

## **Application of Reminiscence Therapy As An Improving Effort Cognitive Function of Older Age**

**Ganda Sigalingging<sup>1</sup>, Zulkarnain Nasution<sup>2</sup>, Martaulina Sinaga<sup>3</sup>, Magdalena Ginting<sup>4</sup>**

Universitas Darma Agung Medan, Indonesia<sup>124</sup>

Sekolah Tinggi Ilmu Kesehatan Mitra Husada Medan, Indonesia<sup>3</sup>

E-mail: gandabonagade@gmail.com

KEYWORDS	ABSTRACT
Cognitive, Elderly, Reminiscence, Therapy	Cognitive decline in the elderly can affect their physical abilities and quality of life. Cognitive decline is often characterized by impaired memory and communication, resulting in dependence on others. This study aims to apply reminiscence therapy as an effort to improve cognitive function in the elderly. The case study was conducted using the gerontic nursing care process approach. The research subjects consisted of two elderly over 60 years old with cognitive impairment, who were evaluated using the Mini Mental State Examination (MMSE). Reminiscence therapy was implemented in 3 sessions for 2 weeks, each lasting 90 minutes. After the application of reminiscence therapy, both subjects' MMSE scores improved. The first subject showed the score increased from 15 to 21, while the second subject from 16 to 23, which showed improvement in the category of cognitive impairment. The application of reminiscence therapy is able to stimulate long-term memory and improve cognitive function in the elderly. These results are in line with previous research which shows that this therapy is effective in improving cognitive abilities and quality of life of the elderly. Reminiscence therapy is an important intervention to improve memory and cognitive function in the elderly with cognitive impairment. The application of this therapy can make a significant contribution to the care of the elderly and improve their quality of life.

## **INTRODCUTION**

Dementia is a significant global health problem, characterized by cognitive and behavioral symptoms that can be classified into core symptoms such as memory loss, language impairment, and decreased cognitive function, and peripheral symptoms that include psychological and psychiatric changes. Behavioral changes that appear in elderly people are believed to occur due to a decrease in cognitive function. Naturally, the human body will experience a decline in function, including organs and psychological aspects. Cognitive function decline generally occurs in elderly people, with several influencing factors, such as gender, age, education, health factors, depression, and body mass index. Currently, it is estimated that around 55 million people worldwide suffer from dementia, with 60% of them living in low- and middle-income countries. The decline in cognitive function in the elderly is characterized by signs and symptoms such as memory impairment, changes in perception, communication disorders, and decreased focus and attention, resulting in difficulties in carrying out daily activities. This decline is inevitable because it can occur due to physiological changes in brain structure that usually occur with age.

With the increasing number of elderly population and prevalence of dementia, there is an urgent need to find effective therapeutic solutions. Reminiscence therapy is one promising approach to help improve cognitive function in older adults. This study aims to explore the effectiveness of reminiscence therapy in improving cognitive function, so that it can make a positive contribution to the quality of life of older adults experiencing cognitive decline.

The ability of cognitive function in the elderly depends on the physiology of the brain, while the brain in the elderly experiences decline due to degeneration or aging, this causes disturbances in cognitive, intellectual function, as well as social and work activities. As we get older, this cognitive decline will normally occur if it falls into the category of mild disorders, however if this decline in cognitive function continues, it will cause the elderly to experience severe cognitive impairment which results in problems in the daily life of the elderly and results in severe cognitive impairment. dependence on basic daily needs (Arevalo-Rodriguez et al., 2021).

Based on 2019 World Population Prospects data, the number of people aged 65 years and over is expected to increase from 703 million people in 2019 to almost 1.5 billion people in 205. Based on 2020 BPS data, the percentage of elderly people in North Sumatra is female. higher than men with a total of 8.19 million. (Statistics of the Elderly Population of North Sumatra Province 2020, n.d.) Along with the aging process, the body will experience various health problems or what are usually called diseases. degenerative. One of the degenerative diseases that elderly people often suffer from is dementia or what many people know as senile dementia. Dementia is a general term used to describe global impairment of cognitive function which is usually progressive and affects daily life activities (Arevalo-Rodriguez et al., 2021).

Health problems chronic and cognitive and memory decline (Liu et al., 2021). Symptoms of mild cognitive decline include slowed thinking, lack of processing using appropriate memory strategies, difficulty concentrating, easily switching to things that are not needed, taking longer to learn something new. Decreased cognitive function can take the form of forgetfulness, which is the mildest form of cognitive impairment which is estimated to be experienced by 39% of seniors aged 50-59 years, and increases to more than 85% of those aged over 80 years. This easy forgetfulness can progress to mild cognitive impairment (MCI) to dementia as the most severe clinical form.

Cognitive decline can be prevented by increasing movement and thinking activities that involve both sides of the brain (Susanto et al., 2020). However, the phenomenon in the field shows that the decline in cognitive function in the elderly has not received optimal treatment. Existing techniques to improve cognitive function in the elderly need to be made easier and more effective. One promising approach is reminiscence therapy. This therapy is a method for expressing feelings that can trigger the emergence of positive coping mechanisms, which affect the perception and emotions of the elderly in viewing problems. The aim of this therapy is to help improve cognitive function in the elderly (Woods et al., 2018).

Several studies have shown the positive impact of reminiscence therapy. For example, Yanagida et al. (2024) found that it significantly improved cognitive function in the elderly. The results of this study recommend reminiscence therapy as one of the interventions that can be done to maintain the cognitive function of the elderly. In addition, Ayano et al. (n.d.-b) reported that there was an increase in cognitive function after reminiscence therapy. Maria (2012) reviewed several studies on the effects of reminiscence therapy on dementia, which showed that this therapy not only improved mood, but also some cognitive abilities.

Although many studies have shown positive results, there are gaps in the literature that this study needs to fill. Most previous studies have focused more on the impact of reminiscence therapy in the context of dementia without exploring in depth the mechanisms underlying improved cognitive function in older adults in general. This study aims to fill this

gap by systematically evaluating the effects of reminiscence therapy on various aspects of cognitive function, as well as understanding how it can be integrated in everyday elderly care practices.

One therapeutic approach that has been reviewed over the years is reminiscence therapy, this therapy involves discussing past experiences, individually or in groups. (Ayano et al., n.d.-a) This reminiscence therapy can trigger an impulse that will occur in memory, where memory is a process of storing sensory impulses which are important for use in the future as a regulator of motor activity and processing for thinking. Reminiscence therapy is a method of expressing feelings that triggers the emergence of self-confidence and respect in the elderly, which will have an impact on positive coping which will influence the perception and emotions of the elderly in viewing a problem. Reminiscence therapy aims to help improve cognitive function in the elderly been used so far have their own weaknesses.

The aims of this study were to evaluate the effectiveness of reminiscence therapy in improving cognitive function of the elderly, as well as understanding the mechanisms underlying these changes. This study is expected to provide new insights into reminiscence therapy as an effective intervention in treating elderly with cognitive impairment. In addition, the results of this study can be the basis for health workers in designing better and more appropriate intervention programs to improve the quality of life of the elderly.

## **METHOD RESERACH**

The method used is a case study and Gerontic Nursing Care approach. The case study used is an Evidence Based Nursing Practice-based application by conducting an assessment, nursing diagnosis, intervention, implementation and nursing evaluation. The case study subjects were two elderly people aged >60 years who were measured using the Mini Mental State Exam (MMSE) assessment with impaired cognitive function. The implementation of the case study was carried out in Timbang Deli Village, Medan Amplas. Instruments in case studies use observation sheets and standardized Mini Mental State Exam (MMSE) assessments. The application of reminiscence therapy uses picture storybooks to review children's childhood experiences. Telling experiences as a teenager and adult by showing pictures of beautiful women and handsome men. Provide musical instruments and memorable songs. Displaying family photos from childhood to adulthood as a means to stimulate the sharing of family and home experiences. Reminiscence therapy was applied to the elderly for 2 weeks. The intervention was carried out as many as 3 sessions with themes that had been agreed upon at each meeting with a duration of 90 minutes for each session. Reminiscence therapy is carried out simultaneously to save time. MMSE scores were measured before and after reminiscence therapy. Score values 24-30 are included in the normal category, score values 17-23 in the category of probable cognitive impairment, score values: 0-16 in the category of definitive cognitive impairment. MMSE score data is presented in a frequency table.

## **RESULT AND DISCUSSION**

The application of case studies is carried out by carrying out nursing care starting from assessment, formulating nursing diagnoses, planning interventions, implementing and conducting nursing evaluations. Case studies were conducted on two elderly subjects in accordance with the inclusion criteria. To get a real picture of the implementation of nursing care for clients with cognitive impairment, the author describes a case that the author observed on Friday, December 1-7, 2023.

**Table 1. Client Characteristics**

<b>Variable</b>	<b>Client1</b>	<b>Client 2</b>
Age	63yearsold	83yearsold
Gender	Woman	Woman
Ethnic group	Java	Tionghoa
Education	JuniorHighSchool	Health Nursing School

Table 1 shows that the two subjects had different data: client 1, 63 years old, Javanese, junior high school education. Client 2, 83 years old, Chinese with School of Health Nursing education.

**Table 2 MMSE Assessment Results**

<b>Assessment Results</b>	<b>Client1</b>	<b>Client2</b>
MMSE	15	16
Category	Definitive cognitiveimpairment	Definitive cognitiveimpairment

Table 2 of the MMSE assessment score results shows that both subjects are included in the category of definitive cognitive impairment and formulated a diagnosis, namely memory impairment associated with the aging process (DPP SDKI PPNI Working Team, 2017). The results of the assessment and formulation of nursing diagnoses are then carried out nursing actions with the nursing goal of improving orientation. The application carried out is memory therapy to improve cognitive function in the elderly (PPNI, 2018).

**Table 3. Implementation of Reminiscence Therapy and MMSE Assessment Results**

<b>No</b>	<b>Time</b>	<b>activities</b>	<b>Results</b>		<b>Category</b>
			<b>Client1</b>	<b>Client2</b>	
1	December 1,2023	Carrying out an assessment Mini Mental State Exam State Exam	15	16	Severe cognitive impairment (0-17)
2	December 2,2023	Implement reminiscence therapy in session1	Implemented	Implemented	
3	December 4,2023	Implement reminiscence therapy in session 2	Implemented	Implemented	
4	December 6,2023	Implement reminiscence therapy in session 3	Implemented	Implemented	
5	December 7,2023	Conducte dare view of reminiscence therapy	21	23	Moderate cognitive impairment (17-23)

Table 3. The results of the MMSE assessment showed the results of cognitive measurements taken before reminiscence therapy was at a score of 15 with definitive cognitive impairment category, client 2 with a score of 16 with definitive cognitive impairment category. After reminiscence therapy was performed 3 times, client 1's cognitive assessment score increased to 21 with probable cognitive impairment criteria, while client 2 obtained a score of 23 with probable cognitive impairment category.

## DISCUSSION

Cognitive therapy can help the elderly recognize negative thoughts that arise, so that positive perceptions will be created. Positive perceptions will affect positive coping. The application of reminiscence therapy in the elderly with memory impairment shows an increase in cognitive abilities in the elderly. This is because in reminiscence therapy the elderly will be stimulated to remember past long-term memories so that in the brain there is a stimulus that can improve cognition and prevent a significant decrease in memory.

Reminiscence therapy actions are carried out in 3 sessions, namely in the first session sharing stories about childhood experiences and memories, in the second session telling stories about games that were liked as a child, session 3 sharing stories about favorite songs. This reminiscence therapy action is applied individually to help the elderly recall past events. In session 3 of reminiscence therapy, both subjects, namely client 1 and client 2, experienced improvements in several MMSE assessment questions. Client 1 experienced an increase in answering questions in the orientation, registration, and language categories. Client 2 experienced an improvement in the language category, namely being able to follow instructions from the researcher and repeating commands even though they were done repeatedly.

The interesting thing about this case study is that cognitive impairment in clients 1 and 2 both fall into the category of definitive cognitive impairment, but the score of 83-year-old client 2 has a higher score than client 1. In addition, the score is based on observations while providing nursing care to clients who are physically healthier than client 2. It's just that hearing loss is more fatal in client 2 while memory is better than client 1. This condition means that age does not always have a bad impact on a person's memory. As a person ages, the relationship with health becomes more significant. Age is one of the factors that influence changes in cognitive function in the elderly, this is due to changes that occur in the brain due to age.

The ability of cognitive function in the elderly depends on the physiology of the brain, while the brain in the elderly has decreased due to degeneration or aging, this causes impairment in cognitive, intellectual, and social and occupational activities. As we age, this cognitive decline will normally occur if it falls into the category of mild impairment, but if this decline in cognitive function continues, it will cause the elderly to experience severe cognitive impairment which results in problems in the daily life of the elderly and results in dependence on basic daily needs. (Woods et al., 2018).

The results of reminiscence therapy conducted for 3 meetings with a duration of 90 minutes are evidenced by an increase in the cognitive function of the elderly with an increase that can be seen from the results of the MMSE scores of the two subjects given, so that there is an increase. the effect of reminiscence therapy before and after therapy is given and has increased. Based on the intervention structure created by the author, the author applies it by recalling past events with the aim of improving cognitive function orientation in the elderly who experience memory impairment. (PPNI, DPP SDKI Working Group Team. 2017) The ability of reminiscence therapy to improve cognitive function in dementia patients is shown by the increase seen in the MMSE score, this shows that reminiscence therapy can improve the quality of daily life.

Giving Reminiscence Therapy can trigger impulses that will occur in memory, where memory is a process of storing sensory impulses that are important for future use as a regulator of motor activity and thought processes, where previously memory was stored in the nervous system, then memory will become part of the processing mechanism (Sofia, 2018). This therapy aims to improve cognitive function and communication skills, so that the elderly can remember events in their past in the part of the brain that is the hippocampus that will work. The hippocampus itself plays a role in memory function, namely storing and managing the information received so that it can become a long-term memory reserve. In addition, this therapy simultaneously improves relaxation and cognitive activity in dementia patients, meaning that patients can actively recall memories while maintaining a relaxed state, thus contributing to psychological stability and stress reduction.

## CONCLUSION

Implementation of nursing care for both clients is carried out with a duration of 90 minutes for 2 weeks. Before reminiscence therapy is performed, an assessment is carried out to determine cognitive impairment in the elderly using MMSE assessment. Furthermore, reminiscence therapy is carried out to determine the development of cognitive function in the elderly. Evaluation after implementation shows that there is a cognitive improvement after being given reminiscence therapy as seen from the MMSE assessment score where before implementation both subjects are included in the category of severe cognitive impairment. (0-17) after therapy there was an improvement to moderate cognitive impairment (17-23). It can be concluded that the application of reminiscence therapy is important in an effort to improve memory in the elderly who experience cognitive impairment.

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