Original Research/Systematic Review

Dementia Care in the Elderly: A Case Study in Tanjung Paku Health Center, Solok

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ABSTRACT

Background: *Dementia, a progressive cognitive decline syndrome affecting memory, orientation, and daily activities, is a global health concern. At Tanjung Paku Health Center, Solok City, five cases of dementia in the elderly were recorded from January to December 2024 out of 315 total elderly individuals, highlighting the urgency of comprehensive nursing care.*
Objective: *This study aims to describe nursing care for the elderly with dementia, from assessment to evaluation.*

Methods: *Using a descriptive design with a single case study approach, the research was conducted from March 24-29, 2025, in RT 001/RW 006, Tanjung Paku Village, Solok City. The subject was one elderly person (Medical Record No. 003574) selected by purposive sampling based on inclusion criteria. Nursing care involved data collection and analysis, diagnosis formulation, intervention planning, action implementation, and evaluation of changes in the patient's condition.*

Results: *The patient exhibited primary symptoms of dementia such as frequent forgetfulness, difficulty recalling past events, verbal communication and comprehension difficulties, and blurred vision. Environmental observation revealed a high fall risk due to the absence of handrails in the bathroom. Nursing diagnoses established were impaired memory, impaired verbal communication, and risk for falls. Implemented interventions included memory exercises (puzzle play therapy), communication strategies for hearing deficits, and fall prevention.*

Conclusion: *Comprehensive nursing care is crucial in addressing cognitive impairment, communication issues, and physical safety problems in elderly individuals with dementia. Specific interventions like puzzle therapy and family education show positive potential in symptom management and improving patient quality of life.*

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INTRODUCTION

Introduction The significant increase in global life expectancy has led to a growing elderly population in various countries, including Indonesia. This phenomenon consequently increases the prevalence of degenerative diseases, one of which is dementia.

Dementia is defined as a syndrome characterized by a progressive and significant decline in cognitive functions, including memory, thinking, orientation, comprehension, learning ability, language, and judgment. This condition is often accompanied by impaired emotional control, social behavior, or motivation (World Health Organization, 2020). Data from the Alzheimer's Association indicates that dementia is one of the leading causes of disability and dependency in older adults worldwide (Alzheimer's Association, 2021).

In the working area of Tanjung Paku Health Center, Solok City, data show that out of 315 elderly individuals, five cases of dementia were recorded from January to December 2024. This figure underscores the relevance of dementia as a health issue in the community and necessitates serious attention. Elderly individuals with dementia require holistic and continuous care, focusing not only on physical aspects but also on psychological, social, and spiritual well-being (Touhy & Jett, 2018). Nurses, as frontline healthcare providers, play a crucial role in delivering this comprehensive care.

Nursing care for the elderly with dementia aims to preserve remaining functions, prevent complications, manage challenging behavioral symptoms, and improve the quality of life for both patients and caregivers (Touhy & Jett, 2018). A systematic nursing process—from assessment, diagnosis, planning, implementation, to evaluation—is an essential framework for achieving these goals. Accurate documentation, using formats like SOAP (Subjective, Objective, Assessment, Plan) or SOADO (Subjective, Objective, Analysis, Diagnosis, Outcome/Plan), is vital to ensure continuity of care, professional accountability, and as a tool for monitoring patient responses to interventions (Rahmi, 2019).
Given the complexity of dementia and the importance of appropriate nursing care, this case study research was conducted. This study aims to thoroughly describe how nursing care is applied to elderly individuals with dementia in the real context of Tanjung Paku Health Center, Solok City, and to analyze patient responses to the interventions provided.

MATERIALS AND METHOD

This study employed a descriptive design with a single case study approach. The case study approach was chosen due to its ability to provide an in-depth and comprehensive overview of nursing care for a single elderly individual with dementia in a natural setting, thus allowing for a holistic exploration of complex phenomena (Polit & Beck, 2018). The subject of the study was an elderly person with Medical Record Number (No. RM) 003574, residing in RT 001/RW 006, Tanjung Paku Village, Solok City. The subject was selected using purposive sampling based on inclusion criteria: an elderly person diagnosed with dementia who was willing to participate, supported by consent from the family or guardian. The study was conducted in the working area of Tanjung Paku Health Center, specifically at the subject's residence. Data collection and nursing care implementation took place from March 24-29, 2025.

Data were collected through source triangulation, including in-depth interviews with the family or primary caregiver to obtain subjective data regarding the patient's medical history, complaints, and the impact of dementia on daily life. Additionally, direct observation was performed to gather objective data on the elderly person's behavior, cognitive function, self-care abilities, and interactions with their environment. Document review was also conducted, involving medical records and existing or newly created nursing care progress notes using the SOAP/SOADO (Subjective, Objective, Analysis, Diagnosis, Outcome/Plan) format.

The collected data were analyzed descriptively and qualitatively, following the stages of the nursing process. These stages began with the collection and analysis of subjective and objective data obtained from interviews, observations, and document review to identify the patient's nursing problems. Based on the data analysis, nursing diagnoses were established in accordance with applicable nursing diagnosis standards (e.g., PPNI, 2017). Subsequently, nursing interventions were planned in line with the established diagnoses, referring to relevant nursing intervention standards (e.g., PPNI, 2018). The planned interventions were then implemented for the patient. Finally, an evaluation of changes in the patient's condition and responses to interventions was conducted periodically to assess the achievement of nursing outcomes (e.g., PPNI, 2019). The entire process was systematically documented using the SOAP/SOADO format.

RESULTS

The case study on nursing care for elderly individuals with dementia (Medical Record No. 003574), conducted in the working area of Tanjung Paku Health Center, Solok City, from March 24-29, 2025, revealed various significant findings regarding the patient's condition and response to the provided nursing care. Based on a comprehensive assessment, the patient exhibited primary symptoms of dementia, including frequent forgetfulness and difficulty recalling past events or information. This condition was often accompanied by disorientation to time and place. Furthermore, impaired verbal communication was identified, where the patient demonstrated difficulty understanding instructions or questions and sometimes provided responses irrelevant to the conversation context. In addition to cognitive issues, the patient also complained of blurred vision, which could potentially worsen disorientation and increase the risk of injury. Observation of the home environment revealed that the absence of handrails in the bathroom, a vital area for elderly safety, posed a high fall risk. These data formed the basis for formulating the patient's nursing problems.

Based on the collected data and critical analysis of the patient's problems, three main nursing diagnoses were successfully established. These diagnoses included Impaired Memory, related to cognitive decline due to dementia; Impaired Verbal Communication, manifested by difficulty understanding and responding to information; and Risk for Falls, based on a combination of visual impairment, cognitive problems (disorientation), and an unsafe environment (lack of handrails in the bathroom). These diagnoses then served as a guide for planning specific and directed nursing interventions, which were individually designed and subsequently implemented for the patient.

To address Impaired Memory, the intervention implemented was memory exercise through puzzle play therapy. This therapy involved the patient in assembling puzzle pieces for 30 minutes per session. The nurse accompanied and provided simple instructions, facilitating the patient to interact with the puzzle pieces, encouraging focus and pattern recognition. Furthermore, to address Impaired Verbal Communication, the intervention focused on communication for hearing deficits. The nurse educated the family on effective communication techniques, such as speaking clearly, at an adequate volume but without shouting, speaking slowly, using simple and direct sentences, and maintaining eye contact when communicating with the patient. Education also covered the importance of regular earwax removal to optimize the patient's hearing ability, which could directly impact communication comprehension. Finally, to address the Risk for Falls, the intervention involved education and environmental modification for fall

prevention. The nurse provided counseling to the family on the importance of a safe environment for elderly individuals with dementia, including recommendations to install handrails in the bathroom, ensure floors are always dry and non-slippery, maintain sufficient lighting in the house, and remove clutter on the floor that could potentially cause the patient to trip and fall. The family was also encouraged to consistently accompany the patient during risky activities.

Evaluation of the nursing care showed positive responses from both the patient and the family. For the Impaired Memory diagnosis, after several puzzle play therapy sessions, the patient showed improvement in terms of focus and duration of engagement in the activity. While a significant improvement in memory could not be assessed in a short period, this increased engagement indicated successful cognitive stimulation. For the Impaired Verbal Communication diagnosis, the family demonstrated a better understanding of the taught communication techniques and began to apply them, along with a commitment from the family to maintain the patient's ear hygiene. Meanwhile, for the Risk for Falls diagnosis, education on fall prevention was well-received by the family, and they expressed commitment to making environmental modifications as advised, such as installing handrails in the bathroom. The entire nursing care process and its progress were routinely documented in detail using the SOAP/SOADO format. This documentation facilitated continuous monitoring of the patient's condition and responses to each intervention, and allowed the nurse to make adjustments to the nursing care plan.

DISCUSSION

The findings in this case study significantly underscore the complexity of problems faced by elderly individuals with dementia and the importance of comprehensive nursing care. The assessment results, showing issues with memory, verbal communication, and fall risk in the study subject, are highly consistent with the clinical picture of dementia described in the literature (Smeltzer et al., 2010; World Health Organization, 2020). Cognitive decline, especially in memory, is a core symptom of dementia that progressively affects the patient's quality of life and independence in daily activities (Alzheimer's Association, 2021). Therefore, a holistic and accurate assessment, covering not only cognitive but also functional and environmental aspects, forms the fundamental basis for effective nursing care planning.

Establishing appropriate nursing diagnoses, such as impaired memory, impaired verbal communication, and risk for falls, is a crucial step that guides interventions. In this case, these diagnoses reflect the patient's priority needs and direct the nurse to focus on the problems that most affect the patient's safety and comfort. This aligns with guidelines from the Indonesian Nursing Diagnosis Standard (SDKI) which emphasizes the importance of nursing diagnoses as a bridge between assessment and targeted intervention planning (PPNI, 2017).

The implementation of nursing interventions demonstrates a multifaceted approach suitable for the needs of dementia patients. Puzzle play therapy as a memory exercise intervention is a non-pharmacological strategy that has shown potential in stimulating remaining cognitive functions and slowing the rate of cognitive decline in elderly individuals with dementia (Fransiska, 2023; Nurleny et al., 2021). While dementia is progressive, cognitive interventions like this aim to preserve the patient's functional capacity for as long as possible and enhance their engagement with the environment, ultimately contributing to an improved quality of life (Sukmawati, 2024; Snyder et al., 2016). The patient's positive response to puzzle activities, such as

increased focus and engagement, indicates that such interventions have therapeutic value. This is further supported by studies indicating that cognitive recreational activities can reduce apathy and improve social interaction in dementia patients (Livingston et al., 2017).

Furthermore, addressing impaired verbal communication through family education on adaptive communication techniques and sensory maintenance (such as earwax removal) is a highly relevant and practical intervention. Communication difficulties are one of the biggest challenges in caring for elderly individuals with dementia, which can lead to frustration for both patients and caregivers (Anipah, 2024; National Institute on Aging, 2020). By enhancing the family's ability to communicate effectively, it is hoped that the patient's interaction with the environment will improve, reducing misunderstandings and increasing the patient's sense of security. Optimizing hearing, although often overlooked, is a basic yet highly impactful step in facilitating communication and reducing misinterpretation in the elderly.

The focus on fall prevention through environmental modification is also a vital aspect of dementia nursing care. Elderly individuals with dementia have a higher risk of falls due to a combination of disorientation, balance impairment, visual problems, and often an unadaptive environment (Langitan, 2024). Literature consistently shows that multifactorial interventions, including education, environmental modifications, and balance exercises, significantly reduce fall incidence in older adults with cognitive impairment (Gillespie et al., 2012). Educating families to take preventive measures such as installing handrails in bathrooms and maintaining a safe environment underscores the importance of the family's role as a partner in care. This approach not only focuses on the patient but also empowers the family to create an environment that supports the safety and well-being of the elderly. Active family involvement in home care planning and implementation has been shown to improve patient outcomes and reduce caregiver burden (Schulz & Beach, 1999).

The regularity in documenting the entire nursing care process using the SOAP/SOADO (Subjective, Objective, Analysis, Diagnosis, Outcome/Plan) format proved crucial in this case. This format allows nurses to systematically record data (S & O), analyze (A) and accurately formulate diagnoses (D), and serves as a basis for planning and implementing outcome-centered interventions (O). Comprehensive documentation not only supports nurse accountability but also facilitates continuity of care, simplifies communication among healthcare professionals, and serves as valid evidence of the nursing care provided (Prastiwi, 2023; Rahmi, 2019). The ability to record patient progress in a structured manner enables nurses to effectively monitor responses to interventions and make adjustments to the nursing care plan according to the patient's dynamic needs.

As a single case study, this research provides an in-depth overview of nursing care for one elderly individual with dementia. However, a key limitation is the generalizability of its results to a broader population. These findings can serve as a basis for further research with a larger sample size or controlled intervention studies to validate the effectiveness of the implemented interventions more widely.

CONCLUSION

This case study demonstrates that comprehensive nursing care for elderly individuals with dementia is essential in addressing various health problems experienced, including impaired memory, impaired verbal communication, and risk for falls. The implementation of interventions such as puzzle play therapy for memory

stimulation, adaptive communication techniques and ear hygiene for addressing hearing deficits, and environmental modification for fall prevention, shows positive potential in symptom management and improving the patient's quality of life. The systematic nursing care process, thoroughly documented using the SOAP/SOADO format, strongly supports the effectiveness and continuity of care for elderly individuals with dementia.

Based on these findings, it is recommended that Tanjung Paku Health Center in Solok City develop programs or standard guidelines for nursing care for elderly individuals with dementia, including continuous training for nurses on non-pharmacological interventions and the importance of safe environmental modification. For nurses, it is expected that they consistently apply all stages of the nursing care process and document them completely and accurately using the SOAP/SOADO format to ensure the quality and continuity of care. Furthermore, increased education and psychosocial support should be provided to families or caregivers to equip them with adequate knowledge and skills in caring for elderly individuals with dementia, while also reducing the potential caregiver burden. For future research, it is suggested to conduct further studies with a larger sample size or an intervention research design, aiming to test the effectiveness of various types of non-pharmacological therapies and nursing interventions for elderly individuals with dementia at different stages, and to explore caregiver experiences in more depth.

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