

CHAPTER 2

LITERATURE REVIEW

2.1. Family Concept

2.1.1. Definition of Family

The family is the smallest social unit in society, consisting of two or more people related by blood, marriage, or adoption. They live together, interact with each other, and fulfill their respective roles and functions to achieve common goals. The family is the primary environment for individuals to receive physical, psychological, social, and spiritual support, which influences the growth, development, and well-being of family members. Therefore, the family is viewed as an interconnected system and the continuity of family function (Russell, 2020).

Families play a crucial role in maintaining, protecting, and improving the health status of their members. They serve as the primary source of support for health-related decisions, care for sick family members, and the adoption of healthy lifestyles. Strong family involvement has been shown to enhance the capabilities of family members, making the family a primary focus in family services and community nursing (Kerangan et al., 2021).

2.1.2. Family Types

According to (Widagdo 2016 in Wahyuni et al., 2021), family types can be classified into two main groups, namely traditional families and non-traditional families.

1) Traditional Family

- a. Nuclear Family (Nuclear Family) is a family consisting of a father, mother and children who live in one household.
 - b. A dyad family is a family that only consists of a husband and wife without any children.
 - c. Single Parent is a family led by one parent and child, usually resulting from divorce or death of a partner.
 - d. Single Adult is a household consisting of only one adult who is not married or living alone.
 - e. An Extended Family is a nuclear family that lives together or interacts closely with other family members, such as grandparents, uncles, or aunts.
 - f. Middle-Aged or Elderly Couple is a middle-aged or elderly couple who live together because their children have grown up and have their own household.
 - g. Kin-Network Family, several families who live close together or together and share certain resources and services.
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- a. Non-traditional Family
 - b. Unmarried Parent and Child Family is a family consisting of parents and children without any legal marriage ties.
 - c. Cohabiting Couple is two adults who live together without the bonds of marriage.

- d. Gay and Lesbian Family is a family formed by couples of the same gender and carrying out family functions like a married couple.
- e. Nonmarital Heterosexual Cohabiting Family is a couple of opposite gender who live together without being married and do not have a formal marriage commitment.
- f. Foster Family is a family that accepts and cares for children who are not blood related temporarily as a foster family.

2.1.3. Family Functions

According to Andarmoyo in Clara (2020), the family functions carried out by the family are:

1) Affective Function

The affective function plays a role in fulfilling psychological needs. Family members develop a positive self-image, a sense of belonging, a sense of meaning, and affection. Support is provided and developed through family interactions. The affective function is a source of energy that determines family happiness.

2) Socialization Function

Each stage of family and individual development is achieved through interactions or relationships that are manifested in socialization. Family members learn discipline, norms, culture, and behavior through

relationships and interactions within the family, enabling them to play a role in society.

3) Economic Function

Developing sources of income to meet current family needs and saving for future family needs. Family care/health care function

Families provide health care for each member to prevent health problems and work together to provide care for sick members.

4) Function of Education

Sending children to school aims to instill knowledge and skills and shape behaviors aligned with their talents and interests. This prepares children for future adult life by fulfilling adult roles and raising them according to their individual developmental levels.

2.1.4. Family Duties in the Health Sector

Families have a responsibility to provide therapeutic healthcare to sick family members. This care is a humanitarian effort to support growth and development, leading to optimal health. Generally, patients who receive attention and assistance from their families are more likely to follow medical advice than those who lack social support (Wahyuni et al., 2021). The following are the family's responsibilities in healthcare:

1) Knowing family health problems

Health is a family's most important need and should not be neglected. Without it, everything becomes meaningless, and often all family resources are depleted. Parents need to understand the health

conditions and changes occurring within the family. Even small changes in family members can become a major concern for the family or parents.

2) Deciding on appropriate health measures

This task is the family's primary effort to seek assistance appropriate to the family's circumstances, taking into account who among the family members has the ability to make decisions regarding the actions to be taken.

3) Providing care to sick family members

When caring for a sick family member, the family needs to know the following things:

- a. Disease conditions
- b. The nature and development of the care required
- c. Availability of facilities for care
- d. Resources available in the family, and
- e. The family's attitude towards the sick person.

4) Modifying a healthy home environment

Modifying food for hypertension sufferers includes:

- a. Avoid excessive use of table salt
- b. Avoid preserved foods
- c. Limit consumption of animal and plant foods
- d. Limit consumption of meat, liver and offal
- e. Increase consumption of vegetables and fruits.

When modifying a healthy home environment for a sick family member, families should consider the following:

- a. Resources owned by the family
 - b. Benefits of family maintenance
 - c. The importance of sanitation and hygiene
 - d. Disease prevention efforts
 - e. Family attitudes or views
 - f. Solidarity between family members.
- 5) Utilizing public health service facilities

When referring a family member to a health facility, the family needs to know the following:

- a. Location and availability of health facilities
- b. The benefits that can be obtained from this facility
- c. Level of family trust in health workers and facilities
- d. Previous negative experiences with healthcare workers or facilities
- e. Affordability of health facilities for families.

2.2. Concept of Disease

2.2.1. Definition of Hypertension

When checking blood pressure, you'll get two numbers. The first number (top) indicates the pressure when the heart contracts, or systolic, while the second number (bottom) indicates the pressure when the heart relaxes, or diastolic. Hypertension, or high blood pressure, is a condition in which a person's blood pressure rises above normal limits, as seen from the results of systolic and diastolic blood pressure measurements using a blood

pressure monitor. This condition is categorized as hypertension if the systolic pressure reaches or exceeds 140 mmHg and the diastolic pressure reaches or exceeds 90 mmHg (Ministry of Health of the Republic of Indonesia, 2021).

Hypertension, or high blood pressure, is a disorder of the blood vessel walls characterized by increased blood pressure. This condition disrupts the supply of oxygen and nutrients to the body's tissues that need it. As a result, the heart must work harder to meet oxygen needs. If this condition persists over the long term, hypertension can develop into a chronic disease (Hastuti, 2022).

2.2.2. Etiology

Based on its cause, hypertension is divided into two main types: primary (essential) hypertension, which is a type of hypertension whose exact cause is unknown. Secondary hypertension, on the other hand, is hypertension caused by an underlying medical condition, such as renal artery stenosis or disorders of the kidney parenchyma (Yogi, 2019).

Untreated hypertension can be dangerous if it persists for a long time, as it can cause complications in other organs, such as the heart, eyes, brain, kidneys, and large blood vessels. Hypertension can be treated with two main approaches: pharmacological and nonpharmacological. Nonpharmacological approaches include lifestyle changes, such as adopting a healthy diet, regular exercise, limiting alcohol consumption, and choosing nutritious foods. Pharmacological approaches, on the other hand, involve

taking antihypertensive medications to help control blood pressure. A combination of these two methods is often necessary to maintain blood pressure within normal limits and prevent further complications (Zainuddin et al., 2022).

2.2.3. Hypertension Risk Factors

There are several risk factors for hypertension that can and cannot be controlled, including:

1) Controllable Factors

a. Obesity

Weight gain leads to increased body fat. This condition, if prolonged, can affect blood flow and oxygen distribution throughout the body. This leads to dilation of blood vessels and increased blood pressure. Obesity also increases fat tissue, which requires more blood flow, increasing the volume of blood the heart must pump. Excess weight can trigger salt and water retention due to increased insulin levels, which in turn increases blood volume and increases the heart rate. This combination of factors leads to increased blood pressure (Kartika et al., 2021).

b. Lack of activity

Lack of physical activity can increase the risk of hypertension, as it is associated with potential weight gain. People who are sedentary tend to have a higher heart rate, requiring the heart muscle to work harder to pump blood during contractions. This puts

additional stress on the cardiovascular system, which can lead to increased blood pressure (Maharatu, 2019).

c. Excessive salt consumption

According to the World Health Organization (WHO), recommended salt consumption can help reduce the risk of hypertension. The WHO recommends that sodium intake not exceed 100 mmol per day (equivalent to approximately 2.4 grams of sodium or 6 grams of salt). Excessive sodium consumption can lead to increased sodium concentrations in the extracellular fluid. To normalize this condition, fluid is drawn out of the cells, increasing the extracellular fluid volume. As a result, blood volume also increases, which can ultimately trigger hypertension (Siswanto et al., 2020).

d. Smoking and Consuming Alcohol

Nicotine and carbon monoxide, inhaled through cigarettes, enter the bloodstream and damage the endothelial lining of arteries. This damage can trigger atherosclerosis and increase blood pressure (Kartika et al., 2021). Furthermore, alcohol consumption also has negative health effects. Alcohol can be a risk factor for hypertension because it has a similar effect to carbon dioxide, which increases blood acidity, makes it thicker, and forces the heart to work harder to pump blood. Alcohol also increases blood cortisol levels, which stimulates the activity of the renin-angiotensin-aldosterone system

(RAAS), thereby increasing blood pressure and can lead to hypertension (Mega et al., 2019).

e. Stress

Stress or emotional pressure, such as feelings of depression, sadness, anger, fear, or guilt, can trigger the adrenal glands to release the hormone adrenaline. This hormone increases the heart rate and strength, resulting in increased blood pressure. If stress persists for a long period, the body attempts to adapt, which can lead to organ dysfunction or pathological changes. One symptom that can arise from this condition is hypertension (Kartika et al., 2021).

2) Uncontrollable Factors

a. Family History

A family history of hypertension can increase the risk of developing the condition in offspring. The risk of hypertension in individuals with a close family member with a history of hypertension increases up to fourfold. Statistics show that if one parent has a non-communicable disease, the child has a 25% chance of developing the disease in their lifetime. However, if both parents have a non-communicable disease, this risk increases to 60% (Unger et al., 2020).

b. Age

As we age, the body undergoes physiological changes, such as thickening of blood vessel walls due to the buildup of collagen in the

muscle layer of blood vessels. This causes blood vessels to become stiffer and restricts blood flow, typically beginning around age 45. Furthermore, there is increased peripheral resistance, a decreased baroreceptor response to changes in blood pressure, and decreased kidney function, including reduced renal blood flow and glomerular filtration rate. These factors contribute to uncontrolled hypertension (Musfirah & Masriadi, 2019).

c. Gender

Men have a higher risk of developing hypertension than women. This is related to psychological factors, such as the work pressure often experienced by men, as well as unhealthy habits like smoking. Meanwhile, women have a lower risk before menopause because the hormone estrogen provides protection against cardiovascular disease (Tumanduk et al., 2019).

2.2.4. Classification of Hypertension

Hypertension is classified into two main categories, namely based on cause and severity (PDHI, 2021), as follows:

1) Based on etiology

a. Primary (Essential) Hypertension

Primary hypertension is the most common type of hypertension, accounting for 90% of all cases. Its exact cause is unknown, but it is thought to be related to genetic, lifestyle, and environmental factors. This type of hypertension is more common in women, individuals

living in urban areas, and those with stress chronic psychological stress due to work or certain personality traits, such as frustration.

b. Secondary Hypertension

This type accounts for 5-10% of hypertension cases and is usually caused by certain treatable medical conditions. Early treatment is crucial to prevent complications, such as:

- Renal Hypertension: Caused by renal ischemia which triggers the release of renin from the kidneys.
- Hormonal Hypertension: Originates from hormonal disorders such as adrenogenital syndrome, primary hyperaldosteronism, Cushing's syndrome, pheochromocytoma, or the use of hormonal contraceptives
- Neurogenic Hypertension: Caused by problems in the brain such as encephalitis, cerebral edema, cerebral hemorrhage, or tremors that stimulate the sympathetic nervous system, thereby increasing blood pressure.

2) Based on severity

Table 2.1 Classification of Hypertension

Category	Systolic Blood Pressure (mmHg)	Diastolic Blood Pressure (mmHg)
Normal	<130	85
Normal-high	130-139	85-89
Grade 1 hypertension	140-159	90-99
Grade 2 hypertension	≥160	≥110

Source: International Society of Hypertension Global Hypertension Practice Guidelines, 2020

2.2.5. Clinical Manifestations of Hypertension

Hypertension is a serious condition that often shows no obvious signs or symptoms. Therefore, hypertension is often referred to as a silent killer, as many sufferers are unaware they have the condition (Purnamasari & Meutia, 2023). Some common symptoms of hypertension include:

- a. A heartbeat that feels fast or irregular
- b. Vision becomes blurry
- c. Headache accompanied by a feeling of heaviness in the nape area
- d. Ringing sensation in the ears
- e. Feeling restless
- f. Pain in the chest area
- g. Get tired quickly

2.2.6. Pathophysiology of Hypertension

Human blood contains angiotensinogen produced by the liver. The process of hypertension begins with the formation of angiotensin II from angiotensin I, which occurs through the action of Angiotensin I Converting Enzyme (ACE). Angiotensin I is formed when angiotensinogen in the blood is converted with the help of the hormone renin. Angiotensin I is then converted to angiotensin II by the ACE enzyme found in the lungs. Angiotensin II plays a crucial role in regulating blood pressure (Marhabatsar & Sijid, 2021).

Angiotensin II plays a role in increasing blood pressure in the arteries. Its effect occurs through rapid vasoconstriction. Antidiuretic hormone

(ADH), or vasopressin, is one of the fastest-acting vasoconstrictors in the body. ADH is produced in the hypothalamus and functions in the kidneys to regulate osmolality and urine volume. Increased ADH levels cause a reduction in urine production. Increased ADH levels cause a reduction in urine production, resulting in less fluid being excreted from the body. As a result, osmolality increases and extracellular fluid volume increases by drawing fluid from the intracellular space. This will increase blood volume, which can ultimately lead to hypertension (Marhabatsar & Sijid, 2021).

Hypertension can also be triggered by the hormone aldosterone, a steroid hormone produced by the glomerulosa cells in the adrenal cortex. The adrenal cortex plays a key role in regulating sodium (Na) reabsorption and potassium (K) secretion in the renal tubules. Aldosterone increases sodium reabsorption and potassium secretion by stimulating sodium-potassium ATPase. Furthermore, this hormone also increases sodium permeability in the cortical luminal membrane. When sodium levels from salt (NaCl) increase, the body needs to dilute it by increasing the volume of extracellular fluid. This increase in extracellular fluid can ultimately lead to hypertension (Marhabatsar & Sijid, 2021).

2.2.7. Complications of Hypertension

According to Maulana (2022), hypertension can cause various complications, including:

1) Stroke

Stroke occurs due to bleeding caused by high blood pressure in the brain or due to an embolus that breaks free from a blood vessel outside the brain that is exposed to high pressure.

2) Kidney failure

Kidney failure is caused by progressive damage to the kidney capillaries (glomeruli) due to high blood pressure. When the glomerular membrane is damaged, blood can leak into the functional units of the kidney (nephrons), impairing their function and potentially leading to hypoxia or even cell death.

3) Encephalopathy (brain damage)

This brain damage often occurs in malignant hypertension, where very high blood pressure increases capillary pressure, pushing fluid into the interstitial spaces throughout the central nervous system.

4) Myocardial infarction

Myocardial infarction occurs when coronary arteries affected by atherosclerosis cannot supply enough oxygen to the heart muscle (myocardium), or when a thrombus forms that blocks blood flow in the vessel.

2.2.8. Hypertension Supporting Examination

Laboratory tests include hemoglobin and/or hematocrit, fasting blood sugar, HbA1c, lipid profile: total cholesterol, LDL, HDL, triglycerides, sodium, potassium, and calcium levels, uric acid, thyroid stimulating

hormone (TSH), creatinine, and eGFR. Urinalysis includes microscopic examination, dipstick urine protein or albumin:creatinine ratio, and 12-lead ECG (Adrian & Tommy, 2019).

2.2.9. Hypertension Management

The high number of hypertension cases in Indonesia presents a challenge for healthcare professionals to optimize treatment methods (Siswati et al., 2023). Hypertension management can be divided into two types:

1) Pharmacology

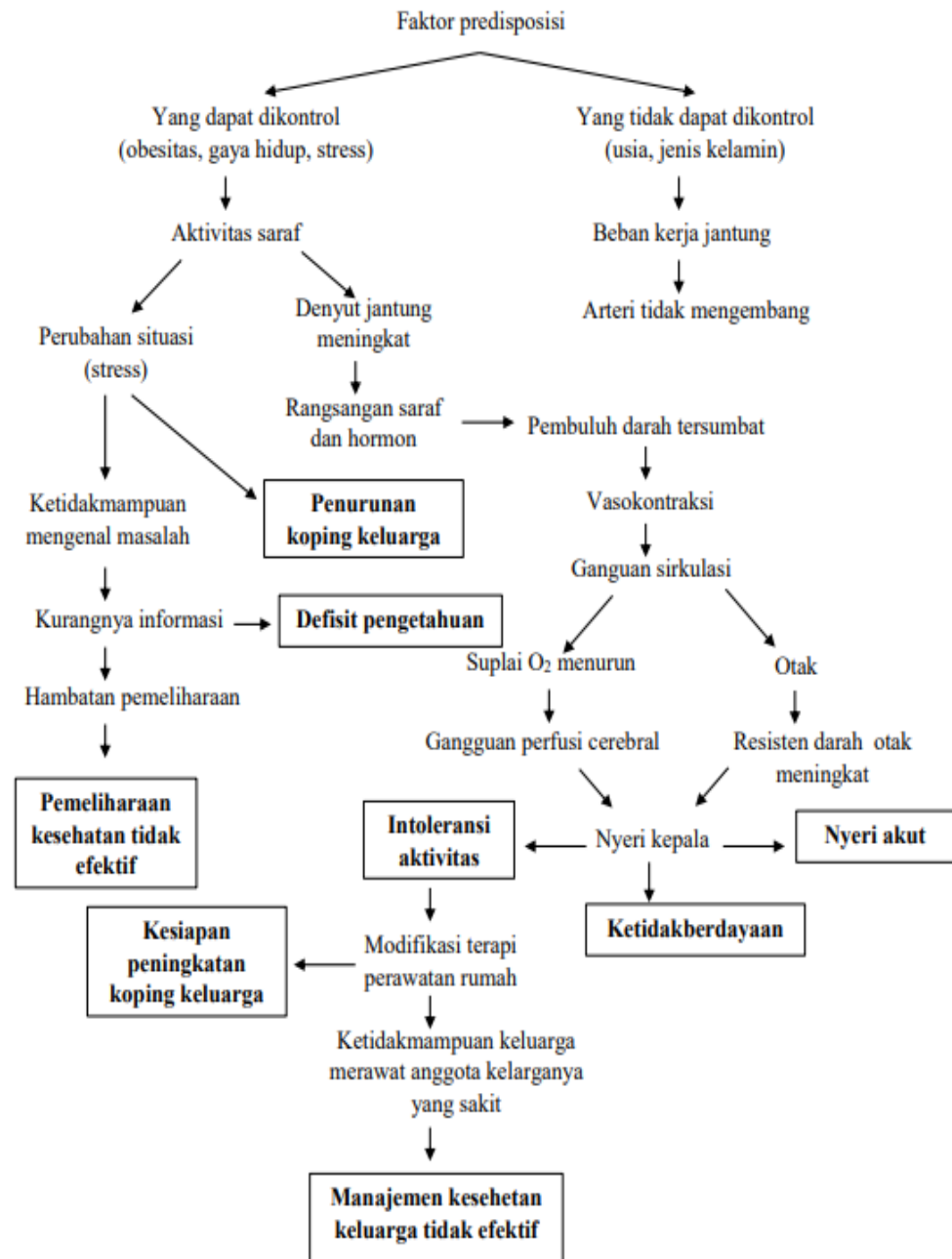
Pharmacological treatment for hypertension varies depending on the severity of the disease and the presence or absence of complications. Consensus holds that hypertension management consists of three steps. Steps I and II use a combination of two medications: an ACE inhibitor/ARB (such as captopril or lisinopril) and a CCB/diuretic (such as furosemide or Cipro). Step III, a diuretic or alpha/beta blocker, such as spironolactone, is added (PDHI, 2021).

2) Non-Pharmacological

Non-pharmacological therapy is a complementary treatment to pharmacological therapy for hypertension. This approach focuses more on lifestyle and habit changes, such as adopting a low-salt or sodium diet, utilizing herbal ingredients, drinking boiled bay leaf water, and practicing relaxation therapy. Furthermore, non-pharmacological therapy is also considered an alternative or complement to

pharmacological therapy because it is safer and does not cause long-term side effects. However, many people still don't understand its benefits or are reluctant to undergo this therapy, citing the time-consuming and high-consistency requirements. As a result, many prefer pharmacological therapy, which, while providing faster results, can cause long-term side effects (Iqbal & Handayani, 2022).

2.2.10. Pathway



2.3. Family Self Management Plan Concept

2.3.1. Definition of Family Self - Management Plan

Family Self-Management Plan is an approach that actively involves patients and families in chronic disease management through planning,

decision-making, health monitoring, and independent implementation of healthy lifestyle behaviors. This approach emphasizes the family's ability to identify health problems, set treatment goals, develop disease management strategies, and provide ongoing support to the sick family member to achieve optimal health outcomes (Mestre et al., 2024).

Family Self-Management Plan This is realized through the development of a structured care plan with the family to improve the ability to manage the disease, adhere to therapy, control risk factors, and maintain healthy lifestyle changes. In the case of hypertension, this program includes regulating a low-salt diet, adherence to medication, routine blood pressure monitoring, regular physical activity, and family support in daily care. Research shows that implementing a Family Self-Management Program can improve knowledge, self-efficacy, family nursing behavior, and help control blood pressure in people with hypertension (Susanto et al., 2024).

2.3.2. The Purpose of the Family Self Management Plan

According to Susanto et al., 2024, the primary goal of the Family Self-Management Plan (FSMP) is to improve families' ability to independently manage their members' health problems by enhancing knowledge, skills, self-efficacy, and family support. This program is designed to help families understand their illness, participate in health decision-making, and implement appropriate care behaviors to improve the quality of life and health status of their sick family members.

Specifically, the goals of the Family Self-Management Plan for families with hypertension include:

- 1) Increase family knowledge about hypertension, risk factors, complications, and how to control it
- 2) Improving the family's ability to care for and monitor the condition of family members suffering from hypertension.
- 3) Improving patient compliance with treatment and health worker recommendations through family support
- 4) Helping families adopt a healthy lifestyle, such as a low-salt diet, regular physical activity, smoking cessation, and controlling other risk factors.
- 5) Improving self-efficacy and family behavior in managing hypertension sustainably.
- 6) Improve the family's ability to make decisions and resolve health problems that arise during the care process.
- 7) Helps achieve optimal blood pressure control and prevents complications of hypertension.

2.3.3. Family Self Management Plan Components

Family Self-Management Plan (FSMP) It consists of several interrelated components to help families manage chronic illness independently. The components of the Family-Self Management Plan (Susanto et al., 2024) include:

1) Health Education for Family Caregivers

This component aims to increase family knowledge about hypertension, including its definition, risk factors, signs and symptoms, complications, prevention, and management efforts. Through education, families are expected to understand the condition of their hypertensive family members and make appropriate decisions regarding their daily care.

2) Hypertension Diet Education and Low Salt Diet Practices

This component focuses on improving families' ability to manage the diets of people with hypertension. The material covered includes the importance of limiting sodium intake, selecting healthy food ingredients, preparing low-salt foods, and implementing a diet that supports blood pressure control. Families are also provided with hands-on practice on how to incorporate a low-salt diet into their daily lives.

3) Physical activity or physical exercise

Physical activity is an effective non-pharmacological approach to blood pressure management. This component provides families with education and training on safe and appropriate physical activities for those with hypertension. Families are expected to support and motivate their hypertensive family members to engage in regular physical activity to improve fitness and help control blood pressure.

4) Strengthening Through Health Counseling

Health counseling is provided on an ongoing basis to reinforce the health behavior changes the family has already made. This activity provides the family with the opportunity to discuss challenges encountered during treatment, find solutions to emerging problems, and gain motivation to maintain healthy lifestyles while managing hypertension.

2.3.4. Stages of Implementing the Family Self Management Plan

The Family Self-Management Plan (FSMP) is implemented in stages, involving the hypertension sufferer and family members as primary caregivers (Susanto et al., 2024). The stages of implementing the Family Self-Management Plan include:

1) Assessment stages

Nurses identify the health condition of the hypertension patient and the family's ability to provide care. The assessment includes medical history, blood pressure, diet, medication adherence, physical activity, and available family support.

2) Stages of education about hypertension

Families are provided with health education about hypertension, its risk factors, causes, signs and symptoms, complications, and the importance of blood pressure control. This education aims to increase family knowledge as a basis for self-care.

3) Stages of strengthening the role of the family

At this stage, families are given an understanding of their roles and responsibilities in caring for a family member with hypertension. They are encouraged to be the primary source of support for treatment, health monitoring, and healthy lifestyle changes.

4) Stages of preparing a care plan (Family Self-Management Plan)

The nurse, together with the family, develops a realistic action plan tailored to the family's needs. This plan includes blood pressure targets, medication schedules, a low-salt diet, physical activity, and a health monitoring schedule.

5) Plan implementation stage

The family implemented the plans that had been prepared, such as implementing a low-sodium diet, reducing coffee and cigarette consumption, doing regular physical activity, monitoring blood pressure, and ensuring compliance with taking medication.

6) Mentoring and counseling stage

Nurses provide support through regular counseling and monitoring to help families overcome obstacles that arise during program implementation. These activities aim to maintain motivation and improve the success of hypertension management.

7) Evaluation and follow-up stage

Evaluation is conducted by assessing changes in knowledge, self-efficacy, family care behavior, medication adherence, adherence to a

low-salt diet, and blood pressure control outcomes. Evaluation results are used to determine follow-up and refine the next care plan.

2.3.5. The Role of Nurses in Family Self-Management Plans

Nurses play a crucial role in the implementation of the Family Self-Management Plan (FSMP). Nurses focus not only on the patient but also involve all family members to improve their ability to provide care, make health decisions, and independently implement healthy lifestyle behaviors. Nurse involvement aims to help families develop the knowledge, skills, and confidence to manage their family members' health conditions (Susanto et al., 2024). The nurse's role in the Family Self-Management Plan includes:

- 1) As educators, nurses provide health education to patients and families regarding hypertension, risk factors, complications, treatment, healthy eating patterns, physical activity, and how to control blood pressure so that families have adequate knowledge in carrying out care.
- 2) As a facilitator, the nurse helps the family identify health problems, determine care needs, and prepare a Family Self-Management Plan that is appropriate to the family's condition and abilities.
- 3) As counselors, nurses provide guidance, motivation, and psychological support to patients and families in dealing with health problems and obstacles that arise during the process of managing hypertension.
- 4) As a coordinator, the nurse connects the family with various sources of necessary health services, such as community health centers, hospitals, health cadres, and other health workers to support successful treatment.

- 5) As advocates, nurses help families obtain the information and health services they need and protect the patient's right to receive optimal care.
- 6) As a motivator, nurses encourage patients and families to maintain healthy lifestyle behaviors, increase adherence to treatment, and be active in implementing the hypertension management plan that has been prepared.
- 7) As an evaluator, the nurse monitors and evaluates the implementation of the Family Self-Management Plan, including assessing changes in knowledge, health behavior, medication compliance, and the family's ability to control hypertension.

Through this role, nurses can help improve families' self-management skills, strengthen family support, and improve the success of hypertension control and the patient's quality of life (Susanto et al., 2024).

2.4. Ineffective Family Health Management

2.4.1. Definition of Ineffective Family Health Management

Ineffective family health management is a condition where the family is not yet able to manage health problems optimally so that the process of maintaining and restoring the health of family members does not run according to the expected goals (SDKI PPNI Working Group Team, 2017).

2.4.2. Major and Minor Data

1) Major Data

Table 2.2 Major Data

Subjective	Objective
1. Expressing not understanding the health problem suffered	1. Family member's illness symptoms are getting worse
2. Expressing difficulty carrying out prescribed care	2. Family activities to address health problems are inappropriate

2) Minor Data

Table 2.3 Minor Data

Subjective	Objective
1. (not available)	1. Failure to take action to reduce risk factors

2.4.3. Causative factor

- 1) The complexity of the health care system
- 2) Complexity of the care/treatment program
- 3) Decision-making conflict
- 4) Economic difficulties
- 5) Many demands
- 6) Family conflict

2.4.4. Management

Ineffective family health management in hypertensive patients can be addressed through the Family Self-Management Plan (FSMP) approach. The Family Self-Management Plan is a family-based nursing intervention

aimed at improving the family's ability to manage chronic illness through education, increased self-efficacy, health monitoring, decision-making, and active family involvement in the care process. This approach focuses on family empowerment to support therapy adherence and sustainable health behavior change (Susanto et al., 2024).

According to Susanto et al., (2024), the Family Self-Management Program for hypertension patients is carried out through several main components, namely:

1) Family health problem assessment

Nurses identify the patient's health condition, history of hypertension, medication adherence, diet, physical activity, smoking habits, and family support. This stage aims to identify factors contributing to ineffective family health management.

2) Health education

Families are educated about hypertension, its risk factors, complications, the importance of medication adherence, a low-salt diet, physical activity, stress management, and the importance of regular blood pressure checks. Health education has been shown to improve self-management skills in hypertension patients (Febtrina et al., 2024).

3) Family Self-Management Plan Preparation

Family care involves developing a realistic hypertension management plan that can be implemented at home. This plan includes a

medication schedule, health check-ups, physical activity targets, salt restriction, and regular blood pressure monitoring.

4) Implementation and Monitoring

Families implement the plans they have developed with the assistance of nurses. Monitoring includes medication adherence, low-salt diet adherence, physical activity, blood pressure monitoring, and any challenges encountered during the program.

5) Evaluation and reinforcement

Treatment evaluates the achievement of goals established with the family. Evaluation is conducted by assessing changes in health behavior, adherence to therapy, the family's ability to manage hypertension, and the achievement of established targets. Reinforcement is provided to maintain good health behaviors.

Implementing a Family Self-Management Plan has been shown to improve medication adherence, adherence to a low-salt diet, family knowledge, caregiver self-efficacy, health care behavior, and help control blood pressure in hypertensive patients. Therefore, the Family Self-Management Plan can be used as a family nursing intervention to address ineffective family health management in hypertensive patients.

2.5. Nursing Care Concept

2.5.1. Assessment

Assessment is the initial step in the nursing process and is a systematic process of collecting data from various sources to evaluate and determine

the client's health status. Data collection can be done using three methods: interviews, observation, and physical examination. Assessment is the first step in the nursing process (Bolat & Teke, 2020).

a. General family data

Includes the name of the head of the family, age, gender, education, occupation, address, telephone number, and composition or composition of family members. Family composition describes the family members identified as part of their family.

b. Genogram

A family genogram is a diagram that depicts a family tree. It contains information about three generations of the family (the nuclear family and the families of each parent).

c. Family Type

Explaining family types and the obstacles regarding these types of families or problems that occur with traditional and non-traditional family types.

d. Tribes

e. Religion

f. Socioeconomic status

Family expenses. In assessing socioeconomic status, a person's health status is influenced. The impact of family inadequacy can make someone reluctant to seek medical attention or other healthcare facilities.

g. Family recreational activities

h. Family health history and family development stages

1) Current stage of family development

Can be found with the eldest child of the nuclear family

2) Unfulfilled stages of family development

Explains the obstacles that prevent family development tasks from being fulfilled and the obstacles to why these development tasks have not been fulfilled.

3) Nuclear family health history

This includes a history of hereditary diseases, diseases that other family members have suffered from, especially infectious diseases, infections or immune disorders, as well as activities carried out that make the body feel tired and weak.

4) Family health history

Includes a history of illnesses suffered by the client's family, both related to the illness suffered by the client, as well as other hereditary and infectious diseases.

i. Environmental characteristics

Environmental characteristics that need to be studied are the characteristics of the house, neighbors and community, family geography, family support systems.

j. Family Structure

1) Role structure

Explain the role of each family member

2) Family values or norms

Knowing the values and norms adopted by the family related to their health.

3) Family communication patterns

Identify ways of communicating between family members.

4) Family power structure

The ability of family members to control and influence others to change behavior.

k. Family functions

1) Affective function

Things that need to be studied are how far the family cares for and supports each other, has good relationships with others, shows empathy, and pays attention to feelings.

2) Nursing function

a. Health beliefs, values, and behaviors explain the values held by the family, the prevention and health promotion activities carried out, and the family's health goals.

b. Family health status and perceived susceptibility to illness: the family assesses their health status, health problems that make them vulnerable to illness and the number of health checks.

c. Family diet practices include knowing the sources of food consumed, how to prepare food, the amount of food consumed per day and the habit of consuming snack foods.

- d. The role of the family in self-care practice is the actions taken to improve health status, disease prevention, family care at home and family beliefs in home care.
- e. Medical preventive measures include children's immunization status, dental hygiene after eating, and family patterns of food consumption.

3) Socialization function

It examines interactions or relationships within the family, the extent to which family members learn discipline, rewards, punishments as well as giving and receiving love.

4) Reproductive function

Things that need to be studied regarding the reproductive function of the family are: how many children, what family plans are related to the number of family members, and the methods used by the family in an effort to control the number of family members (Putri, 2021).

5) Economic function

This data explains the family's ability to meet clothing, food, shelter, savings, and the ability to improve health status.

1. Family stress and coping

The family stress and coping that need to be studied are the stressors experienced, the family's ability to respond to stressors, the coping strategies used, and dysfunctional adaptation strategies.

m. Physical examination

- The general condition includes assessing the level of consciousness (GCS) and assessing vital signs
- Sensing system (vision)
- Olfactory system
- Respiratory system
- Cardiovascular system
- Digestive system
- Urinary system
- Nervous system
- Musculoskeletal system
- Integumentary system

n. Family expectations

It is necessary to examine how families expect nurses (health workers) to help resolve health problems that occur.

2.5.2. Diagnosis

Ineffective family health management is related to the complexity of the care/treatment program as evidenced by expressing a lack of understanding of the health problems suffered, expressing difficulty in carrying out the prescribed treatment, symptoms of family members' illnesses getting worse, family activities to address health problems being inappropriate, failing to take action to reduce risk factors (D. 0115) (SDKI DPP PPNI Working Group Team, 2017).

2.5.3. Nursing Interventions

Table 2.4 Nursing Interventions

No	Nursing Diagnosis	Objectives and Outcome Criteria	Intervention
1	Ineffective family health management (D.0115)	After providing family nursing care by making 60-minute home visits 4 times a week, it is hoped that family health management will improve (L.12105) with the following outcome criteria: 1. The ability to explain health problems experienced increases 2. Family activities to address health problems appropriately increase 3. Actions to reduce risk factors increase 4. Verbalization of difficulty performing prescribed care decreased 5. Symptoms of family member's illness are hereditary	Family Support Care Planning (I.13477) Observation • Identify family needs and expectations regarding health • Identify the consequences of not taking action with the family • Identify actions that families can take Therapeutic • Motivation to develop attitudes and emotions that support health efforts • Use the means and facilities available in the family • Create optimal changes to the home environment Education • Recommend using existing health facilities • Teach care methods that families can do

2.5.4. Nursing Implementation

Nursing implementation is a phase where nurses carry out plans or interventions that have been previously implemented based on SIKI terminology, implementation consists of carrying out and documenting which are specific actions used to carry out interventions, (SDKI DPP PPNI Working Group Team, 2016).

2.5.5. Nursing Evaluation

Evaluation is the activity of comparing results and implementation with established criteria and standards to determine success. If the results and evaluation are partially unsuccessful, a new nursing care plan must be developed. Nursing care evaluations are documented in the form of a SOAP (Sumadi Kaize & Dwi Ningsih, 2022):

- 1) S (subjective), when the nurse encounters a patient's complaint which is still felt even though nursing actions have been carried out.
- 2) O (objective), data obtained from observations based on the results of evaluations of actions that have been carried out, measurements carried out by nurses are based on direct observation of patients and what patients feel after the treatment is carried out.
- 3) A (assessment), namely subjective and objective data to assess the extent to which goals have been achieved
- 4) P (Plan), which is an action plan based on analysis, if the goal is achieved, the nurse stops the plan, if the goal is not achieved, the nurse

changes the plan and continues the patient care plan. This evaluation is usually called a follow-up evaluation.