disease or disorder in which the blood vessels experience a continuous increase in pressure. Due to an increase in blood pressure, the heart will work harder to burn blood throughout the body. Hypertension is also known as the silent disease because the patient will not know that he has hypertension before checking his blood pressure (Sukma, et al 2018).

World Health Organization (WHO) data for 2018, proves that around 1.13 billion people in the world have hypertension, which means that 1 out of 3 people in the world is diagnosed with hypertension. The number of hypertensive patients continues to increase every year, it is estimated that in 2025 there will be 1.5 billion people affected by hypertension, and it is calculated that every year 10.44 million people die from hypertension and its complications (Kemenkes, 2019).

According to the American Heart Association (AHA), the American population aged over 20 years suffer from hypertension has reached up to 74.5 million people, but almost 90-95% of cases have no known cause. Hypertension has resulted in the death of around 8 million people each year, of which 1.5 million deaths occur in Southeast Asia, where one third of the population suffers

(Nelwan, 2019). In Indonesia, the number of hypertension in the elderly is 63.5% (Indonesian Health Profile, 2018). Meanwhile, in the Riau Islands, hypertension problems amounted to 57.6% (Riau Archipelago Health Office, 2018). Likewise, in the city of Batam, there were 54,424 cases of hypertension in the elderly, and in the Sekupang Health Center there were 6,525 cases. Meanwhile, the highest number of elderly people affected by hypertension is in the Tanjung Riau sub-district, totaling 30 people (Batam Health Office Profile, 2019).

Compliance with taking medication for hypertensive patients is a very important thing to do. Because people who have hypertension cannot be cured, but must comply with taking medication and control blood pressure or be controlled so that complications do not occur and increase mortality. Compliance with taking medication plays an important role in the long-term treatment of hypertension. Compliance also requires support from the family to provide motivation, support from health workers and education also influences treatment (Rusida, et al 2017).

The impact of patient compliance in taking antihypertensive drugs is that it can affect blood pressure to normal and will gradually prevent negative effects from other organs of the body. Hypertension drugs known today have been proven to be able to control blood pressure in hypertensive patients and also play an important role in reducing the risk of cardiovascular complications. However, the use of antihypertensive drugs alone is not enough to produce an effective control effect if it is not supported by adherence to taking hypertension medication (Susanto, et al 2018).

The non-adherence of hypertensive patients in taking medication can have enormous negative effects, such as the emergence of complications. Impact Non-compliance will result in patients suffering from diseases such as myocardial infarction, stroke, acute kidney failure, coronary heart disease, atrial fibrillation, this can increase the workload of the heart, and can increase morbidity, mortality and treatment costs. Because the impact of non-adherence to taking hypertension medication is very large for health, so we must be able to control blood pressure by obediently taking hypertension medication according to doctor's recommendations given especially for patients who have long suffered from hypertension (Oktaviani, Zunnita and Handayani, 2020).

Treatment of hypertension can also be done by adopting a healthy lifestyle and taking antihypertensive medication, so that it will be easy for patients to deal with hypertension. To reduce patients suffering from complications, such as heart disease, stroke, will affect the treatment that has been done. The success of treatment in hypertensive patients is influenced by several factors, one of which is adherence in taking the drug. Compliance with medication (medication compliance) is taking hypertension drugs prescribed by a doctor and the correct dosage in treatment will only be effective if you comply with the provisions in taking the drug. Several factors that influence compliance include knowledge, motivation, and family support (Hanum, et al 2019).

Based on research conducted by Siregar (2021), obtained data for hypertension patients in 2020 at Haji Adam Malik General Hospital Medan, namely 312 inpatients and 971 outpatients and a mortality rate of 56 patients. Hypertension patient data obtained in January 2021 were 24 inpatients and 106 outpatients and the death rate was 2 patients (Medical Record Installation of Haji Adam Malik General Hospital Medan, 2021). To reduce the risk of relapse and rehospitalization, the authors assume that this phenomenon can be corrected by complying with the medication recommended by the doctor, and maintaining body stability from excessive body activity. Based on the description above, the researcher is interested in conducting research on the description of medication adherence in hypertensive patients at Haji Adam Malik General Hospital Medan.

2. RESEARCH METHOD

This type of research uses descriptive research methods. Researchers conducted this study on patients at the Haji Adam Malik General Hospital in Medan. This research was conducted on May 17-18 2022. The population in this study was 971 patients with a sample of 30 patients. The sampling technique is the Purposive Sampling Technique. In this study, univariate analysis included data and

respondents based on demographic data, namely age, gender, religion, ethnicity, education, income, occupation, length of time suffering from hypertension.

3. RESULTS AND DISCUSSIONS

Table 1. Frequency Distribution of Respondents Based on Demographic Data Age, Religion, Ethnicity, Gender, Occupation, Education, Monthly Income and Length of Suffering from Hypertension Adherence to Taking Medication in Hypertensive Patients at Haji Adam Malik General Hospital Medan in 2022.

Characteristics	Frequency	Percent (%)
Age		
30-40	0	0
40-50	4	13.3
≥ 50	26	86.7
Total	30	100
Religion		
Christian Protestant	18	60.0
Catholic	1	3.3
Islam	11	36.7
Total	30	100
Ethnic group		
Toba Batak	17	56.7
Karo Batak	9	30.0
Java	3	10.0
Pakistan	1	3.3
Total	30	100
Gender		
Man	23	76.7
Woman	7	23.3
Total	30	100
Work		
Government employees	5	16.7
Self employed	12	40.0
Farmer	9	30.0
Doesn't Work	4	13.3
Total	30	100
Education		
SD	2	6.7
SMP	9	30.0
SMA	12	40.0
Diploma (D3)	4	30.0
Bachelor	3	13.3
Total	30	100
Monthly income		
≤ 2 million/month	20	66.7
≥ 2 million/month	6	20.0
Not Earning	4	13.3
Total	30	100
Long Suffered from hypertension		
1-5 year	20	66.7
≥ 5 year	10	33.3
Total	30	100

Based on Table 1. shows that from 30 respondents, there were no respondents aged 30-40 years, 41-50 years as many as 4 respondents (13.3%) and aged ≥ 50 years as many as 26 respondents (86.7%). Religious data for Protestant Christians were 18 respondents (60.0%), Catholicism was 1 respondent (3.3%), and Islam was 11 respondents (36.7%). Data on the Toba Batak ethnicity were 17 respondents (56.7%), Karo Batak ethnicity 9 respondents (30.0%), Javanese ethnicity 3 respondents (10.0%) and Pakistani ethnicity 1 respondent (3.3%) . Data for male respondents were 23 respondents (76.7%) and female respondents were 7 respondents (23.3%). Data on the employment of

Government employees respondents were 5 respondents (16.7%), Entrepreneurs were 12 respondents (40.0%), farmers were 9 respondents (30.0%) and not working were 4 respondents (13.3%). Education data for elementary school respondents were 2 respondents (6.7%), junior high school respondents 9 respondents (30.0%), senior high school 12 respondents (40.0%), diploma (D3) 4 respondents (13.3%) and bachelor degree 3 respondents (10.0%). Data on respondents' monthly income of ≤ 2 million/month were 20 respondents (66.7%), income per month ≥ 2 million/month were 6 respondents (20.0%) and did not earn as many as 4 respondents (13.3%). Data on respondents who had suffered from hypertension for 1-5 years were 20 respondents (66.7%) and for a long time suffering from hypertension > 5 years were 10 respondents (33.3%).

Table 2. Frequency Distribution of Respondents Based on Medication Compliance in Hypertension Patients at Haji Adam Malik General Hospital Medan in 2022

Category	Frequency	Percent (%)
Medication adherence		
Tall	21	70.0
Currently	9	30.0
Low	0	0
Total	30	100

Based on table 1. showed that out of 30 respondents of hypertensive patients who adhered to taking medication, there were no low categories, 21 respondents (70.0%) in the high category and 9 respondents (30.0%) in the moderate category. Researchers assume that adherence to taking medication in hypertensive patients is greatly influenced by how to properly treat/treat patients, as well as taking medication regularly that has been recommended by a doctor. This was found in data from research instruments that had been filled in by respondents showing adherence to taking medication for hypertension patients in the high category, including: they said in the last 2 weeks they had never missed taking medication (86.7%), when their condition improved they never stop taking medication (83.3%), they don't feel bothered about undergoing treatment such as taking medication every day (83.3%), and they never/rarely have difficulty remembering taking medication (83.3%).

In line with the research results of Fauziah & Rahmawati, (2019), it shows that the level of medication adherence in hypertensive patients affects the success rate of therapy so that patient awareness is needed in carrying out treatment to support the success of therapy and can prevent unwanted effects from occurring. Hypertension cannot be cured, but blood pressure can be controlled by adjusting lifestyle and adherence to taking medication as recommended so that blood pressure remains within normal limits and does not cause damage to other organs.

According to research by Indriana et al, (2020), it shows that the characteristics of 79 respondents at Hospital X Cilacap for a high level of adherence were 36 respondents (45.6%), moderate compliance were 29 respondents (36.7%), and low compliance as many as 14 respondents (17.7%). This study is the same as the results of Bianti's research, (2015) regarding adherence to taking medication, there are sufferers who are already aware of the consequences of their illness so they are obedient and take medication regularly.

In terms of age, it shows that of the 30 respondents, the most age ≥ 50 years is 26 respondents (86.7%). Researchers assume that the older the patient, the longer they seek treatment so that they have more experience in carrying out treatment and know more about the consequences of the disease they are experiencing so that at that age they are no strangers to the treatment they are doing. In line with research conducted by Fauziah & Rahmawati, (2019) the highest level of compliance is in the age group ≥ 50 years. This is due to information and experience on the importance of treatment received by respondents in hypertension. The results of the research by Nurmalita et al, (2019) said that the respondents in the study were dominated by the middle age group (80%). According to Aripin (2015), Individuals aged 45 years and over have a 90% risk of suffering from hypertension. With age, a degenerative process occurs, namely a decrease in the

elasticity of the blood vessel walls, so that the arterial pressure is higher. Aging also causes disruption of neurohormonal mechanisms such as the renin-angiotensin-aldosterone system and also causes increased peripheral plasma concentrations and also the presence of glomerulosclerosis due to aging and intestinal fibrosis resulting in increased vasoconstriction and vascular resistance, resulting in increased blood pressure.

In terms of religion, it shows that of the 30 respondents, the most Protestant Christians are 18 respondents (60.0%). Researchers assume that they are able to accept their situation and draw closer and ask God for healing, and that does not mean that other religions cannot accept their situation but it just so happened that when conducting the research, the majority of respondents were Protestant Christians.

In terms of ethnicity, it shows that of the 30 respondents, the most are Toba Batak, 17 respondents (56.7%). The Toba Batak tribe has a cultural pattern that is upheld in every region, one of which is that in holding a big party they provide all special needs, namely pork, alcoholic beverages, where the Toba Batak tribe is very closely related to obedience in following customs. Their life expectancy is very high, they work hard to earn money to meet their needs and are ambitious in achieving big things like what they want they should be able to work hard and do things that can make what they want can be achieved. Thus it can be explained that the Toba Batak tribe suffers more from hypertension in this study due to their diet, stressful lifestyle, and cultural patterns that are required to follow customs.

In line with research conducted by Harianja et al, (2021), based on research results it was found that out of the 48 respondents studied, the majority of respondents had a nutritious diet of 39 respondents (81.25%). Of the 39 respondents (81.25%), 11 respondents (22.91%) had a nutritious diet and did not experience hypertension and 28 respondents (58.34%) had a nutritious diet and experienced hypertension. Based on the results of statistical test calculations, the p-value was obtained, namely $0.017 < 0.05$, so it can be concluded that there is a relationship between diet and the incidence of hypertension in the Toba Batak people.

In terms of gender, it was shown that of the 30 respondents, the majority were male, with 23 respondents (76.7%). Researchers assume that men suffer more from hypertension because of a lifestyle that tends to increase blood pressure, namely smoking behavior, drinking alcohol accompanied by unhealthy foods, and eating patterns that are not maintained. make high cholesterol, and consume excess salt. Several studies have almost entirely compared men and women. Cases of hypertension are easier to find in men because of problems at work which are vented by smoking and drinking alcohol accompanied by unhealthy foods. The impact is that blood pressure becomes high, because men do more strenuous activities so fatigue accompanied by an unhealthy lifestyle is a factor in hypertension. The ratio of the increase in blood pressure in men reached 2.29 for the increase in systolic blood pressure and 3.76 for the increase in diastolic blood pressure. This is because the resting heart rate and cardiac index in men are lower and the peripheral pressure is higher than in women (Louisa et al, 2018).

In terms of work, it shows that of the 30 respondents, most are self-employed, 12 respondents (40.0%). Researchers assume they meet more with other people so that more information is obtained so that they can add insight into knowledge. In terms of education, it was shown that out of 30 respondents, 12 respondents (40.0%) had high school education at most. Researchers assume that high school education is already able to judge which one is better and which one is worse related to the health experienced, the higher one's education, the more knowledge one gets. In line with research conducted by Pramana et al, (2019) said education can provide assessment of hypertension knowledge, the importance of taking hypertension medication according to the rules, and it is also easier for the person to receive information. The learning process will affect a person's knowledge and awareness to make changes and improve health. Khuzaima & Sunardi, (2021) Said the educational process can involve a series of activities, so that an individual will gain better compliance, understanding and insight including in terms of adherence and attitude towards drug information.

In terms of the income of the respondents, it was shown that out of the 30 respondents, there were 20 respondents (66.7%) with a monthly income of ≤ 2 million/month. Researchers assume that a low economic level can result in patients not being able to buy drugs that are not covered by BPJS and transportation costs every time they go to the hospital for treatment.

In the review of the duration of suffering from hypertension, it was shown that of the 30 respondents, the most respondents had suffered from hypertension for 1-5 years, as many as 20 respondents (66.7%). Researchers assume that the longer a person suffers from hypertension, the more experience he has with the disease, taking medication, and the schedule for taking medication is used to being able to adapt and be able to accept his current situation. In line with the research of Indriana et al, (2020), said that the long suffering of hypertensive patients is very supportive of knowledge in using drugs. Factors that influence a person's knowledge are experience and level of education. The longer a person suffers from hypertension, the experience of the disease will also increase. The more experience a person has, the higher his knowledge will be.

4. CONCLUSION

Based on the results of the study of 30 respondents it was concluded that the results showed adherence to taking medication in hypertensive patients at Haji Adam Malik General Hospital Medan in 2022 with the most high adherence of 21 respondents (70.0%) and at least 9 respondents (30.0%). Suggestions for further research are expected to be able to add other variables that might also affect many things in this study. For example regarding the relationship of family support with medication adherence in hypertensive patients. Having family support can have a positive impact on sufferers so as to increase adherence in taking medication. Then also apply a healthy lifestyle in terms of food consumed every day.

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