

**FAMILY NURSING CARE ON INEFFECTIVE FAMILY HEALTH
MANAGEMENT IN ELDERLY PATIENTS WITH HYPERTENSION
THROUGH HYPERTENSION EXERCISE EDUCATION IN
PAGARUYUNG VILLAGE, TAPUNG DISTRICT**

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Abstract

The elderly stage is a natural part of human life. Aging is a lifelong process that does not begin at a specific moment but rather from the beginning of life itself. One of the most common diseases experienced by the elderly is hypertension. Hypertension is a condition where blood pressure increases due to problems in the blood vessels, which results in oxygen and nutrients not reaching the body's tissues effectively. The objective of this final professional nursing paper is to describe the outcomes of nursing practice by applying the nursing problem of ineffective family health management in elderly patients with hypertension in Pagaruyung Village, Tapung District, Kampar Regency. The method used in this nursing intervention was the implementation of hypertension exercise. The intervention was carried out over three days, from September 17 to September 21, 2025, with each session lasting 10–15 minutes. The benefits of hypertension exercise include reducing muscle tension, anxiety, high blood pressure, heart rate, and metabolic rate, ultimately helping to lower blood pressure. The results of this case study indicated that after three days of implementing hypertension exercise, there was a significant difference in the family's success in carrying out recommended health activities before and after the intervention.

Keyword: Hypertension Exercise1; Acute Pain 2; Hypertension 3; Elderly 4.

INTRODUCTION

Elderly is a condition that occurs throughout human life. Aging is a lifelong process, not just starting at a specific point in time, but starting from the beginning of life (Firmansyah et al., 2025). One factor affecting the quality of life and health of the elderly is limited access to healthcare services. Furthermore, the lack of information regarding the importance of health check-ups among the elderly is a contributing factor to the increasing prevalence of health problems in the community. One of the most common diseases among the elderly is hypertension (Asdar, 2023). Hypertension, or high blood pressure, is a significant health problem worldwide, including in Indonesia. Hypertension is high blood pressure caused by blood vessel problems. This means that oxygen and nutrients in the blood cannot reach the body's tissues that need them. This condition occurs when systolic blood pressure is above 140 mmHg and diastolic blood pressure is above 90 mmHg (Fatmawati et al., 2024). Long-term (persistent) high blood pressure can cause damage to the kidneys (kidney failure), heart (coronary heart disease), and brain (stroke) if not detected early and treated adequately (Asdar, 2023). According to a 2021 World Health Organization (WHO) report, in 2019, at least 95% of the world's population aged 30-79 years lived with hypertension, with 59% of women and 49% of men suffering from hypertension. The number of people with hypertension is estimated to increase by 2025, with 1.5 billion people living with hypertension, with an estimated 9.4

million people dying annually from complications of hypertension and related diseases (Mega et al., 2023). In Southeast Asia, the prevalence of hypertension is 24.7%, with figures based on gender being higher in men at 25.3% and in women at 24.2% (Arifiani, 2021). Hypertension gymnastics is a physical exercise that can encourage optimal heart function and prevent chronic diseases such as hypertension. Hypertension gymnastics is a sport that aims, among other things, to increase blood flow and oxygen supply to active muscles and skeleton, especially the heart muscle. The mechanism of blood pressure reduction after exercise is because exercise can reflect blood vessels, so by widening blood vessels, blood pressure decreases (Nugroho et al., 2023). Until now, people have used antihypertensive medication to prevent hypertension only when they remember or when it recurs. Therefore, gymnastics has become an easy alternative for seniors to manage high blood pressure. Interviews with three elderly people revealed that they generally experienced similar symptoms, such as headaches over the past six months due to high blood pressure caused by factors such as stress, obesity, and diet. To manage their symptoms, they only take antihypertensive medication when symptoms flare up. Therefore, hypertension exercises are a therapy easily performed by elderly families. Based on the results of the preliminary study obtained, the researcher is interested in conducting research on "Family Nursing Care with the Application of Hypertension Exercises for Hypertension Patients with Nursing Problems of Ineffective Family Health Management in the Elderly in Pagaruyung Village, Tapung District, Kampar Regency.

RESEARCH METHOD

The implementation method used was an experimental technique on elderly people with hypertension. The success of the intervention was measured before and after the application of Hypertension Exercise Therapy for Blood Pressure in the Elderly. The implementation time is carried out for 5 days, namely from the date of implementation starting from TUK 1 to TUK 5. Specifically TUK 3 is carried out for 5 days. The time for providing Hypertension Exercise therapy for Blood Pressure in the Elderly is carried out 2x a week for 30 minutes. Pre is carried out before doing hypertension exercise and post is carried out after doing hypertension exercise. The implementation location is at the home of a family with hypertension in Pagaruyung Village, Tapung District, Kampar Regency, a family with hypertension. The subjects are 2 families with elderly people who have hypertension in RW 02, Pagaruyung Village, Tapung District, Kampar Regency, a family with hypertension.

RESEARCH RESULTS

The study data was conducted in Pagaruyung Village, Tapung District, Kampar Regency, in families with elderly people with hypertension aged 60 to 85 years. The type of elderly family is middle aged. The ethnicity of the elderly is generally Javanese. The religion of the elderly is Islam. The socio-economic status of the elderly is to find their own work as oil palm farmers. Recreational activities of the elderly are rare, usually they go on recreation when invited by their children. 3 family members with the developmental stage of the family with the elderly. The characteristics of neighbors and communities in Pagaruyung Village, Tapung District, Kampar Regency are very active, the elderly often participate in activities in the community such as elderly posyandu and weekly wirid. The elderly rarely eat fruits and vegetables every day. The geographical mobility of the elderly never moves from one area to another and has lived there for decades. The use of health facilities, the 3 elderly people chose not to go to the community health center because the health service is far away, they usually go to the village midwife, they only go to the doctor if they feel symptoms, they do not routinely do check-ups

once a month. Two elderly people out of three said they did not regularly attend the elderly posyandu because no one took them because their children were married and did not live with them, while another elderly person said they rarely did health checks because they often forgot to take their hypertension medication and felt they would get better on their own, if their hypertension medication ran out, they would buy it when they remembered. Economic function, the income of the elderly from the elderly because on average the elderly were still working, but 1 in 3 elderly people also received remittances from their children every month. caring for a sick family member, if the elderly are sick the family only recommends resting at home. Elderly beliefs about health, the elderly are worried that if they continue to take medication there will be side effects, the elderly also said they often forget to take their medicines and feel they will get better on their own. The elderly male still actively smokes and drinks coffee. The family also said the elderly never does hypertension exercises. The family said the elderly still often consumes foods high in salt such as salted fish, eats instant noodles, canned foods such as sardines and often cooks food with coconut milk. The family and the elderly said they already know that they have hypertension but do not understand about hypertension, most families said the elderly often experience pain in the neck, dizziness and numbness in the hands that come at night before bed. Most family members said they do not know how to prevent and reduce problems in sick family members. General condition of 3 elderly people obtained blood pressure results: 162-180/75-103 mmHg. Pulse: 70-90 x / minute. Respiration: 16-20 x / minute. Temperature: 36.0-37.2 °C. The average pain scale of the elderly is 5-7 with the Numeric Rating Scale (NRS). Level of consciousness: Compos Mentis. Urinary pattern: 4-7 x / day. Ability to urinate and defecate independently. Eating pattern, 2-3x / day, good appetite, independent eating habits, elderly people often consume foods high in salt and foods with coconut milk, rarely consume fruits and vegetables, 3 elderly people still often consume salty foods. Drinking pattern 4-6 x / day, 2 of 3 elderly people said they still often drink coffee or tea in the morning. Hearing, touch, smell and taste functions are good. Wrinkled and inelastic skin. Dental hygiene: caries present, Ears: Looks clean, hair and head: graying and hair distribution is sparse. Interaction with the elderly is very friendly, communicates fluently and is willing to follow the student's instructions. Daily self-care for the elderly: bathing and dressing are done independently.

Tabel 1. Average Value of Increase in Ineffectiveness of Family Health Management Against the Implementation of hypertension exercise:

Result Criteria	N	Pre Test	Post Test
Ability to explain health problems experienced	3	2.3	4.6
Family activities to address health problems appropriately	3	2	4.3
Actions to reduce risk factors	3	2	5
Verbalization of difficulty carrying out prescribed treatments	3	2	4.6
Symptoms of family	3	2	4.3

DISCUSSION

This aligns with research (Y. Anggraini et al., 2022), which found that blood pressure measurements before hypertension exercise were 162/80 mmHg, but after the exercise, the blood pressure decreased to 140/86 mmHg. This study concluded that it is effective in lowering blood pressure in hypertensive patients. Progressive muscle relaxation techniques are highly effective in lowering blood pressure when performed correctly and regularly.

CONCLUSION

1. Nursing assessment, using a family nursing assessment format, interview methods, observation, and physical examination to gather necessary data on hypertension patients. The results of the assessment showed that the majority of elderly families still frequently consume foods high in salt, such as salted fish, packaged foods like sardines, and frequently cook with coconut milk
2. Nursing diagnosis, based on the results of data analysis in the elderly nursing assessment conducted, supported by the existence of data that strengthens the establishment of a nursing problem, a diagnosis can be formulated, namely Ineffective Family Health Management.
3. Nursing intervention, the first diagnostic intervention of Ineffectiveness of Family Health Management given to 3 elderly people is based on SIKI. The main intervention given is 5 family health tasks and the provision of Hypertension Exercises to the elderly which are selected based on the results of evidence-based practice journals obtained.
4. Hypertension Exercise actions carried out for 5 days in each respondent's house, providing information about Hypertension Exercise for the elderly carried out for 10-15 minutes according to the SOP.
5. Nursing evaluation, from the evaluation results it was found that the problem was resolved with the family's ability to recognize hypertension problems in the elderly, the family was able to make decisions with a healthy diet that does not contain high salt for the elderly, the family was able to care for the elderly by providing Hypertension Exercises and implementing a high salt diet, the family was able to modify the environment such as making the floor of the house non-slippery, providing lighting in all rooms of the house which is a prevention of falls in the elderly, the family was also able to take the elderly to check their health at health facilities and to the elderly posyandu..

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