

Gerontic nursing care in Mr.P with memory impairment in Tempel Sleman, Yogyakarta

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Abstract

BackgroundAn elderly person is someone who has reached the age of 60 years. The elderly are an age group that has reached the final stage of their lives. This group of people who are classified as elderly experience a process that is often referred to as the aging process. Some of the impacts that occur due to the aging process and degenerative diseases that often occur in the elderly, one of which is the decline in cognitive function. Decreased cognitive function is a normal state for the elderly where the ability to remember, think, learn, solve problems, memory, and evaluate decreases. **Objective:** To analyze gerontic nursing care in Mr. P with memory impairment at Tempel Sleman Yogyakarta. **Methods:** This study is an observational case study. Data collection techniques through observation and interviews. **Results:** Based on the condition in Mr. P with the main diagnosis that appeared, namely memory impairment. After brain exercise intervention and action evaluation during 3 meetings, the results obtained from memory impairment in Mr. P can be reduced. **Conclusion:** After nursing action was carried out on Mr. P with the main problem of memory impairment, it has been resolved. For the elderly, it is expected to be able to do brain exercises regularly to improve memory and reduce memory disorders experienced.

Keywords: elderly; gerontic nursing care; memory impairment

1. Introduction

According to (Cahyadi et al., 2021), the elderly are a group of people who experience a gradual process of change over a certain period of time. The changes that occur include physical, biological, cognitive, psychological, economic changes and their social role in society. Often the elderly and the people around them cannot accept the changes and setbacks that occur so that it will cause problems for the elderly such as neglect. Some of the impacts that occur due to the aging process and degenerative diseases that often occur in the elderly, one of which is the decline in cognitive function. Cognitive decline is a normal state for the elderly where the ability to remember, think, learn, solve problems, memory and evaluate decreases. This occurs due to progressive anatomical changes and atrophy in the brain of the elderly (Napitupulu, 2024). WHO noted that the decline in cognitive function of the elderly is estimated at 121 million people, of which 5.8% are men and 9.5% are women. In the elderly, it is often easy to forget with a prevalence of 30% of memory impairments occurring at the age of 50-59 years, 35%-39% occurring at the age of over 65 years and 85% occurring at the age of over 80 years. In Indonesia, it is stated that the prevalence of cognitive function disorders in the elderly is around 18-35% in the elderly aged 65-80 years and above, caused by diseases such as depression, neurology, diabetes mellitus and cognitive function decline that will interfere with the quality of life of the elderly.

The results of the study conducted by researchers in Tempel, Sleman, Yogyakarta obtained the results of 110 people in the Middle Age category with the age of 45-59 years, the Elderly category with the age of 60-70 years as many as 62 people, and the Old category with the age of 75-90 years as many as 49 people. The Mini Mental State Examination (MMSE) in the elderly with the age category Old (75-90 years) with a total of 8 elderly people, the results of the elderly with the category of cognitive aspects of mental function were obtained as many as 1 elderly (12.5%) and for the category there was damage to the aspect of mental function as many as 7 elderly (87.5%). Based on the background description that has been presented about the elderly with memory impairments, the researcher is interested in conducting research on "Gerontic Nursing Care in Mr. P with Memory Impairment in Tempel Sleman Yogyakarta"

2. Methods

This research is an observational research case study with data collection techniques, namely through observation and interviews. The object of the research in this case is an elderly Mr. P with the age of 78 years who lives in Tempel, Sleman, Yogyakarta with memory impairment.

3. Results and Discussion

In the case of Mr. P, the Client said that he rarely went to the nearest Health Center and the elderly posyandu. Mr. P's current age is 78 years old, Mr. P has two children, one boy and one girl. The client lives at home with his wife and son who are already working. In addition, a Mini Mental State Examination (MMSE) was also carried out on Mr. P with a score of 21 which indicates that there is damage to aspects of mental function. In addition, when the study of Mr. P was found to have the main complaint, namely that Mr. P often forgot what he was doing such as forgetting to pray Isha, forgetting to brush his teeth and forgetting to wash his hair, this has been experienced for more than 3 years, Mr. P seems to take a while to digest what the researcher said. Based on the assessment that has been carried out, the nursing diagnosis established by the researcher is memory disorder. The implementation carried out by the researcher in dealing with memory disorders in Mr. P is by providing education to Mr. P regarding brain gymnastics using posters and conducting brain gymnastics demonstrations consisting of cross crawl movements (cross movements), hooks up, lazy eight, neck rotation, activating the hands, launching gravity, massaging the collarbone and pairing of ear movements. The following are the results of the evaluation conducted for 3 days with approximately 60 minutes per meeting.

Table 1. Evaluation of Nursing Care

SO Evaluation Day 1	SO Evaluation Day 2	SOAP Evaluation Day 3																																																												
<p>S</p> <ol style="list-style-type: none"> Mr. P said that he understood a little about the material presented Mr. P said there are still some movements that have been forgotten <p>O</p> <ol style="list-style-type: none"> Mr. P seemed enthusiastic about participating in the activity Mr. P seemed to be actively asking Mr. P seemed to follow the activity slowly <p>A</p> <p>The problem of Mr. P's memory impairment has not been resolved with the following outcome criteria: Memory (L.09079)</p> <table border="1"> <thead> <tr> <th>Information</th> <th>A</th> <th>T</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>Verbalization of the ability to recall factual information</td> <td>3</td> <td>5</td> <td>4</td> </tr> <tr> <td>Verbalizing the Forgotten Experience</td> <td>3</td> <td>5</td> <td>3</td> </tr> <tr> <td>Verbalization is easy to forget</td> <td>3</td> <td>5</td> <td>3</td> </tr> <tr> <td>Verbalization of the ability to</td> <td>3</td> <td>5</td> <td>4</td> </tr> </tbody> </table>	Information	A	T	C	Verbalization of the ability to recall factual information	3	5	4	Verbalizing the Forgotten Experience	3	5	3	Verbalization is easy to forget	3	5	3	Verbalization of the ability to	3	5	4	<p>S</p> <ol style="list-style-type: none"> Mr. P said there are still some movements that have been forgotten Mr. P said he wanted to apply brain gymnastics every day <p>O</p> <ol style="list-style-type: none"> Mr. P seemed enthusiastic about participating in the activity Mr. P seemed cooperative <p>A</p> <p>The problem of Mr. P's memory impairment has not been resolved with the following outcome criteria: Memory (L.09079)</p> <table border="1"> <thead> <tr> <th>Information</th> <th>A</th> <th>T</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>Verbalization of the ability to recall factual information</td> <td>3</td> <td>5</td> <td>4</td> </tr> <tr> <td>Verbalizing the Forgotten Experience</td> <td>3</td> <td>5</td> <td>4</td> </tr> <tr> <td>Verbalization is easy to forget</td> <td>3</td> <td>5</td> <td>4</td> </tr> <tr> <td>Verbalization of the ability</td> <td>3</td> <td>5</td> <td>4</td> </tr> </tbody> </table>	Information	A	T	C	Verbalization of the ability to recall factual information	3	5	4	Verbalizing the Forgotten Experience	3	5	4	Verbalization is easy to forget	3	5	4	Verbalization of the ability	3	5	4	<p>S</p> <ol style="list-style-type: none"> Mr. P said that he had applied brain exercises every day in his spare time Mr. P said that he could do brain gymnastics movements independently but not sequentially <p>O</p> <ol style="list-style-type: none"> Mr. P seemed happy to be visited by the researcher Mr. P seemed cooperative <p>A</p> <p>The problem of memory impairment in Mr. P is solved with the following outcome criteria: Memory (L.09079)</p> <table border="1"> <thead> <tr> <th>Information</th> <th>A</th> <th>T</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>Verbalization of the ability to recall factual information</td> <td>3</td> <td>5</td> <td>5</td> </tr> <tr> <td>Verbalizing the Forgotten Experience</td> <td>3</td> <td>5</td> <td>5</td> </tr> <tr> <td>Verbalization is easy to forget</td> <td>3</td> <td>5</td> <td>5</td> </tr> <tr> <td>Verbalization of the ability</td> <td>3</td> <td>5</td> <td>5</td> </tr> </tbody> </table>	Information	A	T	C	Verbalization of the ability to recall factual information	3	5	5	Verbalizing the Forgotten Experience	3	5	5	Verbalization is easy to forget	3	5	5	Verbalization of the ability	3	5	5
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remember events					to remember events					to remember events				
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Intervention continued					Intervention continued					The intervention was followed by a follow-up plan:				
1. Evaluation related to brain gymnastics					1. Evaluation related to brain gymnastics					Encourage Mr. P to do brain exercises regularly every day by involving his family to accompany and provide support so that Mr. P can be more optimal in doing brain exercises every day.				
2. Time contracts for meetings and subsequent activities					2. Time contracts for meetings and subsequent activities									
3. Make a revisit related to brain gymnastics					3. Make a revisit related to brain gymnastics									
Anita Dwi Setyowati					Anita Dwi Setyowati					Anita Dwi Setyowati				

(Panggayuh et al., 2025) said that various scientific studies have identified age as a major determinant in the process of declining cognitive function in elderly individuals. This phenomenon is part of a biological process that prevalent with age, where aging naturally affects the structure and function of the brain significantly. The degenerative process is characterized by a reduced number of neurons and weakened synaptic connectivity, which has a direct impact on the brain's ability to process new information and maintain long-term memory. This decline in cognitive capacity is not only physiological, but also has an impact on the psychosocial aspects and the overall quality of life of the elderly. The findings are in line with the concept in the Wear and Tear theory of aging, which explains that the cells of the human body undergo cumulative damage due to repeated and continuous use throughout life. Over time, the accumulation of such damage leads to a decrease in the efficiency of cellular functions, including nerve cells in the brain, which ultimately contributes to a decline in cognitive abilities. The impact of this decline is not only limited to disruptions in carrying out daily activities, but can also trigger serious psychological consequences such as increased risk of depression, feelings of helplessness, and a tendency to experience social isolation. Therefore, a comprehensive understanding of the correlation between the aging process and the decline in cognitive function is very important in the context of geriatric health services. This knowledge can be the basis for designing preventive and curative intervention strategies, with the aim of maintaining optimal mental and cognitive health of the elderly. Such interventions can include health education, cognitive stimulation, social support, as well as multidisciplinary approaches involving medical personnel, psychologists, and families as an integral part of the aged care system.

(Panggayuh et al., 2025) He also said that the brain is an essential organ that acts as a control center for all human body activities, as well as a center for information processing and decision-making. The vital functions of the brain in the human biological and psychological system place it as a major component that requires special attention and care to maintain its optimal continuity. Efforts to maintain brain health can be done through a holistic approach that includes harmonization between body movements and breathing patterns, as well as involvement in activities that stimulate cognitive functions such as visual perception, imagination, and emotional responses. Physical activities such as light exercise and gymnastics have been shown to improve motor efficiency and strengthen memory capacity. In the context of the elderly, the implementation of gymnastics activities must be adjusted to the individual's physical condition to minimize the risk of injury. One relevant form of intervention is brain exercises, which are a simple series of movements designed to integrate motor and neurological functions through coordination of gestures. Brain gymnastics has the advantage that it does not require a lot of energy, so it is suitable to be applied to the elderly population with physical limitations.

(Juita & Shofiyah, 2022) conveyed that the elderly are often socially constructed as a weak, unproductive, and vulnerable group to marginalization. This perception has an impact on the way society treats the elderly and influences the policies and services available to them. As the number of elderly population increases, the challenges in maintaining and improving their quality of life are becoming increasingly significant, especially in the aspect of mental health. Various studies show that the elderly are prone to complex and multidimensional psychological disorders. The five main disorders often found in this group include depression, anxiety disorders, dementia, insomnia and delirium and somatoform disorders. Depression in the elderly, This disorder is characterized by prolonged feelings

of sadness, loss of interest in daily activities, fatigue and decreased self-esteem. Depression in the elderly is often rooted in past experiences that cause disappointment and dissatisfaction. This condition has serious implications, considering that about 25% of deaths in the elderly are related to acts of self-harm. In addition, the elderly can also experience anxiety disorders, where the elderly experience excessive anxiety, which has an impact on psychological comfort and social functioning. The prevalence of this disorder is estimated to reach 3.8% of the elderly population, and can interfere with emotional well-being and overall quality of life. Another problem that often occurs in the elderly is dementia where dementia is a progressive neurocognitive disorder that affects the ability to remember, think, understand information, count and learn. Dementia significantly inhibits an individual's ability to carry out daily activities and increases dependence on others. In addition to dementia, the elderly also experience sleep disorders such as insomnia, characterized by difficulties in maintaining sleep quality and also the elderly experience delirium where delirium is an acute organic mental disorder characterized by decreased awareness, alertness, psychomotor activity, and fluctuating thought processes.

(Sari et al., 2024) said that in the context of health services for the elderly who experience cognitive impairment, the family plays a very fundamental and irreplaceable role. As the smallest social unit in society, the family functions as the main support system that makes a significant contribution to the well-being of the elderly, both from emotional, physical, and social aspects. The support provided by the family includes care and affection, assistance in daily activities, and the strengthening of interpersonal relationships that can improve the overall quality of life of the elderly. This role becomes increasingly important when the elderly experience a decline in cognitive function, such as dementia, which impacts their ability to live independently. One of the main challenges is the limited knowledge and skills in understanding the medical and psychological conditions of the elderly, as well as in implementing appropriate treatment strategies. In addition, the high physical demands of caring for the elderly, such as helping with mobilization, maintaining hygiene, and regulating medication consumption, can cause significant physical fatigue for family members acting as caregivers. While families are the main pillars in the care of the elderly with cognitive impairment, they also need comprehensive support from health workers, communities, and public policy to reduce the burden they bear and increase their capacity to provide optimal care.

4. Conclusion

Based on the results of the discussion "Gerontic Nursing Care Case Report on Mr. P with Memory Impairment in Padukuhan Bulan Banyurejo Tempel Sleman Yogyakarta" above, the following conclusions can be drawn:

- a. The nursing study carried out on the elderly Mr. P obtained data including the main complaints felt, namely Mr. P complained that he often forgot what he was doing such as forgetting to pray Isha, forgetting to brush his teeth and forgetting to wash his hair, this has been experienced for more than 3 years, Mr. P seems to take a while to digest what the researcher said. The nursing diagnosis that appears in the nursing care of Mr. P is Memory Disorder (D.0062)
- b. The implementation or implementation of nursing measures in this case is carried out according to the patient's needs. By providing interventions in the form of brain exercises. The end of the nursing process is an evaluation of the nursing care provided. The evaluation carried out by the researcher in the case of Mr. P was carried out during 3 meetings with the evaluation of the results made in the form of SOAP. As a result of the evaluation on memory disorders, Mr. P was able to understand and follow the activities taught by the researcher even though it was gradual.

5. Acknowledgements

The researcher realizes that the preparation of this scientific paper is still far from perfect considering the limitations of science, experience, and time, so the author expects constructive suggestions and criticism from all parties to further improve this research. Therefore, the researcher would like to thank you for all parties who have supported this research, so that it can be carried out well.

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