

Community Nursing Care with Knowledge Deficit Problems About Low Salt Diet in Hypertension Respondents in Punaga Hamlet, Bajeng District, Gowa Regency

Muhamad Isnaini

Nursing Study Program, University of Sheikh Yusuf Al Makassari Gowa, Gowa, Indonesia

ARTICLE INFO	ABSTRACT
<i>Keywords:</i> Nursing care, low salt diet, hypertension	This research aims to reveal and know the description of nursing care regarding adherence to a low salt diet in hypertension respondents. This research was conducted in Punaga Hamlet, Maradekaya Village, Bajeng District, Gowa Regency with respondents who experienced hypertension which took place from June to July 2022. The observation was used as a data collection technique. Then the data analysis techniques used in achieving research using qualitative descriptive analysis include data reduction, data presentation, and conclusion. The results of the study revealed that after education about hypertension and a low-salt diet, the respondents understood the education that had been delivered and there was an effect of education, namely increasing knowledge about a low-salt diet in hypertension respondents. There is an influence of hypertension education and a low-salt diet on hypertension respondents and their families so that the client's family understands their illness, if foods high in salt can trigger hypertension, and families can find out the right way of handling hypertension.
Email :	Copyright © 2022 Eduhealth Journal.All rights reserved is Licensed under
muhammadisnaini@usy.ac.id	a Creative Commons Attribution- NonCommercial 4.0 International
	License (CC BY-NC4.0)

1. INTRODUCTION

Hypertension is also known as a disease of high blood pressure where in this condition the blood vessels experience interference which results in the supply of oxygen and nutrients being also disrupted. Hypertension is known as the number one cause of death in the world and it is estimated that people with hypertension will continue to experience an increase as the population increases. Hypertension is a general circumstance where the supply of blood flow on the walls artery becomes bigger so which can cause several problems in health, like the heart. Symptoms of hypertension are not real and must be considered and require immediate treatment. The cause of hypertension is influenced by many factors, including those that can be changed and those that cannot be changed. Factors that cannot be changed include age, gender, and family medical history. The factors that can be changed are lifestyle factors which include smoking habits, consumption of saturated fat, obesity and lack of exercise, and excessive salt consumption [4]

An estimated 17 million people die each year from cardiovascular causes. One of them is high blood pressure, around 9.4% of deaths worldwide are caused by untreated high blood complications, such as ischemic heart disease (45%) and stroke (51%). [5] . The other study stated that 40% of developing countries suffer from high blood pressure, while only 35% of developed countries suffer from high blood pressure. For Africa, it occupies the highest position for people with high blood pressure, namely 40%, in the United States 35%, in Southeast Asia 36%, and in Asia, this disease causes 1.5 million deaths each year. [6] . The number of people with high blood pressure in Indonesia each year increased by 34.1%, but the number of sufferers diagnosed by health workers was 8.4% or only 8.8% for treatment. This shows that most cases of high blood pressure in the community have not been diagnosed and health services have not been reached. Thus the highest prevalence rate in Indonesia is in South Kalimantan (44.13%), followed by West Java (39.60%), East Kalimantan (39.30%), and Central Java [7]

The incidence of hypertension in South Sulawesi during the last three years has been increasing gradually. Based on data obtained from the South Sulawesi Provincial Health Office, there were



115,824 cases. This is a health problem that needs attention in South Sulawesi because hypertension has always been a non-communicable disease.

The hypertension diet is a diet for people with hypertension which is intended to help lower blood pressure and to maintain blood pressure towards normal [8]. In addition, the hypertension diet is also intended to reduce other hypertension risk factors such as excess body weight [9]. A diet for people with hypertension is usually called a low-salt diet where the salt in question is the sodium salt found in table salt (NaCl), baking powder, sodium benzoate, and vetsin (monosodium glutamate) [10]. Sodium is the main cation in the body's extra-cellular fluid which functions to maintain the body's fluid and acid-base balance and plays a role in nerve transmission and muscle contraction [11]. Daily food generally contains more sodium than the body needs.

Diet modifications or diet arrangements are very important in hypertension patients, the main goal of setting a hypertension diet is to regulate healthy foods that can control high blood pressure and reduce cardiovascular disease. Hypertension diet to overcome or at least maintain blood pressure [12]. The nurse is one of the health workers who play a role in educating individuals, families, and communities as well as anticipating and evaluating patient's health by implementing a comprehensive nursing process to diagnose, identify, plan, implement, and evaluate so that they can face their challenges in nursing actions. So that they can get the correct result, can overcome the problem of high blood pressure in the family, it is necessary to carry out the nursing process.

Based on the explanation above, a study was carried out which aimed to reveal and find out the description of nursing care regarding adherence to a low-salt diet in hypertension respondents in Punaga Hamlet, Maradekaya Village, Bajeng District, Gowa Regency.

2. METHODS

To achieve the research objectives, the type of research used was descriptive qualitative research which was a case study. The case study in this study focused on nursing care which aimed to comply with the low-salt diet in hypertensive respondents. This research was carried out in Punaga Hamlet, Bajeng sub-district, Gowa Regency with community respondents who experienced hypertension which took place from June to July 2022. The observation was used as a data collection technique. Then the data analysis techniques used in achieving research using descriptive qualitative analysis include data reduction, data presentation, and conclusion.

3. RESULTS AND DISCUSSION

Respondents' Identity

From the data collection carried out, the following is presented the identity of the respondents in this study.

Table 1. Respondents' Identity			
Identity	Respondent I	Respondent II	Respondent III
Name	Mr. M	Mr. R	Mr. S
Gender	Man	Man	Man
Age	48 years	52 years	50 years
Marital Status	Married	Married	Married
Occupation	Laborer	Farmer	Daily Laborer
Tertiary Education	Junior High School	Junior High School	Elementary School

Based on table 1, shows that the respondents in this study consisted of three people who had hypertension, all of whom were male, aged 48 to 52 years, and married status. Then the work of the respondents consisted of laborers, farmers, and daily workers with elementary, junior high, and high school education levels.

Disease History

From the data collection carried out, the following is presented the disease history of the respondents in this study



Table 2. Disease History			
History	Respondent I	Respondent II	Respondent III
Main Complaint	Painful	Painful	Painful
Main Complaint History	1	10,	When they wake up, the respondent feels weak and has a headache

Based on table 2, shows that respondents in this study generally had a main complaint, namely pain, while for a history of main complaints, respondent I generally complained of weakness and headaches, respondent II generally often felt sleepy, weak, and easily tired, and for respondent III Generally, when they wake up, the respondent feels weak and has a headache.

Current Disease History

From the data collection carried out, the following is presented the disease history of the respondents

Table 3. Disease History Now			
Disease history Now	Respondent I	Respondent II	Respondent III
When did it start	Respondent started to	Respondents started	Respondents started
hurting	get sick	getting sick in July 2020	getting sick since 2019
Characteristics	Often experience	Often feel achy and	Often feel a
	headaches, get tired easily when doing activities, and the back of the neck often feels cramps	dizzy	headache in the back
The journey since getting sick	Incidents of disease appear every day, and respondent also rarely avoids consuming salty foods	Disease incidence occurs every day, respondent likes oily food and coconut milk.	Incidents of disease appear every day, respondent Likes to consume food fatty and coconut milk

Based on table 3, shows that the respondents in this study generally have the characteristics of a current disease, respondent I generally often experience headaches, gets tired easily when doing activities, and often feels cramps in the back of the neck, respondent II experiences headaches, and gets tired easily when doing activities and the back of the neck often feels cramped and for respondent III generally they often feel headaches in the back.

Physical Checkup

From the data collection carried out, the following is presented the physical examination of the respondents

Table 4 . Physical Checkup			
Physical examination	Respondent I	Respondent II	Respondent II
1. General	Composmentist	Composmentist	Composmentist
Condition	Consciousness	Consciousness	Consciousness
2. Vital signs	BP: 180/100 mm Hg	TD:180/90mmHg	BP: 160/100 mm Hg
	N : $82 \text{ x} / \text{minute}$	N: 63 x/minute	N: 80 x/minute
	S: 36 C	S: 36 C	S: 36 C
	RR: 20 x/minute	RR: 20 x/minute	RR: 20 x/minute



Physical examination	Respondent I	Respondent II	Respondent II
3. Head Checkup a. Hair	Clean scalp, no dandruff, and no lesions, evenly distributed black and white hair (gray hair) hair breaks easily, no branching, and no abnormalities	Clean scalp, no dandruff, and no lesions, uneven distribution of black and white hair (gray hair) hair breaks easily, no branches, and no abnormalities	Clean scalp, no dandruff, and no lesions, evenly distributed black and white hair (gray hair) hair breaks easily, no branching, and no abnormalities
b. Eye	Complete eyes, right and left symmetrical, right and left clear corneas, anemic conjunctiva, light reflex, right and left irises are black, no abnormalities	Complete eyes, right and left symmetrical, right and left clear corneas, anemic conjunctiva, light reflex, right and left irises are black, no abnormalities	Eyes complete, right and left symmetrical, right and left clear corneas, conjunctiva not anemic, light reflex present, left and right irises black, visual acuity normal, no aids
c. Nose	No nostril breathing, clean nostrils, no secretions, no swelling of the nasal bones, and no polyps	No nostril breathing, clean nostrils, no secretions, no swelling of the nasal bones, and no polyps	No nostril breathing, clean nostrils, no secretions, no swelling of the nasal bones, and no polyps
d. Oral cavity	Dry lip mucosa, the normal-sized tonsils of the uvula are located symmetrically in the middle	Dry lip mucosa, the normal- sized tonsils of the uvula are located symmetrically in the middle	Dry mouth, moist lip mucosa, normal lip shape, clean teeth, habit of brushing teeth twice a day, no difficulty swallowing, no enlarged tonsils
e. Ear	Medium ear shape, right and left symmetrical, clean ear canal, no excess cerumen, hearing works properly	Medium ear shape, right and left symmetrical, clean ear canal, no excess cerumen, hearing works properly	Ears, symmetrical shape, no complaints, normal hearing
f.Neck checkup	There was no enlargement of the thyroid gland, no gangrene, no pus, no odor. There is no shortness of	There was no enlargement of the thyroid gland, no gangrene, no pus, no odor. There is no shortness of	There was no enlargement of the thyroid gland, no gangrene, no pus, no odor. There is no shortness
g. Thoracic checkup:	breath, coughing, and secretions. Symmetrical chest shape, regular breathing rhythm, normal breathing pattern, no nostril breathing	breath, coughing, and secretions. Symmetrical chest shape, regular breathing rhythm, normal breathing pattern, no nostril breathing	of breath, coughing, and secretions. Symmetrical chest shape, regular breathing rhythm, normal breathing pattern, no nostril breathing



Based on table 4, shows that the data of the three patients who were respondents did not have a significant difference regarding the general physical examination.

Data analysis

From the data collection carried out, the following is presented the respondents' data analysis
Table 5. Respondent data analysis

No		Data	Problem	
_	Respond	lent 1	Non-compliance	
	DS :		related	to
	a.	Complaining that the body is easily limp	inadequate	
	b. (Often experience headaches, get tired easily when doing	understanding	
	:	activities, and the back of the neck often feels cramps	_	
	c.]	Respondents rarely avoid consuming salty food		
	DO:			
1	d .	Respondents seem to still not understand what		
	1	hypertension is and how to treat it		
	e. :	food that is cooked still does not limit the salt.		
	f	At the time of activity looks tired.		
		TD; 180/100 mm Hg		
	•	N: 82 x/i		
		S: 36 C		
]	RR: 20 x/i		
	Respond		Non-compliance	
	DS:		related	to
	a. Res	spondents always decided to buy medicine at the shop	inadequate	
		t when they were sick, if the pain did not go away then	understanding	
		y went to the health center or hospital.	8	
		he respondent feels achy and dizzy, he will rest so that he		
		esn't do much activity		
2	DO:			
		espondents want to quickly solve problems about their		
		ealth		
	b. T	he family said they wanted to improve their health.		
		P: 180/90 mm Hg		
		: 63 x/i		
		: 36 C		
		R: 20 x/i		
	Respond		Non-compliance	
	DS:	-	related	to
		Respondents do not check their health regularly at the	inadequate	
		health service facility	understanding	
		The family says not enough notice of the health patient	8	
		Family No know method nurse patient moment Sick		
3	DO:			
-		The family seemed to pay less attention to the		
		respondent's health		
		BP: 160/100 mm Hg		
		N: 80 x/i		
		S: 36 C		

Nursing Intervention

From the data collection carried out, the following is presented the nursing intervention data. **Table 6. Intervention Nursing**



E-ISSN. 2808-4608

Nursing diagnoses	Nursing Planning		
	SLKI SIKI		
Non-compliance related to inadequate understanding	 Compliance Level After nursing actions for 3x24 hours, it is hoped that the level of understanding will increase Results Criteria: a. Mentalizing the will to meet the treatment or treatment program increases b. Verbalization follows the increasing prompts c. The risk of complications of disease/health problems decreases d. Behavior following the treatment program/treatment improved e. The behavior of carrying out the recommendations improved f. Signs and symptoms of the disease improve 	 Disease Process Education : Definition: facilitating the determination and regularity of undergoing a predetermined treatment program. Action : Observation a. Identification of adherence to undergoing a treatment program. Therapeutic a. Commit to going through the treatment program properly b. Make a family accompaniment schedule to take turns accompanying the patient during the treatment program if necessary c. Document activities during the treatment process d. Discuss things that can support or hinder the treatment program e. Involve the family to support the treatment program being undertaken Education a. Inform the treatment program b. Inform the benefits that are obtained if you regularly undergo a treatment program c. Advise the family to accompany and care for the patient during the treatment program 	

The main discussion in this study was community nursing care with the application of health education about a low-salt diet to hypertension respondents in Punaga Hamlet, Bajeng District, Gowa Regency which included assessment, diagnosis, intervention, implementation, and evaluation. Besides that, it will discuss the supporting factors and the gaps that occur between theory and reality while nursing diagnoses are non-compliance.

a. Assessment

In discussing this case, the researcher discussed the correlation between theory and case reports of non-adherence to nursing care to Mr "M", Mr "R" and Mr "S". with hypertension which has been carried out from 06 June 2022 – 20 June 2022 in Punaga Hamlet, Bajeng District, Gowa Regency.



Activities carried out include assessing, enforcing nursing diagnoses, planning nursing interventions, implementing, and evaluating nursing

- In assessing the client's identity which includes name, gender, age, occupation, last education, religion, and residential address. From the identities of the three cases above, the researcher discussed the difference in age of the 3 cases, namely, case 1 was 48 years old, case 2 was 52 years old, and case 3 was 50 years old
- 2) Health history

In reviewing the medical history which included chief complaints, present medical history, and past medical history, the researcher discussed the main complaints among the three cases.

In respondent 1, it happened with the main complaint, namely complaining of pain in the head, feeling cramps in the back of the neck, and the body easily limp. In respondent 2, there were complaints of frequent aches and fatigue. While respondent 3 complained of weakness and headaches.

Following the etiology, what often occurs in hypertension is usually complaints that appear such as headaches, a feeling of soreness and discomfort in the back of the neck, weakness, feeling like falling, fast heartbeat, and ringing in the ears. So based on the researcher's analysis, the symptoms felt by the three patients were the same as the theory.

b. Nursing Diagnosis

In the literature review, the nursing diagnoses that appear in hypertensive clients, namely nonadherence, are related to inadequate understanding, because from the results of the assessment on the client, the authors found data that led to this diagnosis. That is marked by Mr. M did not follow the treatment program as recommended, the patient and family did not fully understand hypertension treatment, and Mr. R and his family also do not know about the risk of disease complications if they consume excessive salt. And the third respondent is marked with Mr. S does not routinely check his health at the nearest health service facility, the family pays little attention to the respondent's health and does not know how to care for the respondent when he is sick.

c. Nursing Intervention

Planning is the process of preparing various nursing interventions needed to prevent, reduce or reduce problems [15]. In determining the planning stage for nurses, various knowledge and skills are needed, including knowledge of the client's strengths and weaknesses, values and beliefs, boundaries of nursing practice, the role of other health workers, the ability to solve problems, make decisions, write goals, and choose and make strategies of safe nursing in meeting the goals, writing nursing instructions as well as the ability to carry out collaboration with other health levels. This planning activity includes prioritizing problems, formulating objectives, outcome criteria, and actions.

The authors develop interventions based on the Indonesian Nursing Outcome Standards (SLKI) and the Indonesian Nursing Intervention Standards (SIKI). Nursing interventions are tailored to the problems experienced by the client so that needs can be met. Care plans for nursing problems in patients Mr. M, Mr. R, and Mr. S were taken in a literature review based on the theory of family nursing care with treatment non-adherence in inpatient nursing care, there were nursing interventions in each nursing diagnosis.

In preparing the nursing plan, it is carried out together with the family so that the plan to be implemented is a family formulation and the author only provides direction and guidance. In preparing the nursing action plan, it places more emphasis on family independence in carrying out and carrying out the five family tasks in the health sector by providing counseling and motivation, this is because the causes of problems are closely related to family knowledge and behavior. In preparing the nursing plan, the authors did not find a gap between the case review and the theoretical review, because the nursing care plan given to patients and families was chosen by existing theory while taking into account the client's regularity in managing a low salt diet.

d. Nursing Implementation

The author performed nursing actions following the plans that have been prepared previously. The results of the implementation carried out on respondents with non-compliance were carried out by



adjusting to the conditions of the respondents without leaving the principles and concepts of nursing [16].

In carrying out the implementation of nursing on Mr. M, Mr. R and Mr. S have been implemented following a predetermined plan. In the nursing diagnosis of non-compliance in patients with hypertension related to inadequate understanding, nursing actions are required for 3 visits. There were no obstacles in the implementation of nursing actions because the patient and family were cooperative with the nurse so that the action plan could be implemented properly.

e. The final stage of the nursing process is to evaluate.

This evaluation is carried out to assess whether the goals set by the author in the action plan are successful or not. In carrying out nursing care to respondents Mr "M", Mr "R", and Mr "S" for 3 x 24 hours the results were obtained for Mr "M", with non-compliance nursing problems related to inadequate understanding on day 1 to day 3 can indicate a significant change. Likewise, Mr "R" from day 1 to day 3 also showed a significant change.

4. CONCLUSION

After conducting education about hypertension and low-salt diets, respondents understood the education that had been delivered and there was an effect of education, namely increasing knowledge about low-salt diets in hypertension respondents. This research is expected to be a reference for subsequent studies in conducting nursing care for hypertension respondents. There is an influence of hypertension education and a low-salt diet on hypertensive respondents and their families, so that the client's family understands their disease if foods high in salt can trigger hypertension, and families can find out the right way of handling hypertension.

REFERENCES

- [1] Putra B. Kunci Penanganan Hipertensi Refrakter: Mendalami Entitas Hipertensi Esensial dan Sekunder. J Indones Med Assoc 2019;68:1–7. https://doi.org/10.47830/jinma-vol.68.1-2018-92.
- [2] Nurvita S. Literature Riview Gambaran Hipertensi di Indonesia. J Rekam Medis Manaj Infomasi Kesehat 2021;1:1–5.
- [3] Arum Y. Hipertensi pada Penduduk Usia Produktif (15-64 Tahun). Higeia J Public Heal Res Dev 2019;1:84–94. https://doi.org/https://doi.org/10.15294/higeia.v3i3.30235.
- [4] Sekar S, Irawan D, Susanto A. Analisis Faktor-Faktor yang Memengaruhi Kejadian Hipertensi. J Bionursing 2020;2:164–1171. https://doi.org/10.20884/1.bion.2020.2.3.70.
- [5] Soares J, Domingos S, Ivoni S. GambaranTingkat Pengetahuan Penderita Hipertensi Terkait Penyakit Hipertensi. J Keperawatan GSH 2021;10:27–32.
- [6] Adam L. Determinan Hipertensi Pada Lanjut Usia. Jambura Heal Sport J 2019;1:82–9. https://doi.org/10.37311/jhsj.v1i2.2558.
- [7] Tirtasari S, Kodim N. Prevalensi dan Karakteristik Hipertensi Pada Usia Dewasa Muda di Indonesia. Tarumanagara Med J 2019;1:395–402. https://doi.org/https://doi.org/10.24912/tmj.v1i2.3851.
- [8] Amelia R. Hubungan Dukungan Keluarga Terhadap Kepatuhan Diet Hipertensi Pada Penderita Hipertensi Di Kelurahan Tapos Depok. J Kesehat Saelmakers Perdana 2020;3:77–90.
- [9] Heriyandi, Hasballah K, Tahlil T. Pengetahuan, Sikap, Dan Perilaku Diet Hipertensi Lansia Di Aceh Selatan. J Ilmu Keperawatan 2018;6:59–69.
- [10] Kiha R, Palimbong S, Kurniasari M. Keefektifan Diet Rendah Garam I Pada Makanan Biasa Dan Lunak Terhadap Lama Kesembuhan Pasien Hipertensi. J Keperawatan Muhammadiyah 2018;3:74–89. https://doi.org/10.30651/jkm.v3i1.1574.
- [11] Inaki M, Soelistyoningsih D, Jayanti N. Hubungan Dukungan Keluarga Dengan Kepatuhan Diet Rendah Garam Pada Penderita Hipertensi Sistolik. Media Husada J Nurs Sci 2021;2:132–40. https://doi.org/10.33475/mhjns.v2i3.62.
- [12] Darmarani A, Darwis H, Mato R. Hubungan Pengetahuan Dengan Kepatuhan Diet Hipertensi Pada Lansia Yang Menderita Hipertensi Di Desa Buntu Buda Kecamatan Mamasa. J Ilm Kesehat Diagnosis 2020;15:366–70.
 - Community Nursing Care with Knowledge Deficit Problems About Low Salt Diet in Hypertension Respondents in Punaga Hamlet, Bajeng District, Gowa Regency. **Muhamad Isnaini** 423



- [13] Manoppo E, Masi G, Silolonga W. Hubungan Peran Perawat Sebagai Edukator Dengan Kepatuhan Penatalaksanaan Hipertensi Di Puskesmas Tahuna Timur. J Keperawatan 2018;6:1– 8.
- [14] Adiputra I, Trisnadewi W, Oktaviani N, Suryana. Metodologi Penelitian Kesehatan. Denpasar: Yayasan Kita Menulis; 2021.
- [15] Djibu E, Afiani M, Zahra F. Pengaruh Peran Perawat Sebagai Edukator Terhadap Kepatuhan Minum Obat Pada Pasien Hipertensi. Media Husada J Nurs Sci 2021;2:47–53. https://doi.org/10.1016/S0002-9394(26)91015-5.
- [16] Nababan T, Sihite U. Efektivitas Peran Perawat Terhadap Pelaksanaan Promkes pada Penderita Hipertensi di Wilayah Kerja Puskesmas Tandang Buhit Kecamatan Balige Kabupaten Toba Samosir Tahun 2017. J Keperawatan Prior 2018;1:1–10.