

The Effect of Reminiscence Intervention on Psychological Well-Being among Individuals with History of Suicide Attempt: A Randomized Controlled Trial

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Received: 10 October 2022

Revised: 15 November 2022

Accepted: 17 December 2022

Abstract

Background: Since psychological well-being can predict the individuals' suicidal ideation, therapeutic interventions such as reminiscence can be helpful for these persons. This study aimed to evaluate the effectiveness of reminiscence intervention on psychological well-being among individuals with a history of suicide attempt.

Methods: This study was a randomized controlled trial. The population of this study consisted of individuals who had attempted suicide and referred to public hospitals in Shiraz. The sample size in each control and experimental group was estimated to be 20 people.

Results: The comparison of the mean score of depression in the intervention and control groups showed that the two groups did not have a significant difference before the intervention ($P=0.414$), while immediately after the intervention ($P<0.001$) and one month after it ($P=0.003$) a significant difference was observed. Also, the mean score of anxiety immediately after the intervention and one month after the intervention was significantly different between the intervention and control groups ($P<0.05$). In the stage immediately after the intervention, the comparison of the mean scores of self-esteem in the intervention and control groups showed a significant relationship ($P=0.019$).

Conclusion: It can be said that this intervention has been effective in reducing the symptoms of anxiety and depression and increasing the self-esteem of people who have a history of attempted suicide.

Please cite this article as: Bazrafshan MR, Jokar M, Kavi E, Soufi O, Delam H. The Effect of Reminiscence Intervention on Psychological Well-Being among Individuals with History of Suicide Attempt: A Randomized Controlled Trial. *J Health Sci Surveillance Sys*. 2023;11(1):84-90.

Keywords: Psychotherapy, Attempted suicide, Anxiety

Introduction

Suicide attempt is defined as a non-fatal behavior of self-harm with the purpose of death.¹ According to research, Iran has had one of the highest suicide rates in the Eastern Mediterranean Region.² Psychological well-being is broadly defined as a person's sense of happiness and positive feeling about his/her life, as well as the absence of stress in life, which can be associated

with variables of life satisfaction, lack of depression and anxiety, self-esteem, positive moods and emotions.³⁻⁵ Several factors have been identified in the etiology of the suicidal attempt. From these factors, the results of the research indicated that in most suicide cases, mental disorders played a significant role.⁶ Among mental disorders, mood disorders have the highest risk of suicide in both genders,⁷ and among mood disorders depression has the greatest risk.⁸ Additionally, the comorbidity of

anxiety and depression is seriously observed in suicidal attempts. Anxiety creates more vulnerability, and it is a risk that can predict suicidal attempt.⁹ Also, the results of studies showed that people before the suicidal attempt experienced other problems, including lack of self-esteem.¹⁰

Psychotherapy is one way to improve anxiety, depression, and self-esteem in people who have attempted suicide.¹¹ One type of psychotherapy is reminiscence which is taken from the concept of integration in Erikson's theory of lifespan development and, more importantly, the life review theory proposed by Butler. Butler suggests that the life review is a natural process that all people take when they feel their lives are about to end. In this way, the person is trying to create happiness and better quality of life and adapt to the current situation, using the reminder of the past events, emotions, and past thoughts.⁸ In this method, symptoms of depression and anxiety decreased; also, the individuals' self-esteem and social intimacy were enhanced through the renewal of past experiences.^{12, 13}

Researchers suggest that reminiscence intervention has a special value for improving the patients' psychological conditions.¹⁴ In reminiscence intervention, by defining the themes and specific structure for reviewing memories, the individuals move in a definite and predetermined framework.¹⁵

Reminiscence intervention has been considered as a low-cost intervention in nursing and psychology. However, most research has been conducted on the elderly, and only few studies have been carried out on care-seekers and do not include people at risk of suicide or those who had attempted suicide.¹⁵

Since depression, anxiety and lack of self-esteem are more prevalent among people with attempted suicide, it is a question whether the reminiscence intervention can be used to increase self-esteem and decrease the symptoms of anxiety and depression in these individuals, thereby preventing suicide in people at risk of suicide.

Methods

This study was a randomized controlled trial. The ethics committee approved this randomized clinical trial study (IRLARUMS.1396.3), and it was registered in the Iranian clinical trial registry (IRCT2009030304001742N2).

The statistical population of this study consisted of individuals who had attempted suicide and referred to public hospitals in Shiraz. The samples of this study were selected according to the inclusion criteria. All subjects voluntarily participated in the study; they had an acceptable ability to talk, hear, and see; had no depression and anxiety due to physical problems such as hypothyroidism; were under no treatment that might interfere with mental, memory, and thinking

ability; were familiar with the Persian language; and had not attended other group therapy programs. The occurrence of any crisis, whether individual, family, or social during the study; symptoms of the crisis when expressing and reviewing life events during the study; absence in the sessions more than once; and reluctance to continue participation in the study at any time were the exclusion criteria.

Among the participants who had inclusion criteria, 40 individuals with a score of 14 to 28 from the Beck Depression Questioner were selected by simple random sampling. At first, using random sampling method (using envelope A&B) and according to the order of the inclusion criteria samples, we asked them to select one of the envelopes. If the envelope (A) was selected and also had the inclusion criteria, the individual was selected as a sample. In the next step, the selected samples were randomly divided into 2 groups: 20 experimental and 20 control groups.

According to similar studies¹⁶ and using the following formula ($s=2.23$, confidence level=0.95, and power 0.90, $d=2.63$), the sample size of 15 people in each group was calculated for this study. According to the probability of losing the sample, a total of 20 people were selected for each group.

The researchers explained about the goals and importance of the study for them and after obtaining the informed consent, they performed the pre-test using questionnaires. The questionnaires used in this study were as follows:

1- Beck Depression Questioner: This questionnaire contains 21 items measuring the symptoms of depression. The questions are scored using a Likert scale (0 to 3). Zero represents the lowest score and three represents the highest score. Generally, a higher score indicates more severe depressive symptomatology.¹⁷ In Iran, this inventory was standardized by Rahimi (2014), showing that the Beck Depression Questionnaire had a satisfactory validity.¹⁸

2- The Anxiety Questionnaire has 40 questions with two dimensions (state and trait).¹⁹ Two dimensions are scored using a 4-point Likert scale (almost never to almost always). The score for each subtest is from 20-80. A higher score is a reason for more anxiety symptoms. In Iran, this inventory shows that the anxiety questionnaire had a satisfactory validity.²⁰

3- The Self-Esteem Questionnaire: This questionnaire²¹ is scored based on a 4-point Likert scale ranging from strongly agree to strongly disagree. The total score ranges from 10-40. A score of more than 35 indicates higher self-esteem. A score of 25- 35 indicates normal self-esteem, and less than 25 shows low self-esteem. In Iran, this inventory shows that the self-esteem questionnaire had a satisfactory validity.²²

Reminiscence Protocol: It was developed by Stinson et al.¹⁴ and translated for the first time and used

by Majzoobi et al.²³ In this protocol, twelve topics are discussed at twelve sessions, and the duration of each session is approximately one to one and a half hour. At each session, the stimuli can be used to remind the memories depending on the topic of each session (such as photo albums, memento, souvenirs, tools, toys, and so on). In this study, the reminiscence program was implemented during the sessions by researchers themselves. According to the suggestion in some previous studies,²⁴ in this study, some sessions were merged and the number of protocol sessions dropped to 8 sessions (sessions 1 with 2, 4 with 5, 9 with 10, and 11 with 12 were merged).

Intervention

Participants were asked to fill out the questionnaires in three stages, including before (time 1), immediately (time 2), and one month (time 3) after the intervention.

In the intervention group, reminiscence protocol was performed, but no intervention was done in the control group.

Statistical Analysis

Due to the non-normality of dependent variables distribution (depression, anxiety, self-esteem), non-parametric tests were used.

Results

The two groups were similar in terms of demographic characteristics (Table 1) ($P>0.05$).

Comparing the means of depression in the intervention group in the pre-intervention stage, immediately after the intervention and one month after the intervention showed a significant relationship ($P<0.001$); the mean score of depression was reduced from 21.0 ± 2.95 to 17.40 ± 2.85 and 18.95 ± 2.91 .

Also, the comparison of the mean score of depression in the intervention and control groups showed that the two groups did not have a significant difference before the intervention ($P=0.414$), while immediately after the intervention ($P<0.001$) and one month after the intervention ($P=0.003$) a significant

difference was revealed.

There was a significant difference between the intervention and control groups in terms of the mean anxiety score (state and trait) immediately after and one month after the intervention. ($P<0.05$). On the other hand, comparing the means of anxiety in the intervention group in the pre-intervention stage, immediately after the intervention and one month after it showed a significant relationship ($P<0.001$). The mean score of state anxiety changed from 45.50 ± 8.74 (before intervention) to 39.90 ± 5.82 (immediately after intervention) and 40.85 ± 5.94 (one month after intervention). Also, the mean score of trait anxiety decreased from 43.60 ± 8.69 (before intervention) to 39.15 ± 8.28 (immediately after intervention) and 40.30 ± 8.38 (one month after intervention).

Comparison of the mean scores of self-esteem in the intervention and control groups revealed a significant relationship only in the stage immediately after the intervention ($P=0.019$) (Table 2).

Discussion

The results showed that there was a considerable difference in terms of depression score in the experimental group compared to the control group immediately and one month after the intervention. Therefore, the first hypothesis of this study was confirmed.

Usually, depressed individuals avoid talking about their feelings or do not ask anyone for help.²⁵ In such circumstances, the intervention of the reminiscence by gathering people with a background of suicidal attempts and creating a safe environment free of any criticism can increase the sense of belonging and trust. Also, placing them in a specific framework for reminiscence and preventing the occurrence of negative memories²⁶ can increase positive emotions during the recall and reduce depression.

In addition, other studies have been carried out using the method of reminiscence, showing that this method can increase the amount of integrity, self-esteem and enhance well-being, autobiographical

Table 1: of the participants' demographic characteristics

Variable		Intervention Group		Control group		P Value
		Number	Percent	Number	Percent	
Gender	Male	9	45%	9	45%	1
	Female	11	55%	11	55%	
Education	Reading literacy	2	10%	2	10%	0.733
	Guidance	6	30%	8	40%	
	Diploma	9	45%	9	45%	
	University	3	15%	1	5%	
Marital status	Single	3	15%	1	5%	0.570
	Married	15	75%	17	85%	
	Widow	2	10%	2	10%	
Age	Mean	50.95		50.70		0.891

Table 2: Comparison of the mean scores of depression, anxiety (state and trait), and self-esteem between the intervention and control groups before (time 1), immediately after (time 2), and one month after the intervention (time 3)

		Time1	Time2	Time3	P value**
Depression	Intervention	21±2.95	17.40±2.85	18.95±2.91	<0.001
	Control	21.85±3.28	22.20±3.48	22.05±2.94	0.570
	P value*	0.414	<0.001	0.003	
Anxiety (state)	Intervention	45.50±8.74	39.90±5.82	40.85±5.94	<0.001
	Control	46.05±7.69	46.20±7.87	46.20±7.90	0.759
	P value*	0.674	0.005	0.026	
Anxiety (trait)	Intervention	43.60±8.69	39.15±8.28	40.30±8.38	<0.001
	Control	45.20±7.65	45.10±8.49	45.80±8.32	0.500
	P value*	0.424	0.027	0.033	
Self-Esteem	Intervention	20.05±4.45	21.95±3.80	21±4.09	<0.001
	Control	19.95±2.50	19.75±2.19	19.85±2	0.955
	P value*	0.294	0.019	0.064	

*Mann-Whitney U; **Kruskal - Wallis

memory by recalling memories and build a bridge between experiences and emotions of the past and present life.^{27, 28} All these can somehow be effective in reducing depression among individuals with a history of suicide attempt. The findings of the studies conducted by Siverová²⁹ showed that the use of such therapy significantly reduced the rate of depression in the elderly patients with cognitive impairment. Also, in the study of Momeni³⁰ it was found that reduction in depression continued three months after the intervention. In the study conducted by Chueh et al.,³¹ it was revealed that psychotherapy program was able to significantly decrease depression in veterans of the Second World War.

The results of the study carried out by Stinson,¹⁴ aiming at determining the effect of structured group reminiscence therapy on depression in the older people, did not show a significant change in the reduction of depression, which is not consistent with our study results. Probably, this is because of the differences in the intervention program and measurement tools, sample size, and characteristics of the studied community.

There was a significant difference in terms of anxiety score in the experimental group compared to the control group immediately and one month after the intervention. Therefore, it can be said that the second hypothesis posed in this study that the reminiscence could decrease the anxiety of suicide attempters was confirmed. Anxiety in individuals with a history of suicidal attempts may be associated with depression,³² and the presence of anxiety is significantly associated with subsequent suicide attempts.³³ The results of other studies also show that life review and reminiscence interventions are an effective treatments to reduce anxiety symptoms and improve mental health of individuals.³⁴⁻³⁷ Therefore, following the reduction in anxiety after the intervention, it can be concluded that the reminiscence intervention has been able to reduce anxiety in individuals with a history of suicide by focusing on memories and developing positive

thoughts and even reducing the amount of depression. In line with the obtained results, the study carried out by Chou³⁸ found that reminiscence intervention could be effective in decreasing the anxiety of the elderly with a history of dementia.

The results showed that there was a considerable difference in terms of self-esteem score in the experimental group compared to the control group immediately and one month after the intervention. Therefore, the third hypothesis of the study, i.e. reminiscence intervention would increase self-esteem in suicide attempters, was confirmed. It can be said that those who attempt suicide have a serious problem in regulating emotions and have a feeling of guilt, instability in interpersonal relationships, and self-concept or ego.³⁹ A reminiscence intervention is a compensatory strategy that strengthens the ego and reduces incompatibility with the life's events.⁴⁰ The results of a study which aimed to determine the effect of life review on self-esteem are in line with the findings of the present study.⁴¹ However, in the present study, reminiscence intervention did not have a long-term effect on self-esteem, so researchers believe that the long-term effects of reminiscence intervention on self-esteem need further investigation.

Because reminiscence intervention not only serves as collecting and recalling memories or experiences, but also is a structured process that regularly and systematically draws people's attention to their past, it leads to the evaluation and search of problems, provides conditions for them to troubleshoot problems again, and gives meaning and purpose to life.⁴² The reminiscence intervention provides an opportunity for self-expression, so that a person can accept himself/herself in social interactions and, by reaching a deeper and sometimes new understanding, increases his self-esteem. By increasing the individuals' self-esteem during the sessions of reminiscence intervention, they can gradually accept their identity for themselves and achieve a sense of independence and ability to adapt to changes and events in their lives.²⁶ Refahi's

study⁴³ showed that reminiscence interventions could improve self-esteem in the elderly. The study of Wu⁴⁴ also showed that in addition to reducing the amount of depression, reminiscence intervention increased the self-esteem of the elderly people.

The psychological state of the samples when participating in the study may affect the results of the study, which was beyond the control of the researchers. It is also suggested that the study should be done with a larger sample size and a longer period of time.

Conclusion

Reminiscence intervention is considered a low cost, feasible, and independent intervention in nursing. This can be considered a therapeutic intervention by nurses. Hence, the effectiveness of this intervention can be considered by nurses to prevent suicide and suicidal behaviors.

Acknowledgement

The present article was extracted from the research plan approved by Larestan University of Medical Sciences (No: 1396-228). The authors would like to acknowledge all the participants for their contribution and Larestan University of Medical Sciences for financial support of the study.

Conflict to Interest: None declared.

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