

# The Effect of a Positive Psychotherapy-Based Program on the Perceived Social Support of Patients with Depression

## Abstract

**Background:** Positive psychotherapy aims to enhance the quality of life in patients while alleviating the symptoms of their condition. This study sought to evaluate the impact of a positive psychotherapy-based program on the social adjustment of patients with depression. **Materials and Methods:** This randomized clinical trial involved 66 patients diagnosed with depressive disorder who were hospitalized in the psychiatric wards of Khorshid and Farabi hospitals in Isfahan during 2022. Participants were randomly assigned to either the intervention group or the control group, with 33 individuals in each. The intervention group underwent a series of six group-based training sessions, each lasting 90 minutes, conducted twice a week with 8-10 participants per session. The control group received standard routine care. Perceived social support was assessed using a standardized questionnaire at three time points: before the intervention, immediately after the intervention, and 1 month later. Data analysis was conducted using descriptive and inferential statistical methods in SPSS (version 16). **Results:** Significant differences in the mean perceived social support scores were observed between the two groups both immediately after the intervention ( $t = -2.12$ ,  $df = 42.35$ ,  $p = 0.040$ ) and 1 month later ( $t = 3.09$ ,  $df = 44.42$ ,  $p = 0.003$ ). In addition, within the intervention group, the mean perceived social support scores showed significant variation across the three measurement points ( $F = 16.84$ ,  $p < 0.001$ ). **Conclusions:** The positive psychotherapy-based program effectively improved the perceived social support of patients with depression in the intervention group compared to the control group.

**Keywords:** Depression, psychotherapy, social support

## Introduction

Mental disorders are among the most significant health issues worldwide, causing functional impairments and disrupted thinking in those affected.<sup>[1]</sup> Several factors, including genetic, physical, psychological, social, and cultural influences, have been found to contribute to the development of these disorders.<sup>[2]</sup> On a global scale, the prevalence of mental disorders was reported to affect approximately 971 million people in 2017, representing 7% of the total burden of disease worldwide.<sup>[3]</sup> The World Health Organization (WHO) predicts that by 2025, these disorders will account for 18% of the global disease burden.<sup>[4]</sup> In Iran, the prevalence of mental disorders is reported to be 19.94%.<sup>[5]</sup> Depression is one of the most common mental disorders.<sup>[6]</sup> According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), depression

is classified as a mood disorder.<sup>[7]</sup> This disorder is considered as one of the main causes of disability worldwide.<sup>[8]</sup> According to the WHO, the incidence of depression has increased by nearly 20% in the last decade. Currently, according to the most recent statistics, about 4.4% of the world's population suffers from this disorder.<sup>[9]</sup> This disorder accounts for 21% of mental disorders in Iran.<sup>[10]</sup> Based on the fifth edition of DSM (DSM-5), the criteria for diagnosing depression include feelings of sadness, loss of interest or pleasure,<sup>[11]</sup> lack of hope and motivation, decreased self-confidence, pessimism, discomfort,<sup>[12]</sup> lack of concentration and memory loss, and suicidal thoughts.<sup>[10]</sup> According to DSM-5, the diagnose of depression requires at least five symptoms of depression to be present for at least two consecutive weeks in the sufferer.<sup>[12]</sup> Depressive disorder can be regarded as one of the main causes of

Seyed Reza  
Mousavi,  
Sima Ghezalbash,  
Fatemeh  
Ghaedi-Heidari

Department of Psychiatric  
Nursing, School of Nursing and  
Midwifery, Isfahan University of  
Medical Sciences, Isfahan, Iran

### Address for correspondence:

Ms. Sima Ghezalbash,  
Department of Psychiatric  
Nursing, School of Nursing and  
Midwifery, Isfahan University of  
Medical Sciences, Isfahan, Iran.  
E-mail: ghezalbash@nm.mui.  
ac.ir

### Access this article online

Website: <https://journals.iwwo.com/jnmr>

DOI: 10.4103/ijnmr.ijnmr\_288\_23

### Quick Response Code:



This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 License (CC BY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal.

For reprints contact: WKHLRPMedknow\_reprints@wolterskluwer.com

**How to cite this article:** Mousavi SR, Ghezalbash S, Ghaedi-Heidari F. The effect of a positive psychotherapy-based program on the perceived social support of patients with depression. *Iran J Nurs Midwifery Res* 2026;31:206-13.

**Submitted:** 27-Sep-2023. **Revised:** 14-Apr-2024.

**Accepted:** 16-Jul-2025. **Published:** 07-May-2026.

disability impairing the sufferer's social, occupational, and family life.<sup>[10]</sup>

One of the important factors that play a prominent role in preventing or aggravating depression in human life is the level of social support individuals receive.<sup>[13]</sup> Previous studies indicated that depressive disorder was associated by a decrease in the individuals' sense of perceived social support.<sup>[14,15]</sup> Social support comes in two forms, namely, received and perceived social support. Received social support refers to the support actually received by an individual, while perceived social support relates to the individual's assessment of the availability of support during times of need and necessity.<sup>[16]</sup> Perceived social support has a great impact on people's physical and mental states. Studies suggest that enhancing perceived social support can reduce the risk of both physical and mental health problems,<sup>[14,17]</sup> and it also boosts self-esteem, self-efficacy, and interpersonal communication.<sup>[18]</sup> The results of Anderson's study also indicated that the incidence of mortality and level of depression were lower in individuals with an appropriate mental understanding of social support.<sup>[19]</sup> Currently, the primary treatment for mood disorders, such as depression, is pharmacotherapy.<sup>[20]</sup> In the management of psychiatric disorders, nonpharmacological therapies, such as behavioral therapy, interpersonal psychotherapy, and cognitive therapy, are also commonly used.<sup>[21]</sup> To date, several approaches have been implemented to improve social adjustment in depressed patients. One notable treatment strategy is positive psychotherapy, which was introduced by Seligman, Rashid, and Parks.<sup>[22]</sup> Positive psychotherapy is a new method in psychotherapy that focuses on abilities, capacities, and positive emotions.<sup>[23]</sup> In this regard, previous studies have reported the efficacy of positive psychotherapy in reducing depression<sup>[24,25]</sup> and enhancing mental well-being.<sup>[26]</sup>

Previous studies have mostly shown the effectiveness of using positive psychology on physical disorders such as cancer, thalassemia, and MS,<sup>[24,27,28]</sup> but they have paid less attention to mental disorders and psychological factors of patients. The combination of psychological interventions with biological treatments in mental health disorders can more effectively manage the condition, support the patient, and help them accept both the disease and the treatment plan.<sup>[29]</sup> Ignoring the psychological needs of depressed patients can lead to further complications. However, when patients possess skills such as the ability to form healthy social relationships and seek social support from others, their ability to cope with challenges improves, potentially reducing the negative consequences of depression. Supporting patients with psychiatric disorders and meeting their needs is one of the duties of all members of the care team, including psychiatric nurses. Psychiatric nurses play a crucial role in enhancing the health and independent functioning of patients with psychiatric disorders, as well as implementing supportive interventions. Consequently,

the use of psychological interventions to improve the social support of depressed patients presents a cost-effective approach that is essential for clinical nurses. Therefore, the aim of this study was to evaluate the impact of a positive psychotherapy-based program on the perceived social support of patients with depression.

## Materials and Methods

This study was a randomized controlled clinical trial (IRCT20220409054461N1, accessible at <https://fa.irct.ir/trial/62877>) conducted among all patients with depression who were hospitalized at Farabi and Khorshid hospitals in Isfahan from April to July 2022. The sample size was calculated through a repeated formula, fixed at 33 per group for statistical significance. In this study, the numbers of patients in each group were equal ( $\lambda = 1$ ). Total number of measurements before and after the training was 3. The correlation between the data at different times was considered 0.38 ( $\rho_T$ ). In addition, the type I error ( $\alpha$ ) and statistical power values were considered equal to 0.05 and 0.8, respectively. According to similar studies as well as other effective parameters such as time and cost, the standardized expected effect size parameter ( $\Delta_{\text{plan}}$ ) was considered equal to 0.79. As a result, the estimated sample size was 30 per group. Considering the 10% drop, the final number of samples increased to 33 people in each group. The patients were randomly assigned to two groups: intervention and control. The sampling method used in this study was convenience sampling. Patients with odd numbers were placed in the control group, while those with even numbers were assigned to the intervention group. Using a random number table, the required number of even and odd numbers was selected. These numbers were then placed into separate envelopes and stored in a box. Patients who met the inclusion criteria were selected through convenience sampling. For each patient, an envelope was drawn from the box, and based on the number, they were assigned to one of the two groups. The inclusion criteria were as follows: being diagnosed with depression by a psychiatrist and hospitalized in one of the psychiatric wards, being at least 18 years old, being able to read, write, and speak in Persian, having no history of mental retardation or cognitive disorders (e.g., dementia) that could impair learning, being in the nonacute phase of depression, having no psychotic symptoms, having no history of substance abuse, not participating in similar educational programs concurrently or before this study, and not experiencing severe stress (e.g., divorce) in the past six months. The exclusion criteria included patients who were unwilling to continue participating in the study, those who experienced any physical or mental health problems during the study, or those who encountered severe stressful events that prevented them from continuing their participation. In addition, patients who missed more than two training sessions were excluded. The sampling frame was based on

all patients with depression who met the sampling criteria. A total of 74 patients were initially examined, of whom 5 were excluded due to their unwillingness to participate and 3 were excluded due to noncompliance with the inclusion criteria. Therefore, 66 patients were included in the study. The patients were then randomly assigned to two groups: intervention ( $n = 33$ ) and control ( $n = 33$ ), using random number tables [Figure 1].

In this study, two questionnaires were used to collect data: a demographic information form and the Multidimensional Scale of Perceived Social Support. The demographic form included variables such as age, gender, education level, marital status, employment status, family income, duration of depression, and place of residence. The Multidimensional Scale of Perceived Social Support, developed by Zimet *et al.*,<sup>[30]</sup> is a 12-item scale measuring social support from three sources, namely family, society, and friends. Each item is rated on a scale from 1 (strongly disagree) to 7 (strongly agree). A higher score indicates better perceived social support. The minimum and maximum scores for the entire scale are 12 and 84, respectively, while the subscales for family, society, and friends range from 4 to 28. The reliability of the Perceived Social Support Scale was confirmed through internal consistency, with Cronbach's alpha coefficients for the entire scale and the three subscales (family, society, and friends) being 0.91, 0.87, 0.83, and 0.89, respectively. The correlation coefficients for the entire scale and the three subscales—family, societal, and friends' social support—were  $r = 0.86$ ,  $r = 0.78$ ,

$r = 0.69$ , and  $r = 0.75$ , respectively. These coefficients, all significant at  $p < 0.001$ , demonstrated the test-retest reliability of the multidimensional scale of perceived social support. The validity of the multidimensional scale of perceived social support was assessed and established through convergent and discriminant validity tests. These were conducted using the mental health scale, the emotional empathy scale, and a list of positive and negative emotions, administered across diverse samples comprising students and members of the general population. Exploratory and confirmatory factor analyses confirmed the construct validity of the scale, identifying three factors: family support, social support, and friends' support.<sup>[31,32]</sup>

The content for the positive psychotherapy training sessions was developed based on a review of the literature, the positive thinking therapeutic package, and Susan Quilliam's applied positivism approach. This educational content was reviewed and approved by eight psychiatric nursing faculty members from the Isfahan College of Nursing and Midwifery [Table 1]. Patients in the intervention group were further divided into subgroups, each consisting of eight participants. The intervention involved six 90-minute training sessions held twice weekly in a hospital classroom. To minimize cross-group contamination, the control group was sampled first, followed by the intervention group. Each session began with a review of the participants' assignments and exercises from the previous session and concluded with Q and A, group discussions, and a summary of the session content. During group discussions, participants

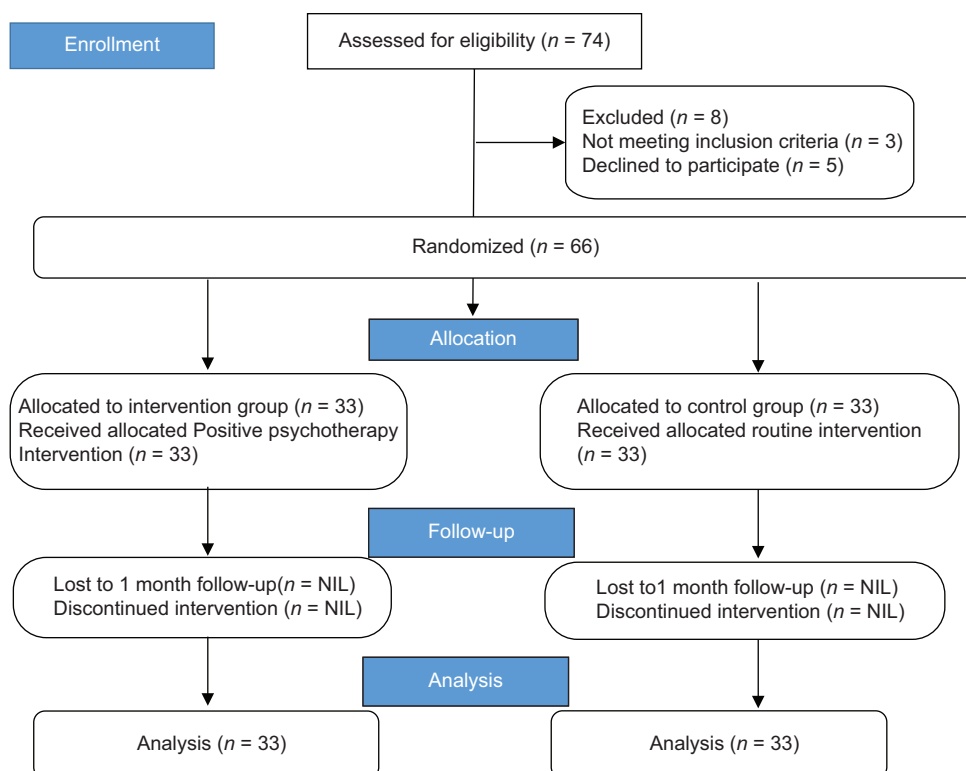


Figure 1: The CONSORT flow diagram of the patients' recruitment

**Table 1: Content of training sessions based on positive psychotherapy<sup>[39]</sup>**

Session	Content	Participants assignment
1	<ul style="list-style-type: none"> <li>Introduction to the positive thinking program.</li> <li>Determine their expectations regarding the topics discussed for the next meeting.</li> </ul>	Think of examples of positive and negative thoughts and talk about them in the next meeting.
2	<ul style="list-style-type: none"> <li>Familiarization with negative thoughts and ways to adjust them.</li> <li>Positive thinking and its effect on people's health and longevity.</li> </ul>	The patients were asked to start their morning with a positive theme, such as paying attention to the sunrise, reviewing sweet memories, and talking with those who find it enjoyable.
3	<ul style="list-style-type: none"> <li>Teaching positivity through challenging negative thoughts.</li> <li>Changing mental images.</li> <li>Using constructive language, and revising beliefs.</li> </ul>	The patients were asked to list five positive factors in their lives.
4	<ul style="list-style-type: none"> <li>Teaching positivity through institutionalizing positive thinking strategies in life.</li> <li>Continuing to practice positive thoughts opportunities for positive thinking through coping, and adapting to problems that we cannot solve.</li> </ul>	Asked the patients to prepare a list of positive words in their life for the next session and repeat them so much that it gradually becomes part of their lexicon.
5	<ul style="list-style-type: none"> <li>Trying to live positively by creating a positive relationship, paying attention to health, the prerequisites for positivity.</li> <li>Establishing good relationships with people around, and loving from the bottom of your heart.</li> </ul>	The patients were asked to make a list of positive points in their life and focus on them.
6	<ul style="list-style-type: none"> <li>Bringing laughter to life</li> <li>Ways to strengthen self-esteem</li> <li>Creating a good exercise habit</li> </ul>	

N.B. Reviewing the previous session's content and assignments and asking patients to express their opinions and feelings about the tasks and assignments of the previous session was done at beginning of each session

shared personal experiences, discussed life events, and proposed solutions for challenges they faced. The training materials were identical across all subgroups and delivered using a combination of lectures, group discussions, and Q and A sessions. Participants were assigned tasks to complete before each session and presented their work at the beginning of the subsequent session.

Baseline demographic data were collected before the intervention. Both the intervention and control groups were assessed for perceived social support at three time points: before the intervention, immediately after the intervention, and 1 month postintervention. Participants in the intervention group completed the postintervention questionnaire at the conclusion of the sixth session. Similarly, control group participants completed the same questionnaires at the same intervals. To evaluate the sustainability of the intervention's effects, all participants were contacted one month after the final session and asked to return to the hospital to complete the questionnaire. The control group did not receive any intervention throughout the study. Data were analyzed using SPSS software (Version 16; SPSS Inc., Chicago, IL, USA). The Shapiro-Wilk test assessed the normality of the data distribution. Statistical analyses included descriptive measures (frequency, percentage, mean, and standard deviation) and inferential tests, such as independent *t*-tests and repeated measures ANOVA with LSD *post hoc* comparisons.

### Ethical considerations

This study was approved by the ethics committee of Isfahan University of Medical Sciences (IR.MUI.NUREMA.REC.1401.001). Written informed consent was obtained from all participants after the study objectives were explained to them, and their anonymity was assured.

### Results

The mean (SD) age of participants in the control group was 40.85 (11.91) years, while the intervention group had a mean age of 41.88 (11.32) years. The mean (SD) duration of the disease was 67.88 (97.25) months in the control group and 63.34 (85.37) months in the intervention group. Additional demographic characteristics of participants are presented in Table 2. No statistically significant differences were observed between the two groups with respect to demographic variables ( $p > 0.05$ ).

Table 3 summarizes the results of the independent *t*-test, which indicated no statistically significant differences between the two groups in the mean scores of perceived social support and its subdimensions before the intervention ( $p > 0.05$ ). However, significant differences emerged between the groups immediately after the intervention ( $t = -2.12$ ,  $df = 42.35$ ,  $p = 0.040$ ) and 1 month postintervention ( $t = 3.09$ ,  $df = 44.42$ ,  $p = 0.003$ ) regarding the mean scores of perceived social support and its dimensions.

**Table 2: Comparison of demographic characteristics among the intervention and control groups**

Characteristics	Intervention group (n=33)	Control group (n=33)	p
Age M (SD)	41.88 (11.32)	40.85 (11.91)	$p^*=0.720$
The duration of the disease M (SD)	63.34 (85.37)	67.88 (97.25)	$p^*=0.841$
Marital status n (%)			
Married	19 (57.60)	15 (45.50)	$p^{**}=0.615$
Unmarried	11 (33.30)	14 (42.40)	
Divorced	3 (9.10)	4 (12.10)	
The widow	0 (0.00)	0 (0.00)	
Job status n (%)			
Employed	7 (21.20)	8 (24.20)	$p^{**}=0.735$
Unemployed	11 (33.30)	13 (39.40)	
Retired	3 (9.10)	1 (3.10)	
housewife	12 (36.40)	11 (33.30)	
Education status n (%)			
High school	17 (51.50)	16 (48.50)	$p^{**}=0.458$
Diploma	6 (18.20)	10 (30.30)	
College education	10 (30.30)	7 (21.20)	
The amount of family income n (%)			
Less than living expenses	16 (48.50)	17 (51.50)	$p^{**}=0.206$
Equal to living expenses	14 (42.40)	16 (48.50)	
Above the living expenses	3 (9.10)	0 (0.00)	
Gender n (%)			
Female	16 (48.50)	16 (48.50)	$p^{***}=0.597$
Male	17 (51.50)	17 (51.50)	
Type of residence n (%)			
Urban	26 (78.80)	28 (84.90)	$p^{***}=0.270$
Rural	7 (21.20)	5 (15.10)	

\*Independent *t*. \*\*Chi-squared. \*\*\*Fisher exact

**Table 3: Comparison of the mean total score of perceived social support and its dimensions between the intervention and control groups before, immediately and 1 month after the intervention**

Measurement	Time	Intervention group (n=33) Mean (SD)	Control group (n=33) Mean (SD)	p
Family support	Before the intervention	21.97 (3.73)	22.34 (4.98)	$t=0.34, p=0.738$
	Immediately after the intervention	23.52 (1.68)	21.94 (4.04)	$t=2.07, df=42.74, p=0.045$
	One month after the intervention	24.60 (1.54)	22.36 (3.61)	$t=-3.29, df=43.30, p=0.002$
Support from friends	Before the intervention	11.94 (2.88)	12.09 (5.83)	$t=0.13, p=0.894$
	Immediately after the intervention	12.97 (2.33)	11.01 (5.00)	$t=0.42, df=45.25, p=0.046$
	One month after the intervention	14.45 (3.22)	11.79 (4.97)	$t=-2.60, df=54.78, p=0.012$
Support of special people	Before the intervention	19.55 (5.07)	18.25 (5.49)	$t=-1.00, p=0.320$
	Immediately after the intervention	20.91 (3.40)	18.43 (5.56)	$t=-2.19, df=52.96, p=0.033$
	One month after the intervention	21.33 (3.11)	18.12 (4.63)	$t=-3.31, df=56.04, p=0.002$
Total score	Before the intervention	54.82 (9.72)	55.19 (13.99)	$t=0.12, P=0.903$
	Immediately after the intervention	60.97 (5.40)	55.70 (13.24)	$t=-2.12, df=42.35, p=0.040$
	One month after the intervention	63.82 (5.59)	56.49 (12.44)	$t=-3.09, df=44.42, p=0.003$

As presented in Table 4, the repeated measures ANOVA results demonstrated significant differences in the mean scores of perceived social support across the three time points (preintervention, immediately postintervention, and 1 month postintervention) within the intervention group ( $F = 16.84, p < 0.001$ ). Conversely, no significant differences were observed in the control group over time ( $p > 0.05$ ).

*Post hoc* analyses using the LSD test revealed that in the intervention group, the mean scores of perceived social support were significantly higher both immediately after the intervention and one month later compared to preintervention scores ( $p < 0.05$ ). Furthermore, a significant difference was noted between the scores immediately postintervention and those one month later ( $p < 0.05$ ), suggesting sustained improvements in perceived social support over time.

**Table 4: Comparison of the mean total score of perceived social support and its dimensions in each of the two intervention and control groups between three times (before, immediately and 1 month after the intervention)**

Group	Dimensions of perceived social support	Time			p
		Before the intervention Mean (SD)	Immediately after the intervention Mean (SD)	One month after the intervention Mean (SD)	
Intervention group (n=33)	Family support	21.97 (3.73)	23.52 (1.68)	24.60 (1.54)	p=0.001, F=11.70
	Support from friends	11.94 (2.88)	12.97 (2.33)	14.45 (3.22)	p<0.001, F=16.68
	Support of special people	19.55 (5.07)	20.91 (3.40)	21.33 (3.11)	p<0.001, F=15.93
	Total score	54.82 (9.72)	60.97 (5.40)	63.82 (5.59)	p<0.001, F=16.84
Control group (n=33)	Family support	22.34 (4.98)	21.94 (4.04)	22.36 (3.61)	p=0.473, F=0.72
	Support from friends	12.09 (5.83)	11.01 (5.00)	11.79 (4.97)	p=0.305, F=1.19
	Support of special people	18.25 (5.49)	18.43 (5.56)	18.12 (4.63)	p=0.570, F=0.54
	Total score	55.19 (13.99)	55.70 (13.24)	56.49 (12.44)	p=0.609, F=0.40

## Discussion

The aim of this study was to investigate the effect of a positive psychotherapy-based program on the perceived social support in patients with depression. The results of this study showed that this intervention improved perceived social support in patients with depressive disorder and this effect remained stable in the follow-up phase. This finding was in line with the results of Torkashvand *et al.*'s<sup>[33]</sup> study, which investigated the effectiveness of positive psychology training on perceived support and self-criticism in female household heads. They indicated that the mean score of perceived social support before the intervention did not differ between the intervention and control groups. However, the mean score of perceived social support increased significantly after the intervention in the experimental group compared to the control group.

This finding is also consistent with the study by Hadian *et al.*,<sup>[34]</sup> which investigated the effect of teaching positivity skills on the life satisfaction of families with members experiencing mental disorders. Their results indicated no significant differences in life satisfaction scores between the intervention and control groups before the intervention. However, the positivity-focused intervention led to a marked increase in life satisfaction immediately after the program and one month later in the intervention group compared to the control group. This finding is also consistent with the results reported by Amini Moridani.<sup>[35]</sup>

The intervention in this study was conducted in groups and was grounded in positive psychotherapy. It included components such as teaching positive living skills, fostering positive relationships, and enhancing self-esteem. These sessions provided numerous opportunities for participants in the intervention group to practice empathetic communication and build trust with one another. Patients were guided to identify their sources of support, accept and use them, establish effective communication with those around them, and approach others for help when facing challenges—all while maintaining a positive perspective toward others.

The observed improvement in perceived social support among the participants can be attributed to the collaborative and interactive nature of the intervention. By being part of a group with individuals who shared similar experiences, participants developed empathy for one another. This empathy, along with the supportive role of the researcher as an accessible source of encouragement, played a significant role in fostering these positive outcomes.

The mean score of perceived social support and its dimensions showed significant differences across the three time points in the intervention group, whereas no significant changes were observed in the control group. This finding aligns with the results of Karahan *et al.*,<sup>[36]</sup> who evaluated the effectiveness of an educational intervention on perceived social support among caregivers of stroke patients. Their study reported significant differences in perceived social support scores at three time points—before, immediately after, and 2 months postintervention—in the intervention group, with no such changes observed in the control group. Similarly, this result was consistent with the findings of Milosiva *et al.*<sup>[37]</sup>

To explain this outcome, it is essential to revisit the content of the intervention in this study. The sessions included discussions on positive psychotherapy concepts and fostering positive thinking. Topics such as avoiding negative thoughts, interpretations, and mental imagery about life and others were emphasized. Patients were encouraged to establish positive relationships free from negative judgments and to interact more effectively with others, including fellow patients, treatment staff, and family members. These elements likely contributed to participants' improved perception of social support.

Furthermore, the group-based format of the intervention fostered an environment where patients felt more comfortable expressing their emotions. Sharing similar experiences—such as hospitalization in a psychiatric facility and managing comparable challenges—allowed participants to empathize with one another, creating a supportive atmosphere that enhanced their perception of available social support resources. In addition, the

researchers actively participated in the sessions, guiding patients to recognize their sources of support and practice seeking assistance when needed.

However, this finding contrasts with the results of Haji Sadeghian *et al.*,<sup>[38]</sup> who evaluated the effects of a psychosocial support program on perceived stress, social support, and quality of life among family caregivers of individuals with mental disorders. Their study found that while perceived social support scores significantly increased immediately and 1 month after the intervention, no significant difference was observed between scores at the 1-month mark and immediately after the intervention. This discrepancy may be attributed to differences in the study populations. Family caregivers, who often juggle multiple roles and responsibilities, may have had less time to sustain the practices taught during the intervention, reducing its long-term impact.

One limitation of this study was that the sample consisted exclusively of patients with depression. As a result, the findings may not be generalizable to individuals with other psychiatric disorders. Another limitation was the absence of long-term follow-up to assess the sustained effects of the psychotherapy program on perceived social support. Future studies should explore the effectiveness of similar interventions in patients with other psychiatric disorders and incorporate extended follow-up periods to evaluate the durability of the intervention's impact.

## Conclusion

The findings of this study demonstrated that a positive psychotherapy intervention significantly improved the perceived social support of patients with depression. This suggests that incorporating this therapeutic approach, alongside other treatment modalities, could play a valuable role in enhancing patient well-being and reducing the effects of psychiatric disorders. Future research is encouraged to investigate the impact of positive psychotherapy on perceived social support in patients with substance use disorders and those with a history of suicide attempts.

## Acknowledgments

The authors of this manuscript are thankful of all the patients who participated in this study and the hospital staff for their invaluable cooperation and support.

## Financial support and sponsorship

Isfahan University of Medical Sciences

## Conflicts of interest

Nothing to declare.

## References

1. Rehm J, Shield KD. Global burden of disease and the impact of mental and addictive disorders. *Curr Psychiatry reports*. 2019;21:10.
2. Ghazavi Z, Dehkhoda F, Yazdani M. The effect of group psycho-educational program on quality of life in families of patients with mood disorders. *Iran J Nurs Midwifery Res* 2014;19:50-5.
3. James SL, Abate D, Abate KH, Abay SM, Abbafati C, Abbasi N, *et al.* Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990–2017: A systematic analysis for the Global Burden of Disease Study 2017. *Lancet* 2018;392:1789-858.
4. Saffari M, Sanaeinasab H, Rashidi-jahan H, Pakpour AH. Common mental health disorders in military forces: A systematic. *J Mil Health Promot* 2021;1:172-81.
5. Zeighami R, Zamir SM, Javadi A, Mahmoudi T. Evaluating the medication adherence from the viewpoints of patients with mental disorders and their families. *J Inflamm Dis* 2020;24:e156200.
6. Gutiérrez-Rojas L, Porras-Segovia A, Dunne H, Andrade-González N, Cervilla JA. Prevalence and correlates of major depressive disorder: A systematic review. *Braz J Psychiatry* 2020;42:657-72.
7. Nakhaee Moghaddam Z, Sajadi SA, Chamanzari H, Sepehrikia M, Vaghei N, Salarhaji A. The effect of occupational therapy on self-esteem of housewives with mood disorders after discharge from the hospital: A clinical trial study. *Avicenna J Nurs Midwifery Care* 2018;26:49-56.
8. Mitchell BL, Thorp JG, Wu Y, Campos AI, Nyholt DR, Gordon SD, *et al.* Polygenic risk scores derived from varying definitions of depression and risk of depression. *JAMA Psychiatry* 2021;78:1152-60.
9. Mora C, Zonca V, Riva MA, Cattaneo A. Blood biomarkers and treatment response in major depression. *Expert Rev Mol Diagn* 2018;18:513-29.
10. Dadfarnia S, Hadianfard H, Rahimi C, Aflakseir A. Predicting depression based on cognitive emotion regulation strategies. *J Toloo-e-behdasht* 2020;19:32-47.
11. Haghighat N, Torkzaban A, Sharifi N. The association between food craving and depression in a sample of female university students: A cross-sectional study. *Feyz Med Sci J* 2021;25:791-800.
12. Manshaee GR, Hoseini L. The effectiveness of child-centered mindfulness training on social adjustment and depression symptoms in depressed children. *Psychol Exceptional Individuals* 2018;8:179-200.
13. Moghadam K, Mansour-ghanaei R, Esmailpour Bandboni M, Atrkar-Roshan Z. The Relationship Between Social Supports With Depression Among Elderly in the Eastern Cities of Guilan. *J Toloo-e-behdasht* 2020;19:85-95.
14. Ioannou M, Kassianos AP, Symeou M. Coping with depressive symptoms in young adults: Perceived social support protects against depressive symptoms only under moderate levels of stress. *Front Psychol* 2019;9:2780.
15. Abolghasem Firoozkkohe F, Sharifi M, PourShahriar H, Shokri O. The mediating role of coping strategies in the relationship between perceived social support and postpartum depression. *Women Stud Sociol Psychol* 2019;17:57-86.
16. Razmjooei P, Zarei R. The mediating role of psychological empowerment in the relationship of perceived organizational support and perceived social support with the work quality of life. *Psychol Models Methods* 2018;9:71-86.
17. Mohammadi M, Jaffari R. Mediating role of Alexithymia between perceived social support and somatic complaints among depressed women. *Q J Woman Soc* 2021;11:199-216.
18. Montazer Someh Saraie F, Asadi Majreh S. Comparison of

- perceived social support, marital satisfaction and empathy in women with postpartum depression and normal. *J Sabzevar Univ Med Sci* 2019;26:421-30.
19. Anderson DR, Roubinov DS, Turner AP, Williams RM, Norvell DC, Czerniecki JM. Perceived social support moderates the relationship between activities of daily living and depression after lower limb loss. *Rehabil Psychol* 2017;62:214.
  20. Seeberg I, Kjaerstad HL, Miskowiak KW. Neural and behavioral predictors of treatment efficacy on mood symptoms and cognition in mood disorders: A systematic review. *Front Psychiatry* 2018;9:337.
  21. Shakeri M, Parhoon H, Mohammadkhani S, Hasani J, Parhoon K. Effectiveness of meta-cognitive therapy on depressive symptoms and quality of life of patients with major depression disorder. *J North Khorasan Univ Med Sci* 2015;7:253-65.
  22. Vojdany S, Golzari M, Borjali A. The Effectiveness of positive psychotherapy on depression and marital satisfaction of depressed women. *J Appl Psychol* 2014;8:30.
  23. Sorbi MH, Sadeghi K, Rahmanian M, Ahmadi SM, Paydarfar HR. Positive psychotherapy effect on life expectancy and general health of type 2 diabetic patients: A randomized controlled trial. *Iran J Diabetes Obes* 2018;10:31-6.
  24. Pahlavan A, Ahi G. Effectiveness of positive psychology interventions on death anxiety and sleep quality of female patients with multiple sclerosis (MS). *Res Clin Psychol Couns* 2020;9:28-42.
  25. Abiri Bonab F, Alivandi Vafa M, Khademi A, Javanmard G. The comparison of the effectiveness of positive group and individual intervention on the persistent depressive disorder in foster care/irresponsible parenting adolescent girls. *Women Fam Stud* 2022;15:135-51.
  26. Güleç Keskin S, Gülirmak K. The effect of positive psychotherapy education on subjective wellbeing among nursing students. *Perspect Psychiatr Care* 2022;58:861-70.
  27. Saeedi B, Khoshnood Z, Dehghan M, Abazari F, Saeedi A. The effect of positive psychotherapy on the meaning of life in patients with cancer: A randomized clinical trial. *Indian J Palliat Care* 2019;25:210-7.
  28. Atia MM, Eita LH, Alhalawany RM, Ghoneim AA, Badawy SA. The effectiveness of positive psychotherapy on the self-efficacy and psychological wellbeing of children with thalassemia. *Egypt J Health Care* 2021;12:797-812.
  29. Videbeck SL. *Psychiatric-Mental Health Nursing*. Wolters Kluwer Health-Ipsuk; 2022.
  30. Zimet GD, Dahlem NW, Zimet SG, Farley GK. The multidimensional scale of perceived social support. *J Pers Assess* 1988;52:30-41.
  31. Saharkhizan D, Azadi M. Association of perceived stress, social support and self-esteem with disordered eating due to Alexithymia. *Shenakht J Psychol Psychiatry* 2023;9:91-104.
  32. Besharat MA. Multidimensional scale of perceived social support: questionnaire, instruction and scoring. *Dev Psychol* 2019;15:447-9.
  33. Torkashvand F, Zahedi FS, Izadi M. The effectiveness of positive psychology training on perceived support and self-criticism in women heads of households. *J Psychol Res* 2023;14:31-43.
  34. Hadian M, Fereidooni-Moghadam M, Maghsoodi J. The effect of teaching positivity skills on life satisfaction of families with patients with mental disorders. *Educ Ethics Nurs* 2023;12:31-9.
  35. Amini Moridani M, Tol A, Sadeghi R, Mohebbi B, Azam K. Assessing the effect of family-based intervention education program on perceived social support among older adults with type 2 diabetes: Application of social cognitive theory. *J Nurs Educ* 2015;4:30-40.
  36. Karahan AY, Kucuksen S, Yilmaz H, Salli A, Gungor T, Sahin M. Effects of rehabilitation services on anxiety, depression, care-giving burden and perceived social support of stroke caregivers. *Acta Medica* 2015;57:68-72.
  37. Miloseva L, Vukosavljevic-Gvozden T, Richter K, Milosev V, Niklewski G. Perceived social support as a moderator between negative life events and depression in adolescence: Implications for prediction and targeted prevention. *EPMA J* 2017;8:237-45.
  38. Hajisadeghian R, Ghezlbash S, Mehrabi T. The effects of a psychosocial support program on perceived stress of family caregivers of patients with mental disorders. *Iran J Nurs Midwifery Res* 2021;26:47-53.
  39. Sadeghi M, Abbasi M, Beyranvand Z. The effectiveness of skill-training through Quilliam optimism package on academic optimism and academic engagement of female students. *J School Psychol* 2020;8:156-75.