OVERVIEW OF KNOWLEDGE AND IMPLEMENTATION OF LOW SALT DIET

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ABSTRACT

Introduction: Hypertension is a disease that often occurs without complaints with systolic blood pressure equal to or above 140 mmHg and diastolic pressure equal to or above 90 mmHg. **Objective:** This study aims to describe the knowledge and application of a low salt diet in hypertensive patients in the Rejosari Community Health Center working area. **Method:** This research method uses descriptive research with a quantitative design and a cross-sectional approach. The sample was 77 respondents using proportional random sampling technique. The research instrument used a questionnaire and 24 hour food recall. Research analysis uses univariate analysis. **Results:** There were 38 people (49.3%) who had poor knowledge about a low salt diet. A total of 43 people (55.8%) did not comply with the recommended implementation of a low salt diet, namely RG 1 as many as 3 people (3.9%), RG 2 as many as 15 people (19.5%), and RG 3 as many as 25 people. people (32.4%). **Conclusion:** The majority of knowledge about a low salt diet among hypertensive patients in the Rejosari health center working area is in the poor and sufficient categories and most respondents are not suitable for implementing the recommended low salt diet.

Keywords: Hypertension, Knowledge, Low salt diet

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INTRODUCTION

Hypertension according to the World Health Organization (WHO) is a condition where there is an increase in a person's blood pressure with systolic blood pressure equal to or above 140 mmHq and diastolic blood pressure equal to or above 90 mmHg (WHO, 2023). Hypertension is one of the diseases in the silent killer category, meaning a disease that often occurs without complaints. This means that sufferers do not know and do not feel any symptoms of hypertension (Ministry of Health of the Republic of Indonesia, 2018). If not treated as soon as possible and continuously for a long time, this disease can have serious consequences, even a high risk of death due to heart failure (50%), myocardial infarction (33%), and kidney failure (10-15%) (Asri et al., 2022).

The incidence of hypertension worldwide is estimated at 1.28 billion people. Most of these incidents (two thirds) live in low and middle income countries (Musa, 2022). According to Basic Health

Research (Riskesdas) data. hypertension in Indonesia in 2018 had a prevalence of 34.11% of population. This figure has increased compared to the incidence of hypertension in 2013 with a prevalence of 25.8% (Kemenkes RI, 2021). The incidence of hypertension in Riau Province in those aged ≥ 15 years has increased in 2021 by 337,936 people (23%) compared to the previous year, only reaching 14% of the number of hypertension sufferers (Dinas Kesehatan Provinsi Riau, 2021). The incidence of hypertension in Pekanbaru City is in first place in Riau Province 226,112 hypertension sufferers (Dinas Kesehatan Provinsi Riau, 2021). The health center with the highest prevalence of hypertension in Pekanbaru City is the Rejosari Health Center with a total of 4258 people (Dinas Kesehatan Kota Pekanbaru, 2022).

In Indonesia, there is a social security administering body in the health sector which began operating in 2014, namely the Health Social Security Administering Agency (BPJS Health). The tiered referral system used by BPJS Health means

that patients who cannot be treated at first level health facilities (FKTP) will be referred to advanced health facilities (FKRTL) to receive further services. Hypertensive patients with resistance, complications and a systolic pressure of more than 180 mmHg will be referred to FKRTL (Fitrian et al., 2021). Apart from the referral system, BPJS also has a program to improve the quality of life for people with chronic diseases, one of which is hypertension, which is called the Chronic Disease Management Program (Prolanis).

Management of hypertension is based on European Society the of Cardiology (ESC)/European Society of Hypertension (ESH) non-pharmacologically auidelines pharmacologically. Pharmacologically, treatment can take the form of administering hypertension drugs, including Angiotensin Converting Enzyme-Inhibitors/Angiotensin Receptor Blockers (ACEi/ARB), Calcium Channel Blockers (CCB), and βnon-pharmacological blockers. Meanwhile. treatment for hypertension can include lifestyle stopping smoking, limiting changes, consumption and regular physical activity, as well as limiting salt consumption (Williams B., et al., 2018).

Controlling hypertension, which is often misunderstood by the public, is the use of salt. People only reduce the use of salt in food, but actually many foods contain salt, such as fast food, canned food, dairy products, goat meat, offal, salted eggs, and others (Farapti & Furqonia, 2023). Having a low salt diet can help reduce blood pressure, maintain blood pressure towards normal and reduce the risk of complications. Salt consumption is recommended based on WHO standard guidelines of no more than 5 grams/day (Bhattacharya et al., 2022).

Based on a preliminary study conducted using interview techniques on 20 people with hypertension in the Rejosari Community Health Center working area. Complaints felt by hypertension sufferers include headaches, neck pain, dizziness, palpitations, fatigue and blurred vision. Hypertension sufferers come to the community health center once a month to check their blood pressure and be given hypertension medication. Non-pharmacological therapy carried

out by hypertension sufferers in the Rejosari Community Health Center working area such as reducing salt consumption, exercising, but has not been carried out effectively. The Rejosari Community Health Center has also provided education and counseling regarding a low-salt diet, but it has not evaluated whether the patient is on a low-salt diet or not. The results obtained were 8 out of 20 people who had not been able to implement a hypertension diet properly. This condition is influenced by the lack of knowledge and application of a low-salt diet as well as the patient's habit of eating salty foods which are still difficult to avoid. This study aims to determine the knowledge and application of a low salt diet in hypertensive patients at the Rejosari Community Health Center.

METHOD

This research uses a descriptive type of research with a quantitative design, namely this research describes the knowledge and application of a low salt diet in hypertensive patients. The approach used in this research is a cross sectional approach. The sample for this study was 77 hypertensive patients in the Rejosari Community Health Center working area using proportional random sampling technique.

Data collection uses a questionnaire that has been tested for validity and reliability. The first questionnaire contains the respondent's demographic data. The second questionnaire contained multiple choice questions knowledge of a low salt diet with options a, b, c, and d. The second questionnaire was tested for validity and reliability on 30 respondents, so that the valid test results of the 30 questions contained 17 valid questions, then the invalid questions were modified, so that there were 20 questions for this second questionnaire with r count > r table (0.361) and the results reliability test obtained 0.820 (≥0.6). The third questionnaire uses a 24 hour food recall form. Data analysis in this research is univariate analysis using simple descriptions by variables studied describina the including percentage analysis and frequency distribution of each variable.

RESULTS
Table 1 Overview of Respondent Characteristics (n-77)

Characteristics of responden	n	%
Gender		
Man	23	29,9
Woman	54	70,1
Age		
≥18-19 years	0	0,0
20-29 years	02	2,6
30-39 years	06	7,8
40-49 years	20	26,0.
50-59 years	27	35,1.
60-69 years	16	20,7.
≥70 years	6	7,8
Education	F	G E
No school	5 14	6,5
Elementary school	14 13	18,2
Junior high school Senior high school	37	16,9 48,1
Senior night school S1	8	10,3
Work		10,0
Not working	13	16,9
Student/college student	1	1,3
Civil servants/TNI/Polri	4	5,2
Private employees	1	1,3
Self-employed	15	19,4
Farmer	3	3,9
Laborer	2	2,6
Housewife	37	48,1
Honorary teacher	1	1,3
Since when have you been		·
suffering from hypertension?		
< 5 years	31	40,3
≥ 5 years	46	59,7
Suffering from other illnesses Yes		1,3
Stomach acid	1	
Gout	10 13	3,0
Asthma	1	1,3
Indigestion	3	3,9
Rheumatism	1	1,3
Headache	1	1,3
Vertigo	2	2,6
No	58	75,3
Total	77	100

Based on table 1, it is known that of the 77 respondents studied, the majority were female, 54 people (70.1%). The youngest respondent was 24 years old and the oldest was 73 years old. The most common age range was 50-59 years, 27 people (35.1%). Furthermore, regarding the education level of respondents, the majority were high school, 37 people (48.1%). The highest number of jobs were obtained, namely as housewives, 37 people (48.1%). For the category since when did they suffer from hypertension, the highest number was obtained, namely patients with hypertension more than 5 years ago, 46 people (59.7%). The majority of hypertensive patients did not suffer from other diseases, namely 58 people (75.3%), while 19 people suffered from other diseases.

Table 2 Frequency distribution and percentage of low salt diet knowledge (n-77)

Knowledge	n	%
Good currently not enough	7 32 38	9,1 41,6 49,3
Total	77	100

In table 2, it can be concluded that the majority of respondents in the Rejosari Community Health Center work area have poor knowledge about low salt diets, namely 38 people (49.3%), 7 people (7.1%) have good knowledge and have good knowledge, while there were 32 people (41.6%).

Table 3 Frequency distribution and percentage of low salt diet implementation (n-77)

Low salt diet Implementation		n	%
Low salt diet I	In accordance	0	0,0
LOW Sait tilet i	It is not in	3	3,9
	accordance with		
Low salt diet	In accordance	10	13,0
II	It is not in	15	19,5
	accordance with		
Low salt diet	In accordance	24	31,2
	It is not in	25	32,4
	accordance with		
Total		77	100

In table 3, it can be concluded that the patient is seen from his blood pressure. Respondents' blood pressure results were classified based on the low salt diet recommended by RG 1, RG 2, or RG 3. The majority of respondents did not comply with the recommended implementation of a low salt diet, namely 43 people (55.9%) consisting of RG 1 as many as 3 people (3.9%), RG 2 as many as 15 people (19.5%), and RG 3 as many as 25 people (32.4%). Meanwhile, those who complied with the recommendations were 34 people (44.2%) consisting of RG 2 as many as 10 people (13%) and RG 3 as many as 24 people (31.2%).

DISCUSSION

Gender

Based on the results of research conducted on 77 respondents, it is known that the majority of hypertensive respondents were women, namely 54 people (70.1%) and 23 people (29.9%) men. Women have a tendency to have higher blood pressure and are at risk of adverse cardiovascular effects than men (Kumar & Misra, 2021). The results of research conducted by Nurmayanti et al... (2022) at Tk Hospital. II dr. Soepraoen Malang, where the prevalence of hypertension in women is the highest, namely 80%, while in men it is only 20%. In general, the risk of hypertension is higher in men than in women, but those aged >45 years before the menopause phase tend to experience a high risk of hypertension because women begin to lose the hormone estrogen little by little which will have an impact on cardiovascular where there is a decrease in the elasticity of blood vessels so that blood vessels it is difficult for blood to increase its diameter so that blood pressure increases (Purwono et al., 2020).

Age

Based on the results of research conducted on 77 respondents, it is known that the majority of hypertensive respondents were aged 50-59 years, namely 27 people (35.1%). As you get older, your body's cardiovascular system will decline, which can increase the risk of hypertension. Age is one of the main factors that influences the emergence of hypertension. This is due to natural changes in the body, including the heart, blood vessels and

hormones (Ekarini et al., 2020).

Maulia, et al. (2021) explains that at the age of 45 years and over, the arterial walls will thicken due to the buildup of collagen in the muscle layers, so that the blood vessels will slowly narrow and become stiff. As you get older, narrowed blood vessels will affect blood circulation so that blood pressure will increase

Level of education

Based on the results of research conducted on 77 respondents, it is known that the majority of respondents' last education was high school, 37 people (48.1%). The results of this study show that the majority of respondents with low education have insufficient knowledge due to lack of exposure to information in serving food according to the health problems they are experiencing. However, 5 respondents were not in school and aged ≥ 50 years, namely 73 years old, 71 years old, 65 years old, 69 years old and 59 years old. These respondents were not exposed to the media at all.

The main reference for knowledge is the level of education. The results of research conducted by Hamzah et al., (2021) in the Molibagu Community Health Center working area explained that 17 people (54.8%) had an elementary school education level, meaning that there are still many hypertension sufferers who have only graduated from elementary school and lack knowledge about hypertension. A low level of education greatly influences the behavior of hypertension sufferers in controlling hypertension. On the other hand, those with higher education will have awareness of certain risk factors that can control hypertension (Sobierajski et al., 2023).

Work

Based on the results of research conducted on 77 respondents, it is known that the majority of respondents work as housewives, 37 people (48.1%). A person's activities are influenced by the work they do, including the type of work, work stress, working hours and the work environment they face. As housewives, they tend to have lighter physical activities and require both mental and physical readiness, which can result in prolonged

stress, resulting in a high risk of hypertension (Pramestutie & Silviana, 2016).

Suffering from hypertension for a long time

The length of time a person suffers from hypertension is the time a person is diagnosed with hypertension. The cause of long suffering from hypertension is how quickly a person experiences hypertension. The causes of hypertension experienced by respondents vary, such as age, heredity, that their parents also suffer from hypertension, pre-eclampsia during pregnancy with their first child, lifestyle and certain health conditions. Hypertension cannot be cured, but it can be controlled. This can be seen from the results of research conducted on 77 respondents. it is known that the majority of respondents have suffered from hypertension since ≥ 5 years ago, namely 46 people (59.7%). To treat hypertension, the patient must comply with the medication that must be consumed and eat regularly.

The more factors that cause hypertension in a person, the more likely it is that someone will develop hypertension more quickly than someone who has no risk factors or who has few risk factors. The results of this study are in line with research conducted by Purwono et al., (2020) explaining that the majority of respondents suffered from hypertension > 11 years as many as 24 people (41.4%). As a person ages, blood pressure will increase. This is the effect of degeneration that occurs as a person ages. And the longer a person suffers from hypertension, the lower the level of compliance, this is because most sufferers will feel bored of seeking treatment (Ketut Gama et al., 2014).

Suffering from Other Illnesses

Based on the results of research conducted on 77 respondents, it is known that the majority of patients did not suffer from other diseases, namely 58 people (75.3%). There were 19 patients suffering from diseases other than hypertension (24.7%), of which 19 people suffered from other diseases, namely stomach acid, 1 person (1.3%), 10 people (13%), gout. 1 person had rheumatism (1.3%), 2 people had vertigo (2.6%), 1 person had asthma (1.3%), 1 person had headaches (1.3%),

and 3 people had ulcers. (3.9%). Hypertension is known as the silent killer because it often goes without complaints. If not controlled, hypertension can cause complications, such as heart disease, stroke, kidney disease, heart attack, etc. (Indonesian Ministry of Health, 2018).

Description of Respondents' Knowledge about Low Salt Diets

The results of the research on the description of the knowledge possessed by hypertensive patients about low salt diets in the work area of the Rejosari Community Health Center, 38 people (49.3%) had poor knowledge about low salt diets and 32 people (41.6%) had moderate knowledge.). This shows that insufficient knowledge about a low salt diet in hypertensive patients will affect the individual's ability to implement a low salt diet. The reasons for this include the respondent's habits and the respondent not knowing the amount of sodium in each food item he consumes.

A person's level of nutritional knowledge has a big influence on the diet they must follow. When individuals have food and can organize and choose what food to eat and it has a lot of high nutritional content and is useful for the body (Nazari & Khairunnisa, 2022). The increasing knowledge of sufferers about hypertension will encourage someone to behave better in controlling hypertension so that their blood pressure remains under control. Not only that, the incidence of hypertension is also an influence on the knowledge of hypertension sufferers, because with good knowledge, you can control hypertension so that your blood pressure remains under control (Wiranto et al., 2023).

Description of Respondents' Implementation of a Low Salt Diet

The results of research on the description of the application of a low salt diet by hypertensive patients in the Rejosari Community Health Center working area are that most of them do not comply with the recommended diet for 43 people (55.8%). During the research, researchers found that most patients paid little attention to the food they consumed.

Implementing a low salt diet in hypertensive patients can be carried out well, if one factor is having good knowledge so that the patient has the awareness to control their blood pressure. Awareness of following a low salt diet is influenced by the level of self-awareness of hypertension sufferers. Awareness in implementing a low salt diet is influenced by providing counseling, consultation, assistance by cadres and therapeutic communication from health workers to hypertension sufferers (Zahidah, 2021).

The results of this research are in line with research conducted by Wahyudi et al.. (2020) with quantitative research methods in the work area of the Rawat Enter Gedong Air Health Center, Bandar Lampung City, stating that of the 139 respondents, the majority were disobedient or consumed more sodium intake than 80 (57.2%) recommended and only 59 (42.8%) adhered to or had sufficient sodium intake with the low salt diet they were following. A low salt diet is very important for optimal blood pressure control. Salt due to sensitivity can increase various physiological mechanisms (Chang & Jinho, 2022). Excessive consumption of seasonings and consuming ready-to-eat foods such as instant noodles and snacks are the causes of patients' sodium intake being more than the recommended low-salt diet that patients should follow (Nurmayanti et al., 2022).

Future researchers can compare the knowledge and low salt diet of patients before and after being given treatment (education/counseling). With this research, we can find out the knowledge and application of a low salt diet in hypertensive patients, so that sufferers can carry out early prevention and be aware of the importance of following a hypertension diet. Limitations in this study, there were several respondents who were difficult to find, so data collection was carried out using a questionnaire (google form) without seeing directly how to fill out the questionnaire and there are 3 questions on the modified knowledge questionnaire because the sentences are too long. this research uses 20 questions for the knowledge questionnaire.

CONCLUSION

The majority of respondents have insufficient knowledge about low salt diets. The implementation of a low salt diet in hypertensive patients can be concluded that the majority do not follow the recommended low salt diet. Future researchers can compare the knowledge and low salt diet of patients before and after being given treatment

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