



Original Article

The effectiveness of short-term group interpersonal psychotherapy to symptoms of depression, emotional expressiveness, social skills and quality of life in depressed university students

Javad Nezafat Ferizi¹; Ali Mashhadi^{2*}; Seyed Amir Amin Yazdi²; Fatemeh Noferesti³

¹ M.Sc. in clinical psychology, Ferdowsi University of Mashhad, Mashhad, Iran

² Associate professor of psychology, Ferdowsi University of Mashhad, Mashhad, Iran

³ B.A. in clinical psychology, Ferdowsi University of Mashhad, Mashhad, Iran

Abstract

Introduction: Depressive disorder is considered one of the most common psychological disorders among students, which can affect various aspects of a person's life. Accordingly, the aim of the study was to investigate the effect of short-term group interpersonal psychotherapy on depression, emotional expressiveness, social skills and quality of life of students.

Materials and Methods: This clinical trial conducted from October 2014 to March 2015. The statistical population of consisted of students of Ferdowsi University of Mashhad. The participants (n=24) were selected through convenience sampling from the students who referred to Ferdowsi University clinic with complaints of depression then divided into control and experimental groups randomly. In this study, 8 weekly sessions (90 minutes) of short-term group interpersonal psychotherapy were administered in the experimental group. The research instruments were quality of life questionnaire (WHOQOL), emotional expressiveness questionnaire (EEQ), social skills inventory (SSI), Beck Depression Inventory-2 and demographic questionnaire. Data were analyzed by Multivariate Analysis of Covariance (MANCOVA) using SPSS version 19.

Results: The scores of Beck Depression Inventory-2 significantly decreased in the experimental group compared to the control group ($P=0.004$). Also, scores for all indicators of emotional expressiveness ($P=0.031$), subscales of emotional expression, social expression, emotional sensitivity, emotional control and social control of the social skill questionnaire ($P=0.047$), and areas of psychological and social relationships, and quality of life significantly increased in the experimental group compared to the control group ($P=0.023$).

Conclusion: It seems that short-term group interpersonal psychotherapy can be considered as an effective therapeutic approach in reducing symptoms of depression and improving quality of life, emotional expressiveness and social skills in depressed individuals.

Keywords: Depression, Emotion, Psychotherapy, Quality of life, Social skills

Please cite this paper as:

Nezafat Ferizi J, Mashhadi A, Amin Yazdi A, Noferesti F. The effectiveness of short-term group interpersonal psychotherapy to symptoms of depression, emotional expressiveness, social skills and quality of life in depressed university students. *Journal of Fundamentals of Mental Health* 2015 Nov-Dec; 17(6): 318-24.

Introduction

Depression is considered one of the most common psychological disorders among university students (according to 1). According to multiple studies, depression is one of the clinical variables that cause a lot of referrals to psychiatric clinics and accounts for a large share of students' medical problems (2).

Studies show that in different countries, the prevalence of the disorder among university students

is increasing (3,4). In the research that has been done on depression in Iran, it's prevalence has been estimated between 36%-66% among university students and 15%-25% among ordinary people (5).

Depression is a debilitating condition that affects all aspects of person's life. So that damages individual's personal and family relationships, job adjustment and public health (6). This disorder is an emotional state that is characterized by depressed mood, feeling guilty, decrease in energy and interest in daily activities, difficulty in communication and withdraw from others (7,8). In other words, depression disorder can be considered as one of the most

*Corresponding Author: Department of clinical psychology, Ferdowsi University of Mashhad, Mashhad, Iran
mashhadi@um.ac.ir

Received: Nov. 25, 2014

Accepted: Sep. 06, 2015

powerful factors causing inefficiency in human life (9). According to forecast of World Health Organization, if necessary measures had not been done, by 2020, depression would have been the main problem of mental health (according to 5). Researchers have been noted that this disorder, as a psychological factor, not only distracted psychological structure, but changed the external environment and interpersonal relationships (9). With a review of the research literature that has been written about depression, can be found a few components that are affected by this disorder. These components include: person's social skills, that the depressed person, lose his social performance, and could not reach to a good level of social functioning in interpersonal relationships (10). The other component is quality of life that is, according to World Health Organization (2011), one of the most important pillars of human life and addressing it is one of the main tasks of health authorities. The third component is emotional expressiveness. Emotional expression is an important component that psychologists relate it to mental health of people, and a number of theorists, believe that depressed people, because of weakness in this component are affected by this medical disorder (11).

Nowadays there are many treatments for depression, but few of them, could have proven their effectiveness in clinical trials (12). Various researches have been shown that interpersonal psychotherapy is considered one of the most effective treatments for depression. This treatment resulted in a reduction of the consequences of depression in prisoner women (13), reduction of depression symptoms and loneliness feel in depressed female students (7), reduction of depression in addicted individual's wives (8) and depressed mothers with low socio-economic status (14), reduction of depression symptoms and alcohol consumption behavior in depressed alcoholic women (15), reduction in depressive symptoms and enhancement of quality of life and social skills in adolescents (16). In the meta-analysis was performed on interpersonal psychotherapy on depression, its effectiveness was demonstrated as a stand-alone therapy, and in combination with drug therapy too (17).

Interpersonal psychotherapy (IPT) is a short-term psychotherapy with a focus on structure, context and interpersonal skills (12). The theoretical background of this treatment is Mayer's psycho-biological approach, Sullivan's interpersonal school and Bowlby's attachment theory. Therefore, its main emphasis is on the relationships between mood and

interpersonal events. The results of several studies that have been done in the field of child development, animals or in emotional expression, social support and life events fields have been taken place, has been highlighted the importance of this relation. For example, disturbing events and psychosocial stress may predict depression whereas having intimate relationships with others can act as a protective factor against depression. Accordingly, in interpersonal psychotherapy is assumed that several factors (genetic and environmental) are involved in prevalence of depression and that's why this type of treatment focuses on patient's psychosocial and interpersonal context (18).

In a study conducted by Talbot et al., Interpersonal psychotherapy for depressed women with a history of sexual abuse was investigated. The results of this study showed that women treated with IPT showed greater reduction in symptoms of depression, post-traumatic stress disorder and shame compared to another group (19). Askrama et al. in another study examined the efficacy of interpersonal psychotherapy along with medication on patients with chronic depression. Results showed that patients treated with IPT showed significant decrease in depressive symptoms and better performance than patients who took the drug (20). Results of studies of Soleimani, Mohammad Khani and Dolatshahi on students indicate that short-term interpersonal psychotherapy could create a significant decrease in symptoms of depression and dysfunctional attitudes (21).

Due to the fact that depression influence on emotion and expressing it and change functioning level and mood of person from normal to depressed mood And considering that expressing emotion is considered one of the main components of social skill (22), it Can be said that by changing the expressing emotion, the person's function in social environment is disrupted. Since social relationships are one of the aspects of quality of life, it seems to affect the quality of life too. Given that interpersonal psychotherapy relationships that are considered of underlying factors contributing to the formation of depression, the aim of this study was considered to investigate the effect of short-term group interpersonal psychotherapy in reducing depressive symptoms by increasing communication skills and how to express emotion and consequently enhance quality of life were considered.

Materials and Methods

This clinical trial with pretest- posttest design by control group and experimental group was

conducted with the approval of Ferdowsi University of Mashhad in 2014 and with the confirmation code IRCT 2015081723664N1 has been registered at the registry of clinical trial. The population of the study, were students were referred to Ferdowsi University of Mashhad clinic with complaints of depression. The criteria for entry into this study were: 1- having symptoms of depression and a minimum score of 14 on the Beck Depression Inventory 2; 2- minimum age of 18 years; 3-Being a university student ; 4- Not being under psychiatric treatment (drugs) and psychological treatment simultaneously and should be completed previous psychological treatment a month before entering treatment; 5- patient should not have a diagnosis of psychotic disorder or an organic mental disorder.

The criteria for entry into this study were Suicide, drug abuse, severe physical disease, conflicts and confrontations with gang members, previous and current psychiatric disease except under review case and the absence of more than two sessions were the criteria for leaving the study.

Accessible sampling method was used. In this way that 40 patients were selected from the list of people (with complaints of depression) referred to the clinic for counseling and treatment, and invited to participate in the study. After visiting 40 and completing the research tools (Beck Depression Inventory-2) and completing the consent form and the full knowledge about the research, 24 qualified patients who had gotten scores higher than 14 placed in control and experimental groups (each group 12 persons) as a sample case in simple randomization (Draw method). Emotional Expressiveness Questionnaire (EEQ), Social Skills Inventory (SSI) and World Health Organization Quality of Life (WHOQOL) performed on the two groups before and after the intervention.

The experimental group participants were trained under 8 weekly 90-minute sessions of interpersonal psychotherapy by MA researcher in clinical psychology that had the necessary skills and was familiar with this treatment through interpersonal psychotherapy manual. Due to scientific principles, the control group should not be left during the study period but should be under supervision and control of the research and should be apart from dependent variable, so that the impact of this variable on the control group were examined more precisely. With this purpose, the control group participants were trained simultaneously under 8 weekly sessions of 90 minutes teaching of study methods, too.

For the Ethical Treatment, after training sessions and post-test implementation for both the two

groups at the end of the study, group interpersonal psychotherapy were held for the control group. Results were analyzed by multivariate analysis of covariance using SPSS version 19.

Research instruments

- *Beck Depression Inventory (BDI-II)*: This inventory is one of the most common scales for measuring depression that was created in 1961 by Beck and his colleagues and was revised in 1971. Beck inventory has two long 21-point form and short 13-point form. 3) In this study Long form was used. Question responses are scored from 0 to 3 and cutting points are as follows: 0 to 13= minor depression, 14 to 19= mild depression, 20 to 28= moderate depression; and 29 to 63= severe depression. The questionnaire, with Hamilton Rating Scale for Depression (HRSD) has correlation 0.71 and test-retest reliability for a week is 0.93. The internal consistency of the questionnaire is also 0.91 (according to 23). In a study that was conducted on 354 patients with major depression to determine the validity and reliability of the revised version of Beck Depression Inventory, Cronbach's alpha coefficient of 0.91 was calculated (24).

- *Emotional Expressiveness Questionnaire (EEQ)*: The questionnaire consists of 16 items and three subscales of positive emotional expressiveness, expression of intimacy and negative emotional expressiveness. The reliability of this scale was evaluated by internal consistency method and by using Cronbach's alpha coefficient and its value was calculated for the total scale and subscales of expressing positive emotion, expressing intimacy and expressing negative emotion 0.68, 0.65, 0.59 and 0.68 respectively (according to 25). King and Emmons obtained Cronbach's alpha for listed total scale and subscales 0.70, 0.74, 0.63 and 0.67 respectively (26). In this study, Cronbach's alpha of the questionnaire for the total scale and subscales of expressing positive emotion, expressing intimacy and expressing negative emotion obtained 0.79, 0.77, 0.73 and 0.77 respectively.

- *Social Skills Inventory*: The inventory that is constructed by Riggio (1989) is a 90 item tool with six subscales which is designed as a short and comprehensive self-report to assess social skills. Six scales of this tool measure social skills in both emotional (expressivity, sensitivity, and control) and social (expressivity, sensitivity and control) levels. A 5-point Likert scale of (1 to 5) is used to scoring items. Riggio (1989) have been estimated reliability of the inventory, by test-retest method and

Cronbach's alpha between 0.62 to 0.96 (according to 27). The reliability of six scales, and scores of SSI in research on couples in Ahvaz was calculated between 0.53 and 0.96, respectively (27).

- *Quality of Life Questionnaire (WHOQOL-BREF)*: This questionnaire is designed to measure quality of life by World Health Organization and includes physical health, psychological, social relationships and environmental fields, which are to be self administered. The results which is reported by the creators of World Health Organization Quality of Life scale that have been conducted in 15 international center organization, the Cronbach's alpha coefficient have been reported between 0.73 to 0.89 for the four subscales and total scale have been reported respectively. In a study that took place in Iran in order to standardize the questionnaire, Cronbach alpha coefficients range was reported between 0.52 and 0.84 respectively (28). The Cronbach's alpha coefficient for quality of life on intensive care unit nurses, calculated 0.88, 0.70, 0.77 and 0.65 respectively for the total scale and subscales and 0.77 for quality of living environment (29).

It should be noted that in this study, the descriptive statistics of mean and standard deviation and inferential statistics of multivariate analysis of covariance by means of software SPSS version 19 were used.

Results

The sample of the study, included in 24 persons (12 persons in the experimental group, 12 persons in control group) and mean age of them was 21 years with a standard deviation of 2 years. Table 1 shows demographic characteristics of participants.

Table 1. Demographic characteristics related to students

Group	Marriage variable	Frequency		Sex	Frequency	
		Frequency	Percent		Frequency	Percent
Experimental	Single	10	0.84	Man	2	0.16
		9	0.83		3	0.25
Experimental	Married	2	0.16	Woman	10	0.84
		3	0.17		9	0.75

To study effectiveness of short-term interpersonal psychotherapy, multiple test tables were studied to evaluate the effect of multivariate group therapy on indicators of depression, emotional expressiveness, social skills and quality of life. Because the M-Box test has not been significant, we use Wilks' lambda component. This component assesses information

for a lack of difference between the independent variables (groups) in the population of the study. Wilks' lambda value for depression is 0.92, emotional expressiveness 0.55, social skills 0.32 and quality of life 0.4. According to P and F values, there are significant differences between the two groups on combine dependent variables. (F(4 and 113)=0.4 and P=0.023 and F (6 and 113)=0.32 and P=0.47, F(3 and 113)=0.55 and F=0.031, F(1 and 113)=3.42 and P=0.004).

Table 2. Multivariate analysis of covariance to test the effect of the independent variable on the variables depression, emotional expressiveness, social skills and quality of life

Dependent variable		Degree of freedom	F	Significance
Depression		1	87.33	0.004
Emotional Expressiveness	Positive emotional expressiveness	1	101.22	0.026
	Intimacy expressive	1	88.33	0.015
	Negative emotional expressiveness	1	79.40	0.043
Social skills	Emotional expression	1	71.73	0.032
	Social expression	1	55.13	0.012
	Social expression	1	43.40	0.044
	Emotional sensitivity	1	32.60	0.020
	Emotional control	1	40.80	0.001
	Social control	1	29.90	0.019
Quality of life	Physical health	1	190.20	0.067
	Psychological health	1	155.60	0.044
	Social relationships	1	187.40	0.045
	Environment	1	189.30	0.059

As seen in Table 2. The results of the comparison of post-test of variables in two groups and control the effect of pre-test indicate that After participating in Group Interpersonal Psychotherapy sessions, depression scores (F=87.33, P=0.004) of people who participated in the experimental group significantly reduced than those replaced in the control group, and on the positive emotional expressiveness, intimacy and emotional expressiveness indicators with F statistic is equal to 101.22, 88.33 and 79.4 respectively and with a significant level of 0.026, 0.015 and 0.043 respectively and indicators of emotional expression, social expressiveness, emotional sensitivity, social sensitivity, emotional control and social control, by F statistic is equal to 43.4, 55.13, 73.71, 32.6, 40.8 and 29.9 respectively. And so by significant level

of 0.0320, 0.012, 0.044, 0.020, 0.001, 0.019 and indicators of physical health, psychological health, social relationships and environment, the F statistics is equal to 190.2, 155.6, 187.4 and 189.3 with a significant level of 0.067, 0.044, 0.045, and 0.059 significantly increased.

Discussion

This study aimed to evaluate the effectiveness of short-term group interpersonal psychotherapy on depression symptoms, emotional expressiveness, social skills and quality of life of students. The results show that this type of treatment has been effective on the improvement of participants with depression (reduction of signs and severity of symptoms).

This result is consistent with findings of studies of Dinani and colleagues (8), Johnson and Zlotnick (13), Toth and colleagues (14), Stephanie and colleagues (15), Seyyed Alhoseini and colleagues (16), Cuijpers and colleagues (17), Bolton and colleagues (30), Swartz and colleagues (31) and Mulcahy and colleagues (32). As previously mentioned, one of the problems that depressed people suffer from it is the problems of communication. Due to the fact that interpersonal psychotherapy consider on depression as a disorder made in relationship and focuses on interpersonal relationships and social support of depressed person, can reduce the symptoms of depression.

Another variable that was examined was emotional expressiveness. The result is similar to the findings of the only study that have been done in the field by Gross and John (33). What the theorists consider of emotional expressiveness is not the mere expression of it, but a person's ability to understand what brings him a psychological event and feelings and emotions that stirred inside him. It seems to can be considered this problem, as one of the foundations of interpersonal psychotherapy and it is to address the problem, and internalize dimensions of an outside experience inside, that is In fact the inner psychological experience.

Interpersonal psychotherapy theorists believe that emotional expressiveness in this treatment is as a psychological tool that protects them from disorders such as depression and continue to be immune to depression after leaving the group.

Findings showed that this treatment have been effective on indicators of emotional expressiveness, emotional sensitivity, emotional control, social control and social expressiveness of the experimental group. It should be noted that what has been hypothesized, is social skill in relation to

emotion component. Emotional expression, which is one of the ideals of interpersonal psychotherapy, such as the previous hypothesis was significantly different from the control group. Emotional sensitivity that refers to individual understand, also had increased. In emotional sensitivity persons learn to enhance their understanding toward people in their living environment. And this is an issue that can be attributed to the framework of the group, rules governing it and techniques that people have to observe to stay in. Social expressiveness indicator that refers to have an active voice group members and expressing common needs between people in a society, means increase in the sense of emotional sensitivity in group. Control, that is referring to maintain emotional control and inhibition of emotional expression in individual and social situations, is one of the most important pillars of interpersonal communication that it's significance can be attributed to social skills training, and increase person's knowledge about emotion and its functions.

Quality of life is another variable that effectiveness of short-term interpersonal psychotherapy was studied on it. The results show the effect of this treatment on psychological health and social relationships indicators and suggest that there is not significant difference in health and environment indicators in the experimental group compared to the control group. Findings of the study hypothesis are consistent with the results of Tarkhani (34), Moghaddam Rahmani (35) and Markowitz et al (36). Overall issue in quality of life can be explored at the end of effective psychotherapy, and it is improving overall level of a person's life. In fact, World Health Organization provides the scale to discuss a multidimensional indicator for health in which one can obtain acceptable score from all it's indicators. Although Participants did not have significantly lower scores compared to the control group in two scales of four scales of quality of life, however comparing this score with the original score acquired in this indicator, showed an acceptable level of health. Thus, it can be considered the multidimensional nature of the effect of this psychotherapy.

This study, had limitations like other studies. Small sample, lack of control of certain intervening variables such as level of education, age and marital status of the subjects and the time limit on carrying out research that led to participating groups did not follow it, are some limitations of this study.

Conclusion

Differences in mean post-test between control and experimental groups in the components of emotional expressiveness, social skills, quality of life, and depression indicators show the effectiveness of group interpersonal psychotherapy. This confirms the theoretical foundations underlying this therapeutic approach; that depression arises in the interpersonal context of the individual and improves in this context. In other words, short-term interpersonal psychotherapy is an effective therapeutic approach in reducing symptoms of depression and improving emotional

expressiveness, social skills, and quality of life.

Acknowledgement

This study is based on a Master's thesis that is registered on clinical trial site with the confirmation code IRCT 2015081723664N1 and is conducted with the approval of Ferdowsi University of Mashhad and without the financial support of specific institutions and its results has no relation to the interests of the authors. It is appreciated for cooperation of the authorities and participants.

References

1. Khawaja NG, Santos MLRR, Habibi M, Smith R. University students' depression: A cross-cultural investigation. *High Educ Res Dev* 2011; 32(3): 392-406.
2. Leisman A, Gerrard B. Stress in employed women: Impact of marital status and children at home on neurohormone output and home strain. *Psychol Med* 2009; 59(4): 352-9.
3. Sarokhani D, Delpisheh A, Veisani Y, Sarokhani MT, Manesh RE, Sayehmiri K. Prevalence of depression among university students: a systematic review and meta-analysis study. *Depress Res Treat* 2013; 2013: 373857.
4. Tiffany F, Miguel D, Martha P, Osvelia D, Jeannette D. Depression and related problems in university students. *College Student J* 2012; 46(1): 193-202.
5. Abdollahi A, Ebadi Nezhad Hosseini SM, Motalebi SA, Abu Talib M. Examining the association between emotional Intelligence with depression among Iranian boy students. *Asian J Soc Sci Hum* 2013; 2(3): 153-61.
6. Nardi B, Francesconi G, Catena-Dell'osso M, Bellantuono C. Adolescent depression: Clinical features and therapeutic strategies. *Eur Rev Med Pharmacol Sci* 2013; 17(11): 1546-51.
7. Tarkhan M, Bazleh N, Fallah S, Paknahad Z, Rezaei A, Nezamivand S, Safdari S. Effectiveness of group interpersonal therapy on loneliness, happiness and depression of girl students of Iran. *J Basic Appl Sci Res* 2012; 2(9): 9189-93.
8. Taghavi Dinani P, Amiralsadat F, Samkhanian E, Zarbakhsh M, Baramsipour Z. Study the effectiveness of brief group interpersonal psychotherapy in reducing depressive symptoms of addict's spouses]. *American-Eurasian J Agricult Environ Sci* 2014; 14(4): 282-6.
9. Haginejad A, Rafieian M, Zamani H. [Study of individual variables affecting citizens' satisfaction with the quality of the living environment]. *Geography and development Iranian journal* 2010; 17(8): 63-82. (Persian)
10. Khodapanahi MK, Asghari A, Saleh Sedghpoor B, Katebahi J. [Preparing and investigating the reliability and validation of the family social support questionnaire (FSSQ)]. *Journal of family research* 2009; 5(4): 423-39. (Persian)
11. Lewis M. The emergence of human emotions. *New York: Wiley*; 2010: 265-80.
12. Weissman M, Markowitz J, Klerman GL. [Clinician's quick guide to interpersonal psychotherapy]. *Dadashi M, Aghili MM. (translators). Tehran: Arghmand*; 2012: 27-256. (Persian)
13. Johnson JE, Zlotnick C. Pilot study of treatment for major depression among women prisoners with substance use disorder. *J Psychiatr Res* 2012; 46(9): 1174-83.
14. Toth SL, Rogosch FA, Oshri A, Gravener-Davis J, Sturm R, Morgan-López AA. The efficacy of interpersonal psychotherapy for depression among economically disadvantaged mothers. *Dev Psychopathol* 2013; 25(4): 1065-78.
15. Stephanie A, Nancy L, Sarah M, Ellen L, Gerard J, Kenneth R. A pilot study of interpersonal psychotherapy for alcohol-dependent women with co-occurring major depression. *USA: Routledge* 2013; 34(3): 37-41.
16. Seyyed Alhoseini Z. [Efficacy of interpersonal psychotherapy group (IPT-AG) in reducing symptoms of depression and increased quality of life and social skills of adolescents]. *MA. Dissertation. Mashhad: Ferdowsi University, College of psychology and education science*, 2013: 1-101. (Persian)
17. Cuijpers P, Geraedts AS, van Oppen P, Andersson G, Markowitz JC, van Straten A. Interpersonal psychotherapy for depression: A meta-analysis. *Am J Psychiatry* 2011; 168(6): 581-92.
18. Brakemeier EL, Frase L. Interpersonal psychotherapy (IPT) in major depressive disorder. *Eur Arch Psychiatr Clin Neurosci* 2012; 262(2): 117-21.
19. Talbot NL, Chaudron LH, Ward EA, Duberstein PR, Conwell Y, O'Hara MW, et al. A randomized effectiveness trial of interpersonal psychotherapy for depressed women with sexual abuse histories]. *Psychiatr Serv* 2011; 62(4): 374-80.
20. Schramm E, Zobel I, Dykieriek P, Kech S, Brakemeier EL, Külz A, et al. Cognitive behavioral analysis system of psychotherapy versus interpersonal psychotherapy for early-onset chronic depression: A randomized pilot study. *J Affect Disord* 2011; 1(3): 109-16.

21. Soleimani M, Mohammadkhani P, Dolatshahi B. Effectiveness of brief group interpersonal psychotherapy in reducing university students' depressive symptoms and its effect on attributional style and dysfunctional attitudes. *Psychological research* 2008; 11(1): 41-65. (Persian)
22. Bonano GA, Kletz D. Facial expressions of emotion and curse of conjugal bereavement. *J Abnorm Psychol* 2011; 106(1): 126-37.
23. Groth-Marnat G. [Handbook of psychological assessment]. Pasha Sharifi H, Nickho MR. (translators). Tehran: Roshd; 2009: 1-512. (Persian)
24. Mohammadkhani P, Dobson KS, Massah Choolabi O. [Psychometric characteristic of Beck Depression Inventory-II in patients with major depressive disorder]. *Quarterly journal of Rehabilitation* 2007; 8 (2): 1-82. (Persian)
25. Rafieiny P, Rasolzadeh Tabatabaei K, Azan Fllah P. [Relation between emotion expressed and general health in students]. *Journal of psychology* 2006; 10(1): 84-105. (Persian)
26. Hasani J, Shahgholizadeh M. [Emotional expressiveness, emotional control, and ambivalence over emotional expressiveness in runaway and normal girls]. *Culture counseling* 2014; 5(17): 117-34. (Persian)
27. Khogasteh Mehr R, Shekarkan H, Aman Elahi Fard A. [Predict success and failure of sex-based social skills]. *Journal of Psychology University of Tabriz* 2007; 6(2): 40-59. (Persian)
28. Nejat S, Montazeri A, Holakoie Naieni K, Mohammad K, Majdzadeh SM. [Standardization of the World Health Organization Quality of Life Questionnaire (WHOQOL-BREF): Translation and psychometric Iranian version]. *Journal of public health and Institute of Health Research* 2006; 4(4): 1-12. (Persian)
29. Rahimi D, Payami M. [The study of social support and its relationship with burnout intensive care]. *Journal of Zanzan University of Medical Sciences* 2009; 33 (8): 52-57.
30. Bolton P, Bass J, Neugebauer R, Verdelli H, Clougherty K, Wickramaratne P, Speelman L, Ndogoni L, & Weissman MM. [Group interpersonal psychotherapy for depression in rural Uganda: A randomized controlled trial]. *JAMA* 2003; 289 (23): 3117-3124.
31. Swartz HA, Frank E, Shear MK, Thase ME, Fleming MAD, Scott J. [A pilot study of brief interpersonal psychotherapy for depression among women]. *Psychiatry Services* 2004; 55 (4): 448-450.
32. Mulcahy R, Reay RE, Wilkinson RB, Owen, C. A randomised control trial for the effectiveness of group interpersonal psychotherapy for postnatal depression. *Arch Women Ment Health* 2010; 13(2): 125-39.
33. Gross JJ, John OP. Revealing feeling: facts of emotional expressivity in self reports, peer ratings, and behavior]. *J Pers Soc Psychol* 2007; 72(2): 435-48.
34. Tarkhan M. [The effectiveness of short-term group interpersonal therapy on the psychological well-being and the life quality of addicted individuals' wives]. *Quarterly journal of educational psychology Islamic Azad University Tonekabon branch* 2011; 2(1): 23-36. (Persian)
35. Moghaddam Rahmani M. [Efficacy of interpersonal psychotherapy as a group to reduce symptoms, improve quality of life and marital satisfaction in women with postpartum depression]. MA. Dissertation. Mashhad: Ferdowsi University, College of psychology and education sciences, 2014: 1-100. (Persian)
36. Markowitz JC, Petkova E, Neria Y, Van Meter PE, Zhao Y, Hembree E, et al. Is exposure necessary? A randomized clinical trial of interpersonal psychotherapy for PTSD. *Am J Psychiatry* 2015; 172(5): 430-40.