

Investigating the Effectiveness of Reminiscence Therapy on of Elderlies Depression and Optimism: An Experiment Study

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Abstract

Background and purpose: Depression in elderly can lead to significant problems which have detrimental effects on old people's life; there is an obvious need for preventive interventions which are at once effective and affordable. The aim of this research was to investigate the effectiveness of positive reminiscence therapy on of elderly's depression and optimism.

Materials and methods: This research has experiment design study. The study design was pre post-test with the control group. The population were women of 60 and over in Tehran's nursing homes, after investigating Inclusion and exclusion criteria, 27 women were chosen that finally from which; 10 women were selected as intervention group and 11 women were chosen as the control group from residents in one of Tehran's nursing home. The intervention group received 8 sessions, 1 h per session and each week 2 sessions (totally 4 weeks) of reminiscence intervention. Geriatric Depression Scale (GDS) and Life Orientation Test (LOT) was done on 4th session, 8th session and follow up (after one month) in both groups. Data were analyzed using SPSS V22 software.

Results: Differences between intervention and control group in age mean, duration of stay, a number of children and psychiatric examination weren't significant. Reminiscence therapy was significantly effective in reducing depression and enhancing optimism among elderly in the experimental group ($p=0.001$).

Conclusion: Based on the findings, the necessity of using positive reminiscence therapy for enhancing positive emotions in the elderly was emphasized.

Keywords: Elderly; Depression; Optimism; Reminiscence therapy

Introduction

According to the World Population ageing report (2015), the world is facing the phenomenon of aging. According to the recommendation of the World Health Organization, the age of adolescence is 60 years. On the other hand, with the increase in age, the prevalence of chronic physical and mental illness in the elderly will increase and it will become a new and dangerous issue. Most elderly people suffer from one or more chronic illnesses or disabilities and as the age increase, their prevalence increase [1-4]. Meanwhile, depression is one of the most common problems of aging [5] which is more prevalent among nursing home residents [6].

One of the well-known therapies that affect senile depression is-remembrance [7,8]. According to definition of the American Psychological Association: reminiscence is Memories, recalling events, past feelings and thoughts facilitate matching with present and life [9]. In recent years, increasing awareness about different approaches to memorizing and their relationship with mental health has provided stronger evidence and insights for the development and spread of effective therapies [10].

According to observation, there was a significant difference in the rate of depression among the elderly who were treated reminiscence in contrast to those who received routine care and after the end of the intervention [10-12], it is observed in the follow-up phase [13-18]. In Wat and Wong's study, integrative reminiscence therapy and instrumental reminiscence therapy were recognized as the most effective memory retrieval approaches [19].

Perhaps the most important reason for the impact of integrative reminiscence therapy is collecting memories and mourning for them [20]. The findings indicate that the most important results of -integrative reminiscence therapies are the reduction of fatigue and bitterness of past, having a sense of mastery and positive thoughts [21,22], preparing for death, promoting mental health and the level of recognition, socialization [22] improving the quality of life [23], increasing optimism [24-26], having a sense of identity and ability to solve a problem. In these therapies (integrative reminiscence & instrumental reminiscence), restoring positive memories and dimming negative memories in the mind increases self-esteem and self-confidence [27].

The findings, on the other hand, have shown that memorizing itself and without a therapeutic approach is associated with less pain and fewer depression symptoms while integrative reminiscence improves physical activity, increases optimism, reduces pain and depression symptoms [25] based on published new reminiscence (the stories we live by) [13] the author has tried to integrate all these positive points into an effective therapeutic package and so far has been shown to have a significant effect on the improvement of depression in the elderly [28].

Corte showed that the above intervention had a significant effect on depression in the elderly. Additionally, it costs less than routine care costs to the depression of the elderly [15,17], and even in follow-up studies, the effect of intervention is clearly visible [16]. This intervention, on the one hand, by adopting integrative intervention reminiscence therapy - focuses on the success of an individual in the past to create a strong, positive personality and tries to give a new meaning to the negative memories of the past. On the other hand, it tries to reconsider the solutions of the problem in the past to deal with today's problems and to set new and applicable goals [15].

Any research on the effect of reminiscence (the stories we live by) on improving depression and enhancing optimism in the elderly has not been done in Iran yet. The purpose of this research is to answer this question through the implementation of rehabilitation therapy on depression in elderly women living in a nursing home in Tehran.

Materials and Methods

The present study is an experimental pre-test and post-test with the control group. One of the nursing homes in Tehran was selected for sampling and all the elders living in this house were examined for inclusion in the study. inclusion criteria include no mental disability, at least 60 years of age, having at least a moderate depression (obtaining a minimum score of 8 in GDS), having a moderate cognitive status (obtaining a minimum score of 21 in MMSE of the elderly), not attending other therapeutic groups and not being individually treated by another person psychologically.

The criteria for entering the study were reviewed among 82 elderly residents of the nursing home. The criteria for entering the study were reviewed among 82 elderly residents of the nursing home. After receiving the informed consent, the elderly psychiatric examination test, life orientation questionnaire and depression test completed for 27 subjects who had the criteria of the company in the test. 15 subjects were randomly assigned to the intervention group and 12 subjects were selected as the control group.

Study Tools

The following three tools were used in this study. 1) A mini-mental state examination for elderlies (MMSE): The most commonly used cognitive examination tool in the world, which measures various cognitive functions and provides a general assessment of the subject's cognitive status [29]. 2) The Geriatric Depression Scale (GDS): Includes an initial form of 30 yes/no questions. The present study uses a 15-item type of questionnaire which has been confirmed to be reliable and valid able [30]. 3) Life-orientation Test (LOT): A tool has 10 questions to measure the degree of optimism of individuals and its reliability and validity have been verified in Iran [31]. The reminiscence program includes an eight-session intervention that runs in a group.

- Combining the hard times of the past with the story of life derived from integrative reminiscence therapy
- Developing a story of a person's life that helps participants adapt to new events and organize new goals from integrative reminiscence and instrumental reminiscence
- Retrieving positive memories that can create a new structure for a new life story, derived from instrumental reminiscence

Method of Intervention

The intervention sessions in the test group were held in groups each includes 2-3. The number of group members was limited due to the unwillingness of the participants to large groups. From the beginning to the end of the sessions the members of the groups were fixed and the participants were randomly included in the groups. The examiner was contacted equally (8 sessions) with the control group members in order to remove the effect of the client's expectation on the members of the groups as with the members of the experimental group, the intervention sessions were held, and with the control group, there was just a greeting and regular care.

This was as if the two groups did not know how the examiner treats each of them. In the fourth session, the eighth session and after a month (follow up session), the GDS and the LOT were taken again from the subjects. The first five intervention sessions focused on birth and childhood, youth, work and income, love and disadvantages, loss of life, and hard times. At each meeting, participants discussed one of the difficulties associated with the subject matter of the meeting and they said how to solve the problem. The three final sessions focused on the future and the meaning and purpose of the participants' life [17].

Statistical analysis

After data entry into software, in order to descriptive analyzes and analytical analyzes especially comparison of meanings in different follow-up periods between intervention and control groups Independent Samples and T-Test were used and in order to examine changes in the scores of depression and optimism during the follow-up period, Repeated Measures Test (GLM) was used. The assumption of normalization of the data was verified by using the Shapiro-Wilk test Findings Of the 15 subjects in the intervention group, 1 person due to death, 2 people due to lack of cooperation in the next sessions and 2 people due to absence of more than one session were excluded from this group and among the 12 subjects in control group one person was removed from the group due to being discharged from the nursing home. Totally 10 people were included in the experimental group and 11 in the control group in the present study (Table 1).

	Intervention group	Control group	P-Value
Age (year)	77.9 (6.9)	74.1 (7.5)	0.242
Duration of staying at the nursing home (year)	17.3 (7.5)	15.1 (10.0)	0.731
Number of children	3.2 (2.7)	4.5 (2.9)	0.320
Psychological problems score	24.2 (2.0)	24.6 (1.9)	0.614

Table 1: Comparison of mean (SD) of the baseline variables for the intervention and control group, the elderly living in the nursing home.

The mean age in the intervention and control group was 77.9 and 74.09 years respectively (P-Value=0.242).

The average length of stay in the nursing home was 17.3 and 15.09, respectively (P-Value=0.731).

There was no significant correlation between depression score and optimism with other variables at the beginning of the study. The mean

of depression and optimism score at the beginning of the study for the whole population was

3.2 (SD=1.0) and 11.3 (SD=2.9) respectively. The scores of the experimental and control groups in the GD Swere evaluated in four

stages of pre-test, during the test, post-test, and follow-up, the results of which are presented in (Table 2).

		Intervention group	Control group	P-Value
Depression	Before intervention	13.0 (1.4)	13.5 (0.52)	0.332
	After the fourth intervention session	7.3 (3.1)	12.8 (1.1)	0.001
	After the eighth session of the intervention (end of intervention)	7.7 (2.9)	13.2 (0.75)	0.001
	One month after the intervention	8.7 (4.1)	12.5 (1.3)	0.018
Optimism	Before intervention	11.0 (3.7)	11.5 (2.1)	0.680
	After the eighth session of the intervention (end of intervention)	14.7 (4.7)	12.4 (2.8)	0.177
	One month after the intervention	14.9 (5.2)	11.9 (2.1)	0.116

Table 2: Comparison of depression and optimism mean score (SD) in intervention and control groups at different times before, during and after intervention.

Depression during the follow-up period for the intervention group was significantly reduced (P-Value=0.001). While changes over time were not significant for the control group (P-Value=0.065). Optimism during the follow-up period showed a significant increase for the intervention group (P-Value=0.014). While optimism changes over time were not meaningful to control (P-Value=0.488) (Figures 1 and 2).

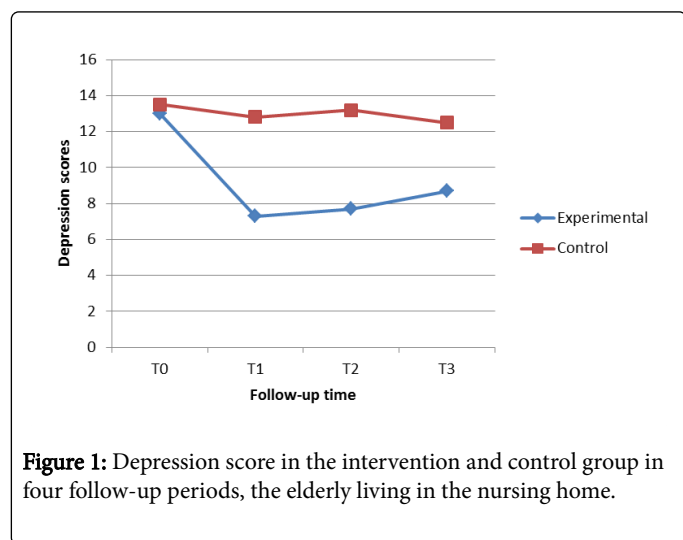


Figure 1: Depression score in the intervention and control group in four follow-up periods, the elderly living in the nursing home.

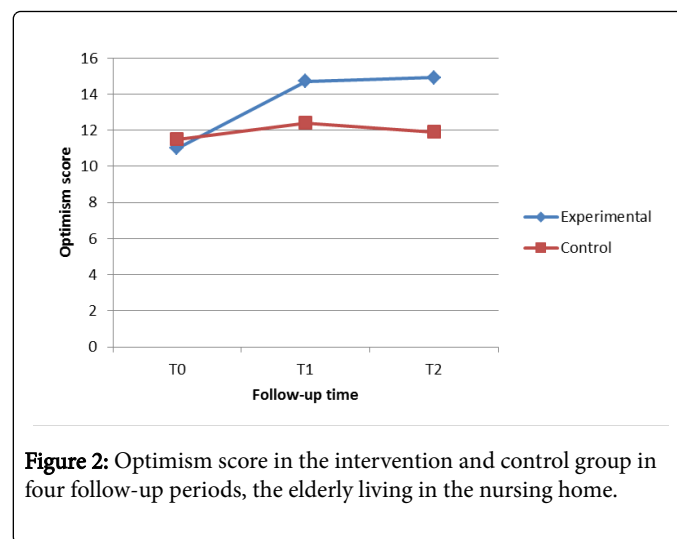


Figure 2: Optimism score in the intervention and control group in four follow-up periods, the elderly living in the nursing home.

Discussion

The aim of this study was to investigate the effect of reminiscence therapy on depression and optimism of the elderly in comparison with the usual care of the nursing home. The findings of the present study indicate that memory rehabilitation has a significant positive effect on the reduction of depression in elderly people living in a nursing home. This finding is consistent with the findings of pre-existing research on the efficacy of reminiscence - therapies on the rate of depression in the elderly people [7,8,11,20].

There has been little research on the effect of (the stories we live by) reminiscence on reducing depression in the elderly. The result of this study showed that the above intervention significantly reduced depression in the elderly, which is in line with the findings of previous studies. The study of Boehlmyer et al. which for the first time performed sessions of this type of reminiscence among depressed elderly people aged 55 and above showed that the reminiscence - had a

significant positive effect on reducing depression in the elderly [13]. In another study, Corte et al. found that the group receiving reminiscence showed a significant decrease in the severity and rate of depression symptoms compared to the group receiving common care [15]. The remarkable thing is that depressed people tend to keep in touch with negative memories. As a result, many types of research suggest that the use of instrumental and integrative reminiscence interventions would be inadequate and increase positive thoughts by reminding positive memories [10,13,15-17,21,32]. In fact, it seems that therapeutic programs that are focusing on positive memories help the elderly have better feelings about themselves and the future, and they will have a better look at this part of their life, old age. Elderly people may have negative thoughts about themselves, and such thoughts may be due to negative events that have taken place in the past, as a result, they catch negative thoughts about their ability to adapt to future events. (the stories we live by) reminiscence focuses on three important components, including the gathering of past hard times, reminding of life's memories (Which helps the authorities adapt to today's events) And reminding or restoring positive memories can create a new structure for the new life story of a person who increases the sense of inner satisfaction and sense of mastery in one person [15].

In one month follow up, the difference between the control and experimental groups and the difference between the pretest and the follow up of the participants was significant and the experimental group in the follow-up phase showed a significant improvement in the criteria for depression, compared to their control and pre-test group. This result is consistent with previous findings that survival of intervention effects is in the follow-up phase [13,15-17,21]. Because of the high levels of depression in the elderly, this is very important [33, 34]. Nevertheless, further studies are needed to conclude more precisely.

The results of this study showed that reminiscence led to a significant increase in the optimism scores of participants in the intervention group and it is consistent with the findings of Halford et al. [24] and McDonald et al. [25]. Although the optimism score in the follow-up periods was greater for the intervention group than the control group, this difference was not significant in terms of statistics just because of the small sample size and the power of the study. So that the power of study for the two stages of the post-intervention test for optimism was 27% and 40% respectively. While Power study for the depression score was higher than 80% in all three stages after the intervention. Therefore, although the observed difference in the intervention and control groups for optimism in the follow up period was not statistically significant, however; the observed difference is clinically important and will be statistically significant in repeating the study in the above sample size. And in repeating the study in the sample size, the meaning will be statistically significant

The most important difference between optimists and pessimists is how they are confronted with problems. Unlike the pessimists, the optimists expect good consequences, even in the face of hardship; they get low depression and greater compliance [35]. Although depression is a common problem in old age, optimistic elders are less depressed and optimism can prevent the growth of depression over time [36]. Therefore, one of the most important factors in the survival of the intervention in the follow-up phase is the increase of the optimism of the experimental group participants. Enhancing optimism has probably increased the level of tolerance, giving them the opportunity to plan with a more positive view of the future and be more optimistic to achieve the desired result, which was not studied in previous studies.

According to existing research findings, the use of reminiscence in boarding facilities and nursing homes is recommended. However, it should be noted that due to the limitations of the present research including the low volume of the present research, the results could not be simply generalized; therefore, it is suggested to other researchers interested in this field to evaluate the effectiveness of this category of interventions on sample groups with larger volumes and also with different tools. On the other hand, it is suggested to compare the effect of this intervention with other similar therapies, such as integrative reminiscence and instrumental reminiscence, between men and women living in nursing homes and out of the nursing home and longer follow-ups of 3 months, 6 months, and one -year help to understand the shelf-life of the intervention.

References

1. Gerber AM, Botes R, Mostert A, Vorster A, Buskens E (2016) A cohort study of elderly people in bloemfontein, south africa, to determine health-related quality of life and functional abilities. *S Afr Med J* 106: 298-301.
2. Rafiemanesh H, Mehtarpoor M, Mohammadian-Hafshejani A, Salehiniya H, Enayatrad M (2014) Cancer epidemiology and trends in sistan and baluchestan province, Iran. *Med J Islam Repub Iran* 29: 254.
3. Rafiemanesh HEM, Salehiniya H, Khani Y, Hosseini S, pournamdar Z, et al. (2015) Epidemiology and trends of mortality from prostate cancer in Iran. *J Res Med Sci* 33: 32-38.
4. Zahedi A, Rafiemanesh H, Enayatrad M, Ghoncheh M, Salehiniya H (2014) Incidence, trends and epidemiology of cancers in north west of Iran. *Asian Pac J Cancer Prev* 16: 7189-7193.
5. Yohannes AM, Baldwin RC, Connolly MJ (2008) Prevalence of depression and anxiety symptoms in elderly patients admitted in post-acute intermediate care. *Int J Geriatr Psychiatry* 23: 1141-1147.
6. Jongenelis K, Pot A, Eisses A, Beekman A, Kluiters H, et al. (2004) Prevalence and risk indicators of depression in elderly nursing home patients: the aged study. *J Affect Disorders* 83: 135-142.
7. Apostolo J, Bobrowicz-Campos E, Rodrigues M, Castro I, Cardoso D (2016) The effectiveness of non-pharmacological interventions in older adults with depressive disorders: a systematic review. *Int J Nurs Stud* 58: 59-70.
8. Jonsson U, Bertilsson G, Allard P, Gyllensvard H, Soderlund A, et al. (2016) Psychological intervention of depression in people aged 65 years and over: a systematic review of efficacy, safety, and cost-effectiveness. *PloS one* 11: e0160859.
9. VandenBos GR (2007) *APA dictionary of psychology*, American Psychological Association, Washington, USA.
10. Westerhof GJ, Bohlmeijer E, Webster JD (2010) Reminiscence and mental health: a review of recent progress in theory, research and interventions. *Ageing and Society* 30: 697-721.
11. Bailey EM, Stevens AB, LaRocca MA, Scogin F (2016) A randomized controlled trial of a therapeutic intervention for nursing home residents with dementia and depressive symptoms. *J Appl Gerontol* 30: 896-908.
12. Elias, Syed SM, Neville, Christine, Scott, et al. (2015) Reminiscence Therapy for older people suffering from loneliness, anxiety and depression: a review of the literature. *The Fifth Asian*

- Conference on Psychology and The Behavioral Sciences, Nagoya, Japan.
13. Bohlmeijer E, Kramer J, Smit F, Onrust S, van Marwijk H (2006) The effects of integrative reminiscence on depressive symptomatology and mastery of older adults. *Community Ment Hlt J* 45: 476-484.
 14. Chueh KH, Chang TY (2014) Effectiveness of group reminiscence therapy for depressive symptoms in male veterans: 6-month follow-up. *Int J Geriatr Psych* 29: 377-383.
 15. Korte J (2012) The stories we live by: the adaptive role of reminiscence in later life: Universiteit Twente.
 16. Korte J, Bohlmeijer ET, Cappeliez P, Smit F, Westerhof GJ (2012) Life review therapy for older adults with moderate depressive symptomatology: a pragmatic randomized controlled trial. *Psychol Med* 42: 1163-1173.
 17. Korte J, Majo MC, Bohlmeijer ET, Westerhof GJ, Smit F (2015) Cost-effectiveness of life-review for older adults with moderate depressive symptomatology: a pragmatic randomized controlled trial. *J Aging Stud* 34: 146-154.
 18. Müller A (2012) A qualitative comparison of two interventions from the participants' point of view: the stories we live by vs. expressive writing intervention.
 19. Wong PT, Watt LM (1991) What types of reminiscence are associated with successful aging? *Psychol Aging* 6: 272-279.
 20. Sabir M, Henderson CR, Kang S-Y, Pillemer K (2016) Attachment-focused integrative reminiscence with older african americans: a randomized controlled intervention study. *Aging Ment Health* 20: 517-528.
 21. Korte J, Westerhof GJ, Bohlmeijer ET (2012) Mediating processes in an effective life-review intervention. *Psychol Aging* 27: 1172-1181.
 22. Pinquart M, Forstmeier S (2012) Effects of reminiscence interventions on psychosocial outcomes: a meta-analysis. *Aging Ment Health* 16: 541-558.
 23. Haslam C, Haslam SA, Ysseldyk R, McCloskey LG, Pfisterer K, et al. (2014) Social identification moderates cognitive health and well-being following story- and song-based reminiscence. *Aging Ment Health* 18: 425-434.
 24. Hallford D, Mellor D, Cummins R (2013) Adaptive autobiographical memory in younger and older adults: the indirect association of integrative and instrumental reminiscence with depressive symptoms. *Memory* 21: 444-457.
 25. McDonald DD, Shellman JM, Graham L, Harrison L (2016) The relationship between reminiscence functions, optimism, depressive symptoms, physical activity, and pain in older adults. *Res Gerontol Nurs* 9: 223-231.
 26. Hamzehzadeh M, Golzari M, Foroughan M, Meshki V (2016) Asar bakhshi darmane khatereh pardazi mosbatnegar bar khoshbiniye zanane salmand J Appl Psychol 9: 73-89.
 27. Korte J, Bohlmeijer ET, Westerhof GJ, Pot AM (2011) Reminiscence and adaptation to critical life events in older adults with mild to moderate depressive symptoms. *Aging Ment Health* 15: 638-646.
 28. Westerhof GJ, Bohlmeijer ET (2014) Celebrating fifty years of research and applications in reminiscence and life review: state of the art and new directions. *J Aging Stud* 29: 107-114.
 29. Foroughan M, Jafari Z, Shirin BP, Ghaem MFZ, Rahgozar M (2008) Validation of mini-mental state examination (mmse) in the elderly population of tehran. *Advances in Cognitive Science* 10: 29-37.
 30. Malakouti K, Fathollahi P, Mirabzadeh A, Salavati M, Kahani S (2006) Validation of geriatric depression scale (gds-15) in iran. *Research in Medicine* 30: 361-369.
 31. Hamzezade M, Bageriyan F, Mansorisephehr R (2013) The interactive effect of optimism with goal orientation on attention bias. *Contemp Psychol* 7: 41-50.
 32. Watt LM, Cappeliez P (2000) Integrative and instrumental reminiscence therapies for depression in older adults: intervention strategies and intervention effectiveness. *Aging Ment Health* 4: 166-177.
 33. Alexopoulos GS, Meyers BS, Young RC, Kalayam B, Kakuma T, et al. (2000) Executive dysfunction and long-term outcomes of geriatric depression. *Arch Gen Psychiat* 57: 285-290.
 34. Cole MG, Bellavance FS, Mansour A (1999) Prognosis of depression in elderly community and primary care populations: a systematic review and meta-analysis. *Am J Psychiat* 156: 1182-1189.
 35. Carver CS, Scheier MF, Segerstrom SC (2010) Optimism. *Clin Psychol Rev* 30: 879-889.
 36. Niklasson J, Nasman M, Nyqvist F, Conradsson M, Olofsson B, et al. (2017) Higher morale is associated with lower risk of depressive disorders five years later among very old people. *Arch Gerontol Geriat* 69: 61-68.