

EFFECT OF MOTIVATIONAL ENHANCEMENT THERAPY ON READINESS TO CHANGE PATTERNS OF ALCOHOL USE BEHAVIORS IN MALE ADULTS

Ishanya Raj

Research Scholar (Department of Psychology, Sunrise University, Alwar, Rajasthan, India)

Dr. Bobinder

Professor (Department of Psychology, Sunrise University, Alwar, Rajasthan, India)

Abstract: Motivational Enhancement Therapy (MET) is a motivational interviewing technique that employs a structured intervention to help problem drinkers and drug users improve their behaviour. It's now on the air. It is meant to produce rapid, self-motivated transformation and is based on motivational psychology ideas. This treatment uses motivating strategies to mobilise the client's own resources for change, rather than attempting to direct or train the client through the process step by step. The aim of the present study is to study the effect of motivational enhancement therapy for reduction of alcohol dependency among individuals with alcohol dependence syndrome. Results revealed that Motivational Enhancement Therapy plays an important role in reducing alcohol craving among individual with alcohol dependence syndrome.

Key words: Motivational Enhancement Therapy, alcohol dependency, intervention.

INTRODUCTION

Over the course of eight weeks, MET comprises of three planned and individually tailored treatment sessions. In week one, the first treatment session focuses on delivering structured feedback on the outcomes of the initial assessment battery. Within two weeks of the examination, this session should take place. The goal of the first session is to increase client motivation to start or continue changing. The second session, which takes place in week 2, continues the motivational improvement process with the goal of reinforcing the client's commitment to change. The therapist continues to boost motivation and encourage future improvement in the week 8 follow-up appointment. Each session should take no more than 50 minutes to finish. The treatment takes eight weeks to complete. Miller and Sanchez (1993) defined six FRAMES components that they believed were active ingredients in the relatively brief interventions that have been shown in studies to produce change in problem drinkers.

- ✓ FEEDBACK ON PERSONAL RISK OR INJURY
- ✓ Emphasis is placed on personal RESPONSIBILITY for transformation.
- ✓ Give appropriate ADVICE to modify when prompted.
- ✓ Therapist empathy is a MENU option.
- ✓ Facilitation of the client's SELF-EFFICACY or optimism.

MET's Justification and Fundamental Principles: The MET method begins with the notion that the client bears responsibility and has the power to change. Our job as therapists is to establish a set of circumstances that will increase the client's motivation and commitment to change. MET aims to promote the client's intrinsic drive to change, which will lead to the client initiating, persisting with, and complying with any behaviour modification attempts. The ME therapist strives to convey respect for the client in general. Avoid communicating in a way that implies a superior/inferior relationship between the therapist and the client. Miller and Rollnick (1991) identified five core motivational interviewing practises that underpin this method: Demonstrate empathy Develop ambiguity, avoid debate, roll with opposition, and boost self-efficacy. The MET technique is very different from confrontational therapy strategies, in which the therapist is in charge of breaking down the client's denial. The MET approach is the polar opposite of one in which the therapist labels the problem and suggests a course of action, such as "You are an alcoholic, and you must stop drinking." Instead of emphasising the client's helplessness or powerlessness over alcohol, heroin, or other drugs, the MET therapist emphasises the client's belief in their potential to change (self-efficacy). As previously said, arguing with the customer is avoided at all costs, and tactics for dealing with resistance are more contemplative than exhortation-based. As a result, the MET therapist does not quarrel with clients, impose a diagnostic label, tell clients what they must do, use confrontation to break down denial, or imply that clients are powerless. In addition, the MET approach differs significantly from cognitive-behavioral treatment techniques that seek to teach clients specific coping skills. In MET, there is no direct skill instruction. Clients are not instructed on how to perform a task. Instead, the therapy is based on the client's own resources and ability to change. Instead of telling clients how to change, the therapist encourages them to think about how they may change. Alcohol as a substance Alcohol has always occupied a prominent place in all societies as a crucial element of religious rites, a source of no tainted water, or else as a permanent presence in festivities and fraternizations, when toasts are made for everyone and everything. Alcohol intake is linked to a wide range of social, mental, and emotional implications, in addition to several chronic and acute health effects. These manifest themselves in the job and in relationships, for example, as absenteeism or abuse. Alcohol use disorder (AUD) Alcoholism is a significant contributor to the global burden of disease. Problematic alcohol consumption is linked to a high rate of illness and mortality. In all types of medical settings, patients with problematic alcohol consumption are common. Those seeking treatment in other clinical departments/specialties for medical or surgical illnesses frequently have an underlying alcohol addiction that complicates the medical or surgical condition. Furthermore, many cases of alcoholism stay undiagnosed for years due to the patient's lack of desire and the inability of treatment providers to test for it. After they have broken the law, such as in the instance of drunken driving, people with alcoholism are sometimes directed to counselling.

REVIEW OF LITERATURE

For more than two decades, research has found surprisingly little difference in outcome between longer, more intensive treatment programmes and shorter, less intensive, ever relatively brief alternative approaches in the treatment of alcohol problems (Annis, 1985; Miller & Hester, 1986b; Miller & Rollnick, 1991; U.S. Congress, Office of Technology Assessment, 1983), drug problems (MacKay, McLellan & Alterman, 1992), and mental health problems in general (MacKay, McLellan & Alter (Kiester, 1982).

Levenson et al investigated the effects of a large dosage of alcohol on physiological and self-report reactions to two stresses (1991). (shock and self-disclosure speech) They were tested against the effects of a placebo in three groups of non-alcoholics who were deemed to be at a higher risk for alcoholism because they (a) had an alcoholic parent (parental risk) or (b) fit a free alcoholic personality profile. With proper drinking experience controls, these high-risk groups were put to the test. For females, the menstrual cycle phase was also considered. In the high risk group, the positive reinforcing effect of alcohol (its potential to attenuate physiological stress reactivity) was more substantial than in the low risk group.

Kushner et al. (1992) studied whether alcohol result expectations affected the anxiety-alcohol consumption association. Students were invited to complete surveys on their anxiety levels, recent alcohol consumption patterns, and outcome expectations. As expected, men with high tension reduction alcohol outcome expectations had a stronger positive relationship between anxiety and drinking behaviour than men with low tension reduction alcohol outcome expectations. The outcomes of the study corroborated the Tension Reduction Hypothesis of stress-related drinking.

In over two dozen trials, Bien et al. (1993) found that therapy interventions containing some or all of these motivational factors were successful in commencing treatment and reducing long-term alcohol use, alcohol-related disorders, and drinking-related health outcomes. (It's worth noting that in a lot of these studies, the motivating intervention produced equivalent results when compared to lengthier, more intensive alternatives.) Only one randomised controlled trial has attempted to replicate the efficacy of this method, which has been found to be useful with problem drinkers: Stephens and Roffman (1993) claimed motivational interviewing to be effective with marijuana addicts.

METHODOLOGY

Aim of the study - To study the effect of motivational enhancement therapy for reduction of alcohol dependency among individuals with alcohol dependence syndrome.

OBJECTIVES OF THE STUDY:

1. To examine the pre-intervention level of alcohol dependency among the alcohol dependent patients.
2. To examine the post intervention level of alcohol dependency among the alcohol dependent patients.
3. To examine the multidimensional aspects of craving among the alcohol dependent patients.
4. To examine the effectiveness of Motivational Enhancement Therapy among the alcohol dependent patients in reduction of alcohol dependency.
5. To examine the level of alcohol dependency in controlled and experimental group.
6. To measure social occupational functioning in controlled and experimental group.

Hypothesis:

- There is no significant difference between the pre-intervention and post-intervention scores of alcohol dependency among alcohol dependent clients.
- There is no need to help alcohol dependent clients to maintain abstinence from alcohol consumption.
- There is no significant difference between the multidimensional aspects of craving among the alcohol dependent patients in controlled and experimental group.
- There is no motivational intervention strategies to be effective to promote abstinence.
- There is no help through helpful counselling sessions among alcohol dependent to maintain abstinence.
- There is no significant difference in social occupational functioning in controlled and experimental group.

Venue of the study:

The present study was conducted at outpatient and inpatient department of Motilal Nehru Divisional Hospital, Prayagraj, UP. India

Research Design:

The present study is a hospital based prospective intervention based study.

Sampling Technique:

Simple Random Sampling technique was used, followed by random assignment of participants to experimental and control group.

Sample Size:

The study sample consisted of 20 patients between 20 to 40 years of age, male with diagnosis of alcohol dependence syndrome as per ICD-10 DCR criterion (WHO 1993). They were divided into two equal groups with one group receiving Motivational enhancement therapy along with the usual treatment and the other group receiving the treatment as usual (experimental and control group).

SAMPLING METHOD:

Samples were selected by using the purposive sampling technique.

INCLUSION CRITERIA FOR PATIENTS:

- 1) Patients with a diagnosis of having mental and behavioural disorder due to use of alcohol as per ICD-10 Diagnostic Criteria for Research (WHO, 1993)
- 2) Adult male in age group of 20-40 years.
- 3) Education more than 5th standard.
- 4) Those who will give the informed consent
- 5) Who will be able to understand Hindi language

EXCLUSION CRITERIA FOR PATIENTS:

- 1) Presence of co-morbid psychiatric/neurological disorder.
- 2) Patients with major physical problems.
- 3) Age below 20 or above 40 years.
- 4) Those who are not willing to give informed consent.

Tools used –

1. Informed Consent Form: Prior to performing the study, the participants' permission would be sought. It would include an Information Sheet (to share information about the research, such as the introduction, main purpose, procedure, duration, participant selection, voluntary participation, and study confidentiality.) and a Certificate of Consent (to share information about the research, such as the introduction, main purpose, procedure, duration, participant selection, voluntary participation, and confidentiality of the study) (for signatures if agree to take part).

2. Data Sheet with Socio-Demographic and Clinical Information- A socio-demographic and clinical data sheet will be created specifically for this study to capture demographic and clinical factors such as age, sex, age of commencement of sickness, duration of illness, history of previous and current illness, and family history, among others. Additional information on the patient will be obtained by consulting the patient's case record file at the hospital.

3. Edward & Gross's 1976 Severity of Alcohol Dependence Questionnaire (Sad-Q): It is a 20-item self-administered questionnaire developed by Edward and Gross to assess the degree of alcohol dependence (1976). It has five subscales, each with four elements. Each item is scored on a four-point scale ranging from "almost never" to "almost usually," with a score ranging from 0 to 3. As a result, the maximum possible score is 60, and the lowest possible score is 0. It has a 0.85 test-retest reliability.

4. Alcohol Craving Questionnaire (ACQ, Singleton et al., 1995): The Alcohol Craving Questionnaire is a 47-item questionnaire designed to examine the multidimensional elements of alcohol craving in current users.

Each item is linked to one of five domains associated with alcohol cravings:

- 1) the desire to drink alcohol,
- 2) the intention to drink alcohol,
- 3) the expectation of a favourable consequence,
- 4) the expectation of withdrawal alleviation and a negative outcome, and
- 5) the lack of control over usage.

Confirmatory factor analyses (CFA) were used to validate the factor models. The ACQ's psychometric features were investigated using item characteristics analysis to exclude non-sensitive items, exploratory component analysis of the remaining questions, and calculations with good internal consistency, test-retest reliability, and convergent validity. All domains have an alpha score that runs from 0 to 100.

5. The Social Occupational Functioning Scale (SOFS, Saraswat et al, 2006): This method has been used to assess social functioning. It's a quick, but comprehensive, test of social functioning that's simple to apply in a hectic clinical situation. For the Indian population, this has been standardised. Ratings should be based on the patient's actions throughout the previous month. There are four domains for evaluating daily activities. The scoring for each of the fourteen domains goes from 1 to 5.

PROCEDURE OF THE STUDY:

The patients fulfilling the inclusion and exclusion criteria were taken up for the study. Written informed consent were taken from the patients after explaining the objectives and procedure of the study in detail. Socio-demographic data were collected from patients who were willing to participate and fulfilling the inclusion and exclusion criteria. Two groups were made for the purpose of study. Following were the group:

- Experimental Group--- Treatment as usual with Motivational Enhancement Therapy
- Control Group --- Treatment as usual 10 patients Patients were placed in two groups through the random sampling method. Accordingly patients were screened for the study purpose. Following which they were placed in any of the two treatment groups. Group A: Patients in group A were given 12 sessions of motivational enhancement therapy (2 days a week) for 6 weeks. Each session was of 45 - 60 minutes duration. There will not be any change in other medical treatment procedure.

Group B: Treatment was as usual. Patients from all the two groups did undergo baseline assessment of alcohol dependence syndrome and social functioning.

Alcohol dependence and social functioning assessment were done through the above proposed tests. After baseline assessment, alcohol dependence assessment and social functioning was done after completion of intervention. Randomized Control Experimental Design: I I I Pre Assessment - Before intervention assessment of alcohol dependence, craving control and social functioning was done. Post Assessment- After intervention assessment of alcohol dependence, craving control and social functioning was done. A 10 patients Motivational Enhancement Therapy+ TAU B 10 patients TAU 20 patients of alcohol dependence syndrome

STATISTICAL ANALYSIS

Table-1: Comparison between Experimental group and Control group on Socio-Occupational Functioning scores at post intervention phase.

Variable	Group (Mean ± SD)		Mean Rank		U	Z
	TAU±MET	TAU	TAU±MET	TAU		
Post Assessment						
Adaptive living skill	12.00±1.24	13.30±.94	7.65	13.35	21.50	-2.22*
Social appropriateness	6.00±0.81	7.50±1.35	7.25	13.75	17.50	-2.58*
Interpersonal skills	5.70±0.94	6.50±0.97	8.05	12.95	25.50	-1.97*

*p<0.05, **p<0.01, ***p<0.001

Table 1: shows the comparison of the scores on the social-occupational Functioning between experimental and Control Group which was done by using Mann-Whitney U Test. After analysis, it was found that the mean value for social-occupational Functioning was 24.00±1.56 and 27.20±1.75 for experimental group and Control group. There was significant difference found between the two groups (Z=3.211, p <0.001). Similarly, the mean value for social appropriateness was 6.00±0.66 and 7.30±1.49 for the Experimental and Control group respectively. The difference between the two groups on this domain was also found significant (Z=2.04, p<0.05). This finding also indicates that there was significant difference between Experimental and Control group in respect to this domain of social appropriateness. The mean value for interpersonal skill was 5.70±0.94 of the Experimental group and 6.50±0.97 of the control group. There was significant difference found between both the groups (Z=1.97, p<0.05) which suggests that there was significant difference between the two groups in respect to this domain of interpersonal skills. Pointing towards the fact that high score on the SOFS indicate poor functioning, hence, Experimental group was better in comparison to Control group on social- Occupational Functioning.

Table-2: Comparison between baseline and post scores on Alcohol Craving Questionnaire within TAU±MET group and TAU group.

Variable	Group (Mean ± SD)		Mean Rank		Z
	Base line	Post	Negative Ranks	Positive Ranks	
TAU±MET Group					
UDUA	20.60±2.67	11.20±1.98	5.50	00.00	-02.81**
IUA	19.30±1.49	13.60±1.83	5.50	00.00	-02.81**
APO	26.30±4.16	22.30±1.82	5.00	00.00	-02.67*
ARWNO	28.60±2.22	13.70±3.46	5.50	00.00	-02.80**
LCOU	29.50±1.90	13.40±2.31	5.50	00.00	-02.82**
TAU Group					
UDUA	20.50±3.95	13.90±1.79	5.50	00.00	-02.81**
IUA	20.60±2.41	16.70±1.33	5.50	00.00	-02.82**
APO	27.40±2.17	25.90±2.18	5.00	00.00	-02.68**
ARWNO	28.00±1.94	18.60±2.22	5.50	00.00	-02.81**
LCOU	28.40±1.42	17.20±2.04	5.50	00.00	-02.82**

*Significant at p<0.05, **Significant at p<0.01

Table 2 shows comparison between baseline and post intervention scores on alcohol craving questionnaire across both the groups. Results of this table show that both the groups improved in a statistically significant way on the measures of severity of alcohol but this improvement was more remarkable in GT+TAU group in comparison to TAU group. Intervention group showed improvement on all the domains of ACQ i.e. ACQ Total scores (Z=02.80, P<0.01), Urges and Desires to Use Alcohol (Z= 2.80, P<0.01), Intent to Use Alcohol (Z= 2.81, P<0.01), Anticipation of Positive Outcome (Z= 2.52, P<0.05), Anticipation of Relief from Withdrawal and Negative Outcome (Z= 2.80, P<0.01) and Lack of Control (Z= 2.82, P<0.01) but treatment as usual group showed improvement on ACQ Total (Z=02.80, P<0.01), Urges and Desires to Use Alcohol (Z=2.80, P<0.01), Intent to Use Alcohol (Z= 2.82, P<0.01), Anticipation of Positive Outcome (Z= 2.71, P<0.01), Anticipation of Relief from Withdrawal and Negative Outcome (Z= 2.81, P<0.01) and Lack of Control Over Use (Z= 2.81, P<0.01) domains only with comparatively less significant difference.

DISCUSSION

On pre intervention phase both groups were comparable on all the outcome variables and there was no significant difference between both the groups in terms of severity of alcohol dependence questionnaire,

locus of control, alcohol craving questionnaire, WHO quality of life and brief cope inventory. These findings suggest that above mentioned issues are very pertinent in this population and requires clinical attention in order to improve the life of patients with alcohol dependence syndrome. In term of locus of control similar result were reported by Marchiori et. al. [167] yielded that alcohol addicted individuals had more inclination to internal locus of control than the non-addicted individuals. In USA, Similar results were reported by Thurman et. al. [168] could not find significant differences between the alcohol dependent and non-dependent persons in relation to locus of control.

These findings suggest that locus of control may be a potentially useful clinical construct in the development of treatment plans and therapeutic issues for American Indian patients who are alcoholics.

Similar finding of the present study reported by Naqvi et. al. [175] conducted a study on Cognitive Regulation of Craving in Alcohol Dependent and Social Drinkers. The results of this study did not show any significant differences between the two groups in test scores for Alcohol craving at base line assessment.

On post intervention when both groups were compared on outcome variables significant difference was found between both groups on several measures. At this stage significant difference was found between MET+TAU group and TAU group on SADQ total score ($U= 13.00$, $Z=2.81$, $p<0.01$). These findings suggest that group therapy was effective in reducing severity of alcohol dependence Similar findings were reported by Naqvi et. al. [175]

There was significant difference between these two groups ($Z=2.99$, $p>0.01$) pointing towards the fact that lower score suggests reducing craving of alcohol; hence, TAU+MET group was better in comparison to TAU group on the domains of alcohol craving questionnaire (Table-8).

These findings explains the effectivity of Motivational Enhancement Therapy.

CONCLUSION

The study can thus be concluded by stating that Motivational Enhancement Therapy plays an important role in reducing alcohol craving among individual with alcohol dependence syndrome. Significant difference was found between the two groups pertaining to socio-occupational functioning at post intervention phase which positively adds on to the effectiveness of the therapy.

REFERENCES:

1. Alcoholics Anonymous (1976). Alcoholics Anonymous: The story of how many thousands of men and women have recovered from alcoholism (3rd ed.). New York: A.A. World Services.
2. Annis, H. M. (1985). Is inpatient rehabilitation of the alcoholic cost effective? Con position. *Advances in Alcohol and Substance Abuse*, 5, 175-190.
3. American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorder*. 4th edition, American Psychiatric Association, Washington , DC
4. American Psychiatric Association (2000). *Diagnostic and Statistical Manual of Mental Disorder* Text Revision, 4th edition, American Psychiatric Association, Washington,DC;p.198
5. Baker,. A., & Dixon, J. (1991). Motivational interviewing for HIV risk reduction. In W. R. Miller & S. Rollnick, *Motivational interviewing: Preparing people to change addictive behavior* (pp. 293-302). New York: Guilford Press.
6. Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122- 147.
7. Bern, D. J. (1965). An experimental analysis of self-persuasion. *Journal of Experimental Social Psychology*, 1, 199-218.

8. Bein, T. H., Miller, W. R., & Borouhgs, J. M. (1993). Motivational interviewing with alcohol outpatients. *Behavioural and Cognitive Psychotherapy*, 21(4), 347-356
9. Carver, C.S. (1997) consider the Brief Cope. *International Journal of Behavioural Medicine* ; 4, 92-100.
10. Caspi, A., Begg, D., & Dickson, N., et al. (1997). Personality differences predict health-risk behaviors in young adulthood: evidence from a longitudinal study. *Journal of Personality and Social Psychology*; 73, 1052- 106 3.
11. Chavan, B.S., Arun, P., & Bhargava, R., et al. (2007). Prevalence of alcohol and drug dependence in rural and slum population of Chandigarh: A community survey. *Indian Journal of Psychiatry*; 49,(1),44-48.
12. Donovan, D., Mattson, M.E., & Cisler, R.A., et al.(2005). Quality of life as an outcome measure in alcoholism treatment research. *Journal of Studies on Alcohol Suppl.*, 119-139 (discussion 192- 113).
13. Dupuy, H.J. (1984) Chapt er-9: The Psychological General Well-Being Index: Pages 170-183:
14. Eckhard, C.I., & Christopher, I. (2007). Effects of alcohol intoxica tion on anger experience and expression among partner assau ltive men. *J Con sul C lin Psycho l*;75, (1), 61- 71.
15. Edwards, G. & Gross, M.M. (1976). Alcohol dependence: Provisional description of the clinical syndrome. *British Medical Journal*; I, 1058 - 1061.
16. Eftekhari, A., Turner, A.P., & Larimer, M.E.(2004). Anger expression, coping, and substance use in adolescent offenders. *Addict Behav*; 29, (5), I 00 1-8.
17. Egan , G. (1982). *The skilled helper: A model for systematic helping and interpersonal relating* (2nd ed.). Monterey, CA: Brooks/Cole, 1982.
18. Ivey, A. (1982). *Intentiona l interviewing and counseling*. Monterey, CA: Brooks/Cole.
19. Miller, W. R. (1983). Motivational interview ing with problem drinkers. *Behav io ural Psychotherapy*, 11, 147- 172.
20. Klimas, J., Field, C. A., Cullen, W., O'Gorman, C. S., Glynn, L. G., Keenan, E., ... & Dunne, C. (2011). Psyc hosocial interventions for problem alcohol use in illicit drug use rs (Protocol). *Cochrane Database o f Systematic Reviews* 2011, (8).
21. Miller, W. R. (1989). Increasing motivation for change. In R. K. Hester & W. R. Miller (Eds.), *Handbook of alcoholism treatment approaches: Effective alternatives* (pp. 67-80). New York: Pergamon Press.
22. Miller, W. R., & Jackson, K. A. (1995). "Not listening" and "Listening." In *Practical psychology for pastors: Toward more effective counseling*. Englewood Cliffs, NJ: Prentice-Hall.
23. Miller, W. R., & Rollnick, S. {1991} . *Motivational interviewing: Preparing people to change addictive behavior*. New York: Guilford Press.
24. Miller, W. R., & Sovereign, R. G. {1989}. *The Check-up: A model for early intervention in addictive behaviors*. In T. L0berg, W.R. Miller, P. E. Nathan, & G. A. Marlatt (Eds.), *Addictive behaviors: Prevention and early intervention* (pp. 219-231). Amsterdam:
25. Swets & Zeitlinger Miller, W. R., Sovereign, R. G., & Krege, B. (1988). Motivational interviewing with problem drinkers: II. The Drinker's Check-up as a preventive intervention. *Behavioural Psychotherapy*, 16, 251-268.
26. Prochaska, J. O., & DiClemente, C. C. (1982). *Transtheoretical therapy Toward a more integrative model of change*. *Psychotherapy: Theory, research and practice*, 19, 276-288.

27. Prochaska, J. O., & DiClemente, C. C. (1984). *The transtheoretical approach: Crossing traditional boundaries of therapy*. Homewood, IL:
28. Dow Jones/Irwin. Prochaska, J. O., & DiClemente, C. C. (1985). Processes and stages of change in smoking, weight control, and psychological distress. In S. Schiffman & T. Wills (Eds.), *Coping and substance abuse* (pp. 319-345). New York: Academic Press. Prochaska,].
29. O., & DiClemente, C. C. (1986). Toward a comprehensive model of change. In W. R. Miller & N. Heather (Eds.), *Treating addictive behaviors: Processes of change* (p. 3-27). New York: Plenum Press.
30. Project MATCH Research Group (1993). *Project MATCH: Rationale and methods for a multisite clinical trial matching patients to alcoholism treatment*. *Alcoholism: Clinical and Experimental Research*, 17, 1130-1145.
31. Rehm, J. & Gmel, G. (2002). Average volume of alcohol consumption, patterns of drinking and mortality among young Europeans in 1999. *Addiction*; 97,(1), 105-109.
32. Sharma, M.K, Suman, L.N. & Murthy, P. et al. (2011). State-Trait Anger and Quality of Life Among Alcohol Users. *German J Psychiatry*; 14 (2), 60-65.
33. Singleton, E.G.(1995) A brief version of the Alcohol Craving Questionnaire (ACQ-NOW) : Problems of Drug Dependence, Proceedings of the 60th Annual Meeting, The College on Problems of Drug Dependence, Inc. Volume II: Abstracts. NIDA Research Monograph 180. Rockville, Maryland: National Institute on Drug Abuse, 1999.p. 304.
34. Skodol, A.E., Oldham, J.M., & Gallaher, P.E. (1999). Axis II comorbidity of substance use disorders among patients referred for treatment of personality disorders. *American Journal Psychiatry*; 156, 733-738.
35. Smith KW, Larson MJ. (2003): Quality of life assessments by adult substance abusers receiving publicly funded treatment in Massachusetts. *American Journal of Drug and Alcohol Abuse*; 29,(2),323- 335.
36. *The ICD-10 Classification of Mental and Behavioural Disorder: Diagnostic criteria for Research* (1992). Geneva: World Health Organization.
37. Vaillant, G.E. (1988). What can long-term follow-up teach us about relapse and prevention of relapse in addiction? *British Journal of Addiction* ; 83 , 1147- 1157.
38. Valtonen, K., Sogren, M., & Cameron-Padmore, J. (2005). Coping Styles in Persons Recovering from Substance Abuse *British Journal of Social Work*; 36, 57- 73.
39. Wells, S., Graham, K., & West, P. (2000). Alcohol -related aggression in the general population. *J Stud Alcohol*; 61 (4), 626-632.
40. White, H.R., Brick, J., & Hansell, S. (1993). A longitudinal investigation of alcohol use and aggression in adolescence. *J Stud Alcohol, Supplement*; 11, 62-77.
41. WHO (2002). *The World Health Report - Reducing Risks, Promoting Healthy Life*. Geneva, World Health Organization (WHO).
42. Yalom, I. & Leszcz, M. (2005). *The theory and practice of group psychotherapy* (5th ed.).New York: Basic Books. p. 1
43. Zubaran, C., & Foresti, K., (2009). Quality of life and substance use: concepts and recent tendencies. *Curr. Opin. Psychiatry* 22, 281- 286.