

GERIATRIC NURSING CARE MANAGEMENT FOR Mr. E WITH HYPERTENSION AT THE ELDERLY SOCIAL SERVICE UNIT (UPTD) BINJAI CITY, NORTH SUMATRA PROVINCE

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ABSTRACT

Hypertension is a chronic condition that cannot be cured but can be managed. The incidence of hypertension among older adults is increasing globally, including in Indonesia, due to aging processes and degeneration (Iqbal & Handayani, 2022). The general objective of this study is to implement nursing care management for patients with hypertension at the Social Elderly Care Unit (UPTD Pelayanan Lanjut Sosial) in Binjai City, North Sumatra Province, in 2025. The World Health Organization (WHO) estimates that the global prevalence of hypertension currently reaches 22% of the total world population. The African continent has the highest prevalence, at 27%, while the Southeast Asia region ranks third with a prevalence of 25% of the total population. Data from the Indonesian Ministry of Health in 2018 show that the prevalence of hypertension among the elderly is quite high, with details as follows: the age group 65–74 years is 55.2%, and those over 75 years old is 69.5% (Kusumo, 2021). The results of this study indicate that 34 out of 198 elderly individuals suffer from hypertension, showing a prevalence rate of 22%.

The 2023 Indonesian Health Survey (SKI) showed a decline in hypertension prevalence among those aged 18 years and older, with a prevalence rate of 30.8%. Based on the data obtained, the number of hypertension cases recorded in 2023 was 2,333 cases.

In North Sumatra Province, the prevalence of hypertension reached 6.7% of the total population. This means that approximately 12.42 million people suffer from hypertension, spread across various districts in the province.

Keywords: *Nursing Care, Geriatrics, Hypertension*

Introduction

SDG 3, which aims to ensure healthy lives and promote well-being for all at all ages, is highly relevant to efforts in managing hypertension among the elderly. Hypertension is one of the most prevalent non-communicable diseases in older adults and is a major cause of serious complications such as stroke and heart disease. Within the framework of the SDGs, addressing hypertension in the elderly involves prevention through healthy lifestyle education, early detection, and access to affordable healthcare services and medications. By strengthening primary healthcare services and

raising public awareness about the importance of blood pressure control, the quality of life among the elderly can be significantly improved. This aligns with the SDG target of reducing mortality from non-communicable diseases and achieving well-being for all segments of the population.

Hypertension is a medical condition characterized by an increase in blood pressure due to abnormalities in the heart and blood vessels, or an elevation of blood pressure above the normal threshold—specifically, a systolic pressure greater than 140 mmHg and a diastolic pressure greater than 90 mmHg (Angshera &

Rahmawati, 2020). According to Ekasari et al. (2021), hypertension is influenced by two categories of risk factors: modifiable and non-modifiable. Non-modifiable factors include genetic history, where individuals with a family history of hypertension are twice as likely to develop the condition. Age is also a contributing factor, as blood pressure tends to increase with age due to vascular changes. Gender plays a role as well, with men being at greater risk before the age of 50, and women at higher risk after the age of 55, particularly post-menopause due to hormonal changes. In addition, chronic stress is a significant trigger, as it may lead to unhealthy behaviors such as smoking, alcohol consumption, poor dietary habits, and physical inactivity. One common nursing problem encountered in patients with hypertension is activity intolerance, as these patients often experience fatigue and dizziness during physical activity due to increased cardiac workload.

Research Method

This study focuses on a comprehensive examination of a single patient and employs a qualitative methodology with a descriptive category. Although this case study is designed to address various situations, the time factor is still considered. This method typically involves the analysis of historical aspects and previous behavioral patterns. Its primary advantage lies in the ability to conduct in-depth research despite involving only a small number of respondents. This case study investigates nursing care issues in a client at the Elderly Social Services Unit (UPTD) Binjai who is experiencing hypertension, through health education interventions. The subject of this case is Mr. E, who suffers from hypertension and resides in Wisma Cempaka at the Elderly Social Services Unit (UPTD) Binjai. The study was conducted at the UPTD Elderly Social Services Binjai from March 24 to March 27, 2025, and continued from April 8 to April 9, 2025. Based on preliminary surveys, there were 35 elderly individuals with hypertension out of a total of 198 residents in the facility. The observation in this study was conducted on one elderly

individual with hypertension. Data collection methods included interviews, observation, physical examination, and other relevant techniques. During the interviews, researchers obtained verbal information directly from the respondent. A guided interview format was used, structured according to a pre-prepared nursing assessment format. The researcher asked questions strictly based on this assessment guide. The data collection instrument was a geriatric nursing assessment form. The analysis began by reviewing the answers obtained through the in-depth interviews. This was followed by examining the observational findings and comparing them with existing theoretical frameworks. Finally, the researcher analyzed and interpreted the documented data to formulate recommendations for appropriate nursing interventions.

Result

The patient in this study is Mr. E, a 64-year-old male of Batak ethnicity and a follower of Islam. He is married and has completed senior high school education. Information regarding the patient's condition was obtained through interviews with Mr. E and a review of his medical records. In matters of communication or decision-making related to care, the family member to be contacted is the patient's younger sibling. Based on medical examination results, the patient has been diagnosed with hypertension."

During the assessment, Mr. E reported experiencing headaches, primarily in the back of the head (nuchal area), which felt heavy, accompanied by dizziness and fatigue. These symptoms have been present for approximately three years. Mr. E stated that the complaints have existed since the age of 27 and are believed to be influenced by genetic factors from his mother. To manage his symptoms, Mr. E routinely takes antihypertensive medication. He explained that the reason for staying at the social care facility is because his children and family are busy, and he often feels lonely and does not want to be a burden to them. Mr. E was

admitted to the social care facility on May 18, 2021

Based on the assessment of the patient's medical history, Mr. E was unable to recall any immunizations he had received in the past. He reported no history of allergies to medications, food, animals, or environmental factors. Overall, the patient had no significant health complaints in the past and had never undergone hospitalization or inpatient treatment. He also had no history of regular or periodic medication use. Regarding his perception of his illness, Mr. E stated that he consistently tries to maintain a positive mindset and strives to stay healthy. His hope after receiving care at the social facility is to maintain stable health. Since residing at the facility, he has begun to notice positive changes in his health, although still in the early stages. In terms of values and beliefs, the patient actively practices his religious duties, regularly performing daily prayers (shalat), and expresses a strong desire to continue participating in religious activities such as group recitations (yasinan). He also believes in life after death and accepts that death is a divine decree that will inevitably happen to all human beings.

Based on the assessment results, several nursing diagnoses were identified in the patient. The first diagnosis is activity intolerance, which is related to observable weakness in the patient and an imbalance between oxygen supply and demand. This condition causes the patient to become easily fatigued, even during light activities. The second diagnosis is risk for ineffective cerebral perfusion, associated with a history of hypertension, as indicated by elevated blood pressure during measurement. This suggests a potential disruption in blood flow to the brain, which may affect neurological function. The third diagnosis is disturbed sleep pattern, which is related to environmental disturbances, as evidenced by the patient's complaint of difficulty sleeping soundly. Environmental

factors in the patient's living area are suspected to contribute to the decreased quality of sleep.

In managing the nursing problems experienced by the patient, several interventions were implemented based on the established nursing diagnoses. To address activity intolerance, the nurse conducted assessments to identify any balance disturbances or muscle weakness, and evaluated factors contributing to the patient's fatigue. Vital signs were monitored regularly, especially before and after physical activity. The patient was encouraged to rest when feeling fatigued or weak and was guided to continue daily activities within his capacity (1).

The nurse assessed the patient's functional abilities through direct observation and documented any limitations as part of the ongoing evaluation. Collaboration with the physical therapy team was carried out to design an appropriate activity program tailored to the patient's condition. In response to the disturbed sleep pattern, the nurse identified the primary causes and assessed the patient's sleep habits. The patient was educated on the importance of adequate sleep for overall health and was supported in achieving quality rest, including involving family or close individuals for emotional support. The nurse also encouraged the patient to engage in prayer according to his personal beliefs as a form of spiritual care. The bedroom environment was optimized to promote better sleep by adjusting lighting, minimizing noise, and ensuring a comfortable bed arrangement. The patient's sleep patterns and total sleep hours were routinely monitored as part of nursing evaluation. To manage the risk of ineffective cerebral perfusion, the nurse regularly monitored vital signs and observed for complaints such as headaches and any changes that might indicate impaired cerebral blood flow. The patient was positioned in a semi-Fowler's position to enhance comfort and cerebral circulation, and collaboration with the medical team was established to ensure appropriate treatment and ongoing monitoring

Discussion

This chapter discusses the implementation of geriatric nursing care for Mr. E, who is

experiencing hypertension, conducted from March 26, 2025, to March 28, 2025. The nursing care process includes assessment,

formulation of nursing diagnoses, development of nursing interventions, implementation of nursing actions, and evaluation of outcomes. The method used in this case is the case study method.

Based on the assessment, the hypertension experienced by Mr. E is classified as age-related hypertension, commonly occurring in elderly individuals. Theoretically, the causes of hypertension in older adults include neuronal degeneration or multifocal disorders, vascular disease, and the natural aging process, with age being a major contributing factor. (2) Mr. E is currently 64 years old and has been living in a social care facility for more than two years. According to theoretical explanations, elderly patients often experience a decrease in cardiac output during daily activities. During the assessment, Mr. E also reported frequently experiencing pain in the back of his head, suited to their cognitive abilities and interests; and encouraging adequate rest. Meanwhile, for the diagnosis of **disturbed sleep pattern**, which is related to environmental disturbances and indicated by the patient's complaints of difficulty sleeping, the interventions focused on identifying the patient's sleep patterns and any changes occurring in those patterns (3).

Nursing care for patients with the nursing diagnoses of **activity intolerance**, **risk for ineffective cerebral perfusion**, and **disturbed sleep pattern** was carried out comprehensively over a period of 3x24 hours, using an approach focused on improving the patient's physical, emotional, and environmental condition. For patients with **activity intolerance**, characterized by weakness and an imbalance between oxygen supply and demand, interventions were focused on identifying activity capabilities, monitoring the body's response to activity, and involving the family in daily activities to support increased stamina and physical participation. For patients at **risk for ineffective cerebral perfusion** related to hypertension, the interventions were directed at identifying the causes of increased intracranial pressure, monitoring vital signs, providing a semi-

Fowler's position, and regulating body temperature to help reduce blood pressure and alleviate symptoms such as headaches and restlessness. Meanwhile, for patients with **disturbed sleep patterns** due to environmental barriers, interventions included identifying the patient's sleep patterns, creating a comfortable environment, limiting daytime naps, establishing a consistent sleep routine, and avoiding foods or beverages that may interfere with sleep, with the goal of improving the patient's sleep quality and pattern. All these interventions aim to support the overall improvement of the patient's health condition through individual, family, and environmental approaches.

Over the course of three consecutive days, nursing care was provided to the patient using a systematic approach based on the established nursing diagnoses. On **Wednesday, March 26, 2025, at 09:00 and 10:30**, the patient was diagnosed with **activity intolerance** related to weakness, as indicated by complaints of fatigue during daily activities. The interventions included assessment of balance disturbances and muscle weakness, identification of contributing factors to fatigue, monitoring of vital signs before and after activity, and advising the patient to rest when feeling tired. Additionally, the nurse assessed the types of activities the patient was still able to perform, observed any limitations in physical activity, and collaborated with the physical therapy team to support the recovery of the patient's functional abilities.

On **Thursday, March 27, 2025, at 10:00 and 11:00**, the patient experienced a **disturbed sleep pattern** related to environmental barriers, as indicated by complaints of difficulty sleeping. Nursing interventions included identifying the causes of sleep disturbances, assessing the patient's sleep pattern, educating the patient on the importance of adequate sleep, creating a restful environment (including lighting, noise control, and bed comfort), involving family support, and encouraging the patient to pray according to

their beliefs. The patient's sleep pattern and number of sleep hours were also monitored regularly.

Finally, on **Friday, March 28, 2025**, at **08:30 and 09:30**, the patient was diagnosed with **risk for ineffective cerebral perfusion** related to hypertension, characterized by elevated blood pressure. Interventions included regular monitoring of vital signs, observation for symptoms such as headache and changes in vital signs, positioning the patient in a semi-Fowler's position to improve cerebral blood flow, and collaborating with the medical team to manage blood pressure and prevent further complications. All of these interventions aim to holistically improve the patient's physical and psychological condition.

Conclusion and Suggestion

Nursing care for Mr. E, a 64-year-old patient, indicated that the hypertension he experienced is a common type found in the elderly, likely caused by neuronal degeneration, vascular disorders, or age-related factors. The assessment revealed a decrease in cardiac output during daily activities and complaints of pain in the back of the head, which suggest the impact of hypertension on the cardiovascular system. Based on this assessment, three nursing diagnoses were established: disturbed sleep pattern related to environmental barriers, activity intolerance related to weakness, and risk for ineffective cerebral perfusion related to hypertension as evidenced by elevated blood pressure. The nursing care plan and interventions were developed according to patient priorities and needs and were implemented consistently through appropriate nursing actions to address the identified problems. The evaluation showed that all nursing diagnoses in this case were partially resolved, and the entire nursing process—from assessment to evaluation—was properly documented according to the applicable format.

Based on this case study, it is expected to provide valuable contributions to various parties. For researchers, the results of this study can serve as a reference for expanding knowledge and scientific understanding related

to nursing care for patients with hypertension. For the UPTD Pelayanan Lanjut Sosial Binjai, the findings from this nursing care are hoped to provide valuable input in efforts to improve the quality of health services for elderly patients with hypertension in North Sumatra Province in 2025. Meanwhile, for institutions, this case study is expected to encourage the delivery of more optimal nursing care services for hypertensive patients, as well as to maintain and strengthen collaboration among healthcare professionals such as nurses, doctors, nutritionists, and other medical teams to achieve improved quality of patient care.

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