The Effect of Reminiscence on Self-Esteem, and Depression among Elderly People

*Zeinab, A., Osman; *Enayat A. Khalil; **Magedy M., Arafa, and *Naglaa, M. Gaber

* Psychiatric and Mental health nursing Department, Faculty of Nursing, Cairo University
**Psychiatric Medicine, Faulty of Medicine, Cairo University
Naglaamostafa45@yahoo.com

Abstract: As people enter old age, they begin to experience associated changes in their physical, mental and social health. Elderly individuals often develop feelings of loneliness, sullenness, depression and loss of self confidence. Reminiscence is a commonly-used clinical intervention to assist the elderly in adapting to the aging process. Therefore, this study was conducted to evaluate the effect of reminiscence on self-esteem, and depression among elderly people. A pre-post quasi-experimental design was utilized in this study. A sample of convenience of 30 institutionalized older adults was recruited from Dar El-Hana Geriatric home. Socio-demographic/medical data sheet, Mini-Mental State Exam (MMSE) scale, Geriatric Depression Scale (GDS), and Self-esteem Scale, were used to achieve the purpose of this study. A reminiscence program session was held for 90 minutes for a total of 10 weeks (20 sessions), the program focus on particular stages of life using a semi-structured interview. Findings of this study indicated that, reminiscence intervention significantly raised self-esteem, and the reduction in depression levels did not reach statistical significance. To conclude reminiscence intervention is an effective alternative intervention which can help living-alone elderly adapt to the aging process. Further studies about reminiscence on a larger number of elderly from different geographical areas are recommended.

Keywords: Reminiscence, self-esteem, depression, elderly people

Introduction
Throughout the whole world, the elderly population has been increasing both quantitatively and proportionally. According to the WHO (2009), it is estimated that current population of over-65 years of age, which is 390 million now, will be twice in 2025 (Chao et al., 2006; Fagerström et al., 2008; and WHO, 2009). In Egypt, the number of elderly people increased from 1.1 million in 1940 to 3.4 million in 1996 which represented about 5.5% of the total population. Their percentage from the total population is expected to increase to reach about 10% by 2030 (Makhlof, & Abdel-Fatah, 2003).

Older adults face many psychological concerns because of the emotional responses that occur as a result of the normal aging process, acute and chronic disease, changes in role or status with housing, or problems obtaining medical services. Any of these psychosocial concerns produce stress and can lead to psychosocial problems (Shellman, 2006). Depression is one of the most common, often the most debilitating yet the most treatable illnesses seen in older adults. Depression is insidious. It includes all aspects of the older adult’s life-physical, mental, social, and spiritual (Melillo, & Houde, 2005).

The development of effective therapeutic interventions is required to eliminate psychosocial problems in old age. Reminiscence entails a progressive return to an awareness of past experiences, allowing salient life experiences to be reexamined and reintegrated. Yet, self-esteem and self-health perceptions are variables that was used to measure ego integrity (Butler, 1963). Reminiscence is defined as recall of past events during intervention. Participants are encouraged to talk about these past events, often assisted by aids such as photos, music, objects, and videos of the past (Orrell, & Woods, 2001).

Studies have examined the benefits of reminiscence for the elderly, and concluded that, reminiscence generally reduces depression and confusion (Taylor-Price, 1995; Haight & Hendrix, 1998 and Wang, 2004). Moreover, Laura (2000) conducted a structured and unstructured reminiscence therapy to treat depression among the elderly and concluded that reminiscence therapy helped the depressed elderly to focus on meaning in past life events. Reminiscence therapy has indicated that it is a beneficial process associated with higher perceptions of personal health and life satisfaction (Stinson, 2009). Reminiscence process with an older adult can provide an opportunity for healthcare professionals to learn about and appreciate the life of the individual as well as to gather information regarding psychological factors, health beliefs, coping skills, and cultural perspectives (Shellman, 2006).

Reminiscing is a technique employed to think
and talk about one's life and can be beneficial to clients on a structured or unstructured group or individual basis. Reminiscence has been studied to determine its impact on a variety of conditions including, but not limited to, depression, self-esteem, fatigue, isolation, socialization, well-being, language acquisition and cognitive functioning (Stinson and Kirk, 2006). Reminiscence, as a structured process of recalling memories, is considered an effective nursing intervention for various groups of people, particularly, but not exclusively, the elderly (Jonsdottir et al., 2001).

Significance of the Study

The demographic data point to the rapid increase in the number of elderly people not only in Egypt, but through the world. In Egypt, the elderly population represents 4.4% of the total population, and is expected to increase to 6.7% by the year 2020 (Central Agency for Immobilization and Statistics Census, 2006).

Recent psychosocial Egyptian studies among elderly revealed that most of them experience different degrees of depression, loneliness, life dissatisfaction, and cognitive impairment. From clinical instructors’ experience at geriatric homes, it has been observed that aging is associated with poor mental health in some older people, especially the institutionalized, where low levels of self-health perception, self-esteem, and depression are major problems.

Nurses should be vigilant in assessing how older adults respond to life events, transitions, and challenges to their physical and mental well-being in order to initiate appropriate interventions in a timely manner (Stinson, 2009). In dealing with the increasing numbers of elderly population, nurses need to perform a major role in the practice of reminiscence and thus need to be knowledgeable about reminiscence therapy and its relation to health promotion for the elderly (Lin et al., 2003). Reminiscence therapy is an independent nursing intervention (McCloskey, & Bulechek, 2000).

Aim of the Study

This study aims to evaluate the effect of reminiscence on self-esteem, and depression among elderly people.

Research Hypotheses

Main Hypothesis:

1. Elderly people who receive reminiscence program will have better scores in post-test than in pretest.

2. Elderly people who receive reminiscence program will experience higher self-esteem by the end of the program.

Theoretical Framework

The proposed theoretical model in this study represents the effect of reminiscence therapeutic intervention on depression, self-esteem, and life satisfaction among elderly population. The theoretical foundation of this study has been adopted from Butler’s (1963) life review process and Erickson’s (1963) developmental theory.

Erikson (1963) espoused the importance of ego integrity, which could be only be looking back over one’s life and determining that there was meaning or purpose to that life. To avoid despair, one must determine that living was worthwhile and that there was purpose and satisfaction in living.

Butler’s theory extended Erikson’s stages with the belief that ego integrity is attained through recalling one’s past from analytical and evaluative perspective. Butler formulated the concept of the life review, a universal occurrence among older people, which he described as a conscious, internal mental process of reviewing one’s life. Furthermore, according to Butler the life review is an adaptive process by which older person can put his/her life events in proper perspective and work through unresolved conflicts. The life review is carried out through reminiscence, which is retrieval and reporting of past memories.

Research Design

A quasi-experimental design was selected for the current study; such design fits the nature of the problem under investigation.

Sample

A sample of convenience of 30 institutionalized older adults was recruited for the conduction of this study, according to the following criteria: male and female, aged 60 years or more, capable of verbal communication, demonstrating no obvious cognitive impairments and free from any other psychiatric disorders. The sample size was determined based on the type of the therapy used since the development of the reminiscence therapy requires a small group intervening for relatively a long-time period.

Setting

This study was carried out at Dar El-Hana Geriatric home, which is one of the compartments of Gamiet El-Taaref El-Islamia in ElMohandeseen
district, Giza City. Where a multidisciplinary health team is involved in providing care to residents. This health team consists of social worker, nurses, dietitians, and workers. This residential home serves approximately 86 residents.

**Tools**

Data were collected over a period from July 2009 till July 2010 by using Socio-demographic Data Sheet, Mini-Mental State Exam (MMSE) scale; Geriatric Depression Scale (GDS); and Self-Esteem Scale.

**1- Socio-demographic and Medical Data Sheet:**

It was designed by the investigator and it includes personal data, such as; elderly person’s age, gender, level of education, marital status, religious affiliation, income resources, income satisfaction, etc. Medical information includes, presence of chronic illnesses, smoking habits, and level of dependency in carrying out daily living activities.

**2- Mini-Mental State Exam (MMSE) Scale:**

Developed by Folstein *et al.*, (1975) the MMSE is the most widely used mental status examination in the world. The test has been translated into many languages and has been used as the primary cognitive screening instrument for the elderly people. The MMSE is scored in terms of the number of correctly completed items; lower scores indicate poorer performance and greater cognitive impairment. The total score ranges from 0 to 30 (perfect performance). The client was considered mentally impaired if he/she scored less up to 16 points, and alert if he/she scored 17 points or more. Test-retest reliability over a 1-day to 8-weeks interval was found to range from 0.64 to 0.85 (*Crumb et al.*, 1993). Content validity was tested by using Cronbach’s alpha and it was 0.77 (*Porte*, 1986).

**3. Geriatric Depression Scale (GDS):**

The scale was developed by Yesavage *et al.*, (1983). It was designed specifically to measure depression in the aged. The GDS consists of 30 “Yes-No” items. For scoring; score 0 was given for each item that is “none depressive” and 1 for each “depressive” answer. For reverse answers; 1,5,7,9,15,19,21,27,29,30, each Yes= 1 and each No= zero score. Total score is 30 and it was divided into:

1. Not depressed = 0 - 10
2. Possible depression = 11 - 14
3. Mild depression = 15 - 19
4. Severe depression ≥ 20

The scale was tested for content validity by Ertan *et al.*, (2005) in their study about reliability and validity of the Geriatric Depression Scale. The Cronbach’s alpha coefficient was 0.92. The scale was translated by the investigator in Arabic and tested for reliability by using test-retest reliability coefficient, was 0.84 with a two-week interval

**4. Self-esteem Scale:**

It was developed by the investigator based on Rosenberg self-esteem scale (SES) (1965) and Sorensen self-esteem test (*Sorensen*, 2006). The self-esteem scale in this study consists of 20 items, and was used to measure individual self-valuation and self-acceptance. The scale is divided into three subscales:

First subscale “positive personal self”, which means a person's overall evaluation or appraisal of his or her own worth. It consists of 6 items such as: “I feel that I’m a person of worth, at least on an equal basis with others” and “I feel that I have a number of good qualities”.

Second subscale “negative personal self”, which reflects the state of dissatisfaction with oneself. It comprises 8 items such as “All in all, I am inclined to feel that I am a failure” and “I feel I do not have much to be proud of”.

Third subscale “social self” which includes 6 items which cover the ability to initiate conversation, relations, and confrontation with others such as: “I generally feel anxious in new social situations” and “I have difficulty knowing who to trust and when to trust”.

Self-esteem scale was scored using a 4-point Likert-scale response format ranged from 4= strongly agree to 1= strongly disagree. While negative items’ scores were reversed as 1= strongly agree and 4 = strongly disagree. In the current study the total score ranged from 20 to 80, with higher score representing higher self-esteem. Total score was divided into:

1. Low self-esteem= 20 - < 40
2. Mild self-esteem = 40 - < 60
3. High self-esteem = 60 - 80

The scale was translated into Arabic by the investigator and tested for reliability by using test-retest reliability coefficient was 0.76 with a two-week interval.

**Program implementation:**

Reminiscence program sessions were held for 90 minutes and more, for a total of 10 weeks (20 sessions), with a five-minute relaxation exercise before each session. Subjects were divided into six small groups according to the baseline assessment. Each group to be interviewed twice per week for 10 weeks. The main topics of the session were "it is good to know you through exploring the childhood, adolescence, and adulthood period", “memorable people”, “unforgettable events”, “memorable relatives and friends”, “past golden years”, “important life experiences”, “past and present”, etc. Medical information includes, presence of chronic illnesses, smoking habits, and level of dependency in carrying out daily living activities.
“memory and expectations”.

Ethical Considerations

An official permission to conduct the study was obtained from the directors of the residential home after complete explanation of the nature, and purpose of the study. The informal consent was obtained from elderly persons after complete description of the purpose and nature of the study. Confidentiality was assured to each elderly person and they were informed that data collected will be used only for the research purpose, and their benefits. Information entered into the computer system was protected with code numbers. Only the researcher had access to information in the database or the code key containing personal identifiers. At each session, participants were reminded that information disclosed in reminiscence sessions should not be discussed outside group sessions because information was confidential.

Results

Socio-demographic data

The studied sample consisted of 30 institutionalized elderly people aged 65 years and more with a mean of 73.1 ± 6.5. Figure (1) near half of the studied sample (46.7%) their age ranged between 65-<75 years and their mean age was 73.1 ± 6.5. More than third of the studied sample (36.7%) were widowed, 26.7% of them were single, and 67% of the studied sample were females. 60% of the studied sample has children, and 94.4% have grandchildren. Slightly more than half of the studied sample (53.3%) were highly educated and only 6.7% were illiterates. 43.3% of the studied sample have monthly income ranged from 1000 to less than 1500 Egyptian pounds per month with a mean of 1610 ± 490.1. Moreover, 83.3% of the studied sample reported that they have enough monthly income as they assessed it. Less than half of the studied sample (46%) were employees before retirement, and only 7% of them were non-working. As regards source of income, near three quarters of the studied sample (73.3%) reported that pension was their main source of monthly income, while for 36.3% it was their children meanwhile, none of them have any governmental support. The studied sample (100%) reveal feeling of loneliness, 23.3% , and 10% of the studied sample have no special home for them, no one care for them, or they left their home for children to marry are the main causes of entering the residential home, respectively.

Table (1) and figure (2) shows that there is no statistically significant difference between pre and post levels of depression among the studied sample where \( \chi^2 = 7.588 \) at \( p= .576 \). However, 13.3%, 10%, and 40% of the studied sample reported possible depression, mild depression, and severe depression post reminiscence program compared to 16.7%, 13.3%, and 50% pre reminiscence program respectively.

As regards self-esteem among the studied sample, there are statistically significant and highly significant differences between pre and post reminiscence program regarding items of positive personal self sub-scale such as; having good qualities, ability to accomplish tasks, positive attitude toward self, and self-satisfaction where \( t= 9.700, 2.18, 4.589, \) and 6.666, at \( p=.000, .037, .000, \) and \( .000 \), respectively. There is also a highly statistically significant difference between pre and post reminiscence intervention regarding total score of positive personal self, where \( t=4.439 \) at \( p=.000 \). In relation to negative personal self there is statistically significant difference between pre and post reminiscence program in relation to wishing to gain more respection from others, where \( t= 7.407 \) at \( p=.000 \). As regards social self sub-scale no statistically significant difference was found at pre and post reminiscence program. Moreover, the table reveals that, there is a highly statistically significant difference between pre and post reminiscence program in relation to total score of self-esteem among the studied sample, where \( t= 2.922 \) at \( p=.007 \).Moreover, figure (3) revealed that 6.9%, 75.9%, and 17.2% of the studied sample reported low self-esteem, middle self-esteem, and high self-esteem post reminiscence program, respectively compared to 10%, 83%, and 7% of the studied sample pre reminiscence program respectively.

Table (1): Difference between levels of depression among the studied sample at pre and post reminiscence program

<table>
<thead>
<tr>
<th>Geriatric Depression Scale</th>
<th>Pre-test (n=30)</th>
<th>*Post-test (n=29)</th>
<th>( \chi^2 )</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Zero - 10 (not depressed)</td>
<td>6</td>
<td>20.0</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>11 – 14 (possible depression)</td>
<td>5</td>
<td>16.7</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>15 – 19 (mild depression)</td>
<td>4</td>
<td>13.3</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td>20 and more (severe depression)</td>
<td>15</td>
<td>50.0</td>
<td>12</td>
<td>40.0</td>
</tr>
</tbody>
</table>

*Dropout of 1 participant because of death
Discussion

Sample of the current study consisted of thirty institutionalized older adult aged 60 years or more who met the inclusion criteria of selection. As people enter old age, they begin to experience associated changes in their physical, mental and social health. While learning to adapt to the aging process, elderly individuals often develop feelings of loneliness, sullenness, depression and loss of self confidence. In accordance with Wang et al., (2005) aging is associated with poor mental health in some older people, especially high levels of geropsychiatric disorders are major obstructer of health and quality of life in these elderly people. The health and quality of life of elderly people can promote problem recognition and prevention.

As regards sex, the current study findings stated that, females represented two thirds of the studied sample, and this may be due to increased female longevity more than males. This result is consistent with Abdel-Salam (1996), who revealed that most of the residents in the geriatric homes in Egypt are females. As well, Afefe (2004) reported that more than half of the elderly persons in the residential homes were females, and related this also to females' longevity than males. The finding of the current study also revealed that, the level of depression is affected by gender, this may be due to that women are more likely than men to "internalizing" stress, thereby placing them at greater risk of developing depression, in addition to, a reduced inability to seek assistance or support. This result supported by Wang (2005), who reported similar result that females are more depressed than men as they are easily affected by different life circumstances.

Considering the main causes of institutionalization among the studied sample, the present study result revealed that, the entire studied sample reported that, feeling of loneliness and isolation was the main cause of institutionalization especially after marriage of sons and daughters, or death of the elderly partner. The study also revealed that lack of care of a caregiver, neglecting of children of the elderly persons' needs, leaving their own houses for sons to marry are other main causes for institutionalization, adding to the fear of death at home alone as revealed by many of the studied sample.

The findings of the current study are in accordance with Wang (2004), who reported that majority of the elderly persons were admitted to residential homes due to feeling of loneliness and isolation, and no adequate care in their own homes. Similarly, Cappeliez et al., (2005) supported the same findings, as they found that, psychological state like depression, isolation, and loneliness are main factors for institutionalization. The current study results are also, congruent with Barakat (2008), who proved that, the main reasons for institutionalization were either feeling of loneliness at home, or absence of care giver, or feeling rejected by family members.
or family clashes, and relate these to the fact that moving from extended to nuclear families has made the elderly redundant. Similar findings have been reported by Abdel-Ghany et al., (1991); and Dehnept (2004), who clarified that the elderly may have to leave their homes because of their failing health or their spouses’ death; this moving has full impact on the elderly well-being. Moreover, Wagert et al. (2005) reported that, elderly persons always have loss of friendship, a person might experience, when they move from the neighborhood, and that the staff at the institution cannot fill this gap.

Sub-Hypothesis (1): Elderly people who receive reminiscence program will have lower level of depression by the end of the program

The current study result revealed that, fifty percent of the studied sample expressed severe level of depression at baseline assessment. This may be due to the difficult circumstances that many elderly or older adults focus on such as; the death of a spouse, medical problems can lead to depression, especially in those without a support system. This can be interpreted as depression is often overlooked as a clinical diagnosis in older adults because it is assumed to be normal response to aging, physical losses, or other life events. An elderly suffering from depression often has a combination of psychological, physical and social needs.

In a similar study, Cole, and Dendukuri (2003) agreed that, depression is common and disabling among the growing elderly. They found that a 3% suffer from severe depression, another 10 to 15% have mild to moderate depression. Under-utilization of specialized mental health services by depressed elderly about the severeness of their condition, insufficient knowledge about available services, reluctant to accept help in general, and aversion towards psychological treatment, all these could lead elderly to be depressed. In a recent study, Smith (2010) highlighted that, although depression in the elderly is a common problem, only a small percentage gets the help they need. There are many reasons for depression in older adults to be often overlooked, as some elders under study have good reason to be down or that depression is just part of aging. Elderly adults are often isolated, with few people around them to notice their distress. Finally, many depressed seniors are reluctant to talk about their feelings or ask for help.

However, the current study results revealed that, the studied sample showed lower levels of depression especially for the severe level after applying the reminiscence program, although the effect of reminiscence didn’t cause any statistically significant difference between pre and post reminiscence therapeutic intervention in relation to depression. This result can be explained as reminiscence intervention gives the elderly the chance to express their feelings and attitudes toward different life issues, by sharing others in their feelings they have been acquainted that they are not alone to have these feelings. Because elders often experience losses, isolation, and loneliness, they may benefit from a program that provides a chance for socialization and enjoyment as well as reminiscence. Moreover, reminiscence therapeutic intervention also permitted the elderly persons to get acquainted with others who experienced psychological problems and life events similar to theirs. In addition, many elderly participants in this study reported that they enjoyed program participation and contact with the researcher and other participants very much.

This finding is consistent with other several study findings are supporting the use of reminiscence to boost depressive symptoms of the subjects as those of Cully et al., (2001). Additionally, Cully et al., (2001) confirmed that reminiscence training reduced self reporting of depression by subjects and boosted feeling of self-confidence and personal adequacy. Thus, the feelings of other investigations supported the present study findings in that reminiscence has a general adaptive function for elderly. Reminiscence may be a therapeutic procedure allowing for self-expression and communication, and providing the elderly with a formal outlet for expressing strong affects, unresolved feelings and fears, which they had to repress.

Scattered studies have examined the benefits of reminiscence for the elderly, and concluded that reminiscence generally reduces depression and confusion as those of Stinson et al., (2010). However, other study of the effects of reminiscence on depression have produced inconsistent findings as those of Jonsdottir et al., (2001). In some studies, the lack of effect may have been due to the small number of participants. Furthermore, in reminiscence studies to date, topics, themes, and props were all used interchangeably as triggers within each individual session to stimulate memory recall. Topics varied from childhood memories to exploration of feelings arising from living in nursing home as indentified by Menec (2003).

Sub-Hypothesis (2): Elderly people who receive reminiscence program will experience higher self-esteem by the end of the program

The maintenance of a positive self image is important in helping elderly to deal with the negative impact of aging on their lives. Low levels of self-esteem and self-health perception are major problems
among elderly. Nevertheless, the therapeutic value of reminiscence is thought to promote self-esteem and self-worth for people in old age (Liu et al., 2007). As regards self-esteem among the studied sample before and after reminiscence program, the present study showed improvement in the level of self-esteem as shown after reminiscence therapeutic intervention. The current findings also, revealed significant improvement in self-esteem.

Several explanations that may account for the findings were given by the researcher as, most of the elderly persons who expressed low level of self-esteem was a result of expressing feeling of isolation, devaluation from their families and others, losing their will to take decisions even the simple ones (i.e., time of eating, sleeping, bathing, and/or clothing). So, reminiscence therapeutic intervention gives the elderly persons the possibility to retelling and sharing different life experiences which appeared to help individuals accept personal losses, preserve a sense of usefulness. Reminiscence gives the elderly persons the opportunities to show that they have good qualities, have different abilities to accomplish tasks, show positive attitude toward self, and self-respect.

The current study finding is consistent with Liu et al., (2007), who reported that there is a significant difference in the pre-test and post-test scores measuring self-esteem, and explained that reminiscence intervention appears to improve the self-esteem of elderly people living alone. The findings are also in agreement with Chao et al., (2006), who found similar results and reported that reminiscence as an intervention for elderly people helps improve self-esteem among elderly residents in geriatric homes.

Coleman (2005), who used a four group pre-post test design to examine the effects of reminiscence on self-esteem of institutionalized elderly, disclosed a significant difference on the treatment groups. In this respect, Sivis (2005) stated that people with high levels of self-esteem perceived their state of self-health and well-being positively. The result of the current study is incongruent with Wang (2004) who revealed that reminiscing did not increase self-esteem among elderly persons, several explanation may account for these findings as stated by the researcher. The majority of the subjects demonstrated normal to higher levels of self-esteem on the pre-test, which limited the probability of improvement on the post-test, while the study extended for 16 weeks, the 30 minutes to 2 hours of reminiscing per week may not have been intensive enough to change the subjects’ self-esteem. Also, the reminiscence might not be sensitive enough for the use with this age since it was not developed to be used for an elderly population.

Also, Wang et al., (2005) contradicted the current study findings, since they stated that reminiscence did not increase self-esteem, and self-health perception, this may be due to the short period of reminiscence program (6 weeks). However, an Egyptian study conducted by Shafik, (2004) supported the current study findings carried out in Alexandria and revealed that reminiscence increase self-esteem among elderly residents as it increased social interactions among elderly persons. The findings of the present study are in disagreement with Sivis (2005), who reported that, an analysis of pre and post-test measures of self-esteem revealed no significant increases in self-esteem after providing psychosocial intervention. In the same line, Jonsdottir et al., (2001) contradicted the current study findings and revealed that, no statistically significant difference was found in self-esteem as measured by Wilkoxon Signed Ranks test, and this may be due to severity of the diseases which hinder the continuity of reminiscence intervention sessions, also it may be due to sample size.

**Conclusion**

Aging is associated with poor mental health in some older people especially the institutionalized elderly; where low levels of life satisfaction and self-esteem are major problems. The study results indicate that depression amongst elderly people in the institutions is due to loss of independence, inability to continue previous occupation, feeling of isolation and loneliness, lack of privacy and meaningful occupation. Moreover, the study findings suggested that life satisfaction among elderly residents of institutions might be positively affected by participation in regular leisure activities.

**Recommendations**

Based on the present study findings, the following recommendations are suggested.

1. Reminiscence activities should be applied in different care settings of elderly people in the community. They should be held in a supportive environment in which elderly people could gain self-acceptance, confidence and express their feelings in a creative way.

2. Replication of the study using a larger sample in different geographical areas to generalize results.

3. Nurses are needed for evaluating and designing interventions targeting the mental health needs of older adults, especially those residing in long-term care facility.

4. Nurse educators can apply the knowledge of reminiscence to design training programs for students/staff.
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