The Application of Reminiscence Therapy in Efforts to Prevent Dementia in the Elderly

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Article Information	Abstract

Elderly at risk of dementia caused by decrease in cognitive function, one of the treatments that is safe with no side effects is the reminiscence therapy to increase cognitive function. The purpose of this study was to explain the reminiscence therapy on level of dementia in the elderly. The design of this study was pre-experimental design. The population was elderly in PSTW Wlingi. The total sample was 15 respondents. The sampling technique was purposive sampling with the inclusion criteria of cooperative elderly, easy to communicate with and willing to become respondents. The independent variable was the reminiscence therapy which was carried out for 6 times in a week, the dependent variable was level of dementia. The data was collected by using MMSE (Mini Mental State Examination) questionnaires and analyzed by using Paired t-test with a significance level of $\alpha \leq 0.05$. The reminiscence therapy to decrease level of dementia on elderly (p = 0.000). There was a significant difference between pre intervention and post intervention of the reminiscence therapy. The reminiscence therapy can improve cognitive function with dementia in the elderly. Elderly can apply the reminiscence therapy to help them memories and as support nursing intervention. The future studies could add to the respondents and determine the factors according to the characteristic of respondent.

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INTRODUCTION

Aging is a process of slowly decreasing the ability of tissues to repair themselves or replace themselves, maintain their normal structure and function so that they cannot withstand injury (including infection) and repair damage that occurs at the age of 30-70 years (Sari et al., 2018).The aging process will be experienced by all humans and most of them will experience dementia or senility in old age. This condition is a challenge to maintain the health and independence of the elderly so that they do not become a burden to themselves, their families and society (Suwarni et al., 2018). Dementia specific treatment is not yet available, but medication to treat symptoms can be done. One of them is reminiscence therapy which can train the cognitive function of the elderly.

WHO (World Health Organization) estimates that in 2020 the number of elderly people worldwide will be around 680 million people and in 2030 the number of elderly people worldwide will reach around 840 million people and will continue to grow in 2025 reaching 1.2 billion. Meanwhile, data from the Ministry of Health of the Republic of Indonesia in 2015 showed that there were 18.1 million elderly people in Indonesia, or around 7.6% of Indonesia's total population of 254.9 million people. East Java is a province with a large elderly population, reaching 4.23 million people or around 10.96 percent of East Java's population of 38.6 million (BPS, 2020a).

Data from Alzheimer's Disease International estimates that in 2010 there will be 37 million people with dementia in the world, while in 2015 there will be more than 46 million people with dementia and will increase by 65 million in 2025 out of a total world population of 7.3 billion million. soul. It is estimated that the number will continue to increase by around 131.5 million people in 2050 and the proportion in poor and developing countries will reach 58%. Indonesia is one of ten countries in the world that has the most dementia sufferers in 2015, namely 2.7 million people or around 15% of the total number of elderly people in Indonesia ((Suriastini et al., 2018). In East Java, according to (BPS, 2020), the number of people with dementia reaches around 634,500 million people. Blitar Regency is included in the top 5 regencies in East Java which have the largest number of elderly people in 2020 as much as 17.11% of Indonesia's total population. The number of people with dementia will continue to increase if it is not immediately addressed or treated further.

Dementia is a clinical syndrome characterized by loss of intellectual function and memory, decreased memory and other thinking abilities that significantly interfere with activities of daily life (Spaan, 2016). Dementia attacks the elderly around the age of 65 years, the older you are, the greater the chance of suffering from dementia, which is characterized by decreased physical endurance. Physical and behavioral changes that can occur in all people when they reach a certain chronological stage of development (An & Liu, 2016). The course of dementia usually begins slowly and gets progressively worse, so that this condition is not noticed at first. Dementia sufferers also lose the ability to solve problems, control emotions, and can even experience personality changes and behavioral problems such as irritability which will have an impact on the risk of elder abuse (Azhari et al., 2022). Elderly with dementia whose cognitive function has decreased and if not treated immediately will also result in illness or loss to the elderly themselves, for example, sleep disturbances, weight loss due to forgetting to eat, easy falls and fatigue and irritability due to psychological disturbances due to dementia (Abd Razak et al., 2019).

Things that can reduce the risk factors for dementia are by doing a lot of learning activities whose function is to maintain sharp memory and always train brain function (Pragholapati et al., 2021). In overcoming the problem of decreased cognitive function which has a negative impact on the elderly, nurses as health workers can use methods to reduce impaired cognitive function in the elderly. One of them is the method used to remember and talk about someone's life in the past or reminiscence therapy. This method is used for the elderly who experience cognitive impairment, loneliness and psychological recovery (Kuswati et al., 2020). Susanto et al., (2020) said that therapy to remember the past (reminiscence therapy) can be given to the elderly individually, in families or in groups. Based on the background above, the researcher is interested in conducting community service in implementing reminiscence therapy interventions to prevent increasing dementia in the elderly at PSTW Wlingi, Blitar.

METHOD

In this study, the researchers used the Pre-Experimental Design. This design looks for the effect of pi reminiscence on the prevention of

increasing dementia in the elderly at PSTW Wlingi. In this study the researchers conducted interviews before and after the intervention in the treatment group. The sampling technique used purposive sampling. The sample size was 30 respondents with inclusion criteria, namely the elderly who are cooperative and willing to intervene. The exclusion criteria were the elderly with hearing and speech impairments and the elderly with psychiatric disorders.

The dependent variable in this study was the level of elderly dementia and the independent variable was reminiscence therapy. The instrument used to measure the independent variable was a mini mental status examination (MMSE) symptom questionnaire as a pre test and post test. The MMSE has several questions that are used to measure cognitive function in the elderly. There were 11 questions that must be answered with a total score of 30 scores. Each question in the questionnaire had a quantitative answer in the form of a score. The answer was valued of 1 when the respondents answer the question correctly. The scores obtained the ware summed. The mini mental status

examination (MMSE) was distributed by the researcher, then the respondents filled out the questionnaire themselves which had been distributed by the researcher and were given an explanation of each question.

Reminiscence therapy intervention was carried out 4 times a week. This therapy was a psychotherapy that was carried out by a group of clients together by way of discussing one another who was led or directed. The client could focus on the patient in thinking, helping to remember in the form of discussing a predetermined image. The picture was to remember good memories or telling the past.

The data collected by the researchers were analyzed to measure the effect between the independent and dependent variables using the Paired T-Test statistical test (comparison test of 2 paired samples) significant level $\alpha \le 0.05$. This test was used to determine changes in the level of dementia before and after the checkers game intervention in the treatment group. Location of data collection at PSTW Wlingi, Blitar. The research was conducted on 1 – 7 April 2023.

RESULTS
Distribution of respondents by age
Table 1: Characteristics of elderly by age

Age	Respondent	
	f(x)	**(%)**
60-75 y.o	10	67
76-90 y.o	5	33
> 90 y.o	0	0
Total	15	100

Based on table 1 it can be seen that the respondents Most of the respondents were aged between 60-75 years.

Distribution of respondents based on education level
Table 2: Characteristics of elderly by education level

Level of Education	Respondent	
	f(x)	**(%)**
Not study	0	0
Elementary school	6	40
Junior High	5	33
Senior Hight	4	27
Bachelor	0	30
Total	10	100

Based on table 2 it can be seen that most of the respondents have an elementary school education level.

Distribution of respondents based on gender
Table 3: Characteristics of elderly by gender

Gender	Respondent	
	f(x)	(%)
Male	5	40
Female	10	60
Total	10	100

Based on table 3 it can be seen that the sex of the respondents is mostly female.
Table 4: The results of the assessment of the level of elderly dementia after reminiscence therapy

Number of respondents	Intervention		
	Pre	Post	Δ
1	26	30	+4
2	21	29	+8
3	23	27	+4
4	20	27	+7
5	23	30	+7
6	21	28	+7
7	20	28	+8
8	19	26	+7
9	21	28	+7
10	22	29	+7
11	19	26	+7
12	20	26	+6
13	16	22	+6
14	19	25	+6
15	21	28	+7
Mean	20,7333	27,2667	
SD	2,28244	2,08624	
Paired T-Test		p=0,000	

Based on table 5 of 15 respondents, the lowest pre-test was obtained for elderly dementia, which was 16 and the highest dementia score was 26, with an average of 20.7 and a standard deviation of 2.28, while during the post-test, the lowest dementia score was 22 and the dementia score the highest is 30 with an average of 27.27 with a standard deviation of 2.08. The results of the analysis using the Paired T-test statistical test obtained a value of $p = 0.000$ so that $p < 0.05$, which means that there is a significant difference in dementia scores during the pre test and post test.

Documentation of community service activities

Below are presented some pictures that can make the elderly remember their past which is an ingredient in reminiscence therapy.

Picture 1. Reminiscence therapy sample image

Below is a photo of community service activities with reminiscence therapy

Picture 2. Photo of Reminiscence Therapy activity

DISCUSSION

The problem of dementia that occurs in respondents is a degenerative process or aging process, namely the slow disappearance of the ability of tissues to repair themselves and maintain their normal functions due to the aging experienced by humans over the age of 60 years. The risk of dementia increases every 5 years from the age of 65, due to the increasing number of neurons in the brain that become tangled (Neurofibrillar Tangles) and various plaques appear (Dewi, 2018). From the community service conducted, it was found that most of the women were respondents. Dementia mostly affects women because female hormones enter menopause faster than men with andropause and secondly because their life expectancy is greater than men (Gultom, Rumondang Martina, 2021). The level of education can affect the incidence of dementia. The Canadian Study of Health and Aging in 1994 explained that the elderly who have low education are four times more likely to experience dementia than those with higher education (Clarke et al., 2002).

The results of this cognitive function questionnaire are consistent with the statement of Kuswati et al., (2020) that given past memory game interventions can improve cognitive function in the elderly with dementia. The aging process can reduce cognitive abilities and senility which if left unchecked can cause dementia. Early symptoms of dementia include mild memory impairment, decreased language and communication skills, difficulty with arithmetic, visuospatial and executive functions. If left unchecked, this can lead to more severe dementia and can affect daily life. This change is caused by the increasing number of neurons in the brain that become tangled (neurofibrillary tangles) and the appearance of various plaques (Hastuti & Giyanti, 2022). This decrease in ability is marked by a loss of ability to understand fast speech, complex or abstract conversations or satire. If involved in conversation, sufferers often lose ideas to be expressed and lose the ability to quickly name. Impact on the emotional side, people with dementia will often experience an inability to speak on topic, easily offended, angry and impolite.

Decreasing levels of dementia vary between individuals because each elderly person is a complex and unique individual whose welfare function is influenced by many internal and external factors. If the brain is not actively working actively, then the cells in the brain will experience setbacks and cause easy forgetting which can lead to dementia. This often occurs in the elderly who do not work (Susanto et al., 2020).

One approach to dealing with dementia problems in the elderly is memory therapy or reminiscence, which is remembering past events that were carried out 6 times in a week. This therapy is used for the elderly who experience cognitive impairment, loneliness and psychological recovery which gives impulses to memory, where memory is a process of storing sensory impulses which is important for use in the future as a regulator of motor activity and thought processing (Dewi, 2018). Reminiscence therapy that has been carried out shows an increase in cognitive function and social aspects (mood and behavior) in the elderly which makes the elderly interact with each other. Reminiscence therapy is one of the modalities of managing dementia. In this therapy, patients are instructed to recall their past life experiences using photos, videos, music, or other media. Dementia is a degenerative disease that is often found in elderly patients and is one of the main causes of disability worldwide. Pharmacological therapy in dementia still has a very limited role, so non-pharmacological interventions are starting to get a lot of attention. Reminiscence therapy is one of the non-pharmacological modalities that can be used in the management of dementia.

Reminiscence therapy can be used in the management of dementia as therapy in spontaneous states, as part of other therapies (such as cognitive therapy), or as an integral therapy on its own. Reminiscence therapy in spontaneous conditions is a natural activity that appears spontaneously, is unstructured, and is triggered by a reminder (Gultom, Rumondang Martina, 2021). Reminiscence therapy as part of other therapies (such as cognitive therapy) is more complex. In this case, the patient is asked to share his past life experiences and relate them to his current condition or is asked to recall his past personal abilities to change dysfunctional self-confidence.

CONCLUSION

Reminiscene therapy can affect the cognitive function of the elderly so that memory therapy activities by sharing stories of the past through pictures can be used as an approach to prevent increasing dementia in the elderly into routine programs at elderly gatherings

SUGGESTION

Future research is expected to be able to develop research by adding other interventions in the form of direct games that stimulate cognitive function in the elderly with dementia.

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