#### Research Article

# IMPLEMENTATION OF SELF-CARE AGENCY BASED ON OREM'S THEORY MODEL IN HYPERTENSION PATIENTS

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#### Abstract

**Background Behind**: Hypertension, commonly known as high blood pressure, is often unknown to the patient until their blood pressure is checked. Self-care agency refers to an individual's ability or capacity to identify, set, make decisions, and perform self-care. **Objective**: to determine the results of implementing a Self-Care Agency Based on Orem's Theory Model in Hypertension Patients in Sungai Kitano Village, Martapura. Method Study: This study is a case study with a pretest and post-test questionnaire designed on one hypertension patient and blood pressure checks. The client was given the central intervention in health education, conducted over 10 days with a frequency of once per day for 15 minutes. **Results** and Discussion: After education on self-care agencies, there was an improvement in the client's knowledge. The client's responses to the 10-item self-care agency questionnaire showed an increase from "low knowledge (40%)" in the pre-test to "good knowledge (90%)" with a 50% improvement—additionally, the blood pressure of Ny. N decreased, with a systolic reduction of 14 mmHg. Furthermore, the diastolic blood pressure decreased by 8 mmHg. Conclusion: Education on self-care agency effectively improves knowledge and reduces blood pressure.

**Keywords**: Hypertension, Orem, Self-Care Agency, Self Care

#### INTRODUCTION

Public health problems, especially those caused by non-communicable diseases, have remained a concern for the government. Public awareness of the importance of health has tended to be uneven in every region, including the issue of hypertension, which remains prevalent in society (Sofiana, 2020). Hypertension was a condition where systolic blood pressure was  $\geq$  140 mmHg and diastolic blood pressure was  $\geq$  90 mmHg, measured twice with a 5-minute interval in a calm state (Suprapto et al., 2021).

Hypertension in the general public was commonly known as high blood pressure; however, this condition was sometimes unknown to the sufferers until they checked their blood pressure (Chrismilasari & Negara, 2022). The lack of accurate information about the disease requires more intensive health education (Fakhriyah et al., 2021). Health education is an effort to influence individuals, others, whether groups, communities, to adopt healthy living behaviours (Chrismilasari & Negara, 2022). The low knowledge and awareness of hypertension sufferers disrupted the fulfilment of their self-care

needs. The self-care model was a theory developed by Orem that focused on self-care capabilities (Self-care agency).

The self-care process had be continuously carried out until it led to behaviours that were independently and purposefully able to perform self-care through the provision of education about lifestyle, diet, and medication to improve patients' knowledge regarding self-care for hypertension sufferers (Haryati et al., 2023). Self-care agency is an individual's ability or strength to identify, determine, make decisions, and carry out selfcare (Fajarina et al., 2022). In Self-Care Agency, there were five measured aspects: ego strength, health assessment, knowledge about health and decision-making ability, energy, feelings, and attention to health (Nursalam, 2013).

Health education was provided to individuals to ensure they knew the importance of seeking health information to perform self-care. Self-care agency could be carried out effectively if patients were aware and willing to engage in self-care activities (Kurniati MF & Yusuf Effendi, 2020). Based on the research by

Harpeni (2018), the results showed that out of 24 respondents who performed self-care agency, 14 individuals (58.3%) adhered to modifying their hypertension lifestyle. Meanwhile, out of 21 respondents who did not perform self-care agency, 17 individuals (81.0%) adhered to modifying their hypertension lifestyle. This indicated that respondents who performed self-care agency had a higher likelihood of adhering to lifestyle modifications to control hypertension.

Good self-care improved lifestyles, which were the leading cause of hypertension. The lack of attention to health in individuals' lifestyles was a common cause of hypertension. One effort to maintain and manage hypertension was through diet; patients had to control and regulate their daily eating habits to be healthy and balanced. An assessment on November 25, 2024, revealed that a client in Sungai Kitano, East Martapura District, had hypertension but was unaware of their condition because they rarely checked their blood pressure. Although the client sometimes felt dizzy after waking up, they only rested without seeking to understand the cause.

Based on the interview, it was revealed that a lack of knowledge led to poor lifestyle habits, such as consuming foods high in salt. Therefore, the author decided to educate the client about hypertension. The lack of information and education about lifestyle, treatment, and self-care was one of the causes of low knowledge and awareness among hypertension sufferers. Thus, education on self-care agency based on Orem's theoretical model was necessary to address this issue.

# **METHOD**

The method used was a case study method that applied nursing care. The research was conducted at the client's home in Sungai Kitano Village, RT 02, East Martapura District. The implementation period was from November 28, 2024, to December 7, 2024. The subject of this case study was an adult client with high blood pressure. The criteria for respondents included hypertensive patients who had never undergone health checkups, clients willing to participate as respondents, and clients who could communicate effectively. The instruments used in this application were a questionnaire sheet and a blood pressure measuring device. The questionnaire consisted of 10 statements regarding knowledge of for hypertension. self-care agencies questionnaire was modified from Harpeni's

(2018) study on the relationship between selfcare agency and adherence to changing the lifestyle of hypertensive patients.

The data collection procedure was done through assessment and determining nursing diagnoses and interventions. By implementation in the form of education using audiovisual media for 15 minutes over 10 days, and concluded with evaluation.

### RESULTS AND DISCUSSION

# Analysis of Self-Care Agency Knowledge Before and After Educational Intervention

Assessment data revealed that the client, aged 26, was in good condition, with compos mentis consciousness. Blood pressure: 149/100 mmHg. The client complained of dizziness and pain in the nape of the neck, which was described as heavy. The pain was felt after waking up and reduced when the client rested briefly.

The client was unaware of having hypertension. The client had a family history of hypertension from their mother and grandmother. The client took no medication and had never had their health condition checked at a healthcare facility. When asked about hypertension, the client only knew that hypertension was a condition of high blood pressure. The client did not know how to manage hypertension.

The client also did not believe they had hypertension and doubted that they could have the condition at such a young age. The client was unaware that hereditary factors and lifestyle caused their hypertension. The client stated they still frequently consumed foods high in salt and fat. Based on the assessment results, the nursing diagnosis identified was a knowledge deficit (D.0111) (PPNI, 2017). The expected outcomes to address the nursing problem included increased knowledge level (L.1211), with the ability to explain knowledge about a topic improving, behaviours aligned with knowledge increasing, and verbalization of interest in learning enhancement (PPNI, 2017).

Health education was the intervention provided to the client to address the knowledge deficit. This health education was conducted after the client filled out the questionnaire. The health education was re-evaluated after 10 days, with the author delivering different materials each day regarding hypertension. During the education sessions, the client was allowed to ask questions, and the author could also ask questions daily as an evaluation tool regarding the material covered that day. The education was delivered through audiovisual media lasting 15 minutes.

The materials presented included information about hypertension knowledge, hypertension diet, the importance of hypertension checkups, barriers to hypertension care, stress management, physical activity, health expectations for the future, the desire to seek health information, the dangers of not maintaining blood pressure, and commitment to self-care with family support. An evaluation was conducted after 10 days of providing health education about hypertension using audiovisual media.



Figure 1: Improvement in Self-Care Agency Knowledge Before and After the Implementation of Education

Based on Figure 1. Mrs N's knowledge level using the Self-Care Agency questionnaire with the provision of education through animated videos, there was an improvement in the client's knowledge, which initially was classified as 'low knowledge (40%)' and increased to 'good knowledge (90%)' with a 50% improvement."

The 26-year-old client was found to have a blood pressure of 149/100 mmHg. The client stated that they were unaware of having hypertension because they had never undergone a health checkup at a healthcare facility. The client believed that they were still young and healthy. The client also did not know how to manage blood pressure or the self-care practices for individuals with hypertension. WHO (2023) stated that individuals with hypertension usually do not

experience symptoms, so blood pressure checks are needed to determine if someone has hypertension. In line with this, the client was unaware of having hypertension and, therefore, could not avoid factors that could increase hypertension, increasing hypertension.

The ability of an individual to identify, set, make decisions, and carry out self-care is called self-care agency (Fajarina et al., 2022). Harper (2018) stated that patients who strongly desire to live healthily and practice self-care agencies could maintain their easily accessible healthcare resources, supporting this.

On the other hand, a lack of knowledge, patient awareness, and social support for patients can lead them to continue unhealthy lifestyle patterns without understanding the dangers of the diseases lurking behind them (Lingga, 2012). Therefore, good self-care and the ability to perform self-care are essential for patients in managing their condition, particularly in cases of hypertension.

One of the efforts that can be made to improve self-care in hypertension patients is through education on self-care agencies. In the client, there was an improvement in knowledge from 40% (poor knowledge) to 90% (good knowledge). The client has proven to be able to think about seeking health information. Research by Maswibowo et al. (2018) states that personal knowledge about hypertension can help control efforts, as individuals with expertise are more likely to visit medical facilities regularly, adhere to their hypertension medication, and maintain their blood pressure by checking themselves at healthcare facilities.

This aligns with what the researcher found during the observation of the client who experienced changes in blood pressure after receiving educational intervention. There was an increase in knowledge regarding self-care agencies in hypertension patients, leading the client to avoid factors that could cause an increase in blood pressure, make efforts to improve their hypertension diet, seek information about hypertension, and willingly get checked at a healthcare facility.

# Analysis of the Implementation of Self-Care Agency Based on Orem's Theory Model in Hypertension Patients

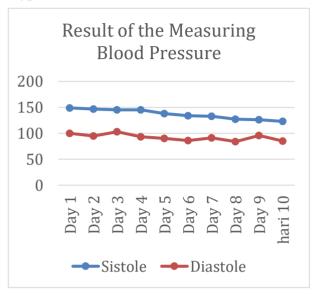


Figure 2: Result of the Measuring Blood Pressure

Based on Figure 2. The client's blood pressure decreased from 149/100 mmHg before the education to 123/85 mmHg after the education on the tenth day. The average blood pressure result showed a systolic pressure of 137 mmHg and a diastolic pressure of 93 mmHg. The systolic blood pressure decreased by 14 mmHg, while the diastolic blood pressure decreased by 8 mmHg.

The reduction in systolic blood pressure observed between before and after the 10-day intervention decreased by 14 mmHg. Furthermore, diastolic blood pressure showed a decrease of 8 mmHg. The results obtained in this study align with the research of Agusthia et al. (2023), which found that educational intervention impacted changes in blood pressure in hypertension patients.

The study by Hidayat et al. (2024) stated that health education impacted the reduction of blood pressure in respondents. This is because health education serves as a means to provide information and influence individuals, helping those who were previously unaware of hypertension to become knowledgeable, which improves their knowledge and attitudes. This was evident in the client, who decided to adopt a hypertension diet, reduce hypertension triggers, and undergo health checkups. In line with this, Datak et al. (2018) stated that cognitive aspects developed through health education play an essential role, particularly

in considering various actions to be taken, making decisions, and determining behavioural actions.

Increased knowledge about self-care agency impacts the improvement of self-efficacy, an individual's belief in their ability to perform certain activities, including the confidence to overcome obstacles in achieving a goal (Rantepadang & Hadibrata, 2023). Self-efficacy helps individuals enhance their belief in the treatment and care for their health through regular medication (N. A. S. Putri, Suindrayasa, & Kamayani, 2022).

This belief motivates the client to engage in self-care and overcome challenges in self-care. During the self-care agency education with the client, emphasis was also placed on the client's commitment to change in self-care. During the health education, the client expressed a desire to adopt a healthy lifestyle because the client believed that the desire for a healthy life came from within themselves. The client realized that if they could not care for themselves, they could not care for others.

This is consistent with the research by Huda (2017), which states that self-efficacy influences hypertension patients to make changes or behavioural adjustments to achieve hypertension treatment goals. Self-efficacy significantly affects changes in self-care management, especially for hypertension patients. Therefore, self-efficacy is crucial to support hypertension patients' willingness and belief in their ability to perform self-care daily to prevent their hypertension from worsening (Rantepadang & Hadibrata, 2023).

Preventing complications due to a lack of self-care can be achieved by having good health assessments, understanding, evaluating one's condition when symptoms requiring medical attention arise. Based on the observation results during the intervention, the client could mention the basic concepts of hypertension, including its definition, risk factors, symptoms, and complications. This aligns with Feldman's (2015) research, which states that self-regulation (recognizing the signs and symptoms of elevated blood pressure, understanding the causes of increased blood pressure, and making good and accurate coordination with decisions), healthcare providers, and regularly checking blood

pressure are essential.

Self-care in chronic disease management requires skills to maintain good emotional wellbeing (Fauziah & Syahputra, 2021). The client, who initially did not know they had hypertension, stated that they were unaware of having hypertension because they felt they were still young. Emotionally, the client was not prepared to accept their hypertension diagnosis. Still, through self-care agency education, the patient received the education well and understood the concepts and management of hypertension. This aligns with Sutini et al. (2022), which says that better emotional conditions, such as care, empathy, and attention, lead to better hypertension control behaviour. This is also influenced by the physical and mental ability to perform optimal self-care.

The client understood the self-care agency education and applied it in daily life, as seen from the continued decrease in blood pressure during the intervention period. Based on the observations during the education intervention, the client could answer each evaluation and recall the material from the previous 10 health education sessions. Therefore, it can be concluded that the client has a good perception of their condition, which will foster motivation and awareness to maintain their health.

#### **CONCLUSION**

Implementing education regarding self-care agency for clients with hypertension in the village of Sungai Kitano, Martapura Timur District, showed effectiveness in improving the self-care agency of hypertension patients. This is evidenced by the client's behaviour, which now includes applying a hypertension diet, being willing to undergo physical exams at healthcare facilities, and an increase in knowledge from a score of 4 (40%) to 9 (90%), as well as a reduction in systolic blood pressure by 14 mmHg and diastolic blood pressure by 8 mmHg.

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