

Implementation of Nursing Care in Hypertension Patients with a family approach: A Case Study



Reni Chairani¹, Tukiran²

^{1,2}Department of Nursing, Poltekkes Kemenkes Jakarta I, Indonesia

ABSTRACT: Hypertension is the number one cause of death in the world every year, including in Indonesia. It has been proven that in Indonesia alone in 2020 there will be around 80 million people with hypertension. For this reason, prevention and control of hypertension in the community must be strengthened and improved in terms of quality of service, health promotion, community empowerment in early detection and monitoring of hypertension risk factors at First Level Health Facilities through Integrated Services for non-communicable diseases. The role of nurses is very important in preventing and controlling hypertension in the community, especially in First Level Health Facilities. Objective: To determine the implementation of family nursing care in hypertensive patients with a family approach as an effort to reduce blood pressure. Objective: To determine the implementation of family nursing care in hypertensive patients with a family approach as an effort to reduce blood pressure. Research Method: The design of this study used a case study method that implemented the application of family nursing care in hypertensive patients with a family approach as an effort to reduce blood pressure. This research was conducted on hypertensive patients in Mr. S's family with hypertension problems in Pedurenan Village, RT 08 RW 02 Karang Tengah, Tangerang. Results: Implementation of family nursing care with a family approach for 3 days reduced hypertension from 160/100mmHg to 140/80 mmHg.

KEYWORDS: Hypertension nursing care, family approach.

I. INTRODUCTION

Heart disease is a health problem that affects both developed and developing countries. Hypertension is the number one cause of death in the world every year. According to data from the World Health Organization (WHO) in 2015, around 1.13 billion people in the world have hypertension. Therefore, people with hypertension will continue to increase every year and it can be estimated that by 2025 there will be 1.5 billion people affected by hypertension, and it is estimated that every year 9.4 million people die from hypertension and its complications. Meanwhile, in Indonesia alone, in 2020 there will be around 80 million people with hypertension [1–3].

Based on the 2018 Basic Health Research (Riskesmas) results, the prevalence of hypertension based on measurement results in residents aged > 18 years in DKI Jakarta is 34.1%. The estimated number of cases is 63,309,620 people, while the death rate in Indonesia due to hypertension is 427,218 deaths. Hypertension occurs in the age group 31-44 years 31.6%, age 45-54 years 45.3%, age 55-64 years 55.2%. From the prevalence of hypertension of 34.1%, it is known that 8.8% were diagnosed with hypertension and 13.3% of people diagnosed with hypertension did not take medication and 32.3% did not take medication regularly [3].

Hypertension or high blood pressure is an abnormal increase in blood pressure in the arteries continuously for more than a period. This occurs when the arterioles constrict. Arterioles constrict making it difficult for blood to flow and increasing the pressure against the artery walls. Hypertension increases the workload of the heart and arteries which, if continued, can cause damage to the heart and blood vessels. Hypertension is defined as a systolic blood pressure of more than 140 mmHg and a diastolic pressure of more than 90 mmHg, based on two or more measurements [4–6].

The general symptoms caused by suffering from hypertension are not the same for everyone, sometimes even without symptoms. In general, the symptoms complained of by people with hypertension are headaches, a feeling of soreness and discomfort in the neck, a feeling of spinning like a seven-wheeler like wanting to fall, palpitations or a fast heartbeat and ringing in the ears. Other symptoms that commonly occur in people with hypertension are dizziness, red face, headache, sudden bleeding from the nose, and a sore neck [7, 8].

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The government's role in controlling non-communicable diseases of hypertension is by being smart and obedient in dealing with hypertension as an effort to prevent and control hypertension, including increasing health promotion through controlling hypertension with "CERDIK" and "PATUH" behavior. Improving community-based hypertension prevention and control with self-awareness through regular blood pressure measurements. Strengthening health services, especially hypertension, the government has made various efforts such as: increasing access to First Level Health Facilities. Optimizing the referral system, and improving service quality. One of the efforts to prevent complications of hypertension, especially heart and blood vessel disease, is through Integrated Services for non-communicable diseases. Community empowerment in early detection and monitoring of risk factors for hypertension through Posbindu PTM held in the community, workplaces and institutions [9, 10]. Therefore, as is known for the prevention and control of hypertension in the community, it must be strengthened and improved in terms of service quality, health promotion, community empowerment in early detection and monitoring of risk factors for hypertension. That's why the role of nurses is very important in preventing and controlling hypertension in the community. By means of early detection and providing health promotion in the form of health education about hypertension, how to prevent hypertension in people who are at risk and then control hypertension to prevent complications. Teach how to care for family members who have hypertension mellitus in a comprehensive manner. Providing knowledge to families in creating a good environment for families and providing motivation to families to utilize existing health services in the community. Based on this problem, the authors feel it is necessary to conduct a deeper study of Mr. S, who is 66 years old and has hypertension.

II. METHOD

The design of this study used a case study method that implemented the application of family nursing care in hypertension patients with a family approach as an effort to reduce blood pressure. This research was conducted on hypertensive patients in Mr. S's family with hypertension problems in Pedurenan Village, RT 08 RW 02 Karang Tengah, Tangerang

III. CASE REPORT

Assessment

The results of the nursing assessment obtained the following data: in the family there are 4 family members: Mr. S as the head of the family who is 66 years old with last education in elementary school, is a Muslim. Mrs. N as a wife, graduated from junior high school, is Muslim. Has 2 children, namely: Mr. I, the first child who is 34 years old, graduated from high school. The client's second child, Mr. E, who is 30 years old, graduated from high school. The type in the family is an elderly family because Mr. S and Mrs. N are old and live with their first child but who has died but is divorced. Mr. S's family ethnicity is Javanese and Muslim for all members. Mr S and Mrs N work as small food traders. The unfulfilled stage of family development is the first child who still lives in the same house as Mr. S.

Mr. S was treated at the Tangerang Hospital for 4 days due to very high blood pressure, namely 210/130mmHg. At this time, Mr S said that he often felt dizzy and often felt his stomach was bloated and had gone to the Community Health Center after taking the medicine he was given, Mr S. felt he had no more complaints. However, if he eats salty, spicy and sour food, Mr S said he felt dizzy and his stomach hurt, due to a lack of understanding about maintaining a healthy diet and a dire need for education. Mr S said that he still felt dizzy when he had too much activity or when he was sleep deprived and sometimes.

Mr. S's communication pattern is good with all family members. Mr. S as the head of the family also plays a role in making decisions in the family. Mr. S and his family attended the recitation held in his home environment. Tn.S. helping his neighbors by inviting his neighbors to help prepare snacks and drinks at his house. Mr S hopes that after undergoing treatment Mr S hopes not to feel dizzy so he can sell properly. Changes felt after falling ill Mr S said he could not do activities for too long and asked his son a lot for help.

In the study of 5 family tasks the ability to recognize health problems: Mr. S and his family have not been able to recognize health problems, said that currently if Mr S has a headache he only takes headache medicine and amlodipine medicine from the health center. did not understand about his illness. Mr. S admitted that he was enthusiastic to find out more about his disease and how to control his hypertension so it would not recur. Ability to make decisions Mr. S and his family have been able to make decisions about his health problems. If Mr S's disease recurs, Mr S will come alone to the nearest health facility or be accompanied by his son. The ability to care for family members who are sick, the family has been able to care for Mr S who has hypertension, by providing activity limits for Mr S. However, the family is not very familiar with how to control Mr S's illness with other than medication because the family so far has only given Mr S medicine if he feels dizzy . Ability to modify the environment: it seems that the family has not been able to modify the environment because there is still sufficient air ventilation in Mr S's house and there are still many cobwebs on the walls and ceilings that are dusty and feel stuffy. Ability to use

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the nearest health facility: Mr S's family is able to take Mr S to the nearest health service facility and Mr S is used to having control at the community health center every month.

The client's current habitual pattern of appetite is good, the client does not have food allergies. Mr. S said that he often eats salty foods. Mr. S regularly consumes vegetables and fruits. The normal client's elimination pattern is like 3-4 times a day with a clear yellow color and chapters 1-2 times a day with a soft brownish yellow consistency. Clients shower 2 times a day and wash their hair 2 times a week. Mr. S's client's activity pattern is working from morning to evening and taking regular walks on the tennis court near his house. The client said he had smoked 1-2 years before Mr S got sick. The client says that he often gets dizzy and stiff in the neck, often lacks sleep because he stays up late with neighbors. And Mr S does not regularly take medicine at the health center.

On physical examination obtained data: weight 65 kg, height 165kg, BP : 160/100mmHg, N: 76 x/minute, RR : 22x/minute, S : 36.5 °, no lymph enlargement, symmetrical eye movements normal eyeball, pink conjunctiva, normal corneal reflex, no eye abnormalities, good light reaction. The auditory system is good, there is cerumen and a characteristic odor of cerumen, the hearing function is good. Normal speech system. Respiratory system no obstruction respiratory rate 22 x / minute, no sputum, chest symmetrical, no injuries, chest palpation: tactile fremitus not palpable in the patient's left and right lung fields, chest percussion: sonor in both lung fields, vesicular chest auscultation in all lung fields. Cardiovascular system: Pulse 90 x/min, regular rhythm, blood pressure 130/80 mmHg, no jugular venous distension, warm skin temperature, CRT 2 seconds, no edema, apical pulse 90x/min, no chest pain. The digestive system of Mr. S's family, Mrs. N, said that you only took gastric medicine from the health center to deal with dirty tongue pain, PQRST scale pain measurement P: pain occurs when Mr S's ulcer disease recurs, Q: pain like being stabbed, R: pain in the The solar plexus spreads to the left upper abdomen, S : ± 4 , T : when Mr S's ulcer disease recurred, bowel sounds were not examined, there was no diarrhea, the liver was not palpable. The endocrine system has no thyroid enlargement, no gangrene. Urogenital system no change in urinary pattern, normal tub frequency 3-4 times a day. Intergumentary system is good, skin is warm, skin color is reddish, skin condition is good. The musculoskeletal system has no difficulty moving.

Nursing Diagnosis

Based on the study above, the authors raised 3 nursing diagnoses related to health problems with hypertension, namely: Risk for decreased cardiac output related to changes in afterload, disturbance of pain comfort associated with symptoms of ulcer disease and knowledge deficit regarding hypertension disease associated with lack of exposure to information.

Nursing Planning

Nursing intervention first diagnosis of risk of decreased cardiac output with the aim: After 1x visit it is expected that the risk of decreased cardiac output does not occur and does not become actual with the outcome criteria: Mr. S's blood pressure is controlled (110-130/70-90mmhg), Mr. S and family Know how to control hypertension. Nursing interventions: (Cardiac Rehabilitation Education) monitor Mr S's blood pressure, teach patients and families heart risk factor modification (eg: health education about the dangers of smoking for the elderly, diet to reduce complications, and appropriate exercise to make the heart healthy) and advise the patient and family for a healthy lifestyle with hypertension.

Nursing intervention for the second diagnosis of pain discomfort disorder with the aim: after 3 visits it is expected that the client will show increased comfort status with the outcome criteria: decreased discomfort complaints, improved blood pressure 110-130/70-90mmhg, Mr. S and family understand how to deal with pain when it occurs. Nursing interventions: Identify the location, characteristics, duration, frequency, pain intensity and pain scale, identify factors that aggravate and relieve pain, monitor the client's vital signs, involve the family in facilitating sleep breaks, provide non-pharmacological techniques to reduce pain and involve the family in monitoring pain independently.

Nursing intervention for the third diagnosis of knowledge deficit regarding hypertension with the objectives: After 3 visits, it is expected that Mr. S and his family will show an increase in knowledge about hypertension with the outcome criteria: Ability to explain knowledge about a topic increases, verbalization of interest in learning increases, appropriate behavior recommendation increases. Nursing intervention: (Health education) provide health education to Mr. S and family about hypertension (definition, causes, signs and symptoms, complications,), schedule health education according to the agreement, provide health education materials and media, provide health education about recognizing hypertension, and monitor Mr S's knowledge of hypertension.

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Nursing Implementation

The implementation of the first diagnosis of decreased cardiac output risk is monitoring Mr. S's blood pressure, teaching patients and families about heart risk factor modification (eg understanding smoking, diet and exercise) and advising patients and families for a healthy lifestyle with hypertension.

The implementation carried out in the second diagnosis of pain discomfort disorders is identifying the location, characteristics, duration, frequency, pain intensity and pain scale, identifying factors that aggravate and alleviate pain, monitoring the client's vital signs, involving the family in facilitating sleep breaks, providing techniques non-pharmacological to reduce pain and involve the family to monitor pain independently.

Implementation carried out on the three diagnoses of knowledge deficits about hypertension is providing health education to Mr. S and family about hypertension (definition, causes, signs and symptoms, complications,), scheduling health education according to the agreement, providing health education materials and media, providing health education about knowing hypertension, and monitoring Mr S's knowledge about hypertension.

Nursing Evaluation

The first diagnosis is risk of decreased cardiac output. Subjective data: Mr S said he was taking medication to lower blood pressure. Objective data: TTV results; BP : 140/80 mmHg, N : 85 x/min, RR : 21 x/min. Analysis: the problem of decreased cardiac output risk is not actual. Planning: Intervention is continued (involve monitoring the client's lifestyle and controlling the client's stress patterns)

Second diagnosis of pain discomfort disorder. Subjective data: Mr S said that he practiced breathing techniques at night when Mr S felt pain, Mr S could repeat the steps of the Deep Breathing Technique. Objective data: TTV results; BP: 140/80 mmHg, N : 85 x/min, RR : 21 x/min, pain scale = 3. Analysis: The problem of discomfort and pain has been resolved. Planning: Intervention is continued (by involving the family to control eating patterns, reminding to take medication and managing client stress).

The third diagnosis is knowledge deficit about hypertension. Subjective data: Mr S said hypertension is a disease in which blood pressure exceeds normal limits, Mr S could mention the signs and symptoms of hypertension, Mr S looked stuttering about the complications of hypertension and Mr S could mention how to control high blood pressure. Objective data: materials and media in the form of flipcharts and leaflets have been made available and Mr S said he was happy to get a more complete explanation of his illness. Analysis: The problem of knowledge deficit is resolved. Planning: Intervention is stopped.

IV. DISCUSSION

Implementation of nursing care for Mr S's family who experienced hypertension for 3 days from 03 June 2020 to 05 June 2020. From the data obtained when conducting a family nursing assessment of Mr S's family, Mr S's family is a type of family with a nuclear family (Nuclear Family) consisting of a husband and wife with 2 children, Mr. S. Mr. S's family has entered the stage of family development at an advanced age where Mr. S and Mrs. N are elderly and Mr. S's last child is 30 years old. According to Kholifah & Widagdo the developmental tasks in families with old age are maintaining satisfying living arrangements, adjusting to declining incomes, maintaining marital relations, adjusting to the loss of a partner, maintaining family ties between generations [11].

When the authors conducted a focus study on the 5 family tasks in the health sector, the authors considered that the family had not fully carried out the 5 main family tasks in the health sector in accordance with the theory put forward by Kholifah & Widagdo because Mr S's family had not been able to recognize the health problems he was experiencing. family, especially Mr. S. The family did not seem to understand Mr. S's disease, namely hypertension, the family did not seem to understand when the author asked several questions related to Mr. S's illness, Mr S's family also did not know how to control Mr S's hypertension apart from medication consumed . Mr S's family was unable to modify a conducive environment for Mr S where the condition of Mr S's house looked stuffy and the house was too crowded so that it disturbed Mr S's resting activities [11].

Based on the data obtained during the assessment, there is data on Mr S's main complaint that Mr S said he often felt dizzy Mr S said he still felt dizzy when his activities were too strenuous or when he was sleep deprived. Hypertensive sufferers recognize or feel complaints and symptoms, so that hypertension is often dubbed the silent killer (silent killer). However, the symptoms are headaches, heavy nape, anxiety, heart palpitations, dizziness, blurred vision, pain in the chest, tired easily [12, 13].

To reduce dizziness and feeling of heaviness on Mr S's shoulders, Mr S used to take the drug Amlodipine 2 x 5 mg, but it was not controlled because Mr S only drank it if he felt dizzy. According to Palmer and Willam Uncontrolled people who suffer from hypertension will trigger further complications such as cardiovascular disease. Heart disease, Stroke and Kidney disease are the risks of complications of cardiovascular disease that often occur. The current use of anti-hypertensive drugs is still effective

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in managing hypertension. Patients with a pattern of taking anti-hypertensive drugs are not routine, only taken when blood pressure increases will cause complications from hypertension to occur. Compliance with treatment of hypertensive patients is important because hypertension is a disease that cannot be cured but must always be controlled or controlled so that complications do not occur which can lead to death [14].

From the data obtained, Mr S belongs to the elderly group where Mr S is 66 years old and has been treated for 4 days at the Tangerang Hospital due to high blood pressure, namely 210/130 mmHg. This is consistent with research which states that the risk of hypertension increases with age with age classification according to the health department showing that age ≥ 75 years is also included in the elderly group. After the age of 45 years, the arterial walls will be thickened by the accumulation of collagen in the muscle layer, so that the blood vessels will gradually narrow and become stiff. Systolic blood pressure increases due to the flexibility of the large blood vessels which decreases with increasing age, while diastolic blood pressure increases then settles or tends to decrease. Increasing age will cause several physiological changes, increasing peripheral resistance and sympathetic activity that affects other organs [15].

Based on the data found through observation, interviews, and physical examination, 3 priority nursing problem diagnoses were obtained, namely: The first nursing diagnosis is the risk of decreased cardiac output, The second diagnosis is a feeling of discomfort, acute pain associated with symptoms of stomach ulcers and The third diagnosis is a deficit of knowledge about hypertension disease associated with less exposure to information.

The implementation carried out in the first nursing diagnosis, namely the risk of decreasing cardiac output, has been carried out properly and successfully carried out according to the plan made by the author. Implementation is more emphasized on adherence to taking antihypertensive drugs and living a healthy lifestyle with hypertension. Supporting factors: Mr S was cooperative and said he was going to the nearest health care facility to treat his hypertension. This shows that the cooperative attitude shown by Mr S and his family is an attitude of agreement towards a healthy lifestyle and can be formed if there is knowledge underlying this behavior, as well as strengthened by evidence and its benefits. If the benefits of the healthy lifestyle expected by the health worker have been found and felt, then an attitude that supports the health of the client and family is formed. The family is able to carry out the third and fourth family care functions, namely the family is able to care for sick family members and the family is able to modify the environment. Inhibiting factors: There are no obstacles in carrying out the nursing implementation process [11].

The implementation carried out in the second nursing diagnosis of pain discomfort is identifying the location, characteristics, duration, frequency, pain intensity and pain scale, identifying factors that aggravate and alleviate pain, monitoring the client's vital signs, involving the family in facilitating sleep breaks, providing non-pharmacological techniques to reduce pain and involve the family to monitor pain independently. Supporting factors: Mr S said that he practiced the Breathing Technique at night when Mr S felt pain, Mr S could repeat the deep breathing technique steps that had been taught and cooperate cooperatively following the author's instructions. Inhibiting factors: There are no obstacles in carrying out the nursing implementation process due to internal family factors that have an interest in learning and the existence of health encouragement [16].

Knowledge about hypertension can be carried out properly and successfully carried out in accordance with the plans that have been made by the author. Supporting factors: clients and families appear to be cooperative when the writer carries out the implementation, namely conducting health education about hypertension and proper diet for hypertensive patients. Implementation is carried out in accordance with the principles in implementing family nursing care according to Ostlund et al, namely the approach taken in implementing family nursing care is health counseling or health care at home [17].

V. CONCLUSIONS

Based on the results of the study, it can be concluded that after carrying out nursing care for 3 days, the nursing diagnoses of the three problems can be resolved according to the outcome criteria set in the plan.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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