

Journal of Research & Health Social Development & Health Promotion Research Center Vol. 5, No.4, Jan & Feb 2016 Pages: 87 -95 Original Article

1. Department of Counseling, Faculty of Educational Science and Psychology, Shahid Chamran University, Ahvaz, Khuzestan, Iran

Correspondence to: Mostafa Dehghani. Department of Counseling, Faculty of Educational Science and Psychology, Shahid Chamran University, Ahvaz, Khuzestan, Iran

Email: dehghani001@gmail.com

Received: 6 Apr 2015 Accepted: 14 Apr 2015

How to cite this article: Aslani Kh, Dehghani M, Khojastemehr R. The effect of behavioral couple's therapy to decreasing exposure violence among women substance abusers. *J Research Health2016; 5(4): 87 -95.*

The effect of behavioral couple's therapy to decreasing exposure violence among women substance abusers

Khaled Aslani¹, Mostafa Dehghani¹, Reza Khojastemehr¹

Abstract

Specific treatment for substance abuse which is supported by experimental is behavioral couple therapy. Participating couples with substance abuse in behavioral couple therapy program has brought positive effects for them and to reduce drug abuse and led improve her family problems. The aim of this study was the effect of behavioral couple's therapy to reduce exposure to violence among women substance abusers. The design of this study was experimental with pre-test, post-test and fallow up with control group. This study population included all couples that had referred to cessation clinic for substance abuse. 20 couples were selected and randomly divided into two groups as experiment and control. Research instrument include scale of violence against women and structured interview by clinical centers psychiatrist. in order to analyze the resulted data, univariate analysis of covariance and multivariate analysis of covariance analyzing method is used along with SPSS-16. The results showed that there was a significant difference in exposure to violence between two groups. In addition, these results have been consistent in follow up period. The acquired results revealed that behavioral couple's therapy was effect in reducing exposure to violence.

Keywords: Behavioral Couple's Therapy, Exposure Violence, Substance Abuse

Introduction

Drug abuse has been studied in various aspects up to now. Among the concepts which should be paid attention for analyzing the drug abuse is the institutions and networks of mutual relationships. The most important institution in analyzing the phenomenon of drug abuse is "family" [1]. In case of entering drugs into the family path and affliction of family members to it, family structure is stroked irreparably and its functions get damaged [2]. Violence towards the wife is one of the prevalent problems among the addicted couples and studies have shown that among almost two third of married men who are participating in drug abuse treatment, at least one person has committed violence towards his wife during the year before the treatment and they report it [3]. Researchers have indicated that aggression towards the wife, while the man is addicted, is 8 times more than those families which have not problems with drug abuse [4]. Families afflicted with drug abuse usually encounter various functions and numerous challenges [5-10]. Life of couples afflicted with drug abuse leads to divorce and separation more than couples without drug abuse. Also, the life quality and marital relationship of couples afflicted with drug abuse undergo numerous negative changes [11]. Studies show that the issues and problems related to the drug abuse in family cause failures in parental skills, weak family communications, children's behavioral problems, neglecting the children and domestic violence. Also, drug abuse is related to the pervasive problems in family such as marital discard, insufficient supervision and management of parents, leaving the home, not engaging in home affairs by the parents, not supporting the children by the parents solving the family and behavior problems by using the violence and aggression [12], weakening the emotional and verbal communications between parents and children [13] and negative interferences of family members towards each other.

In the meantime, one of the damages which appear as a result of affliction with drug abuse in family environment, even outside it is to commit violence by the person with drug abuse. Drug abuse may arouse the persons to violence and the violence itself is one the facilitating factors for using drugs inside the family [14]. From among the subjects which engage the family therapist while being referred to by the addicted couples for treating the drug abuse is the exposure to violence [15]. There is direct relationship between the drug abuse and family and marital problems in such a way that each can precede the other one preferably and creates some defective cycles between the couples and then it is too difficult to escape from and get rid of this ominous one [16].

As obtained from the studies, using the drugs frequently is the main discussion along with the marital conflicts and exposure to violence [17]. There are numerous evidences on the relationship between the drug abuse and exposure to violenceand from among them, the research by Leonard; Lemon, Verhoek, Donnelly & Stewart, Moore, Kahler, Ramsey, Strong [18-20] can be mentioned. Researchers have shown that two factors which lead to the violence in family path are drug abuse and alcohol usage [21]. Therefore, drug abuse and violence are firmly correlated. A set of factors which are in line with the exposure to violenceincludes the depression, mental damages, violence in initial family, approving the exposure to violencenorms, high level of conflicts and marital opposition, low income and using the drugs and alcohol [22]. Created exposure to violencepaves the way for appearing behaviors such as continuing the alcohol abuse, violence, stress, depression and behavior problems [23].

Special treatment for drug abuse which has been supported empirically is the BCT [24,25]. Findings have shown that from among the several interferences made during the past three years, participation of couples afflicted with the drug abuse in BCT program has created positive consequences for them and has led to the reduced drug abuse and improved the family problems [14]. The study carried out by Fals-Stewart, Kashdan, A. Farel and Britchler [26] showed that the amount of drug abuse and exposure to violenceof couples who are participating in BCT program are decreased during one year after treatment rather than to other standard treatments. In a research, effectiveness of BCT on family violence and its frequency among the men afflicted with the alcohol and drug abuse and their wives who are healthy has been discussed [27]. In these studies, couples reported that the amount of their exposure to violencehas reduced 60% than before the treatment.

If do not pay attention to family and family variables involved in drug abuse, Even if a coherent and appropriate plan treatment, the treatment will be ineffective. Also, Relapse occurs.Therefore, this study have been examined effectiveness of BCT on decreasing the exposure to the violence among the women with husbands afflicted with the goal of providing a supportive environment, improve the relationship between couples, creating intimacy and optimum compatibility and provide the necessary training, Which can be a deterrent to drug use and its consequences have caused. Research hasn't been done in this field in the country. In view of the aforementioned, the main issue that this research is seeking is the effectiveness of BCT on decreasing the exposure to the violence among the women with husbands afflicted with the drug abuse and whether the BCT decreases the exposure to the violence among the women with husbands afflicted with the drug abuse.

Method

This study was a quasi-experimental study that have been studied investigate the effect of behavioral couple's therapy to decreasing exposure to violence among women substance abuser in Ahvaz city, Iran, 2013.

Statistical population of this research includes all couples who referred to the addiction treatment clinics of Ahvaz that among which four clinics were selected and were taken as the basis of research. In this population, men had a background on drug abuse (type of drug: opium) and exposure to violencewho were detoxified and they were treated by methadone method during the treatment process. Families' women were in healthy condition.

In this study, for sampling, the multi-stage sampling was used, in this way four clinics were selected from among all addiction treatment clinics in Ahvaz city. Via referring to these clinics, those couples who participated in this research plan were invited to attend the specified clinics on due time in order to take a test and undergoing an interview made by the researcher his/her colleagues for performing the research. In the first step, the exposure to violencequestionnaire was completed by women. In the next step, those women who had one standard deviation lower than the mean in exposure to violencevariable were identified together with their husbands among who 20 qualified couples were selected for participating in present research and they were divided into two groups (experimental group and control group). Inclusion criteria for the study were satisfacted and interested partisipants selected to participate in the study, at least past a year of his life, men studied had a history of drug abuse of drugs and now are drug withdrawal and methadone treatment program and no depression and other personal injury. Exclusion criteria of the study were continue to cooperate with the investigator's consent, couples intending to travel to another place, or move to an adjacent town and the use of any other psychological services and counseling.

Intervention program of behavior coupling treatment was carried out on the experiment group in pair form and the couples of control group were put into the waiting list (after finishing the sessions of behavior coupling treatment on the experiment group, control group and couples who were not in no groups by random sampling, were treated in an appropriate time by the behavior coupling treatment). At the end, after applying the interference on the experiment group, women from both groups underwent the posttest in the variables of domestic violence. Finally, after two months from the treatment period, again the women from both groups took the exams of exposure to violenceas the follow-up.

In order to measure the exposure to violence among the women, this scale was used which had been constructed by Haj-Yahia [28]. This questionnaire consists of 32 items and four factors of mental violence, physical violence, sexual violence and economic violence are assessed. In the research by Haj-Yahia, this questionnaire was distributed among 275 university women in order to validate the questionnaire of violence against the wife. This scale was approved with Cronbach Alpha 0.71, 0.86, 0.93 and 0.92 for mental violence, physical violence, sexual violence, economic violence, respectively [29]. In the present research, the reliability coefficient of this questionnaire was obtained. 86 by using the Cronbach alpha. Reliability of subscales of this questionnaire was obtained 0.83, 0.80, 0.75 and 0.78 by Cronbach Alpha for mental violence, physical violence, sexual violence, economic violence, respectively.

Behavior coupling treatment includes 6 treatment sessions (two sessions a week and 45 min for each session) which is applied on the experiment group. Contents of treatment sessions were designed in 6 sessions on the basis of behavior treatment family specialized for those families involved in drug abuse and within the framework of drug abuse treatment book with behavior treatment family approach written by Donohue. This treatment includes programs such as couples' interactions, creating supportive atmosphere to prevent drug abuse, reflecting the feelings and behaviors explicitly and frankly, increasing the positive behaviors, decreasing the negative behaviors, teaching the life skills and improving the relations [14]. After data collection, exposure to violence were analyzed by statistical SPSS-16 software and after reviewing the fundamental assumptions, by the analysis of covariance. p<0.05 was taken as a significant.

Results

Table 1 shows the mean and standard deviation of scores of violence exposure in experiment and control group separately in stages of pretest, posttest and follow-up.

The Table 1 shows mean and Standard deviation of pretest, posttest and follow-up scores of exposure to violence in experiment group and in the control group. Table 2 shows the one-way analysis of covariance on the posttest score with controlling the pretest of dependent variable of research (exposure to violence). Results given in table 2 show that the one-way analysis of covariance in the variable of exposure to violence (F=58.09 and p= 0.000) is significant. In order to understand this difference, it is sufficient to compare the mean of posttest in both control and experiment groups in terms of the aforementioned dependent

Table 1 Mean and standard deviation of scores of violence exposure in experiment and control group separately in stagesof pretest, posttest and follow-up

	Statistical _ indices	Experiment group			Control group			
		Pre-test	Post-test	Follow-up	Pre-test	Post-test	Follow-up	
Exposure to violence	Mean	62.40	42.40	40.20	61.40	61.50	63.40	
	SD	10.16	7.64	7.65	9.07	8.98	8.95	
	Minimum	42	32	30	51	49	50	
	Maximum	77	55	53	78	78	78	

variables. In regard to the results given in Table 1, the mean of posttest on the total score of exposure to violence in experiment group and control group is 42.40 and 61.5, respectively indicating that violence exposure in experiment group has decreased. Table 3

shows the summary of results of one-war analysis of covariance on the scores of posttest with controlling the pretests on the subscales of exposure to violence in both control and experiment groups.

Contents of Table 3 show that there is a

Table 2 summary of results of one-way analysis of covariance for comparing the posttest score with the pretest score of dependent variable (exposure to violence)

Effect	Dependent variable	Sum of squares	Degree of freedom	Mean of squares	F	Significant	Effect size
Group	Exposure to	1942.53	1	1942.53	58.09	0.00	0.77
	violence						

significant difference between posttest scores of experiment and control groups in terms of at least one of the subscales of exposure to violence. Since there a difference between the control and experiment groups in terms of at least one dependent factor, one-way analysis of covariance in MANCOVA was performed on each of subscales of exposure to violence in order to specify the difference point. Table 4 shows the results of oneway analysis of covariance in MANCOVA for comparing the posttest scores through controlling the pretest on the subscales of exposure to violence in both control and

Table 3 Summary of results of Multivariate analysis of covariance on the scores of posttest with controlling the pretestson the subscales of exposure to violence in both control and experiment groups

Effect	Test	Value	F	Df hypothesis	Df error	Significant	Effect size
	Pillai trace	0.84	15.09	4	11	0.00	0.84
Group	Wliks's lambda	0.15	15.09	4	11	0.00	0.84
	Hotelling trace	5.48	15.09	4	11	0.00	0.84
	Roy's largest root	5.48	15.09	4	11	0.00	0.84

experiment groups.

Results given in Table 4 show that the oneway analysis of covariance in mental violence (F=27.20 and p=0.000), physical violence (F=19.37 and p=0.001), sexual violence (F=10.77 and p=0.005) and economic violence (F=4.86 and p=0.045) are significant. Concerning the mentioned results, scores of all subscales of exposure to violence have decreased in posttest and this reduction is significant. Obtained results emphasize on the effectiveness of behavior coupling treatment on decreasing the mental, physical, sexual and economic violence.

In order to clarify the fact that intervention effect is steady over the time (after posttest

Table 4 results of one-way analysis of covariance in MANCOVA on the posttest scores through controlling the pretest onthe subscales of exposure to violence in both control and experiment groups

Effect	Dependent variable	Sum of squares	Degree of freedom	Mean of squares	F	Significant	Effect size
	Mental violence	229.73	1	229.73	27.20	0.000	0.66
C	Physical violence	144.741	1	144.741	19.37	0.001	0.58
Group	Sexual violence	7.56	1	7.56	10.77	0.005	0.43
	Economic violence	2.72	1	2.72	4.86	0.045	0.25

to follow-up), a multivariate covariance analysis with repeated measures was carried out on the scores of posttest and follow-up, while controlling the pretest of dependent variable of exposure to violence.

Table 5 shows the results of multivariate covariance analysis with repeated measures on the scores of posttest and follow-up, while controlling the pretest of dependent variable of exposure to violence.

Content of Table 5 shows that there is a significant relationship between groups (experiment and control) and interaction

(group * time) in the dependent variable. But there is no significant difference the time of measurement (Post-test and follow-up). Since there is a difference between groups (experiment and control) and interaction (group * time) in the dependent variable, measures were taken for carry out the oneway covariance analysis in MANCOVA on the dependent variable.

Table 6 shows the results of one-way covariance with repeated measures in MANCOVA on the scores of posttest and follow-up, while controlling the pretest of

Effect	Test	Value	F	Df hypothesis	Df error	Significant	Effect size
Between subjects	Pillai trace	0.76	55.57	3	53	0.0001	0.76
	Wliks's lambda	0.24	55.57	3	53	0.0001	0.76
(Groups)	Hotelling trace	3.14	55.57	3	53	0.0001	0.76
	Roy's largest root	314	55.57	3	53	0.0001	0.76
	Pillai trace	0.06	1.1	3	53	0.36	0.06
The subject (time)	Wliks's lambda	0.94	1.1	3	53	0.36	0.06
The subject (time)	Hotelling trace	0.06	1.1	3	53	0.36	0.06
	Roy's largest root	0.06	1.1	3	53	0.36	0.06
Interactions (Group × Time)	Pillai trace	0.6	27	3	53	0.0001	0.6
	Wliks's lambda	0.4	27	3	53	0.0001	0.6
	Hotelling trace	1.53	27	3	53	0.0001	0.6
	Roy's largest root	1.53	27	3	53	0.0001	0.6

Table 5 *Summary of results of multivariate covariance analysis with repeated measures on the scores of posttest and follow-up, while controlling the pretest of dependent variable (exposure to violence)*

dependent variable (exposure to violence) in both control and experiment groups. Results given in Table 6 show that one-way covariance analyses with repeated measures related to the times effect (from posttest to follow-up) are not significant in the variable of exposure to violence (F=0.38 and p=0.54). Therefore, stability of intervention effect of behavior coupling treatment on the exposure to violence over the

time in women with husbands addicted to drugs is confirmed.

Also, In order to clarify this point that intervention effect on the subscales of exposure to violence is steady (after posttest to followup), a multivariate covariance analysis with repeated measures was carried out on the scores of posttest and follow-up, while controlling the pretest of components of exposure to violence.

Table 6 Results of one-way covariance analysis with repeated measures in MANCOVA on the scores of posttest and follow-up, while controlling the pretest of dependent variable (exposure to violence) in both control and experiment groups

Effect	Dependent variable	Sum of squares	Degree of freedom	Mean of squares	F	Significant	Effect size
Between subjects (Groups)	Exposure to violence	2513.07	1	2513.07	56.96	0.0001	0.51
The subject (time)	Exposure to violence	5.06	1	5.06	0.38	0.54	0.01
Interactions (Group × Time)	Exposure to violence	758.62	1	758.62	57.09	0.0001	0.51

Discussion

The present study aims at investigating the effectiveness of behavior coupling treatment on decreasing the exposure to violence among the women with husbands afflicted with drug abuse who refer to the addiction treatment clinics in Ahvaz city.

Results showed that there is a significant

difference between the subjects of both control and experiment groups in terms of exposure to violence in posttest and follow-up stages. This finding also indicates that control an experiment groups are different in terms of exposure to violence in BCT program. Therefore, BCT leads to reducing the violence among the subjects of experiment group compared to the control group posttest stage and it continued for the two-month follow-upstage.

This result is consistent directly with researches by Fals-Stewart, Kashdan, A. Farel and Britchler [26]; A. Farel, Murphy, Stephen, Fals-Stewart & Murphy [30]; Chase, A. Farel, Murphy, Fals-Stewart and Murphy [27].

In line with elaborating the results obtained from this research it can be said that behavior coupling treatment trains the skills for adjustment against the barriers as a result of which people learn how to get along with or avoid the severe desire to drug abuse, negative mood and stress which result in violence against the wife. They also are trained how to encounter the exposure to violence. For example, for encountering the conflicts, they learn the ways to communicate healthily with wife and other members of family and apply them. They adhere to principles and methods of conducting and progressing the negotiations and techniques on problem-solving are taught to them. Applying these skills reduces the violence among the persons. Also, they are motivated to change the negative behaviors into the positive and constructive behaviors within family [26,14].

Also, behavior coupling treatment decreases the couples' stress in situations in which violence may occur through training the stress management, reducing the mental pressure and mediating the undesired excitations, training relaxation and controlling the stress. Moreover, the behavior coupling treatment enhances the interpersonal relationships among the couples through applying the useful and suitable methods for solving the conflicts rather than aggressive reactions, as well as through training the skills of anger management and problem-solving. The outcome of applying these skills is to live satisfactorily and without any violence [14]. coupling treatment Behavior includes planning for implementing the joint activities, appreciating the positive behaviors of each other, ways to reflect and express the ideas, proper ways to negotiate and solve the problems which are appropriate alternatives to expressing the violence.

Behavior coupling treatment program teaches courageous behavior to the couples and this type of behavior improves the relationship with others. In a courageous behavior, person respect himself/herself and others, but in aggressive behaviors the others are not respected [31]. Hence, it can be said that training the courageous behavior is the counterpoint of violence in family.

From among other techniques of behavior coupling treatment is to apply the ABCD model (adverse objectives with using drug) in which couples are informed of the emotions, thoughts and things existing at surrounding environment and act as the exciter of drug abuse and behavioral problems such as exposure to violence. Then, the couples are taught to rank their objectives in order to prevent these consequences, such as violence against the wife. These objectives, in fact, are the alternative behaviors with stimuli and consequences of behavioral problems resulting from the drug abuse. Most factors of physical and mental violence are diagnosed via training and applying this model by the specialist and couples and some measures are taken to solve or prevent these factors [32].

Control program in behavior coupling treatment teaches the couples to identify and diagnose the clues and stimuli which result in interpersonal problems and affect their relationships and in the next step they take actions to prevent or solve them. Self-control program emphasize on drug abuse (desires or emotions which propel the user to use again) and behavioral problems among the couples which occur as a result of not using or tempting to use. For example, a person who thinks drug abuse or physical-mental pain resulting from it may be requested from wife or a member of family at the moment or he is requested to communicate or solve a problem. At this time, we observe exposure to violence and intra-relationship mess rather than effective communication and problem solving which decomposes the family center and unrest dominates. Self-control program emphasize on this situations, conditions and preventing these consequences and feedback the functions of couples [32].

Conclusion

The results showed that there was a significant difference in exposure to violence between two groups. In addition, these results have been consistent in follow up period. The acquired results revealed that behavioral couple's therapy was effect in reducing exposure to violence.

The present research has been implemented on the couples who are involved in drug abuse; therefore, it is not generalizable to the normal couples. This research was implemented on those afflicted with the drug abuse of type opium; therefore it is not possible to generalize to those persons afflicted to drug abuse. Also, this study was carried out among the couples in Ahvaz City; hence, it is not generalizable to the couples of other cities. At the end, all families participating in this research are appreciated.

Therefore, it is recommended that this research be taken on couples from other cities to be achieved greater generalization of the results, that is necessary the IRIB (TV and radio programs) attention to the issue of violence and marital strains and psychological aspects and furthermore it is suggested to be held numerous workshops in the field of behavioral couple therapy and its relationship with psychological factors to with training and employing techniques applied by couples promote their marital adjustment.

Acknowledgements

Hereby respected from authorities and all the families participating of Welfare addiction treatment clinic of ahvaz, Ronak addiction treatment clinic, Ahoura addiction treatment clinic and Bu-Ali addiction treatment clinic who helped us in this study.

Contributions

Study design: MD, KhA, RKh

Data collection and analysis: MD, KhA, Manuscript preparation: MD, KhA, RKh

Conflict of interest

"The authors declare that they have no competing interests"

References

1- Aghabkhshy H. Addiction and pathological family, immunizing children against abuse. Tehran: Afarin publishing; 2000.

2- Kelley ML, Fals-Stewart W. Couples-versus individual-based therapy for alcoholism and drug abuse: Effects on children's psychosocial functioning. *J Consult Clin Psychol*2002; 70(2): 417-27.

3- O'Earrell TJ, Fals-Stewart W, Murphy M, Murphy CM. Partner violence before and after individuallybased alcoholism treatment for male alcoholic patients. *J Consult Clin Psychol*2003; 71(1): 92-102.

4- Fals-Stewart W. The occurrence of partner physical aggression on days of alcohol consumption: A longitudinal diary study. *J Consult Clin Psychol*2003; 71(1): 41-52.

5- Mousavi A. Check qualitative/quantitative families of young drug users. *Journal of Women's Studies*2003; 1(3): 59-88.

6- Pour Boustany AR, Sadrjhany S. Compared with ordinary families of drug abuse. Paper presented at the 3ed National Congress on Family Pathology, 2008, 12-15, Tehran: Shahidbeheshti University; 2008.

7-Ashoori A, Shirinzadehdastgerdi S. (2008). Evaluate and compare the performance of the principal families of addicts and non-addicts. Paper presented at the 3ed National Congress on Family Pathology, 2008, 26-37, Tehran: Shahidbeheshti University; 2008.

8- Besharat MA, Ranjbarnowshahri F, Rostami R. Comparison of family functioning in patients with substance abuse disorder and a normal family. *Journal of Psychology and Educational Science*2008; 38 (3): 137-56.

9- Lemke S, Schutte KK, Brennan PL, Moos RH. Gender differences in social influences and stressors linked to increase drinking. *J Stud Alcohol Drugs*2008; 69(5): 695–702.

10- Homish, GG, Leonard KE. The drinking partnership and marital satisfaction: the longitudinal influence of discrepant drinking. *J Consult Clin Psychol*2007; 75 (1): 43–51.

11- Homish G, Leonard KE, Cornelius JR. Illicit drug

use and marital satisfaction. *Addictive Behaviors*2007; 33(2): 279-91

12- Hogue A, Dauber S, Stambaugh LF, Cecero JJ, Liddle HA. Early therapeutic alliance and treatment outcome in individual and family therapy for adolescent behavior problems. *J Consult Clin Psychol*2006; 74 (1): 121-9.

13- Caughlin JP, Malis RS. Demand/withdraw communication between parents and adolescents: Connections with self-esteem and substance use. *J Soc Pers Relat*2004; 21 (1): 125-48.

14- Caroline JE, Dolores LM, Karen AH, Charla N, Bruce JR, Kathleen MC. A Cognitive behavioral therapy for alcohol-dependent domestic violence offenders: an integrated substance abuse–domestic violence treatment approach (SADV). *Am J Addiction*2007; 16(1): 24–31.

15- Fals-Stewart W, Kennedy C. Addressing intimate partner violence in substance-abuse treatment. *J Subst Abuse Treat* 2005; 29: 5- 17

16- Fals-Stewart W, O'Farrell TJ, Birchler GR. Behavioral couples therapy for substance abuse: Rationale, methods, and findings. *Science and Practice Perspectives*2004; 2(2): 30–41.

17- Murphy CM, Winters J, O'Farrell TJ, Fals-Stewart W, Murphy M. Alcohol consumption and intimate partner violence by alcoholic men: comparing violent and non-violent conflicts. *Psychol Addict Behav*2005; 19(1): 35–42

18- Leonard KE. Domestic violence and alcohol: What is known and what do we need to know to encourage environmental interventions? *J Subst Use*2001; 6: 235–45.

19- Lemon SC, Verhoek-Oftedahl W, Donnelly EF. Preventive healthcare use, smoking, and alcohol use among Rhode Island women experiencing intimate partner violence. *J Womens Health Gend Based Med*2002; 11: 555–62.

20- Stuart G, Moore T, Kahler C, Ramsey S, Strong D. Cigarette smoking, alcohol use, and psychiatric functioning among women arrested for domestic violence. *Am J Addict* 2005; 14: 188–90.

21- O'Earrell TJ, Eals-Stewart W. Substance abuse. J Marital and Family Therapy2003; 29 (1): 97-120.

22- Boles S, Miotto K. Substance abuse and violence: A review of the literature. *Aggress Violent Beh*2003; 8(2): 155–74.

23- Kilpatrick DG, Ruggiero KJ, Acierno R, Saunders BE, Resnick HS, Best CL. Violence and risk of PTSD, major depression, substance abuse/dependence, and co morbidity: Results from the National Survey of

Adolescents. J Consult Clin Psychol2003; 71(4): 692–700.

24- Fals-Stewart W, Leonard KE, Birchler GR. The occurrence of male-to-female intimate partner violence on days of men's drinking: The moderating effects of antisocial personality disorder. *J Consult Clin Psychol*2005; 73 (2): 239-48.

25- O'Farrell TJ, Fals Stewart W. Behavioral couples therapy for alcoholism and drug abuse. New York: Guilford press; 2006.

26- Fals Stewart W, Kashdan TB, O'Farrell TJ, Birchler GR. Behavioral couples therapy for drugabusing patients: effects on partner violence. *J Subst Abuse Treat*2002; 22(2): 87–96.

27- Chase KA, O'Farrell TJ, Murphy CM, Fals Stewart W, Murphy M. Factors associated with partner violence among female alcoholic patients and their male partners. *J Stud Alcoho*2003; 64 (1): 137–49

28- Haj Yahia MM. Wife abuse and its psychological consequences as revealed by the first palestinian national survey on violence against Women. *J Fam Psychol*1999; 13(4): 642-62.

29- Etesamipour R. Comparison of spouse abuse, low self- esteem and sexual disorders in married women in city and village. *J Research Health*2012; 2 (2): 191-9.

30- O'Farrell TJ, Murphy CM, Stephan SH, Fals Stewart W, Murphy M. Partner violence before and after couples-based alcoholism treatment for male alcoholic patients: The role of treatment involvement and abstinence. *J Consult Clin Psychol*2004; 72(2): 202–17.

31- Ames DR. Assertiveness expectancies: How hard people push depends on the consequences they predict. *J Pers Soc Psychol*2008; 95(6): 1541-57.

32- Donohue B, Allen DN. Treating adult substance abuse using family behavior therapy. Canada: Wiley publication; 2011.