




The Iranian Protocol of Group Reminiscence and Health-Related Quality of Life Among Institutionalized Older People

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Purpose: Reminiscence has a positive role in improving memory performance. It may increase the attention of the older adults to themselves, helping them to cope with the crises and the process of aging. We aimed to investigate the impacts of memory recalling, sharing life experiences and stories confidently from the past on promoting numerous domains of quality of life (QoL), among institutionalized older people in the Ilam province of Iran.

Methods: The study was carried out, using a quasi-experimental approach (a pre- and post-one group design). The statistical population consisted of all older people who were institutionalized in nursing homes. Based on inclusion and exclusion criteria, 43 potential participants were recruited, and the status of QoL was assessed, using the Iranian short-form health survey (SF-36) and face to face interviews. Then, eight sessions were designed and implemented. The participants expressed their memories such as bitter and sweet memories at various periods of life, and finally, the QoL of the participants was re-evaluated according to the same questionnaire, three months after the intervention.

Results: There was a significant difference between the scores of pre- and post-intervention in most of the sub-scales of QoL, including physical functioning, role limitations due to physical health and emotional problems, emotional well-being, social functioning, and general health.

Conclusion: Reminiscence may, in certain circumstances, be an effective care option for people living in long-term care with the potential to impact positively on the QoL of residents.

Keywords: reminiscence, quality of life, older people, nursing homes, Ilam

Introduction

Improving living conditions and increasing life expectancy have led to the aging phenomenon. The implications of an aging population are one of the most important economic, social and health challenges for health care providers, family members as well as societies.^{1,2} At present, the older adults have the highest population growth rate, in comparison with the other groups.³ These changes are a revolutionary sign in the demographic dimension of communities that take strict attention to policy-makers, worldwide.⁴ World statistics show that the population of this age group will double until 2050. The rate of the aging population in developing countries such as Iran is rising as the population structure changes.⁵ Moreover, changes in disease patterns have increased chronic difficulties among older people, and consequently led to improved attention to the concepts of health and quality of

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life (QoL), in the past decade.^{6–8} From the perspective of the World Health Organization, this represents an individual's perception of the status of life based on culture, goals, value system, standards and personal interests.⁹

Furthermore, one thing to keep in mind is how life is spent. Having a proper social relationship, a beneficial role in society, the opportunity to make fun, being healthy, and financial independence, all together determine the status of QoL.¹⁰ According to the special needs of older people, their QoL can be easily threatened.¹¹ Nowadays, improving the QoL among institutionalized older people is one of the important aspects of nursing care standards.¹²

Reminiscence may improve cognitive health (the ability to clearly think, learn, and remember) by boosting memory and enhancing the effects of other treatments.¹³ It covers also a situation that is often used for the older adults based on remembering events, feelings and thoughts of the past, in order to create and facilitate the feeling of pleasure, and to enhance the QoL or to adapt to current situations.¹⁴ Most studies recommended that it can be used in nursing homes, different schemes and private houses. Reminiscence may have a positive role in improving the QoL, memory performance, awareness and health status as applied as a psychological treatment and, in fact, a kind of past-calling and can be smart for older persons.^{14,15} This attraction can have three reasons as follows: first, as a part of daily activity, the participants do not have to learn new words and form an initial form of human experiences that are semantically motivated; second, many older people are returning to the past through reminders, as remembering these memories may help people to get more balance in their lives. Finally, because of the challenges faced by their age-class drawbacks in social relations, the residents share experiences, feelings and memories in small groups.¹⁶

Several studies have used reminiscence for improving QoL among older people.¹⁷ The literature suggested that structured reminiscence may be beneficial in treating depression. In examining the psychological benefits of the program, a study confirmed that two components of subjective well-being, including life satisfaction and happiness, have been increased by improving social skills and emotional supports.¹⁸ Another study concluded that reminiscence was associated with positive emotions among older people.¹⁹ Due to the feasibility of this technique and different findings concerning its effect, there is a need for further research on reminiscence to improve the well-being of older adults.

Methods

Setting

All institutionalized residents aged 60 years and over, living in two nursing home centers situated in the Ilam province of Iran, had an equal chance to participate in the study (n=60: Ilam=39 and Eyvan = 21). A nursing home is used in many countries to refer to the centers, where in addition to the housing, support and nursing services are also delivered for older people who cannot live independently in their own houses. In nursing homes, the short-term services are provided to those who require nursing care, assistance in personal activities, and mobility.²⁰

Study Design and Data Collection

The study was carried out by using a quasi-experimental approach (a pre- and post-one group design) and a non-probability sampling technique during 2018–2019. A one-group pre-test–post-test design is a type of research that is most often used by behavioral researchers to determine the effect of a treatment or intervention on a given sample. The health status of the participants was examined based on medical records and applying for the Iranian Mini-Mental State Exam (MMSE). The MMSE consists of 11 questions examining orientation, memory, calculation, attention, comprehension, and visual-spatial function. The score ranges from 0 to 30, with a higher score indicating better cognitive functioning.⁴

Older people were considered ineligible, if they had multiple chronic difficulties or cognitive impairment (a score of 23 or less), or were too frail to undertake the survey. Out of 60 older people in nursing homes, 17 did not have the desired characteristics. The status of the overall score of health-related QoL was assessed, using the Iranian short-form health survey (SF-36),¹⁵ and face to face interviews in a private area. Then, eight local sessions (Table 1) were designed and implemented. The institutionalized participants expressed their memories such as bitter and sweet memories at different periods of life and finally, the QoL of the participants was re-evaluated according to the same questionnaire, three months after the intervention. The study instrument and questionnaire were valid and reliable.

The Reminiscence Program and Protocol

Based on an overview of qualitative and quantitative research on group reminiscence, Stinson (2009) offered a suggested

Table I Iranian Protocol for Structured Reminiscence

Sessions	Meeting Title	Objectives	Motivational Process
1	Understanding the aims, team process and interesting topics.	To be familiar with each other and the environment; to create an interest in people; to feel comfortable at the meeting, to introduce the rules of the program such as the importance of continued attendance and active participation.	Greetings, referrals, Questioners' role-playing, report of similar work, related pre-organizing and free discussion.
2	Expression of childhood memories, adolescence, and later life.	To create a sense of comfort in individuals, to remind names of important people, to create a sense of belonging, to re-experience childhood feelings, to recall the good and bad aspects of the school, and to rebuild common emotions.	Documents identifying one's identity, children's toys and toys of the time, balls and nets, planks, school bags, school uniforms, teacher's name, school location and school records.
3	Family history, life process and marriage	To remember the good moments of life, what they were doing to maintain their marital relationships, to share common experiences, to reminisce the gifts they have received and about the donations they made for family occasions.	Family members' photos, birthdays' photos; wedding photos, and other family occasions.
4	Life in the city and the village and its bitter and sweet memories	To remember the ways of living and supporting rural work such as farming, how to travel from village to town or vice versa, how to go to health centers, the culture and customs of those areas, the problems of urban and rural life, and family connections.	Map of town and village of the birthplace, living distances, geographical location, amenities and services, accidents, games, and travel memories.
5	Expression of work memories and experiences, job positions and successes	To remind the career advancements, encouragements, common fields between members, past enjoyment in the business world, how to find a job, and have savings from work.	Tools, previous currencies, training and skills' certifications, job appreciations, work uniforms, administrative promotions, permits, inventions and discoveries, business locations, and job type.
6	Benevolence, charity, and worship	To remember the ways of helping and supporting the people affected by floods and earthquakes, attending worship services, visiting patients, helping the poor and needy people, helping build mosques and schools, obtaining wedding dowry and bags for needy students	Pictures & photos of charity places, mosques, schools, mass grants, flood and earthquake reliefs, community and Friday prayers, and patient visits.
7	Memories of wars: front-line, the displacement, and the events of that era	To remind front-line memories, how to help the displaced people, how to serve soldiers, how to help the victims and war-affected people, and attending funerals and memorial services.	Pictures & images of the periods of war and recent conflicts, aerial bombing of cities, war-torn regions, displacement and unhomely and safe areas.
8	Free discussions	To give feedback, plan for such meetings in the future, celebrate together and appreciate the people involved, listen to the participants' suggestions, and having group photos.	Review photos and images of previous sessions.

protocol for group intervention.¹⁴ The original protocol involves 12 sessions, which has been validated among older Iranian people.¹⁵ The Iranian protocol consists of eight topics as follows:^{4,13,15}

1. Understanding the aims, team process and interesting topics;
2. Expression of childhood memories, adolescence, and later life;
3. Family history, life process and marriage;
4. Life in the city and the village and its bitter and sweet memories;
5. Expression of work memories and experiences, job positions and successes;

6. Benevolence, charity, and worship;
7. Memories of wars: front-line, the displacement, and the events of that era;
8. Free discussions.

Based on inclusion and exclusion criteria, scheme managers selected, organized, and facilitated reminiscence groups for older people. All participants attended an eight-weekly session of the reminiscence program, in which clinical psychologist acted as a facilitator to encourage the participants to share, teach and fabricate a personalized life-story based on the chosen reminiscence topics, using the local language (Southern Kurdish). The reminiscence program was structured in such a way that focuses on three functions including promoting interaction, teach, and inform and reinforcing self-image. During the sessions, the facilitator used various techniques as cognitive support to prompt the participants' recall of past memories and to provide them structured opportunities to talk and share personal wisdom and past experiences related to the topics with other participants. They also supported the participants to fabricate a personalized life-story book based on the chosen reminiscence topics. Each session lasted for about 90 minutes.

Data Analysis

The Kolmogorov–Smirnov test was used to determine if a data set was well modeled by a normal distribution ($p > 0.05$). Moreover, paired t-tests were used to test if the means of two paired measurements, such as pre-test/post-test scores, are significantly different. The significance level was considered 0.05.

Ethical Consideration

This study was approved by the Ethical Review Committee of the Tabriz University of Medical Sciences (approval number.IR.TBZMED.REC.1397.021). Informed written consent was obtained from all participants. All procedures performed in this study were following the principles stated in the Declaration of Helsinki, ethical standards of the institutional and national research committee.

Results

In this section, the characteristics of the 43 participants including gender, age, marital status and educational level are described. More than half of the respondents (60%) were women, as well as 79% of them aged 60–75 years old. Furthermore, approximately two-thirds of the participants were widowed and 88% were illiterate.

The distributions of SF-36-dimension scores, including physical and social functioning, role limitations (physical and emotional problems), mental health, vitality, pain, and general health perception are summarized in [Tables 2 and 3](#). [Table 2](#) demonstrates the mean scores of the outcome measures before and after the intervention. Significant pre- and post-program differences were found for the most SF-36 areas and dimensions. No statistically significant changes were found for social functioning, vitality, and pain.

As illustrated in [Table 3](#), the results of paired t-tests indicated that the QoL scores have meaningfully increased after the intervention ($p=0.081$).

Discussion

The participants reported gains in the most SF-36 areas and dimensions, including physical functioning, role

Table 2 The Distribution of SF-36 Areas and Dimensions (n=43)

SF-36 Areas & Dimensions		Before Intervention				After Intervention			
		Mean	SD	Min	Max	Mean	SD	Min	Max
Functional status	Physical functioning	15.25	6.25	9.1	27.3	18.12	5.95	9.10	27.3
	Social functioning	4.42	1.21	2.5	6.5	4.01	0.90	2.50	6.5
	Physical problems	4.09	1.04	3.25	6.5	5	1.12	3.25	6.5
	Emotional problems	3.03	0.89	2.23	4.67	3.87	0.81	2.33	5
Well-being	Mental health	15.33	1.71	11.40	18.6	17.23	1.69	11.60	20.4
	Vitality	11.99	1.74	7	15.5	11.66	1.5	8.75	16.25
	Pain	5.34	2.03	1.50	8.5	5.34	2.03	1.5	8.5
General health perception		12.59	2.30	7.60	19	13.45	2.47	8.4	20
Overall quality of life		90.30	8.61	77	110	95.23	8.66	76	117

Table 3 The Association of SF-36 Dimensions and Reminiscence (n=43)

SF-36 Areas & Dimensions		MD	SD	*t	p-value
Functional status	Physical functioning	-2.86	3	-6.25	0.086
	Social functioning	0.41	0.98	2.71	0.01
	Physical problems	-0.91	0.9	-6.64	0.065
	Emotional problems	-0.84	0.82	6.72	0.037
Well-being	Mental health	-1.90	1.53	-8.16	0.046
	Vitality	0.33	2.31	0.94	0.35
	Pain	0.21	1.75	0.87	0.41
General health perception		-0.87	1.93	-2.97	0.042
Overall quality of life		-4.93	5.54	-5.83	0.081

Note: *Paired t-test.

limitations (physical and emotional problems), emotional well-being and general health, as well as overall QoL scores. As hypothesized, the mean score of physical function was different before and after the intervention. This finding was consistent with the results of the other studies.^{18,21-24} Older people experience a better inner feeling by expressing and reviewing their past memories, spent in a busy period. Moreover, they may act more energetically by discharging their emotions while reminiscing.^{22,23} On the contrary, participation in group reminiscence sessions could not significantly increase physical functions among the older adults, living in the community.²²⁻²⁵ This discrepancy can be due to differences in research settings.

The structured group reminiscence improved the social functions of the participants ($p=0.01$). The determining factors of social functioning and psychological distress are not yet fully known among older people.^{18,19} When older people become more and more disabled and lose their capacity to participate in social activities, they may replace these activities with tasks that do not require much physical strength such as reminiscence.²⁶ In fact, group reminiscence maintains the identity of older people by keeping them in a symbolic interactive framework.¹⁵⁻¹⁸

The results of the paired t-tests revealed that there was a statistically significant difference between the mean scores of role limitations (physical problems) before and after the intervention. Consistent results were reported in other literature.^{18,21-23} For older adults, leisure activities are a great way to stay healthy and fit.²⁴ It has been repeatedly shown that staying active during the last period

of life is associated with less disease and lower mortality rate as it promotes health.²³

Before and after the intervention, the mean score of role limitations (emotional problems) was statistically significant. The findings of most studies were similar to the results of the present study.^{21,22,24} To explain this, it can be stated that the inevitable physical and mental weakness during life may make older people very vulnerable. Moreover, the residents of nursing homes have different unanswered needs, which often lead to increased behavioral and mental difficulties. Unfortunately, many of the symptoms of mental illness, being usually normal in the aging process either are ignored or underestimated, which will eventually give rise to numerous problems in these periods.^{14,18,23}

Furthermore, the mean score of vitality before and after the intervention was 11.99 and 11.66 ($p=0.35$), respectively. This finding is inconsistent with the results of many studies, which might be caused by differences in gender and marital status of the participants.²⁵⁻²⁷ Factors such as resolving long-standing problems, increasing tolerance to conflicts, relieving feelings of guilt, fear and strengthening self-esteem, creativity, open-mindedness and acceptance can affect feelings of vitality. It can be said that factors such as solving long-standing problems, increasing conflict tolerance, reducing unhealthy guilt, strengthening self-esteem, creativity, generosity and acceptance may improve the feeling of vitality among older people.^{14,16}

Regarding the status of mental health, the comparison of the scores revealed that there was a meaningful difference before and after the intervention, which was consistent with the results of other studies.^{28,29} Reminiscence plays a helpful role in supporting mental health and may have long-term effects on improving the QoL.^{15,26} The theoretical framework of reminiscence therapy is derived from Erikson's theory of ego development. Erikson divided life span into eight stages. In his theory, Erikson believed people would experience a main crisis or conflict in each stage, which served as a turning point in development and needed to be solved.³⁰ In the theory, reminiscence plays a key role in the end-stages of life and acts as a potential in resolving psychological problems by helping the older adults to regain their integrity. When older people living in nursing homes attend a reminiscence session, they will get an opportunity to make new friends, deepen their friendships, and be able to communicate with others. In addition, the group leads to a reduction in the feeling of

distance in the new situation through interpersonal relationships and the provision of social support by others.^{14,29,30}

The pain intensities of the participants did not decrease after the structured group reminiscence among institutionalized older people ($p=0.41$). This result was inconsistent with many reports.^{24,31} To explain this finding, it can be said that most of the participants (88%) were illiterate and had to do manual and physical works such as agricultural and animal husbandry occupations to earn incomes, and therefore the physical chronic pain continues to increase with age. To reduce this contradictory issue, it might be better to provide suitable conditions and facilities such as non-invasive pain relief techniques and rational coping in nursing home centers.

As hypothesized, general health perception has increased over time ($p=0.042$). Tarugu et al considered group reminiscence to improve the general health of older adults, living in nursing homes and believed that this method would recover the physical and social functions.³¹ To explain this finding, reminiscence is usually a conceptual method for examining and reviewing life events and a psychological process, where past events and occasions are discussed.^{14,26,30}

Finally, the comparison of the overall scores of health-related QoL indicated that the evidence-based protocol for an 8-week group intervention could suggest beneficial values for participants. This finding concurs with previous studies.^{32–34} This can partially explain that reminiscence may extend interpersonal communications, provide an opportunity to express positive and negative feelings towards the past, reconcile with the present, improve the career and family relationships, focus on high-quality interactions, and provide a supportive and relaxing environment.^{27–31,35,36}

Limitations

This was a one-group pre-post design, with no control group, and the pre-intervention scores acting as the baseline control. Although most of the literature has explored the positive effects of reminiscence on older people such as social networks, psychological well-being and social status, the possibilities of negative consequences have been neglected. Finally, while the current research has contributed to increasing the understanding of the meaning of general health ratings, little or nothing is known about the clinical significance of these scores.

Conclusion

Structured group reminiscence has implications on improving the well-being of older persons. Discussing past events allows group members to become more familiar with each other, which increases the growth of group solidarity and received support; it also provides a warm and compassionate environment to feel free to reminisce. The structured group reminiscence helps the older adults to gain positive self-esteem by increasing self-confidence, emotional well-being, and a sense of satisfaction by reminding and rebuilding experiences.

Data Sharing Statement

The datasets analyzed in the current study are available upon request from the corresponding author.

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Author Contributions

As scholars, we attempted to do high-quality research that advance science. We correspondingly used an appropriate research methodology. We also have read and reviewed the manuscript carefully several times, received feedback from our colleagues, and identified the aims and scope of the journals in our target research area. All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas. Moreover, all authors drafted or written, or substantially revised or critically reviewed the article. They agreed on the journal where the article will be submitted, and reviewed and agreed on all versions of the article before submission, during revision, and approved the final manuscript. All authors agree to take responsibility and be accountable for the contents of the article.

Disclosure

The authors report no conflicts of interest in this work.

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