

## **EFFICACY OF MOTIVATION ENHANCEMENT THERAPY (MET) ON PATIENTS WITH ALCOHOL USE**

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### **INTRODUCTION**

Alcohol dependence is a prior psychiatric diagnosis (DSM-IV and ICD-10) in which a person is physically or psychologically reliant on alcohol. The modern definition of alcoholism is still based on preliminary research. Over the last several decades, scientists have worked hard to identify and understand the core characteristics of alcoholism. A chronic disease characterized by uncontrolled drinking and preoccupation with alcohol.

Alcoholism is the inability to control drinking due to both a physical and emotional dependence on alcohol. Symptoms include repeated alcohol consumption despite related legal and health issues. Those with alcoholism may begin each day with a drink, feel guilty about their drinking and have the desire to cut down on the amount of drinking. Treatment involves counseling by a healthcare professional.

### **INTERVENTION STRATEGIES**

Psychosocial interventions, which exclude any pharmacological treatments, are best described as "psychologically-based interventions aiming at lowering drinking behavior or alcohol-related disorders" (Kaner, Beyer, Dickinson, Pienaar, Campbell, Schlesinger, Heather, Saunders, & Burnand, 2007). Brief interventions involve a time – limited intervention focusing on changing behavior. They are often motivational in nature using counseling skills to encourage a reduction in alcohol consumption (McQueen, Howe, Allan, Mains and Hardy, 2011).

Many psychosocial therapies have been identified so far that are expressly geared to address problem alcohol usage. Motivational interviewing (MI), cognitive-behavioral therapy (CBT), brief interventions (SBI), and Twelve Step facilitation programmes are among the most commonly used interventions.

Motivational therapies are the second-most-used therapy in drug rehabilitation centers. Patients might use the therapies to assist them develop internal motivation to start or maintain treatment. They are frequently used in conjunction with behavioral therapy to create incentives for sustaining sobriety.

**Motivational Enhancement Therapy (MET)** is a sort of motivational interviewing that is specifically designed for substance dependence. It alleviates patients' fears or apprehensions about starting treatment or ending their drug use. Instead than teaching patients how to change, the idea is to encourage them to do it.

Motivational enhancement therapy is characterized as a directive, client-centered intervention which helps in modification of behavior by helping subjects in identifying and resolving the ambivalence toward a change in self. In order to free one from the vicious cycle of the alcohol trap one needs self-efficacy, which serves as a protective role to prevent from relapses.

Motivational Enhancement Therapy (MET) is a systematic intervention approach for evoking change in problem drinkers. MET is based on principles of motivational psychology and is designed to produce rapid, internally motivated change. This treatment strategy does not attempt to guide and train the client, step by step, through recovery, but instead employs motivational strategies to mobilize the client's own resources. MET consists of four carefully planned and individualized treatment sessions. The first two sessions focus on structured feedback from the initial assessment, future plans, and motivation for change. The final two sessions at the midpoint and end of treatment provide opportunities for the therapist to reinforce progress, encourage reassessment, and provide an objective perspective on the process of change.

### Goals for MET Sessions

Session	Goal
Session 1 (Week 1)	Provide personalized feedback from assessment instruments; identify and address ambivalence; build motivation for change.
Session 2 (week 2 or 3)	Develop a change plan; strengthen commitment to change.
Session 3 and 4 (week 6 to week 12)	Review progress on the change plan; renew motivation; termination of therapy.

## REVIEW OF LITERATURE

Excessive drinking is a significant cause of mortality, morbidity and social problems in many countries. Brief interventions aim to reduce alcohol consumption and related harm in hazardous and harmful drinkers who are not actively seeking help for alcohol problems. Interventions usually take the form of a conversation with a primary care provider and may include feedback on the person's alcohol use, information about potential harms and benefits of reducing intake, and advice on how to reduce consumption. Discussion informs the development of a personal plan to help reduce consumption. Brief interventions can also include behaviour change or motivationally – focused counselling.

Research on MET suggests that its effects depend on the type of drug used by the participants and on the goal of the intervention. This approach has been used successfully with people addicted to alcohol to both improve their engagement in treatment and reduce their problem drinking.

Kumar, Srivastava, Srivastava, Yadav and Prakash in 2021, studied on the effect of Motivational Enhancement Therapy (MET) on the self efficacy of individuals of Alcohol Dependence. Their study aimed to assess and compare the effectiveness of MET on the self-efficacy of individuals pre and posttest with control design. For the purpose, a total of 40 subjects, alcohol-dependent persons fulfilling the International Classification of Diseases-10 criteria were selected through purposive sampling method from the OPD & IPD of Psychiatry Department IMS, BHU, Varanasi, were randomly divided into two groups. 1<sup>st</sup> group 20 subjects were given motivational enhancement therapy session for 10 sessions along with treatment as usual (MET + TAU), whereas 2<sup>nd</sup> group control group were given treatment as usual (TAU) at the end of intervention post level of self-efficacy were measured through self-efficacy scale. Modified Kuppaswamy Socioeconomic Status Scale, Alcohol use disorder identification test, Self – Efficacy Scale as tools were used. The study concluded that Motivational Enhancement Therapy tries to decrease ambivalence so as to enhance the change in the subject's self-efficacy which assists the individuals in abstinence from alcohol.

Motivation plays an important role in alcoholism treatment by influencing patients to seek, complete, and comply with treatment as well as make successful long-term changes in their drinking. Both alcohol-abusing and alcohol-dependent people can be classified into different “stages of change” in terms of their readiness to alter their drinking behaviour. Consequently, DiClemente, Bellino, and Neavins (1999) concluded in their research that the role of motivation had to be considered more seriously in the treatment

and recovery from substance abuse and to incorporate motivational enhancement strategies into treatment programs.

In a recent study done by Kumar et al (2021) under the heading of the effect of Motivational Enhancement Therapy (MET) on the self efficacy of individuals of Alcohol dependence, it was found that MET tries to decrease ambivalence so as to enhance the change in the subject's self-efficacy which assists the individuals in abstinence from alcohol. The study was done on total of 40 subjects, alcohol-dependent persons fulfilling the ICD-10 criteria selected through purposive sampling method from OPD and IPD of BHU, Varanasi, randomly divided into two groups. First group of 20 subjects were given MET session for 10 sessions along with treatment as usual (MET + TAU), whereas second group were given treatment as usual (TAU) and at the end of intervention post level of self-efficacy were measured through self-efficacy scale.

In a randomized controlled trial of Motivation Enhancement Therapy (MET) with two control conditions: nondirective reflective listening (NDRL) and no further counseling (NFC), done by Sellman, Sullivan, Dore, Adamson and MacEwan (2001), on 122 subjects of mild to moderate alcohol dependence, MET is more effective for reducing unequivocal heavy drinking than either a feedback/education session alone or four sessions of NDRL. MET can be considered an effective "value added" counseling intervention in a real-life clinical setting. In patients with mild to moderate alcohol dependence, nondirective reflective listening provides no additional advantage over a feedback/education session alone.

Adamson and Sellman (2008) conducted by five – year outcomes of alcohol-dependent persons treated with motivational enhancement for determining whether the superior treatment effect of MET previously demonstrated at 6 months was sustained at a 5-year post-treatment follow-up. They concluded that although 5-year outcomes were indistinguishable among the three treatment groups, this was the result of patients in the comparison conditions catching up to the drinking gains of MET patients rather than a deterioration in drinking for MET patients. Individuals allocated to receive MET achieved a greater reduction sooner than either of the comparison treatment conditions.

A randomized controlled trial was undertaken on client language during motivational enhancement therapy and alcohol use outcome by Campbell, Adamson & Carter in 2010. They used to code 106 audiotaped MET sessions from 28 participants who received 3-4 sessions of MET within the context of a randomized

controlled trial for mild-moderate alcohol dependence. Client Language was analyzed within sessions (categorized into Early, Mid, or End Intervals) and across sessions, and in relation to 6 months drinking outcome. It concluded potentially valuable findings that warrant further investigation including supporting the clinical benefit of monitoring Client Language to predict outcome.

## **METHODOLOGY**

**AIM :** To study the efficacy of Motivation Enhancement Therapy (MET) on patients with alcohol use.

### **OBJECTIVES**

- To study the socio-demographic variables of the patients with alcohol use.
- To study and compare the efficacy of Motivation Enhancement Therapy (MET) on patients with alcohol use receiving only therapy and not receiving therapy.

### **FOR ALCOHOLIC PATIENTS**

#### **Inclusion Criteria**

- Patients in the age range of 18 years to 45 years only.
- Patients only diagnosed as alcohol abuse as per ICD-10 diagnostic criteria.
- Only males were taken.
- Only those who were able to comprehend all the instructions during therapy.
- Patients consenting and cooperative for the study.

#### **Exclusion Criteria**

- Patients below the age range of 18 years and above 45 years.
- Patients with any co-morbid psychiatric conditions, like – psychosis, cognitive dysfunctions, epilepsy, intellectually disabled, etc.

## TOOLS USED

### **Socio demographic data sheet** (self made, semi-structured) –

It is a self-designed semi-structured data sheet used to collect demographic information such as age, sex, education, marital status, socioeconomic status, religion, residence, and clinical information such as age of onset, nature of illness, mode of onset, course, frequency of intake, drinking pattern, family history, and so on.

### **Severity of alcohol dependence questionnaire – C (SADQ-C, Stockwell, Sitharan, McGrath and Lang, 1994)-**

Stockwell, Sitharan, McGrath, and Lang created it in 1994 at the Maudsley Hospital's Addiction Research Unit. It is a metric for determining the degree of dependency. Physical withdrawal symptoms, affective withdrawal symptoms, relief drinking, frequency of alcohol use, and speed of onset of withdrawal symptoms are all covered by the SADQ questions.

**Client motivation for therapy scale (CMOTS; Pelletier, Tucson & Haddad, 1997) –**Pelletier, Tucson, and Haddad developed the Client Motivation for Therapy Scale (CMOTS) in 1997. Soares and Lemos in 2003 altered the original CMOTS and translated it into Portuguese. CMOTS consisted of 24 items on a 7-point Likert scale ranging from 1 (not at all true) to 7 (very true) (totally). Intrinsic Motivation, Integrated Regulation, Identified Regulation, Introjected Regulation, External Regulation and Amotivation are the six subscales that make up this scale. Its reliability ranges between 0.682 and 0.896, which indicated good internal consistency.

- **Motivation Enhancement Therapy (MET) Technique (Project MATCH, NIAAA, 1989) -  
*Module for Intervention***

### **1. Session**

Preparation for the initial session- Before treatment begins, pre-assessments will be done and clients will be persuaded to bring their family members/spouses who can be supportive, as the caregiver act as an

“important person” for MET. Confirmation has to be taken that the client will not consume alcohol at all throughout the MET session.

Presenting the rationale and limits of treatment by providing the client with the clear and persuasive explanation of the rationale for this approach. The client should be made to belief that all the decisions regarding his drinking behavior and all the other will be taken by him only. Nobody will be forcing him to change.

Summarization is done in the form of commitment to change. Follow-up note has to be provided in the form of personalized hand-written message containing positive remarks.

### **Homework**

Reading material regarding Alcohol & Health is provided to be read at home.

## **2. Session**

It is scheduled after 1 to 2 weeks after the first session. Briefing up of the first session. Client’s personal feedback will be taken. At the end, Recapitulation will be done.

## **3. Session 3 & 4**

It is scheduled after 3 to 6 weeks, respectively. They are important as “booster” sessions to reinforce the motivational processes begun in initial sessions, by using the same motivational quotes.

### **STRUCTURAL DESIGN**

<b>SAMPLE GROUPS</b>	<b>Alcoholic patients with MBSR</b>	<b>Alcoholic patients without Intervention</b>
<b>N (20)</b>	10	10
<b>SEX</b>	Males	Males
<b>AGE</b>	18 to 45 years	18 to 45 years

<b>THERAPEUTIC INTERVENTIONS</b>	10 sessions	--
<b>DURATION</b>	45 to 50 minutes (500 hours)  (30x500) = 15000 hrs.	---

**PROCEDURE:**

Initially permission was taken from the research ethical committee of the hospital, from where the data has to be collected. Those clients or patients fulfilling the eligibility criteria of the research were selected from the IPD and OPD of the hospital. After that their general information and clinical details were collected on the self-designed, semi-structured Socio-demographic and clinical data sheet. All were provided with the information regarding the study as well as mode of intervention in the personal interview session. Written informed consent was taken from the patients. Then, the patients were screened with the help of baseline assessments.

The patients were assigned in two groups with 10 patients in each. Group I received Motivation Enhancement Therapy (MET) intervention (experimental group), Group II received no therapeutic intervention (control group), but received treatment as usual (TAU).

Following this, upon the completion of MET intervention, a post assessment on the same parameters were done on the two groups. Control group were given proper psycho-education at the end before terminating the program.



## RESULTS

Table -1(a) and 1(b)

Showing the comparison among both the groups of patients with alcohol use with respect to their age and other socio-demographic details.

Variables	GROUPS						U –test	Sig.
Age (in years)	Alcoholic patients on MET (N=10)			Alcoholic patients without intervention (N=10)			0.75	NS
	Mean	±	SD	Mean	±	SD		
	31.6	±	4.32	31.2	±	5.12		

Table -1(b)

VARIABLES		GROUPS				Chi-square	Sig.
		Alcoholic patients on MET (N=10)		Alcoholic patients without intervention (N=10)		0.266	NS
		f	%	f	%		
<b>Marital Status</b>	Married	7	70	8	80	0.266	NS
	Unmarried	3	30	2	20		
<b>Education</b>	Illiterate	1	10	2	20	0.314	NS
	Primary	4	40	3	30		
	Secondary	3	30	4	40		
	Graduation	2	20	1	10		
<b>Occupation</b>	Not working	0	0	2	20	0.144	NS
	Labour	2	20	1	10		
	Business	3	30	2	20		
	Govt. Service	1	10	2	20		
	Private Job	4	40	3	30		
<b>Residence</b>	Urban	3	30	2	20	0.243	NS
	Sub-Urban	5	50	2	20		
	Rural	2	20	6	60		

<b>Family Type</b>	Nuclear	6	60	7	70	0.227	NS
	Joint	4	40	3	30		

NS- no significant difference

Above table shows no significant differences among the socio-demographic variables, indicating that there is no difference in both the groups in terms of age (table 1a), marital status, education, occupation, residence and their family type (table 1b).

## Table-2

Showing the comparison among both the groups of patients with alcohol use with respect to their motivation on Client Motivation for Therapy Scale (CMOTS)

Variables	GROUPS						U -test	Sig.		
	Alcoholic patients on MET (N=10)			Alcoholic patients without intervention (N=10)						
	Mean	±	SD	Mean	±	SD				
	Intrinsic Motivation	27.4	±	3.46	28.2	±			3.51	0.49
	Extrinsic Motivation	35.2	±	9.04	31.8	±			6.95	0.89
	Amotivation	33.4	±	8.48	36.0	±			8.34	0.66

NS- no significant difference.

Above table also shows no significant difference in the motivation level of patients in both the groups. However, it was found that patients in both the groups showed higher amotivation towards treatment provided to them.

**Table-3**

Showing the comparison among the severity level of dependence of patients with alcohol use (with MET) on pre and post test conditions

Variables	GROUPS Alcoholic patients on MET (N=10)				Chi-square	Sig.
	Pre - test (before therapy) f                    %		Post – test (post therapy) f                    %		4.577	0.05
	Mild level	1                    10	4                    40			
	Moderate level	4                    40	5                    50			
	Severe level	5                    50	1                    10			

Above table shows the comparison among the severity level of dependence of patients with alcohol use (with MET) on pre and post test conditions. High significant difference ( $p=0.05$  level) was found among both the groups.

**Table-4**

Showing the comparison among the severity level of dependence of patients with alcohol use (without intervention) on pre and post test conditions

Variables	GROUPS				Chi-square	Sig.
	Alcoholic patients		without			
	intervention (N=10)					
	Pre - test (before therapy)		Post – test (post therapy)			
	f	%	f	%		
Mild level	1	10	1	10	0.233	NS
Moderate level	5	50	6	60		
Severe level	4	40	3	30		

NS = not significant

Table 4 shows the comparison among the severity level of dependence of patients with alcohol use (without intervention) on pre and post test conditions. On comparison between both the conditions no significant difference was found.

## DISCUSSION

Therapy can be an intimidating prospect, particularly for people dealing with an addiction. MET is a form of addiction treatment that aims to combat the reluctance to change, uncovering and sparking an individual's internal motivations that can drive them to make the necessary changes to their behavior.

This research is an attempt to see the efficacy of MET on patients with alcohol abuse. For this purpose, a sample of 20 male patients diagnosed as having alcohol abuse as per the ICD-10 diagnostic criteria, were selected from the IPD and OPD of Manopchar hospital, Raipur. These 20 patients were further divided in two groups of 10 patients each, i.e., 10 patients being provided with MET (experimental group) and other 10 patients who were receiving treatment as usual (TAU) without MET (control group).

Their socio-demographic details and clinical information were collected on a self-made semi-structured socio-demographic and clinical data sheet. Both the groups were compared on their socio-demographic aspects, like- age, marital status, education, occupation, residence and family type and no significant difference was found among both the groups. The mean age of patients in experimental group was 31.6 years (SD= 4.32) and mean age of patients in control group was 31.2 years (SD=5.12). The finding is in accordance with the study done by Chatterjee, Dwivedi and Singh (2021), who stated that the mean age at which dependence is reported was about 33.58 years.

In the present research, most of the males were married, i.e; 70% of patients in the experimental group and 80% of the patients in control group. Majority of the patients in both the groups (i.e., 40% in experimental and control group each) were having primary and secondary education respectively. Most of the alcoholic patients, i.e., 40% in experimental group and 30% in control group were having private job. In terms of their residence, 50% of the experimental group hailed from sub-urban area, whereas, 60% of the control group belonged to rural area. Most importantly, majority of the patients consuming alcohol were from nuclear family, i.e., 60% of the experimental group and 70% of patients in control group.

Motivation plays an important role in alcoholism treatment by influencing patients to seek, complete, and comply with treatment as well as make successful long-term changes in their drinking (DiClemente and Scott, 1997). Many people would like to recover from their addiction but lack the motivation to do so. So, in order to check their level of motivation for the intervention and towards the treatment as usual (TAU), both the groups were given Client Motivation for Therapy Scale (CMOTS). Findings showed that patients with alcohol showed lowest intrinsic motivation, but highest amotivation. The experimental group and the control group both scored low in intrinsic motivation (M=27.4, SD=3.46; M=28.2, SD=3.51 respectively), whereas, highest in amotivation (M=33.4, SD=8.48; M=36.0, SD=8.34 respectively). Findings indicate that alcoholic patients did not wanted to undergo any sort of treatment modalities on their own willingly, but might be due to the pressure of family, workplace and their responsibilities, they agreed for the treatment options. Traditional approaches to treating unmotivated patients with alcohol problems often use aggressive and confrontational strategies in response to the patients' denial (Miller and Rollnick, 1991). In

one widely used approach, a team of family members, friends, and colleagues unite to confront the drinker and convince him that alcoholism treatment is necessary (Johnson, 1986; Liepman, 1993). As Miller (1985) emphasized in his review of the motivation literature, clinicians who work with unmotivated patients must implement less confrontational and more motivation-generating treatment approaches.

Table 3 demonstrates the comparison between pre and post assessments of experimental group on severity scale for dependence. In case of severity scale, majority of the patients in experimental group, i.e; 40% to 50% showed moderate to severe dependence respectively, whereas, while in post assessment (after providing MET intervention), 40% of them showed mild level and 50 % showed moderate level of dependence, suggesting a significant difference of 0.05 level among both the test conditions.

Similarly, comparison between pre and post assessment of control group was seen on the severity of dependence in table-4. It was found that before therapy (pre – assessment condition) most of them, i.e; 40% to 50% showed moderate to severe level of dependence respectively, leading to 60% to 30% of moderate to severe level of dependence respectively after therapy (post assessment condition). No significant difference was found in the control group between the two test conditions.

MET has been shown to be efficacious in reducing alcohol consumption and related consequences in several large – scale randomized controlled studies (Project Match Research Group, 1997; Team UKATT Research Team, 2005; Sellman, Sullivan, Dore, Adamson & MacEwan, 2001).

Earlier studies have also found increase in the days of abstinent among chronic alcohol abuse patients (Dieperink et al., 2014).

MET has been found to be superior to standard community treatment in reducing alcohol/drug use and staying in treatment.

MET can help to encourage individuals to become motivated to make healthier choices and changes to the patterns of their substance use.

## **CONCLUSION**

Motivational Enhancement Therapy tries to decrease ambivalence so as to enhance the change in the subject's self efficacy which assists the individual's in abstinence from the alcohol. MET has been found to be effective in decreasing the severity level of dependence among the patients consuming alcohol.

## REFERENCES

- Adamson, S. & Sellman, J.D. (2008). Five – Year Outcomes of Alcohol-Dependent Persons treated with Motivational Enhancement. *Journal of Studies on Alcohol and Drugs*; 69(4): 589-93.
- Campbell, S.D., Adamson, S.J. & Carter, J.D. (2010). Client language during motivational enhancement therapy and alcohol use outcome. *Behav Cogn Psychother*; 38(4): 399-415.
- Chatterjee, K., Dwivedi, A.K. & Singh, R. (2021). Age at first drink and severity of alcohol dependence. *Med J Armed Forces India*; 77(1): 70-74.
- DiClemente, C.C., Bellino, L.E., & Neavins, T.M. (1999). Motivation for change and alcoholism treatment. *Alcohol Res Health*; 23(2): 86-92.
- DiClemente, C.C. & Scott, C.W. (1997). Stages of change: Interaction with treatment compliance and involvement. In: L.S. Onken, J.D. Blaine, J.J. Boren (eds.). *Beyond the Therapeutic Alliance: Keeping the Drug-Dependent Individual in Treatment*. Rockville, M.D.: National Institute on Drug Abuse. Pp. 131-156. (NIDA Research Monograph No. 165).
- McQueen, J., Howe, T.E., Allan, L., Mains, D. & Hardy, V. (2011). Brief interventions for heavy alcohol users admitted to general hospitals wards. *Cochrane Database Syst Rev*.; 10(8): CD005191.
- Miller, W.R. & Rollnick, S. (1991). *Motivational Interviewing: Preparing People to Change Addictive Behavior*. New York: Guilford Press.
- Johnson, V.E. (1986). *How to Help Someone Who Doesn't Want Help?* Minneapolis: Johnson Institute Books.
- Kaner, E.F., Beyer, F., Dickinson, H.O., Pienaar, E., Campbell, F., Schlesinger, C., Heather, N., Saunders, J. & Burnand, B. (2007). Effectiveness of brief alcohol interventions in primary care populations. *Cochrane Database Syst Rev* (Online), CD004148.
- Kumar, S., Srivastava, M., Srivastava, M., Yadav, J.S. & Prakash, S. (2021). Effect of Motivational Enhancement Therapy (MET) on the self efficacy of individuals of Alcohol dependence. *J Family Med Prim Care*; 10(1): 367-372.
- Liepmann, M.R. (1993). Using family influence to motivate alcoholics to enter treatment: The Johnson Institute Intervention Approach. In: T.J. O'Farrell (ed.). *Treating Alcohol Problems: Marital and Family Interventions*. New York: Guilford Press. Pp. 54-77.
- Project Match Research Group. (1997). Matching alcoholism treatments to client heterogeneity: project MATCH posttreatment drinking outcomes. *J Stud Alcohol*; 58(1): 7-29.

Team UKATT Research Team. Effectiveness of treatment for alcohol problems: findings of the randomized UK alcohol treatment trial (UKATT). *BMJ*; 331(7516): 541.

Sellman, J.D., Sullivan, P.F., Dore, G.M., Adamson, S.J. & MacEwan I.A. (2001). A randomized controlled trial of motivational enhancement therapy (MET) for mild to moderate alcohol dependence. *J Stud Alcohol*; 62(3): 389-96.

Dieperink, E., Fuller, B., Isenhardt, C., McMaken, K., Lenox, R., Pocha, C., Thuras, P. & Hauser, P. (2014). Efficacy of motivational enhancement therapy on alcohol use disorders in patients with chronic hepatitis C: a randomized controlled trial. *Addiction*; 109(11): 1869-1877.