Analysis Of Family Support And Diet Compliance In Hypertension Patients

Almina Rospitaria Tarigan¹, Zulhaida Lubis², Syarifah³

¹Alumni Pascasarjana Ilmu Kesehatan Masyarakat Universitas Sumatera Utara ^{2,3}Staf Pengajar Fakultas Kesehatan Masyarakat Universitas Sumatera Utara

Correspondensi email: alminatarigan@gmail.com

Track Record Arti-	Abstrak
cle Diterima : 07 Mei 2021 Dipublikasi: 01 Juni 2021	Abstrak Hypertension is a disease that suffered by many people in the world, including in Indonesia. Patients with hypertension must make a diet to consume foods that can increase the sufferer's blood pressure. A hypertension diet is one of the important factors in maintaining the health of hypertension sufferers to prevent disease complications. This study aimed to analysis fami- ly support, and compliance with hypertension diet in hypertensive sufferers. This study used a cross-sectional design conducted in the Hulu Village of Pancur Batu Public Health Center, Deli Serdang Regency. The sample size in this study was the entire popula- tion, namely hypertension sufferers. Sample (saturated sample), so that the total sample is 108 people. This study will conduct a Prevalent Rate (PR) analysis to see the risk of dietary ad- herence in hypertensive patients. This study showed family support in the category of bad as many as 85 people (78.7%), the implementation of hypertension diet in the non-compliant category as many as 76 people (70.4%) and adhered to the implementation of hypertension diet as many as 32 people (29.6%). of avoided foodstuffs (hypertension triggers) it is known that for this type of foods high in cholesterol is (a) grilled/boiled meat, which is as much as 76 people (70.4%), (b) meat or chicken skin, which is as much as 55 people (50.9%), and (c) chicken yolks, which is as many as 67 people (62.0%). The type of food high in Sodium is; chips, which is as many as 55 people (50.9%). Pancur Batu Public Health office, seeks to increase counselling about hypertension diet, namely recommended foodstuffs, restricted foodstuffs, avoided foodstuffs and carried out continuously in place and the right time. Families to increase knowledge about the primary prevention of hypertensive diseases so that they can conduct prevention independently and provide motivation (support) to hypertension sufferers to implement the hypertensive diet
	Keywords: Family, Support, Diet, Food, Hypertension

1. Pendahuluan

A better known high blood disease that gets attention from all circles of society, considering the impact it has both short-term and long-term so that it requires a comprehensive and integrated long-term countermeasures (Kementrian Kesehatan Repoblik Indonesia, 2020). Hypertensive disease causes high rates of morbidity (pain) and mortality (death) (Oktaviarini E., 2019). Hypertension disease is a disease that arises from the interaction of various risk factors that a person has both internal and external factors (Susanti, 2020b).

The Institute for Health Metrics and Evaluation (IHME) in 2017, claimed that of the 53.3 million deaths worldwide, 33.1% were caused by cardiovascular disease, 16.7% by cancer, 6% were caused by diabetes mellitus (DM) and endocrine disorders and 4.8% were caused by lower airway infections (IMHE, 2017). IMHE also mentioned that out of a total of 1.7 million deaths in Indonesia, the risk factors that cause death are blood pressure (hypertension) of 23.7%, hyperglycemia of 18.4%, smoking by 12.7% and obesity by 7.7% (IMHE, 2017).

The results of the Basic Health Research (Riskesdas) in 2007, 2013, and 2018 which show a tendency to increase the prevalence of Non-Communicable Diseases such as diabetes, hypertension, stroke, and rheumatic diseases (Kementrian Kesehatan Repoblik Indonesia, 2020). Data from the Health Office of North Sumatra in 2015 recorded hypertension sufferers in January-October 2015, reaching 151,939. Based on Basic Health Research Data, the prevalence of hypertension in North Sumatra Province is 29.19%. This figure is quite high and dangerous if not addressed immediately (Kementrian Kesehatan Repoblik Indonesia, 2020). However, the implementation of disease prevention tends to be ineffective due to the lack of facilities and infrastructure to provide health services (Saragih et al., 2019). For hypertension, there are still many health centres with low blood pressure measurement facilities so that when doing services at home, blood pressure tests cannot be carried out routinely.

Based on the initial survey in January 2015 at Pancur Batu Health Center which has a working area of 22 villages found the number of hypertension patients hospitalized in 2013-2015 continues to increase. The number of hypertension sufferers in 2013, as many as 2,841 sufferers, in 2014 as many as 2,855 sufferers and in 2015 until June as many as 1,250 sufferers. The highest number of hypertension sufferers in the working area of Pancur Batu Health Center in 2013-2015 was in Hulu Village, namely in 2013, numbering 44 people, in 2014, numbering 56 people and in 2015 amounting to 108 people. Out of 108 people with hypertension there are 38 people with hypertension aged over 45 years, 4 people with hypertension including mild stroke and 1 person with hypertension has severe stroke .

Socio-cultural has a very close relationship with health because culture can form a habit and response to healthy or sick conditions in coastal communities, especially the consumption of food (Siregar, 2020b). According to Adinda (2020) and Fatimah (2020) that health problems suffered by a person is inseparable from their diet and nutritional status. Re-

search Pamelia, (2015) shows there is a significant link between fast food eating habits and the incidence of hypertension.

Kadir (2019) research stated that good food consumption patterns tend not to be affected by hypertension, while poor food consumption patterns tend to be affected by level I hypertension and level II hypertension. The results of Siregar, (2020a) research show that hypertension sufferers occur in people who consume salty foods in the category of often (> 1 time a day) and consumption of salty foods 1-10 times a month.

Patients need family support to control the disease. Families have a positive effect on disease control; family relationships, family attention to their offspring, and small involvement in patient care affect patient recovery (Efendi, 2017). Family support itself has a basis to inhibit the progression of hypertension because family support has a close relationship with medication adherence, so that family support is expected to be increased to support the success of hypertension therapy (Susanto, 2015).

Based on the results of interviews with some people with hypertension related to the occurrence of hypertension disease most do not really understand the food intake that should be consumed, the level of education is relatively low and rarely exposed to the source of information or health counseling that should be done by health officials or cadres public health center, there are also sufferers who say a bit bother if they have to make food that is separate from other family members, even most sufferers are not too concerned with hypertension suffered because it has not interfered with daily activities and assumes his blood pressure will be normal again in a few days, in addition to hypertension disease obtained also part of hereditary factors, so do not take advantage of health facilities even though the distance of residence with health facilities is not too far. The purpose of this research, which is to identify family support and compliance with hypertensive diet in the Village Hulu Pancur Batu Sub-district.

2. Metode

This type of research is survey research, analytical cross-sectional study design with an explanatory approach. This research was conducted in Hulu Village, Pancur Batu District. The reason for choosing this location is that there is an increase in hypertension sufferers every time in this village.

This research started from April to June 2016, namely starting to carry out literature searches, preparation of proposals, proposal seminars, research, data analysis, and final reports preparation. This study population were all patients with hypertension in Hulu Village,

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Pancur Batu District, totalling 108 people with hypertension aged 30 years to 50 years old who had systolic blood pressure (current blood pressure. The sample size in this study was the entire population, namely hypertension sufferers. Sample (saturated sample), so that the total sample is 108 people.

Primary data in the study were collected through data collection instruments. The instrument used in the research data collection was a questionnaire made by the researcher, namely the questionnaire on family support and implementation of the hypertensive diet, which was directly obtained from respondents through direct interviews. Secondary data supports the primary data obtained, namely the recording data of patients with hypertension and activity reports related to the hypertension counselling program obtained from Center Pancur Batu's Public Health working area.

This study will analyze the independent variables, namely family support in the supportive and unsupporting categories. This study's dependent variable was adherence to dietary compliance in hypertensive patients with adherence and non-adherence categories. The primary data research instrument was a questionnaire; before being used in the study, the validity and reliability of 30 respondents who were not included as the research sample was conducted in Pancur Batu Health Center's working area, Deli Serdang Regency. The validity test is carried out by measuring the correlation between variable items using the Pearson Product Moment (r) correlation test, provided that the correlation coefficient value is> 0.3 and this reliability uses the Cronbach Alpha coefficient if the Cronbach Alpha value is> 0.6. The Cronbach Alpha test results show a value of 0.958 to be said to be reliable.

Univariate analysis, namely the analysis of independent and dependent variables in frequency distribution and the percentage calculated, namely family support, and the hypertension diet implementation. This study will use cross tabulation between independent variables and dependent variables.

3. Results

Characteristics, family supports and dietary compliance of hypertensive patients of respondents can be seen as follows :

Characteristics,	f	%
Age		
30 – 43 years	64	59,3
44 - 50 years	44	40,7
Sex		
Female	58	53,7
Male	50	46,3
Education		
Low	51	47,2
High	57	52,8
Work	100	
Not work	35	32,4
Working	75	67,6
Total	10	
	108	100
Family Support	f	%
Bad	51	47,2
High	57	52,8
Adherence to Hypertensive Diet	21223	
Non-Compliant	76	70,4
Compliant	32	29,6
Total	108	100

 Table 1. Distribution Characteristics, Family Supports and Dietary Compliance of Hypertensive Patients of Respondents

Respondents' characteristics include age, gender, education, and occupation. The results showed respondents with the most age 30-44 years, namely as many as 64 people (59.3%). The sexes were more female, which was 58 (53.7%). The results showed respondents with the most Higher education category as 57 people (52.8%) and jobs with a category of work as many as 75 people (67.6%).

This study showed that family support was then improved, family support in the category of bad as many as 51 people (47.2%) and family support in high support as many as 57 people (52.8%). The results of the measurement of compliance with the implementation of hypertension diet were then categorized, the implementation of hypertension diet in the noncompliant category as many as 76 people (70.4%) and adhered to the implementation of hypertension diet as many as 32 people (29.6%).

 Table 2. Distribution of Respondents by Recommended Food Ingredients Fruits,

 Vegetables, Fish, Chicken, Meat and Nuts

No	Statement	J	es	l	Not	T	otal
INU	Statement	n	%	n	%	n	%

	Vegetables						
1	Tomato	77	71,3	31	28,7	108	100,0
2	Potato	63	58,3	45	41,7	108	100,0
3	Carrot	56	51,9	52	48,1	108	100,0
4	Mustard	78	72,2	30	27,8	108	100,0
5	Col	67	62,0	41	38,0	108	100,0
6	Spinach	79	73,1	29	26,9	108	100,0
7	Beans	55	50,9	53	49,1	108	100,0
8	Broccoli	44	40,7	64	59,3	108	100,0
No	Statement	J	les	ľ	Not	T	otal
INU	Statement	n	%	n	n	%	n
	Nuts						
1	Peanut	57	52,8	51	47,2	108	100,0
2	Sunflower seeds (kwaci)	0	0,0	108	100,0	108	100,0
3	Fresh milk 200 ml / day	61	56,5	47	43,5	108	100,0
	Fish, Chicken and Meat						
1	Bream	55	50,9	53	49,1	108	100
2	Cob	79	73,1	29	26,9	108	100
3	Meat (grilled, boiled)	81	75,0	27	25,0	108	100
4	Skinless chicken	21	19,4	87	80,6	108	100
5	Egg whites	75	69,4	33	30,6	108	100
	Fruit	-92	-				~
1	Banana	94	87,0	14	13,0	108	100
2	Orange	33	30,6	75		108	100
3	Wine	0	0,0	108		108	100
4	Mango	0	0,0	108		108	100
5	Watermelon	31	28,7	77	71,3	108	100
6	Pineapple	12	11,1	96	88,9	108	100

Based on the recommended dietary patterns (hypertension prevention), it is known that the most consumed foodstuffs >50.0%, namely: for the type of vegetable food is, (a) Tomatoes, (b) Potatoes, (c) Carrots, (d) Mustard, (e) Cabbage, (f) Spinach, (g) Chickpeas and at least broccoli. As for the type of fruit, the food is bananas. Based on the type of food (fish, chicken and meat) most consumed by respondents, namely; (a) Freshwater fish, (b)Cob, (c) Meat (roasted, boiled), (d) egg whites, and for this type of legume, food are (a) peanuts, (b) fresh milk 200 ml/day.

Table 3 Distribution of Respondents by Restricted Foodstuffs
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No	Statamont	Y	es	Ν	ot	То	tal
No Statement	Statement	n	%	n	n	%	n

	Restricted Groceries						
1	Use of kitchen salt	55	50,9	53	49,1	108	100
2	Consumption of sodium-containing foodstuffs such as Biscuits, Crakers, Chips	59	54,6	49	45,4	108	100
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Based on the pattern of consumption of restricted foodstuffs, it is known that the restricted foodstuff according to respondents is the use of kitchen salt, which is as much as 55 people (50.9%) and consumption of foodstuffs containing sodium, which is as many as 59 people (54.6%).

Na	Statement	Y	Yes		ot	Total	
No	Statement	n	%	n			n
	Avoided Food Ingredients						
	Foods High in Cholesterol						
1	Beef processed with coconut milk	22	20,4	86	79,6	108	100
2	Mutton processed with coconut milk	14	13,0	94	87,0	108	100
3	Grilled/boiled meat	76	70,4	32	29,6	108	100
4	Chicken meat or skin	55	50,9	53	49,1	108	100
5	Chicken yolk	67	62,0	41	38,0	108	100
	Foods High in Sodium	0		1		- Y	1 Contraction of the second se
1	Biscuits	21	19,4	87	80,6	108	100
2	Crackers	11	10,2	97	89,8	108	100
3	Chips	55	50,9	53	49,1	108	100
	Preserved food				5. K.		
1	Jerky	0	0,0	108	100	108	100
2	Shredded	0	0,0	108	100	108	100
3	Salted fish	54	50,0	54	50,0	108	100
4	Pindang	0	0,0	108	100	108	100
5	Salted eggs	4	3,7	104	96,3	108	100
	Milk and processed	EDAN	~				
1	Full cream milk	56	51,9	52	48,1	108	100
2	Milk flour	11	10,2	97	89,8	108	100
3	Butter	15	13,9	93	86,1	108	100

Table 5 Distribution of Respondents by Avoided FoodStuffs

Based on the pattern of consumption of avoided foodstuffs (hypertension triggers) it is known that for this type of foods high in cholesterol is (a) grilled / boiled meat, which is as much as 76 people (70.4%), (b) meat or chicken skin, which is as much as 55 people (50.9%), and (c) chicken yolks, which is as many as 67 people (62.0%). As for the type of food high in Sodium is; chips, which is as many as 55 people (50.9%). Based on avoided foodstuffs for

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the type of food preserved is; salted fish, which is as many as 54 people (50.0%) and for this type of milk and processed foods is full cream milk that is as much as 56 people (51.9%).

4. Discuss

Knowledge is information or things that the respondent knows about; hypertension diet, and food intake of hypertension sufferers in the implementation of hypertension diet, because the higher knowledge possessed by hypertensive sufferers, the higher the awareness for implementing food intake regulation for hypertensive sufferers knowledge is the result of human sensing or the result of knowing someone about an object through the senses they have.

Respondents still answered one of the questions about the meaning of the hypertension diet or did not know the hypertension diet such as; (a) hypertension diet (food intake regulation) can reduce high levels of fat (cholesterol) in the body, (b) hypertension diet (food regulation) aims to help reduce high blood pressure, (c) hypertension diet (food regulation) is dietary arrangements for people with high blood pressure. Meanwhile, many questions about food intake for hypertension sufferers are still answered incorrectly, or respondents do not know such as; (a) the use of sodium-containing food ingredients such as baking soda is a type of food recommended for hypertension sufferers, (b) canned food such as sardines is a type of food recommended for hypertensive sufferers, and (c) canned vegetables and fruits are types of food that are recommended for people with hypertension.

Lack of consumption of fruits and vegetables can also cause the body to experience nutritional deficiencies such as vitamins, minerals, and fiber so that it becomes one of the determinants of the incidence of a disease(RM, 2019). Food that is accessed by households is inseparable from food habits that have emerged since the ancestors' time so that these eating habits will be difficult to change (Deller, 2017).

The study by Fahlepi (2019) stated that of the 210 coastal communities of Belawan, 30% were subjects with hypertension using salt in side dishes and vegetables exceeding the recommended level (0.4 teaspoons) and low consumption of vegetables. Windyasari (2016) revealed that the level of food consumption is significantly related to the incidence of hypertension in pre-elderly in the working area of Kampung Bangka Public Health Center, Pontianak Regency, which includes two variables, namely fat (p = 0.015) and sodium (p = 0.049).

The results of Susanti (2020a) research show that the consumption of eating fruits, vegetables and salty foods will be associated with the incidence of hypertension. The human body needs less than 7 grams of table salt a day, equivalent to 3000 mg of sodium. Types of

foods that contain sodium include baking soda, soda powder as a preservative, baked goods, cheese, canned and seafood, and cereals. Eating salty foods has a significant effect on hypertension, where consumption of salty foods will lead to hypertension.

In salt there is natrium, it is even mentioned that salt is the main source of sodium. The sodium content in salt is a mineral element that is believed to have an effect on high and low blood pressure (Mulyantoro, 2016).

One of the efforts that need to be done is to increase education or socialization about the hypertensive diet (food intake regulation) and food intake of people with hypertension in the community to increase knowledge and awareness of implementing a hypertensive diet in order to achieve both individual and community health goals. Formally (counselling at a health care facility) and informally (such as counselling at a social gathering place, recitation) in a language easily understood by the community. Counselling is carried out not only when a patient comes to the Public Health Center for treatment but also immediately goes to the field to meet people with hypertension. It can also involve the community and religious leaders in approaching people with hypertension and the community so that they are willing to follow and attend health counselling carried out by health workers and can modify the place and time of the implementation of health education so that the community can attend counselling.

Respondents' attitudes will change after being given education about the implementation of a hypertensive diet. Providing information from health workers will provide a good response in the implementation of a hypertensive diet. The results showed respondents' attitude towards hypertension diet (food intake regulation) and food regulation of hypertension sufferers as many as 73 people (67.6%) negative category.

The results showed that respondents more disagreed with the question of hypertension diet (ma-right intake regulation) can help lower high blood pressure, (b) if obediently follow a hypertensive diet, it can prevent hypertension. Likewise, with the (negative) questions answered agreed on the regulation of hypertensive diet foods such as; (a) if consuming milk containing fat can prevent the occurrence of hypertension, (b) if canned fruits are consumed then it can maintain normal blood pressure.

The results showed family support of 85 people (78.7%) in the wrong category. It gives an idea that family support plays a full role in the implementation of hypertensive diets. The results showed that of the 4 (four) parts of family support, namely; (a) real support, (b) hopeful support, (c) informational support, and (d) emotional support, turned out to be the most done by the family is emotional support, whereas for the other 3 (three) support is mostly not done by the family.

The results of Firmansyah (2017) research show that the three forms of family support felt by respondents with the highest scores are families reminding respondents to maintain their blood pressure, families recommending eating vegetables and fruit every day, and families maintaining closeness and warmth to motivate respondents to maintain their blood pressure. In addition, three forms of family support felt by respondents, namely family assistance in solving every problem and obstacle in maintaining the respondent's blood pressure, family efforts in reminding respondents to take time for recreation during holidays, and family efforts in providing fruit and vegetables needed by respondents.

The results of Bisnu (2017) research show that family support is needed by hypertensive patients so that their condition does not get worse and they avoid complications due to hypertension. Families can help patients with hypertension, among others, in managing a healthy diet, inviting exercise together, accompanying and reminding them to check their blood pressure regularly.

The Osamor (2015) research show that family members also provide emotional support that helps patients deal with stress due to their illness. When the family provides support to the patient, the patient's condition will improve. Increased family support will be associated with better blood pressure control in hypertensive patients. The results of Sumantra (2017) research show that hypertensive elderly who receive good family emotional support have a 7.467 times chance of being obedient in taking hypertension medication.

The results of Hanum (2019) research show that people with hypertension need family support because someone who is sick needs attention. Family support is the attitude, action and acceptance of the family towards the sick patient. The family also functions as a support system, always ready to assist with assistance if needed.

The results of the Puspita (2017) study indicate that family members who provide good support and show caring attitudes to family members who suffer from hypertension have an important role in medication adherence. In addition, the attention of family members, starting from delivering to health services, helping to pay for treatment, reminding them to take medication, has been proven to be more obedient to treatment compared to people with hypertension who receive less attention from their family

Family support is a form of attention, encouragement that individuals get from others. The family is seen as a system, in case of disruption to one of the family members can affect the whole system. On the contrary, family function can also be one of the causes of family members' disorders. The research Meteng (2016) results show that support from the family will affect adherence to taking medication in hypertensive patients who live with the family;

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the better the level of family support, the more obedient hypertensive patients will be for treatment.

The results of Dewi (2018) research show that information support obtained by patients with hypertension, such as families informing that hypertension can be cured if treated regularly, reminds patients to seek treatment, and families encourage patients to take medicine. In addition, assessment support obtained by patients with hypertension, such as the family hears the patient's complaints after taking medication, the family controls the patient in taking medication, and the family supports the patient to control (routine treatment). The results of the research Purnawinadi (2020) showed that the patient also stated that although he always received family support, the patient often forgot to take hypertension medication due to his negligence and assumed that his activities were not disturbed even though he had hypertension.

The results showed that the implementation of hypertension diet as many as 76 people (70.4%) category is not good. Local foodstuffs found as many as 55 people (50.9%) have not been able to limit the use of kitchen salt, and as many as 59 people (54.6%) has not been able to limit foodstuffs containing sodium. In foodstuffs that avoided, most people consume preserved food, namely Jerky, Abon and Pindang, because preserved food can be consumed more than once and can take to a place where the community conducts its activities. Therefore, this can overcome by regulating their daily diet by consuming a balanced menu and a regular diet.

The implementation of a hypertensive diet is related to the behaviour of sufferers in following a hypertensive diet. Behaviour is closely related to health. Behaviour has a number two role after the environment to health status. Hypertension prevention behaviour through the implementation of hypertension diet is one of the important parts that should consider by staying away from bad habits such as drinking coffee, smoking, irregular exercise, drinking alcohol and eating foods containing fat.

Conclusions

Respondents' characteristics include age, gender, education, and occupation. The results showed respondents with the most age 30-44 years, sexes were more female, higher education working .This study showed that family support was then improved, majority family support in the category of bad high support. The implementation of hypertension diet in the non-compliant category . The pattern of consumption of avoided foodstuffs (hypertension triggers) it is known that for this type of foods high in cholesterol is (a) grilled / boiled meat, meat or chicken skin,, chicken yolks, the type of food high in Sodium is; chips.

Suggestions

Pancur Batu Public Health office, seeks to increase counselling about hypertension diet, namely recommended foodstuffs, restricted foodstuffs, avoided foodstuffs and carried out continuously in place and the right time. Families to increase knowledge about the primary prevention of hypertensive diseases so that they can conduct prevention independently and provide motivation (support) to hypertension sufferers to implement the hypertensive diet.

3. People with hypertension strive to carry out a regular hypertensive diet, avoid foods that can trigger an increase in blood pressure, and routinely perform blood pressure control in the health service.

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