Original Article

The Effect of Social Support Skill-training Group Intervention on Perceived Social Support in Veterans with Posttraumatic Stress Disorder

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Abstract

Background: Traumatic events related to war have long effects on psychiatric psychopathologies. From these disturbing conditions, posttraumatic stress disorder (PTSD) is considered to be the most characteristic feature of psychiatric traumatic experience. The current study was designed to assess the effect of two social support skill-training group interventions on perceived social support in veterans with PTSD. **Materials and Methods:** The study was conducted with the clinical trial method. According to the inclusion criteria, 60 of 367 veterans with PTSD were selected and randomly allocated into two intervention groups and a control group. The two training programs on social support skills consisting of three sessions, each being 1.5–2 h, were held weekly for 3 weeks. The Multidimensional Scale of Perceived Social Support was filled by samples before and 6 weeks after intervention. The data were analyzed by descriptive and analytical statistics using PASW Statistics 18. **Results:** The ANOVA results showed that after intervention, there were significant differences in perceived social support between intervention groups and control group ($F = 1.06$, $p = 0.001$), but there was no significant difference between intervention groups by *t*-test ($t = 28.05$, $p < 0.10$). The paired *t*-test showed a significant difference in all subscale scores of perceived social support between two intervention groups before and after intervention ($p < 0.05$). **Conclusions:** The results of the current study agreed with the positive effects of social support skill training on perceived social support in veterans with PTSD. It is suggested that these training courses should be included in the community re-entry programs of veterans with PTSD.

Keywords: *Iran, posttraumatic stress disorder, social support, stress disorder, veterans*

Introduction

Traumatic events related to war have long effects on psychiatric psychopathologies. From these disturbing conditions, posttraumatic stress disorder (PTSD) is considered to be the most characteristic feature of psychiatric traumatic experience.[1] The Diagnostic and Statistical Manual of Mental Disorders version V (DSM-V) demonstrates that patients diagnosed with PTSD exhibit "clinically significant distress or impairment in social, occupational, or other important areas of functioning".[2] Social functioning impairment is a very important and common clinical indicator of PTSD in veterans.[3] Studies have shown that PTSD symptoms such as hypersensitivity, withdrawal, jealousy, verbal abuse, and bizarre behavior can problematize social relationships of veterans. Relationship problems can have effects on PTSD complexities and damaged social support networks of these patients.[4,5] The link between social support and PTSD has been well explained by Clapp and Beck in their article.[6]

Social support arises from personal relationships.[7] Laffaye *et al*. reported that the perceived social support can predict severity of PTSD symptoms.[5] Laffaye argued that interpersonal stressor is an important factor that damages the support received from relationships in veterans.[5] From the relational point of view, emotional management and communicative skills are important mediators to develop a social network desired by veterans. Doss *et al*. believed that relationship satisfaction in veterans can be predicted by communication and psychological distress. He stated that without these skills, other therapies, such as couple therapy, cannot be effective.[8]

Hogan systematically reviewed 100 studies that had evaluated the efficacy of social support interventions.[9] He stated that one

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category of these interventions was social support skill training, where there was a leader in the professional group and had a defined curriculum. He argued that although the results of this method were controversial, but, overall, the results of social support interventions showed that they were superior to no-treatment or standard care controls (39 of 100 reviewed articles).[9] Tedeschi recommended the design of a training program for facilitating posttraumatic growth in combat veterans that enabled them to develop ways of thinking and moved them toward a better level of functioning.[10]

Karlin stated that evidence-based psychological treatments for PTSD must be disseminated in the veterans' health administration. He believed that a workshop training, which could involve an ongoing consultation, skill mastery, and implementation, can be very useful for promoting discussion and patient motivation. He recommended that clinicians should engage in contextual exercises in veterans.[11]

Iranian studies that have assessed the social support in veterans have contradictory results. Few studies focused on social skills, especially on communication skills of the veterans. The studies that assessed the emotional-oriented interventions demonstrated the positive effects of the emotional management on mental well-being of the veterans.[12,13] With regard to the contextual-based nature of perceived social support, the current study was designed to assess the effect of a social support skill-training group intervention on perceived social support in veterans with PTSD.

Materials and Methods

The study is a clinical trial with IRCT2013112415512N1 code. It was conducted with quasi-experimental method and random allocation of samples among two experimental groups and a control group. After the approval of the study and in the first phase according to Cochrane formula and standard deviation of perceived social support scores in the related latest studies among Iranian veterans (standard deviation = 1.02),[14] with respect to 95% confidence interval, the primary sample size was estimated as 361. Samples were selected from a group of referees to a psychiatric ward of Baqiyatallah hospital in Tehran, Iran, in 2014. All the referred samples were male. According to study's inclusion and exclusion criteria by using convenient sampling, the study samples were selected. The inclusion criteria included a documented diagnosis of chronic PTSD, a maximum age of 60 years, non-psychotic comorbid, personality and substance abuse disorders, and different educational experience. Samples were excluded if they were reluctant or did not actively participate in learning activities. Finally, 367 veterans with PTSD were considered as study samples, and they filled out Social Function Scale (SFS). From these samples, 60 who had undesirable social function according to social function scale were selected and randomly allocated to case group 1, case group 2, and control group [Figure 1]. Sampling time lasted for 3 months—from February–April.

The training program focused on communication skills and its promoting ways in group 1 and on emotional management skills in group 2. Weekly, three sessions of 1.5–2 h each were held for 3 weeks. These two modules were held based on life skills workbooks designed at welfare and rehabilitation organization [Table 1]. The programs were conducted by researchers with the didactic method. The sessions were guided to make an interactive and narrative atmosphere among group members. After these courses, cases were requested to record training activities and their results on daily report sheets for 6 weeks, and they were followed by telephonic discussion for 3 weeks after intervention.

The Multidimensional Scale of Perceived Social Support (MSPSS) was filled by samples before and 6 weeks after intervention. The MSPSS assesses perceptions of social support adequacy from family, friends, and significant others.[15] It has 12 items with a 5-point Likert-type response format (1 = very strongly agree; 7 = very strongly disagree). MSPSS consists of three 4-item subscales: Family, Friends, and Significant others. Most investigations demonstrated good-to-excellent internal consistency and test–retest reliability. Wongpakaran stated that the Cronbach's alpha range is 0.92–0.94 in clinical samples.[16] Also, Iranian studies have used this scale. Chenari *et al*. revealed that Cronbach's alpha of MSPSS in Iranian veterans was 0.89.[14]

Data were analyzed with descriptive and analytical statistics by PASW Statistics 18. The normality of variables was tested by Kolmogorov–Smirnov test. Chi-Square test, *t*-test, and one-way ANOVA were used to compare demographics and perceived social support scores between three groups, before and after intervention. The significant level was considered to be less than 0.05 at all the tests.

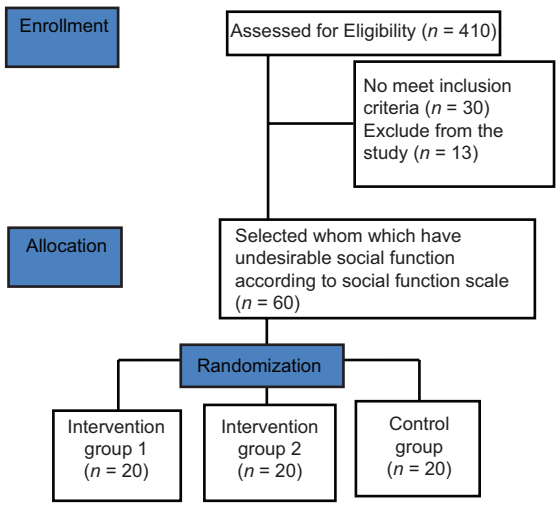

Figure 1: Sampling framework of the study

Ethical considerations

The study was approved with the No. IR.BMSU.REC.1395.375 on March 9, 2016, by the ethical committee of the research deputy of the Baqiyatallah University of Medical Sciences. The participants were informed about the goal of the study, their anonymity, and their authority to continue participation. Also, information was provided to them if they requested and they filled the consent form.

Results

The study samples' mean (standard deviation) age was 56 (3.50) years. Most of them in three groups were married, and based on Chi-square test, there were no significant differences among groups in educational status ($\chi^2 = 0.68$, $p = 0.68$), disability percent ($\chi^2 = 1.30$, $p = 0.99$), perceived social class status ($\chi^2 = 1.68$, df = 4, $p > 0.05$), and duration of treatment ($\chi^2 = 13.41$, $p = 0.33$) and PTSD diagnosis time span ($\chi^2 = 4.15$, $p = 0.99$).

The one-way ANOVA results showed that there was no significant difference in perceived social support scores among three groups before intervention (F = 0.36, $p = 0.10$). Also, there was a significant difference among intervention groups and control group after intervention (F = 1.06, $p = 0.03$), and there was no significant difference between intervention groups after intervention ($t = 28.05$, $p = 0.52$) [Table 2]. The paired *t*-test showed a significant difference in all subscales scores of perceived social support between before and after intervention in each intervention group ($p < 0.05$) [Table 3]. Also, the paired *t*-test did not show any significant difference before and after intervention in the control group ($t = 0.69$, $p = 0.14$). In the control group, the scores of perceived social support in three subscales decreased 6 weeks after intervention, but it was significant only at subscale of others ($t = 0.05$, $p = 0.04$).

Discussion

Results showed that after social support skill-training group intervention, overall perceived social support scores increased in the intervention groups and in each of the subscales, while they decreased in the control group.

Karlin *et al*. stated that the most interventional implementation used for war veterans is cognitive therapies. They believed that the value and importance of ongoing consulting and skill mastery is a good reason for it.[11] Some researchers stated that the veterans with PTSD experienced downtrend adaptive coping strategies; therefore, the implementation of cognitive–behavioral coping strategies can help them to bolster perceived social support.[17,18]

From these interventions, there has been an increasing focus on intimate relationship problems in veterans with PTSD.[4] Relationship difficulties and complexities in veterans with PTSD are major themes of many studies in this scope. Therefore, many researchers focused on evidenced-based interventions that could improve communication skills to reduce the vicious cycle of aggression and the severity of PTSD symptoms.[11,19] Regarding support resources, Jlusic *et al*. stated that perceived family and friends support is higher in veterans without PTSD than in veterans with PTSD, and the support received from friends and fellows decreased over time in the PTSD-diagnosed group.[20] Harris *et al*. stated that the group intervention in veterans with PTSD can be effective because it makes a connection among them and facilitates their communication. Therefore, it can provide a support group.[21]

Table 1: Schedule of two interventional programs

Communicative skill training program	
Session 1	Topic: Active listening; Activity Handouts: Blocks to active listening skills; Journaling Activities: Listening strengths and weaknesses; Educational Handouts: Stages of listening
Session 2	Topic: Nonverbal communication; Activity Handouts: Nonverbal tips for enhanced communication; Journaling Activities: Nonverbal communication pitfalls; Educational Handouts: Improving nonvernal communication
Session 3	Topic: Communication skills; Activity Handouts: Messages, emotions, assertiveness; Journaling Activities: Clear messages, Being more assertive; Educational Handouts: Communication pitfalls
Emotional management skill training program	
Session 1	Topic: Self-awareness; Activity Handouts: Dialogue journal, Individualized reflection; Journaling Activities: Free writing; Educational Handouts: Self-awareness assessment
Session 2	Topic: Self-management activities; Activity Handouts: Recognizing emotions, Self-management based on dialectical behavioral therapy; Journaling Activities: Observing and describing thoughts; Educational Handouts: mindfulness
Session 3	Topic: Social awareness and relationship skills; Activity Handouts: Social awareness; Journaling Activities: Interpersonal conflict reflection; Educational Handouts: Empathy and healthy relationships

Table 2: Comparison of mean scores of perceived social support among three groups before and 6 weeks after intervention

Time/Group	Perceived social support mean (SD)	Cross groups	Test	
			F	*p*
Before				
Control	30.80 (4.87)	Control/Int1	31.50	0.09
Intervention 1	27.40 (5.56)	Int1/Int2	29.35	0.10
Intervention 2	28.90 (4.19)	Int2/Control	27.42	0.09
After				
Control	30.20 (4.49)	Control/Int1	32.03	0.04
Intervention 1	32.90 (4.01)	Int1/Int2	28.05	0.52
Intervention 2	33.75 (4.03)	Int2/Control	30.65	0.01

Table 3: Comparison of perceived social support frequencies in subscales between intervention groups before and 6 weeks after intervention

Subscale/ time	Mean (SD)		Test	
	Intervention 1	Intervention 2	Independent *t*-test	*p*
Significant others				
Before	8.15 (2.81)	8.50 (2.35)	0.54	0.89
After	8.95 (2.23)	9.55 (2.03)	0.04	0.03
Family				
Before	6.86 (1.95)	7.55 (1.82)	0.02	0.08
After	9.15 (1.3)	9.95 (1.43)	0.21	0.02
Friends				
Before	12.4 (2.13)	12.58 (2.32)	0.52	0.90
After	14.80 (1.39)	14.25 (1.94)	0.81	0.03
Overall				
Before	27.40 (5.56)	28.90 (4.19)	0.52	0.82
After	32.90 (4.01)	33.75 (4.03)	0.034	0.04

In the emotional processing theory for managing PTSD, emotional responses are significant. Some believed that negative emotional responses, such as hostility, aggression, and fear, can aggravate situation complexity in veterans with PTSD. King *et al*. stated that these emotional problems had adverse effects on the quality and quantity of accessible social support resources.[22] Dekle and Monson stated that emotional numbing, which reflects on the ability of those with PTSD to experience and express a range of feelings, can affect the attachment with family and friends.[3] Moreover, neuroscience researchers stated that negative emotions such as anger and guilt increase the averseness of flashbacks and prompt ruminative responses in veterans with PTSD.[23] It is believed that emotional restructuring is vital. Sloan *et al*. stated that the emotional representation of PTSD in interventional implementations can effectively reduce depression symptom severity in patients.[24] Recent research explains that there is a relational regulation mechanism between mental health and perceived social support.[25,26] The small sample size is the most serious limitation of the study. Also, considering a center to select the study's samples limited the generalization of the results of the current study.

Conclusion

The results of the current study agreed with the positive effects of the social support skill training focused on communication and emotional skills on perceived social support in veterans with PTSD. It is recommended that the effects of the social support skill training on long-lasting variables such as social function or social relationships of the veterans with PTSD should be assessed.

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Conflicts of interest

Nothing to declare.

References

1. Ginzburg K, Ein-Dor T, Solomon Z. Comorbidity of posttraumatic stress disorder, anxiety and depression: A 20-year longitudinal study of war veterans. J Affect Disord 2010;123:249-57.
2. Bryant RA, Friedman MJ, Spiegel D, Ursano R, Strain J. A review of acute stress disorder in DSM-5. Depress Anxiety 2011;28:802-17.
3. Dekel R, Monson CM. Military-related post-traumatic stress disorder and family relations: Current knowledge and future directions. Aggress Violent Behav 2010;15:303-9.
4. Taft CT, Watkins LE, Stafford J, Street AE, Monson CM. Posttraumatic stress disorder and intimate relationship problems: A meta-analysis. J Consult Clin Psychol 2011;79:22.
5. Laffaye C, Cavella S, Drescher K, Rosen C. Relationships among PTSD symptoms, social support, and support source in veterans with chronic PTSD. J Trauma Stress 2008;21:394-401.
6. Clapp JD, Beck JG. Understanding the relationship between PTSD and social support: The role of negative network orientation. Behav Res Ther 2009;47:237-44.
7. Gottlieb BH, Bergen AE. Social support concepts and measures. J Psychosom Res 2010;69:511-20.
8. Doss BD, Mitchell A, Georgia EJ, Biesen JN, Rowe LS. Improvement in closeness, communication, and psychological distress mediate effects of couple therapy for veterans. J Consult Clin Psychol 2015;83:405.
9. Hogan BE, Linden W, Najarian B. Social support interventions: Do they work? Clin Psychol Rev 2002;22:381-440.
10. Tedeschi RG, McNally RJ. Can we facilitate posttraumatic growth in combat veterans? Am Psychol 2011;66:19.
11. Karlin BE, Ruzek JI, Chard KM, Eftekhari A, Monson CM, Hembree EA, *et al*. Dissemination of evidence-based psychological treatments for posttraumatic stress disorder in the Veterans Health Administration. J Trauma Stress 2010;23:663-73.
12. Mikaeili N, Molavi P, Einy S, Tagavy R. Effectiveness of Emotion Focused Therapy on Emotional Dysregulation, Hopelessness and Suicidal Ideation in Post-Traumatic Stress Disorder Veterans. Iran J War Public Health 2017;9:111-7.
13. Mallahi M, Niknejadi F. Effectiveness of Positive Thinking Skills on Improving the Situation of Fathering Behavior, Conversation and Anger in Relation of Daughters and their Veteran Fathers. Iran J War Pub Health 2017;9:1-7.
14. Chenari R, Nourozi A, Tahmasbi R. The relationship between perceived social support and health promoting behaviours in chemical veterans at Ilam during 2013-2014. Iran J War Pub Health 2014;6:1-10.
15. Canty-Mitchell J, Zimet GD. Psychometric properties of the

Multidimensional Scale of Perceived Social Support in urban adolescents. Am J Community Psychol 2000;28:391-400.

16. Wongpakaran T, Wongpakaran N, Ruktrakul R. Reliability and validity of the multidimensional scale of perceived social support (MSPSS): Thai version. Clin Pract Epidemiol Ment Health 2011;26:7.
17. Pietrzak RH, Russo AR, Ling Q, Southwick SM. Suicidal ideation in treatment-seeking Veterans of Operations Enduring Freedom and Iraqi Freedom: The role of coping strategies, resilience, and social support. Psychiatry Res 2011;45:720-6.
18. Tsai J, Harpaz-Rotem I, Pietrzak RH, Southwick SM. The role of coping, resilience, and social support in mediating the relation between PTSD and social functioning in veterans returning from Iraq and Afghanistan. Psychiatry Res 2012;75:135-49.
19. Dalgleish T. Cognitive approaches to posttraumatic stress disorder: The evolution of multirepresentational theorizing. Psychol Bull 2004;130:228.
20. Jakupcak M, Vannoy S, Imel Z, Cook JW, Fontana A, Rosenheck R, *et al*. Does PTSD moderate the relationship between social support and suicide risk in Iraq and Afghanistan War Veterans seeking mental health treatment? Depress Anxiety 2010;27:1001-5.
21. Harris JI, Erbes CR, Engdahl BE, Thuras P, Murray-Swank N, Grace D, *et al*. The effectiveness of a trauma focused spiritually integrated intervention for veterans exposed to trauma. J Clin Psychol 2011;67:425-38.
22. King DW, Taft C, King LA, Hammond C, Stone ER. Directionality of the association between social support and posttraumatic stress disorder: A longitudinal investigation. J Appl Soc Psychol 2006;36:2980-92.
23. Brewin CR. A cognitive neuroscience account of posttraumatic stress disorder and its treatment. Behav Res Ther 2001;39:373-93.
24. Sloan DM, Marx BP, Greenberg EM. A test of written emotional disclosure as an intervention for posttraumatic stress disorder. Behav Res Ther 2011;49:299-304.
25. Lakey B, Orehek E. Relational regulation theory: A new approach to explain the link between perceived social support and mental health. Psychol Rev 2011;118:482.
26. Moak Z, Agrawal A. The association between perceived interpersonal social support and physical and mental health: Results from the National Epidemiological Survey on Alcohol and Related Conditions. J Public Health 2010;32:191-201.