

The influence of the behavior of hypertensive patients on efforts to minimize stroke attacks in community health centers

Ri Sidomulyo Riau

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ABSTRACT

Hypertension is a disease that arises due to the interaction of various risk factors that a person has. This disease can be experienced by anyone, especially older people. The method in this research is a type of correlation research which aims to analyze the influence of the behavior of hypertensive patients on efforts to minimize stroke attacks at the Ri Sidomulyo Riau Community Health Center in 2023. The population of this study was 1532 people. The sample in this study amounted to 39 people based on purposive sampling technique. The data used is primary by distributing questionnaires to respondents. The results obtained from the knowledge of hypertensive patients regarding dietary management were quite good for the majority, as many as 21 people (53.8%), The majority of hypertensive patients' knowledge about exercise is quite good, 17 people (43.6%), the majority of hypertensive patients' knowledge about weight loss is quite good, 20 people (51.3%) and the majority of hypertensive patients' knowledge about avoiding stress is not good, 17 people. (43.6%). So it can be concluded from this research that there is an influence on the behavior of hypertensive patients on efforts to minimize stroke attacks based on diet regulation, regular exercise and weight loss in the majority which is quite good, while the majority of stress management is not good. Health workers at the Ri Sidomulyo Riau Community Health Center are expected to be able to provide more complete and comprehensive health information.

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1. INTRODUCTION

Hypertension causes high rates of morbidity (sickness) and mortality (death). Hypertension is a disease that arises due to the interaction of various risk factors that a person has. According to WHO, hypertension can be experienced by anyone, especially the elderly population, therefore this disease is a disorder that has quite high rates in the world, ranging from 10-20% of the entire population over 20 years of age (Bangun, 2019). In developed countries such as the United States, it is estimated that 20% or one in 5 (five) people suffer from hypertension. This situation reflects that hypertension in developed countries is the most dominant health problem and requires serious treatment (Valmer, 2018).

In Indonesia, data obtained from the results of methodological research conducted by experts, it is estimated that the population aged 20 years and suffering from hypertension is 1.8-2.86%. However, most studies state 8.6-10%. The percentage of patients in urban areas is greater than the number of patients in rural areas (Dalimartha, 2018). The highest prevalence ranges from 6 to 15% but the extreme figures are low, such as in Ungaran, Central Java, 1.8%, Balim Valley, Jaya Wijaya Mountains, Irian Jaya, 0.6%, and Talang, West Sumatra, 17.8%. It is evident here, the three figures reported, West Sumatra show high figures. Therefore, it needs to be investigated further, as is the relatively very low number (Armylawati, 2017).

A survey conducted (Diwanto, 2015) found that the prevalence of hypertension without or with signs of hypertension was 33.3%. Of these cases, it turns out that 68.4% had mild hypertension

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(diastolic 95/104 mmHg), 28.1% had moderate hypertension (diastolic 105/129 mmHg) and only 3.5% had severe hypertension (diastolic equal to or greater than 130 mmHg). Hypertension that can be identified by sphygmomanometer measurements is classified by WHO with an age limit of between 40-60 years, which is said to be normal, namely if the systolic < 140 and diastolic < 90 mmHg, the border between normal and hypertension is if the systolic is 141-149 and diastolic 91-94 mmHg, and high or hypertension, namely if the systolic is > 160 mmHg and the diastolic is > 95 mmHg.

Until now, efforts to both prevent and treat hypertension have not been completely successful, due to inhibiting factors such as lack of knowledge about hypertension (understanding, signs and symptoms, causes and effects, complications) and also its treatment. Currently, the death rate due to hypertension in Indonesia is very high. The number of hypertensive patients worldwide is estimated at 972 million people or the equivalent of 26.4% of the adult population. The prevalence rate of hypertension in Indonesia, based on the 2017 Riskesdas, reaches 30% of the population. Of that number, 60% of hypertensive patients end up having a stroke (Ismail, 2019).

The number of hypertension patients is estimated at 15 million people but only 4% have controlled hypertension. The prevalence is 6-15% in adults, 50% of whom are not aware of being hypertensive patients so they tend to develop severe hypertension because they do not avoid and do not know the risk factors. World Health Organization/WHO data shows that hypertension is responsible for 62% of strokes and 49% of ischemic heart disease. Not controlling blood pressure properly in a hypertensive patient is also a very big problem (Armylawati, 2017).

The death rate due to hypertension is very high. The number of hypertensive patients worldwide is estimated at 972 million people or the equivalent of 26.4% of the adult population. The prevalence rate of hypertension in Indonesia, based on Riskesdas 2017, reaches 30% of the population. Of that number, 60% of hypertensive patients end up having a stroke. In 2018, Dr Sardjito Hospital treated at least 724 cases of stroke. This number has increased sharply since 2014 when there were only 300 cases. In DIY, currently the potential for stroke reaches 12% for the elderly (Ismail, 2019).

From the data obtained by researchers when conducting an initial survey at the Ri Sidomulyo Riau Community Health Center, data was obtained that in 2023, patients suffering from hypertension will rank 4th in the data on the 10 largest diseases at the Ri Sidomulyo Riau Community Health Center. The number obtained during the 6 months from July to December 2022 was 7,378 people. Of the 10 people interviewed during the initial survey when asked questions about minimizing strokes due to hypertension, 4 people answered reducing eating meat, salt and coconut milk foods, 3 people answered trying to maintain weight and 3 people answered trying to exercise. From the data obtained, researchers want to analyze the behavior of hypertensive patients regarding efforts to minimize stroke attacks at the Ri Sidomulyo Riau Community Health Center in 2023.

2. METHOD

The type of research is correlation which aims to analyze the influence of the behavior of hypertensive patients on efforts to minimize stroke attacks at the Ri Sidomulyo Riau Health Center in 2023. The research was carried out at the Ri Sidomulyo Riau Health Center. The research was conducted in April – August 2023. The research population was all hypertensive patients who came for treatment to the Ri Sidomulyo Riau Community Health Center. The population from September 2022 – January 2023 is known to be 1532 people. Sampling in this study used a purposive sampling technique, in this study there were 39 people (Notoadmojo, 2015).

3. RESULTS AND DISCUSSION

Frequency Distribution and Percentage of Respondents Based on Demographic Data at Ri Sidomulyo Riau Community Health Center

Table 1. Frequency Distribution and Percentage

No	Demographic Data	F	%
1.	Age		
	a. 40-45 years old	5	12.8%
	b. 46-50 years old	12	30.8%
	c. 51-55 years old	15	38.5%
	d. 56-60 years old	7	17.9%
	Total	39	100%
2.	Gender		
	a. Man	17	43.6%
	b. Woman	22	56.4%
	Total	39	100%
3.	Education		
	a. JUNIOR HIGH SCHOOL	8	20.5%
	b. SENIOR HIGH SCHOOL	21	53.8%
	c. PT	10	25.6%
	Total	39	100%
4.	Work		
	a. IRT	17	43.6%
	b. Private	13	33.3%
	c. Civil servants	9	23.1%
	Total	39	100%

It is known that the majority of respondents aged 51-55 years were 15 respondents (38.5%), based on gender the majority were women as many as 22 respondents (56.4%), based on education level the majority had high school education as many as 21 respondents (53.8%) and based on the majority's occupation as housewives, 17 respondents (43.6%).

Frequency Distribution and Percentage of Hypertension Patients' Knowledge about Regular Exercise at Ri Sidomulyo Riau Community Health Center

Table 2. Frequency Distribution and Percentage of Hypertension

No.	Knowledge of Regular Exercise	F	%
1.	Lack of knowledge	12	30.8%
2.	Knowledge is sufficient	17	43.6%
3.	Good knowledge	10	25.6%
	Total	39	100%

It is known that the majority of respondents' knowledge about regular exercise is sufficient, as many as 17 respondents (43.6%).

Frequency Distribution and Percentage of Hypertension Patients' Knowledge about Weight Loss at Ri Sidomulyo Riau Community Health Center

Table 3. Frequency Distribution and Percentage of Hypertension Patients'

No.	Knowledge about Weight Loss	F	%
1.	Lack of knowledge	10	25.6%
2.	Knowledge is sufficient	20	51.3%

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3.	Good knowledge	9	23.1%
Total		39	100%

It is known that the majority of respondents' knowledge about weight loss is sufficient, as many as 20 respondents (51.3%).

Frequency Distribution and Percentage of Hypertension Patients' Knowledge about Stress Management at Ri Sidomulyo Riau Community Health Center

Table 4. Frequency Distribution and Percentage of Hypertension Patients' Knowledge

No.	Knowledge about Avoiding Stress	F	%
1.	Lack of knowledge	17	43.6%
2.	Knowledge is sufficient	14	35.9%
3.	Good knowledge	8	20.5%
Total		39	100%

It is known that the majority of respondents' knowledge about avoiding stress is less than 17 respondents (43.6%).

Description of hypertensive patients' knowledge about dietary management

Based on the research results, it was found that the majority of respondents had sufficient knowledge regarding dietary management, namely 21 people (53.8%), 10 people had good knowledge (25.6%) and 8 people had poor knowledge (20.5%). Well-informed respondents said they tried to avoid preserved foods, reduced their use of salt and tried to consume fruit and vegetables every day to keep their blood pressure from increasing.

So that respondents can maintain their blood pressure well. This situation is caused by well-informed respondents who answered that they received knowledge about hypertension from health workers during treatment and from media such as magazines, books and television. This result is in accordance with the opinion of (Ginanjari, 2020), which states that most knowledge is obtained from experience, media and the environment. In other words, the higher a person's education, the better his knowledge.

The majority of respondents have sufficient knowledge, this can happen because in terms of education the majority are high school and work as housewives. So there are still many respondents who lack overall knowledge about increasing blood pressure. According to the results of research conducted by (Gunawan, 2017), the factors that influence increased blood pressure are irregular lifestyle (66%), wrong diet (21%) and non-compliance with medication (13%).

Respondents who were less knowledgeable answered that they received information from neighbors who suffered from hypertension. This can happen because there are still some respondents who have junior high school education. This condition is not good for patients because it is feared that the information received will not be accurate. Because when asked questions, some respondents said they rarely checked their blood pressure except when they were sick.

This is in accordance with data available in Indonesia in Tanah Abang District, Jakarta in 2023, which states that awareness of hypertension is 50%, the number of patients taking medication is 34%, while those with controlled hypertension are 15%. In practice, we often find someone who knows that they suffer from hypertension, but does not control it and does not seek treatment (Pinzon, 2018). As argued by (Dalimartha, 2018), the cause of hypertension is not yet known with certainty, but it is closely related to the patient's behavior, especially knowledge about hypertension itself, compliance with the regulations implemented by the health program and implementing actions to prevent recurrence of hypertension and avoid complications. However, according to (Sitorus, 2015) dizziness, headaches,

Description of hypertensive patients' knowledge about exercise

Based on the results of the research, the majority of respondents had sufficient knowledge about sports (17 people (43.6%), 10 people had good knowledge (25.6%) and 12 people had less knowledge (30.8%). The results of interviews conducted with several well-informed and well-informed patients said that it is important to exercise to keep blood pressure stable.

Respondents said they often exercise every Saturday and Sunday, taking a brisk walk in the morning. This is in accordance with the opinion that sports is a form of physical activity carried out by the body to maintain health. Doing physical activity is to ensure smooth blood flow and circulation, as well as tightening the muscles in the body. Doing regular exercise not only maintains body shape and weight, but can also reduce high blood pressure. Moderate aerobic exercise for 30 minutes a day for several days each week can lower blood pressure. Types of exercise that can control blood pressure are: walking, cycling, swimming, aerobics (Junaidi, 2018).

Respondents with less knowledge were 12 people (30.8%). This happens because the majority of respondents are housewives who only stay at home and there are still respondents with junior high school education who admit that they are not actively looking for information about hypertension. The patient said that the disease was due to getting older. So the patient considers it something normal and is lazy about exercising. This situation makes respondents lack overall knowledge about hypertension.

Description of hypertensive patients' knowledge about weight loss

Based on the results of the research conducted, it was found that the majority of respondents' knowledge about weight loss was sufficient, as many as 20 people (51.3%). Among all the controllable risk factors for hypertension that respondents knew about from the media, one of them was losing excess weight. This respondent's knowledge is in accordance with the theory that says body weight is one of the things most closely related to hypertension.

The relationship between hypertension and obesity has been proven by several studies, weight loss has been shown to reduce blood pressure. Medical experts advise people who are obese and suffer from hypertension to lose weight until they are 15% over normal body weight. A weight loss of up to 5.5 kg can result in a reduction in diastolic blood pressure of around 10 mmHg (Auryn, 2017).

There were 10 respondents with less knowledge (25.6%). This can happen because there are still some respondents who have junior high school education. Respondents lacked knowledge about weight loss as a controllable risk factor for hypertension. Apart from that, respondents rarely check their blood pressure so they rarely meet with health workers. This makes hypertensive patients vulnerable to developing severe hypertension, because many hypertensive patients are aware that they are hypertensive but do not control it or seek treatment.

This is in accordance with what was stated by (Pinzon, 2018), the number of hypertensive patients is estimated at 15 million people but only 4% have controlled hypertension. The results of research conducted by (Indriyani, 2015), regarding the factors that influence increased blood pressure are irregular lifestyle (66%), wrong diet (21%) and non-compliance with medication (13%).

Description of hypertension patients' knowledge about stress management

Based on the results of the research conducted, it was found that the majority of respondents' knowledge about avoiding stress was less than 17 people (43.6%). This situation is caused by the lack of attention of respondents regarding the relationship between stress and hypertension. Because there are still some respondents with junior high school education who work as housewives.

As for respondents who have a high school education, their knowledge about stress management is still not good because the majority of respondents are 51-55 years old, which is quite old. So they consider their illness trivial and think that their illness is normal as they age. For good stress management, things you can do are exercise, exercise, yoga, relaxation and adequate rest. Talk about the problems you are facing with close friends, if possible consult a psychiatrist or psychologist.

Several ways to achieve a state of relaxation such as meditation, yoga, exercise can control the autonomic nervous system and possibly also reduce blood pressure (Indriyani, 2015). The

relationship between stress and hypertension through sympathetic nerve activity. In stressful conditions, adrenaline enters the bloodstream, causing an increase in blood pressure. Stress is a response that can threaten physical or emotional health. If a person continues to be in this state, blood pressure will continue to increase (Susalit, 2019).

There were 14 respondents who had sufficient knowledge (35.9%). This can happen because the majority of respondents have high school education and some have graduated from college. So the respondents' knowledge was good enough about stress management to avoid an increase in blood pressure. Respondents also regularly check their blood pressure and exercise diligently to avoid stress.

4. CONCLUSION

The conclusions of the research on the influence of hypertensive patients' behavior on efforts to minimize stroke attacks at the Ri Sidomulyo Riau Community Health Center include: Knowledge of hypertensive patients about efforts to minimize stroke attacks based on dietary arrangements at the Ri Sidomulyo Riau Community Health Center in 2023 is quite good. Hypertension patients' knowledge about efforts to minimize attacks stroke based on regular exercise at the Ri Sidomulyo Riau Community Health Center in 2023 is quite good. Knowledge of hypertension patients about efforts to minimize stroke attacks based on weight loss at the Ri Sidomulyo Riau Community Health Center in 2023 is quite good.

Hypertension patients' knowledge about efforts to minimize stroke attacks based on stress management at the Ri Sidomulyo Riau Community Health Center in 2023 is not good.

The suggestions for research on the influence of the behavior of hypertensive patients on efforts to minimize stroke attacks at the Ri Sidomulyo Riau Health Center include: Health workers at the Ri Sidomulyo Riau Health Center are expected to provide more complete education or health information, if necessary use assistive devices. to be more active in seeking information about hypertension from both the media and health workers, one of which is by coming to the Community Health Center and having their blood pressure checked, so that hypertensive patients can avoid complications, namely stroke.

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