Reminiscence Therapy on Reducing Stress Levels in the Elderly

Supriatin Supriatin[1], Asiah Asiah[2], R Nur Abdurakhman[3], Abas Hidayat[4], Thatu Khoerul Maliah[5]

[1,2,3,4] lecturers, Sekolah Tinggi Ilmu Kesehatan Cirebon, West Java, Indonesia.
[5] Student, Sekolah Tinggi Ilmu Kesehatan Cirebon, West Java, Indonesia.

ABSTRACT: Stress has a negative impact on humans. Avoiding this impact requires good stress management, one of which is through reminiscence therapy. This therapy is an activity to reminisce about happy events in the past, which can be a coping mechanism to deal with stress. This research aims to determine the effect of reminiscence therapy on reducing stress levels in the elderly. This type of research uses a pre-experimental design with pre-test and post-test designs against one group. The place of research is at the Assalam nursing home for the elderly, Cirebon, Indonesia, in 2020. Sampling using a total sample of 20 respondents. The instrument used was a stress questionnaire (DASS). We collected data by interviewing and filling out a stress questionnaire. The technique of data analysis using T-test. This study's results indicate a significant effect of applying reminiscence therapy on stress levels in the elderly. The results of this study suggest that reminiscence therapy should be done frequently in nursing homes to reflect on feelings daily and reduce stress in the elderly.

KEYWORDS: elderly; nursing home; reminiscence therapy; stress; reduce.

INTRODUCTION

The journey of human life has gone through several phases. They start from infancy, adolescence, and adulthood to old age (Edde *et al.*, 2021). Each period is an interconnected stage that cannot be repeated. One of the stages of life is old age (R Nur Abdurakhman *et al.*, 2022). Human aging is a complex and diverse process not limited to cellular aging (Susanto, Soetjiningsih and Samiyono, 2020). Several factors that are outside the biological scope affect aging. An understanding of aging cannot be based solely on chronological changes in the individual. Baltes and Schaie (2013) stated that experts believe the aging process has started since a person is born biologically. It is necessary to prepare as well as possible to face the human aging period, even since humans were born.

Priyoto (2015) said that aging is a natural process and goes on continuously. The aging process involves the occurrence of various changes that will have an impact on the decline in physical, mental, and psychosocial conditions. Both physical and attitude changes will affect all aspects of life, including health. In Indonesia, according to Law Number 13 of 1998, the age limit for the elderly is 60 years and over. The elderly age group is 50-64 and 65 years and over (Ada *et al.*, 2019). The elderly are at high risk for various degenerative diseases (age >65 years) (Hou *et al.*, 2019). The group with elderly category is a group that is experiencing the aging process.

Based on predictions, the growth of the elderly population will increase rapidly in the future, especially in developing countries. As one of the developing countries, Indonesia will also experience an explosion in the number of elderly, the age group 0-14 years and 15-49, based on the 2010-2035 projection to decline (Mehryar and Ahmad-Nia, 2004). Meanwhile, the elderly age group (50-64 years and 65+) based on the 2010-2035 projection continues to increase from the total population of Indonesia (Sakariah, 2018). The increasing number of elderly people in Indonesia will cause various problems. The problems that will arise are both physical and psychosocial. Entering old age means experiencing a setback, such as physical deterioration, which is marked by sagging skin, toothless teeth, graying hair, poor hearing, deteriorating vision, slow movement, and unprofessional body figure (Driyani, Herlina and Hidayat, 2016).

Aging is not a disease but a process that gradually results in cumulative changes, decreasing the body's resistance in the face of stimuli from inside or outside the body that ends in death (Asih, Yuniarsih and Hasanah, 2020). There are 901 million people aged 60 years or older, over 12% of the world's population. From 2015 to 2030, the number of people aged 60 is projected to grow by 56%, from 901 million to 1.4 billion (Mashudi, 2020). In 2050 the elderly population is projected to surpass 2015, reaching 2.1 billion. The number of elderly based on population projection data, it is estimated that in 2017 there was 23.66 million elderly in Indonesia (9.03%), and it is predicted that the number of the elderly population in 2020 will reach (27.08 million) in 2025 (33.69 million), in 2030 (40.95 million), and 2035 it will go (48.19 million) (Ariyanto, Fatmawati and Chandra, 2021; Deniati and Annisaa,

2021). This data shows that the number of elderly people in Indonesia has increased yearly. Potential elderly are people who are still able to carry out activities well and carry out activities that can produce both goods and services. At the same time, the elderly who are not potential are powerless to earn a living, so their lives depend on the help of others, such as elderly residents of nursing homes.

In developing countries, the elderly are classified based on their age of the elderly (50-64 years and 65+) (Chandra and Makatika, 2022). While in developed countries such as the United States, France, Japan, and the Netherlands, the elderly are 65 years and over (Mesle and Vallin, 2006). It is estimated that 15% to 20% of people over 65 experience mental disorders such as depression, anxiety, dementia, delirium, or psychiatry (Sahar, 2016). This situation tends to potentially cause various health problems in general and mental health in particular in the elderly. One of the mental health problems that can be experienced by the elderly is stress.

Cannon was the first researcher to develop the concept of stress, known as the "fight-or-flight response," in 1914 (McCarty, 2016; Gallo-Payet, Martinez and Lacroix, 2017). Based on Cannon's idea, stress is the body's response to something. Cannon states that stress is a homeostasis disturbance that can cause physiological balance changes resulting from physical and psychological stimuli. To avoid the negative impact of stress, necessary to have good stress management with pharmacological and non-pharmacological therapy (Gitto *et al.*, 2012; Rokhmatul Hikhmat *et al.*, 2022). Non-pharmacological treatment can reduce stress, such as spiritual therapy, music therapy, relaxation therapy, spiritual therapy, cognitive behavioral therapy, and reminiscence therapy (memory therapy) (Guetin *et al.*, 2013).

Reminiscence is one of the valuable therapies to reduce stress (Imtiaz, Anwar and Khan, 2020). Reminiscence is one of the psychological treatments for the elderly to improve their mental health status. Reminiscence therapy is a nursing intervention using memory to maintain mental health and improve the quality of life in the elderly (Lök, Bademli and Selçuk-Tosun, 2019). The therapist facilitates the elderly to recollect memories. Memories from childhood, adolescence to adulthood by shared with others. Reminiscing about happy events becomes a motivation for the elderly in living life and becomes a coping mechanism to deal with stress.

Reminiscence therapy is a therapy that has high flexibility according to the circumstances and conditions of the elderly. This therapy can be done individually or in groups, with various methods, for example, using pictures (personal photos of each member, magazines, utensils for cooking, and tools for cleaning), video streaming, and describing situations in the past through computers and LCD projectors. Reminiscence activities can by singing songs of memories whose videos and lyrics are widely available on the internet. Wong and Watt (1991) found that this Reminiscence therapy works to reconcile the past, achieve a sense of self-esteem, and solve a problem making the elderly successful in overcoming their adjustment problems and making them successful older people to move on with their lives.

From the results of a preliminary study conducted at the Assalam nursing home, Cirebon City. The orphanage caretaker said there had never been any research on the effect of reminiscence therapy on stress in the elderly. Assalam's nursing home was established in 2020 and is one of the institutions with the highest number of elderly people in Cirebon City. The elderly who lives in the orphanage is more than 60 years old, the results of interviews with five elderly people in the Assalam nursing home. Three people experienced stress due to the new environment, several friends who were no longer there (passed away), decreased function of the sense of sight, which made it challenging to recognize places, and reduced musculoskeletal so it was difficult to walk and so on. They also complained about their illness that did not go away, headaches, irregular sleep, restlessness, feeling confused when asked (forgetful), not excited, and afraid of death. The other two elderly said they had resigned themselves to their current condition.

Based on the above background, this researcher aims to determine the effect of reminiscence therapy on reducing stress levels in the elderly at the Assalam nursing home in Cirebon in 2020.

METHOD

This type of research uses a pre-experimental design with pre-test and post-test designs against one group. The place of research is at the Assalam nursing home for the elderly, Cirebon, West Java, Indonesia, in 2020. The population studied was the elderly who live in Assalam nursing home aged more than 60 years, where the sample was taken by total sampling. The instrument used was a stress questionnaire (DASS). We collected data by interviewing and filling out a stress questionnaire. The technique of data analysis using the T-test

RESULTS

The following table shows the frequency distribution of stress levels in the elderly before and after reminiscence therapy.

Table 1. The Distribution of Stress Levels in the Elderly Before and After Reminiscence Therapy

Categories	Before intervention using reminiscence therapy		After intervention using reminiscence therapy		Increase/ Decrease
	frequency	percentage	frequency	percentage	percentage
Normal	0	0	2	10	10

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Mild stress	5	25	9	45	20
Moderate stress	8	40	7	35	-5
Heavy stress	6	30	2	10	-20
Very heavy stress	1	5	0	0	-5

Table 1 shows 0% normal elderly (not stressed) after reminiscence therapy intervention changed to 10% elderly (10% increase). There was 25% elderly with mild stress, after reminiscence therapy intervention changed to 45% elderly (20% increase). There were 40% elderly with moderate stress, after the intervention of reminiscence therapy changed to 35% elderly (5% decrease). There were 30% elderly with heavy stress, after reminiscence therapy intervention changed to 10% elderly (20% decrease). There were 5% elderly with very heavy stress, after reminiscence therapy intervention changed to 0% elderly (5% decrease). The following table 2 shows the statistical hypothesis test data before and after reminiscence therapy intervention.

Table 2. Statistical Hypothesis Test

	Mean	Std.Deviation	Std. Error Mean	T-test	DF	Sig. (2-tiled)
Pre	3.600	5.538	2.907	2.907	20	0.009
Post						

The table 2 above shows the average difference in stress levels in the pre-post is 3,600. It offers a significant difference in the intermediate stress level of the elderly before and after being given reminiscence therapy. It can be seen from the T-test obtained by 2,907. The correlation value between the stress level of the elderly before and after being given reminiscence therapy with a p-value of 0.009 <0.05. Which indicates a significant correlation between the T-test results and the probability value (sig) identifying Ho: rejected. Ha: accepted. That it is reminiscence therapy affects Stress in the Elderly at the Assalam nursing home, Cirebon, West Java, Indonesia, in 2020.

CONCLUSION
Reminiscence therapy contributes to reducing stress levels in the elderly. Statistically, reminiscence therapy has a significant effect through hypothesis testing on reducing stress levels in the elderly. Through this therapy, the elderly can reminisce about past happiness. It becomes a motivation to live life and can be a coping mechanism to deal with stress.

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REFERENCES
1) Ada, Y. R. *et al.* (2019) 'GAMBARAN KEMANDIRIAN EKONOMI PADA LANSIA', *PLACENTUM: Jurnal Ilmiah Kesehatan dan Aplikasinya*, 7(2), pp. 16–23.
2) Ariyanto, A., Fatmawati, T. Y. and Chandra, F. (2021) 'Pendidikan, Jarak Rumah dan Dukungan Keluarga terhadap Pemanfaatan Posyandu Lansia', *Jurnal Akademika Baiturrahim Jambi*, 10(2), pp. 267–273.
3) Asih, P., Yuniarsih, S. M. and Hasanah, N. (2020) 'Hubungan Kesehatan Spiritual Lansia Dengan Persiapan Menghadapi Kematian', in *Proceeding Seminar Nasional Keperawatan*, pp. 102–107.
4) Baltes, P. B. and Schaie, K. W. (2013) *Life-span developmental psychology: Personality and socialization*. Elsevier.
5) Chandra, H. and Makatika, A. Y. (2022) 'Faktor Risiko yang Berhubungan dengan Kejadian Insomnia pada Lansia di Panti Sosial Tresna Werda Himo-himo Ternate', *GLOBAL HEALTH SCIENCE*, 7(1), pp. 7–13.
6) Deniati, E. N. and Annisaa, A. (2021) 'Hubungan Tren Bersepeda dimasa Pandemi Covid-19 dengan Imunitas Tubuh Lansia', *Sport Science and Health*, 3(3), pp. 125–132.
7) Driyani, I., Herlina, N. and Hidayat, F. R. (2016) 'Hubungan Antara Gambaran Karakteristik Responden Dan Dukungan Sosial Dengan Tingkat Depresi Pada Lanjut Usia Di PSTW Nirwana Puri Samarinda'.
8) Edde, M. *et al.* (2021) 'Functional brain connectivity changes across the human life span: From fetal development to old age', *Journal of Neuroscience Research*, 99(1), pp. 236–262. doi: 10.1002/jnr.24669.
9) Gallo-Payet, N., Martinez, A. and Lacroix, A. (2017) 'ACTH action in the adrenal cortex: from molecular biology to pathophysiology', *Frontiers in Endocrinology*. Frontiers Media SA, p. 101.
10) Gitto, E. *et al.* (2012) 'Stress response and procedural pain in the preterm newborn: the role of pharmacological and non-pharmacological treatments', *European Journal of Pediatrics*, 171(6), pp. 927–933. doi: 10.1007/s00431-011-1655-7.
11) Guetin, S. *et al.* (2013) 'An overview of the use of music therapy in the context of Alzheimer's disease: A report of a French expert group', *Dementia*, 12(5), pp. 619–634. doi: 10.1177/1471301212438290.

12) Hou, Y. *et al.* (2019) 'Ageing as a risk factor for neurodegenerative disease', *Nature Reviews Neurology*, 15(10), pp. 565–581.

13) Imtiaz, D., Anwar, Y. and Khan, A. (2020) 'Wearable sensors and a multisensory music and reminiscence therapies application: To help reduce behavioral and psychological symptoms in person with dementia', *Smart Health*, 18, p. 100140. doi: 10.1016/j.smhl.2020.100140.

14) Lök, N., Bademli, K. and Selçuk-Tosun, A. (2019) 'The effect of reminiscence therapy on cognitive functions, depression, and quality of life in Alzheimer patients: Randomized controlled trial', *International Journal of Geriatric Psychiatry*, 34(1), pp. 47–53. doi: 10.1002/gps.4980.

15) Mashudi, M. (2020) 'Hubungan Kualitas Tidur dan Tingkat Kemandirian Activity of Daily Living dengan Risiko Jatuh Pada Lanjut Usia di Puskesmas Simpang IV Sipin Kota Jambi', *Jurnal Ilmiah Universitas Batanghari Jambi*, 20(1), pp. 237–242.

16) McCarty, R. (2016) 'The fight-or-flight response: A cornerstone of stress research', in *Stress: Concepts, cognition, emotion, and behavior*. Elsevier, pp. 33–37.

17) Mehryar, A. H. and Ahmad-Nia, S. (2004) 'Age-structural transition in Iran: short and long-term consequences of drastic fertility swings during the final decades of twentieth century', *Age-Structural Transitions: Population Waves, Disordered Cohort Flows and the Demographic Bonus", Paris, 23–26 February 2004*.

18) Mesle, F. and Vallin, J. (2006) 'Diverging Trends in Female Old-Age Mortality: The United States and the Netherlands versus France and Japan', *Population and Development Review*, 32(1), pp. 123–145. doi: 10.1111/j.1728-4457.2006.00108.x.

19) Priyoto, L. P. P. (2015) 'Nursing Intervention Classification (NIC) dalam keperawatan Gerontik', *Jakarta: Salemba Medika*.

20) R Nur Abdurakhman *et al.* (2022) 'Effect of hypertension exercise on blood pressure in the elderly', *World Journal of Advanced Research and Reviews*, 13(3), pp. 491–495. doi: 10.30574/wjarr.2022.13.3.0269.

21) Rokhmatul Hikhmat *et al.* (2022) 'The effect of morning walk therapy on blood pressure elderly', *World Journal of Advanced Research and Reviews*, 14(1), pp. 580–583. doi: 10.30574/wjarr.2022.14.1.0371.

22) Sahar, R. H. (2016) 'Efektifitas Relaksasi Benson dan Nafas dalam Terhadap Perubahan Tingkat Kecemasan Lansia di PSTW Gau Mabaji Gowa'. Universitas Islam Negeri Alauddin Makassar.

23) Sakariah, D. S. (2018) 'Pemanfaatan Seni Kertas Lipat sebagai Bentuk Antisipasi Demensia pada Masyarakat Lanjut Usia di Desa Sekarjalak', *Harmoni: Jurnal Pengabdian Kepada Masyarakat*, 2(1).

24) Susanto, T. I., Soetjiningsih, C. H. and Samiyono, D. (2020) 'Terapi Reminiscence: Memberdayakan Lansia untuk Mencapai Successful Aging', *Buletin Psikologi*, 28(1), pp. 72–84.

25) Wong, P. T. and Watt, L. M. (1991) 'What types of reminiscence are associated with successful aging?', *Psychology and aging*, 6(2), p. 272.