

# Enhancement of Coping Strategy and Problem-Solving Skills through Motivational Enhancement Therapy among Individuals with Alcohol Dependence Syndrome

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## *Abstract-*

**Background:** The word “Alcohol” is an Arabic origin word adopted from the word “AlKohol” which means in Arabic “a fine impalpable powder with which Eastern ladies paint their eyebrow, and used lately to refer to anything of highest perfection” (Skinner, 1970).

**Aim:** The present study aim to assess and compare the coping skill and problem solving in the alcohol dependence patients pre and post intervention on the application of motivational enhancement therapy.

**Methods:** This was a quasi-experimental study with pretest-posttest design with control group. The sample consists of a total of 10 patients were diagnosed with alcohol dependence using a purposive sampling selected from the outpatient department of the CIIMHANS, Dewada, Rajnandgoan, India. Further these patients divided into two groups as experimental group (5) and control group (5). Tools used Brief coping and Problem-Solving questionnaire.

**Results:** Result of the current study revealed that the experiment group of alcohol dependence patients improved in different domains of problem solving and coping after the application of motivational enhancement therapy treatment and exhibited enhanced problem solving and coping skills as compared to control group.

**Conclusion:** Motivational Enhancement Therapy allows patients to have an optimistic attitude on life, accepts difficult events, deal with the present, and adopt suitable behaviors to cope with negative thoughts and feelings by enhancing self-motivation and psychological flexibility.

**Key Words:** Motivational Enhancement Therapy, Alcohol Dependence patients, coping skill and problem solving.

## INTRODUCTION

The word “Alcohol” is an Arabic origin word adopted from the word “AlKohol”. People used to be drunk as a part of a game just to enjoy time regardless to their linkage acknowledgement between excessive drinking and aggression. Since time antiquity, alcoholic beverages have been of use in human civilization. Indian people have also not been devoid of the use of alcoholic beverages since time immemorial. Since the primitive era, people have been using alcohol for various reasons, such 'as a medium of enjoyment and recreation', 'a symbol associated with ethnic, racial sub-cultural practices', 'spiritual reasons', 'mode of gratification and toxic emotions (-anxiety, worry and tension) buster', 'social gathering', and possible thousands of other individualized or non- individualized reasons. Historically, ardent supporters or consumers of alcoholic beverages have cited many benefits of alcohol for making it as a part of their lives. People vigorously talked about its nutritional, medicinal, and antiseptic properties and how it can fetch boons for them. It plays an important role in enhancing the enjoyment and quality of life. Alcohol could facilitate relaxation, could provide pharmacological pleasure, and could increase the pleasure of eating. Thus, while alcohol has always been misused by a large section of people and many people have ultimately fallen apart because of regular intake of this substance.

Problem-solving skills are the capacity to recognize problems, generate and evaluate solutions, and implement the best solutions (Jonassen, 1997). It is the associations with depressive disorders and symptoms. Depressed individuals often exhibit a negative orientation toward problems in living and deficits in specific problem-solving skills on self-report inventories and performance-based measures (Dixon et al., 1993; Reinecke et al 2001).

Coping is defined as the mobilization of thoughts and behaviors to control stressful situations both internally and externally (Folkman & Moskowitz, 2004) defined the term coping as Kumar, S., Srivastava, M., Srivastava, M., Yadav, J. S., & Prakash, S. (2021) ‘the action-oriented and intrapsychic efforts to manage environments and internal demands and conflicts among them, which tax or exceed a person’s resources.’ Lazarus and Folkman in 1984 again revised the definition and said “constantly changing cognitive and behavioural effort to manage specific external and/or internal demands that are appraisal as taxing or exceeding the resources of the person.” Various authors classified the coping strategies in various ways. The majority of studies on problem solving and coping strategy were carried out abroad. However, there are relatively few studies conducted in India and even fewer

that compare these disorders while they are in clinical remission. Therefore, this study was conducted to close this knowledge gap in order to better understand the problem solving and coping strategy in patients with alcohol dependence.

The majority of studies on MET were carried out abroad Miller, W. R. (1992). However, there are relatively few studies conducted in India and even fewer. Therefore, this study was conducted to close this knowledge gap in order to better understand coping skill, and problem solving in the patients of alcohol dependence with help of motivational enhancement therapy.

### OBJECTIVE OF STUDY

1. To study the application of motivational enhancement therapy in improving coping strategy skills between experimental and control group of patients with alcohol dependence syndrome.
2. To study the application of motivational enhancement therapy in improving Problem solving skills between experimental and control group of patients with alcohol dependence syndrome.

### HYPOTHESIS OF STUDY

1. There will be no significant deference at pre and post intervention between experimental and control group of patients with alcohol dependence syndrome. After application of motivational enhancement therapy in improving the coping strategy skills.
2. There will be no significant deference at pre and post intervention between experimental and control group of patients with alcohol dependence syndrome after application of motivational enhancement therapy in improving the problem solving skills.

### METHODS AND MATERIALS

The study was cross-sectional hospital based study. A total of 10 individuals diagnosed with alcohol dependence syndrome patients selected for the study were conducted at the outpatient department of Central India Institute of Mental Health and Neuro Sciences (CIIMHANS), Dewada, Rajnandgoan, Chhattisgarh, India. Purposive sampling technique was used. Participants divided into experimental and control group equally. Five alcohol dependence syndrome cases assigned as experimental group who given motivational enhancement therapy with treatment as usual and five alcohol dependence syndrome patients assigned as control group who given treatment as usual.

#### Inclusion and Exclusion Criteria

**Inclusion criteria:** Patients diagnosed with typical alcohol dependence of all varieties described below F 10, the individual usually suffers from dependency of alcohol per ICD-10, age range minimum 18-45 years, only gender (male), duration of illness at least one year. Educated at least primary level and are able to comprehend the instruction, Patient who will give consent for study, Patient who are cooperative and patient who are in remission.

**Exclusion criteria:** Uncooperative or unwilling to give consent, history of severe medical problem, patient age below 18 years or above 45 years and other psychotic, non psychosis (except psychosis & organic).

#### Brief Information about the Tools

**Socio-Demographic and clinical Data Sheet:-** A semi structured Performa design for the study has been used for socio-demographic variable like age, sex, marital status, education, occupation, religion, domicile and monthly family income of the subjects. It also includes information related to clinical variables such as diagnosis, course of illness, duration of illness etc.

**The Brief Coping Scale:-**The Brief COPE inventory was developed by Carver et al. (1989) to assess a broad range of coping responses. The Brief Coping Scale was developed by Carver in the year 1997. It is the abbreviated version of the Coping Inventory. It consists of 28 items and measures 14 areas of coping which can be further clubbed in to problem focused coping, adaptive emotion focused coping and maladaptive emotion focused coping. The dispositional version of COPE is a widely used inventory with its Cronbach's alpha is more than 0.60. Test retest reliability is 0.42 to 0.89 in different scales with satisfactory construct validity.

**Problem Solving Inventory (PSI):-** Problem Solving Inventory developed by Heppner and Petersen (1982) to measure people's perceptions of their personal problem solving behaviours and attitudes will be used in the present study. The PSI is composed of thirty two 6- point Likert-type items, ranging from 1= Strongly Agree, 2= Agree, 3= Partially Agree, 4= Partially Disagree, 5= Disagree, 6= Strongly Disagree. Lower scores indicate assessment of oneself as a relatively effective problem solver, whereas higher scores indicate assessment of oneself as a relatively ineffective problem solver.

#### Statistical Analysis

The statistical analysis was done using IBM Statistical Packages for the Social Science (SPSS) software package for windows, Version 25.0. Armonk, New York, United States: IBM Corp. Descriptive statistics such as frequency, percentage, mean, and standard deviation were employed for socio-demographic data (SD). At the start of the investigation the significance levels of  $p < 0.05$ ,  $p < 0.01$  and  $p < 0.001$  were determined.

### RESULTS

Table 1 Shows comparison on the Brief Coping Scale between experimental and control group at base line. In the present table base line scores of experimental group domains of Pre test scores of Problem focused Copying (20.800+-2.387), Pre test Emotion Focused Coping (38.000+-6.403), Pre test of avoidant coping (22.800+-3.563) Pre test of Brief coping scale total score (81.600+-11.058) and Post test scores of Problem focused Copying (8.200+-1.923), Post test Emotion Focused Coping (20.400+-2.302), Pre test of avoidant coping (11.400+-1.140) Post test of the Brief Coping Scale total score (40.000+-5.291). whereas scores of control group domains of Pre test scores of Problem focused Copying (21.200+-2.588), Pre test Emotion Focused Coping (37.200+-7.726), Pre test of avoidant coping (21.400+-2.073) Pre test of Brief coping scale total score (79.800+-11.366) and Post test scores of Problem focused Copying (15.400+-3.646), Post test Emotion Focused Coping (32.800+-5.890), Pre test of avoidant coping (17.400+-3.361) Post test of the Brief Coping Scale total score (62.600+-12.953). However there was high significant difference

between experimental and control group ( $U=.000$  &  $Z=-2.611$ ,  $P\text{ value}=.009$ ). It was clearly evident from the table that both groups differ significantly and high mean scores obtained by experimental participants indicates overall improvement in coping skills.

**Table No.1 Comparison of difference between Baseline Assessment and Post Intervention Assessment of experimental group and control group among patients with ADS on Brief Coping Scale 1**

Subject	Pre Test				Post Test				Mann Whitney Test		Sig/ P
	MEAN+-SD				MEAN+-SD				U	Z	
Brief Cope Scale	Pre Test Total Score	Pre Test Problem Focused Coping	Pre Test Emotion Focused Coping	Pre Test Avoidance Coping	Post Test Total Score	Post Test Problem Focused Coping	Post Test Emotion Focused Coping	Post Test Avoidance Coping	U	Z	.009
Experimental Group	81.600+-11.058	20.800+-2.387	38.000+-6.403	22.800+-3.563	40.000+-5.291	8.200+-1.923	20.400+-2.302	11.400+-1.140	.000	-2.611	
Control Group	79.800+-11.366	21.200+-2.588	37.200+-7.726	21.400+-2.073	62.600+-12.953	15.400+-3.646	22.800+-1.923	17.400+-3.361			

**\*\*Significant at .05 level**

Table 2. The mean of pre and post assessment on the Problem Solving Inventory between experimental and control group after intervention. In the present table base line scores of experimental group domains of Pre test scores of Problem Solving Copying (65.200+-6.340), Pre test Approach Avoidance Style (33.000+-3.464), Pre test Personal Control (28.000+-3.464) Pre test of Problem Solving Inventory total score (171.000+-18.574) while Post test scores of Problem Solving Copying (33.800+-11.322), Post test Approach Avoidance Style (15.200+-5.118), Pre test Personal Control (12.000+-5.338) Post test of Problem Solving Inventory total score (76.400+-16.211). whereas scores of control group domains of Pre test scores of Problem Solving Copying (71.800+-4.816), Pre test Approach Avoidance Style (37.000+-2.345), Pre test Personal Control (29.400+-2.073), Pre test of Problem Solving Inventory total score (175.600+-12.381) and Post test scores of Problem Solving Copying (57.600+-11.238), Post test Approach Avoidance Style (30.400+-8.234), Pre test Personal Control (22.600+-5.338), and Post test scores of Problem Solving Copying (151.400+-32.860). However there was high significant difference between experimental and control group ( $U=1.000$  &  $Z=-2.402$ ,  $P\text{ value}=.016$ ).

**Table No2 Comparison of difference between Baseline Assessment and Post Intervention Assessment of experimental group and control group among patients with ADS on Problem Solving Inventory.**

Subject	Pre-Test				Post-Test				Mann Whitney Test		Sig/ P
	MEAN+-SD				MEAN+-SD				U	Z	
Problem Solving Inventory	Pre Test Total Score	Pre Test Problem Solving Copying	Pre Test Approach Avoidance Style	Pre Test Personal Control	Post Test Total Score	Post Test Problem Solving Copying	Post Test Avoidance Approach style	Post Test Personal Control	U	Z	.016
Experimental Group	171.000+-18.574	65.200+-6.340	33.000+-3.807	28.000+-3.464	76.400+-16.211	33.800+-11.322	15.200+-5.118	12.000+-5.338	1.000	-2.402	
Control Group	175.600+-12.381	71.800+-4.816	37.000+-2.345	29.400+-2.073	151.400+-32.860	57.600+-11.238	30.400+-8.234	22.600+-5.639			

**\*Significant at .05 level**

## DISCUSSION

The present study attempted to evaluate the enhancement of MET on coping strategies in patients with alcohol dependence syndrome. The experiment group of alcohol dependence patients improved in different domains of brief coping scale such as problem focus coping, emotional focus coping and avoid coping after the application of motivational enhancement therapy treatment and exhibited enhanced coping skill as compared to control group of alcohol dependence syndrome patients. These results are consistent with earlier studies that found MET strategy is reflected by psychological coping skills, which is the increase coping capacity to maintain or modify behavior when it is used to further worthwhile goals in a particular situation (Kumar, S., Srivastava, M., Srivastava, M., Yadav, J. S., & Prakash, S. (2021). The goal of MET intervention is to help the alcohol dependence syndrome patients in developing flexible coping mechanisms that don't intensify problems or prevent them from engaging in fulfilling activities Berman AH, Forsberg L, Durbeej N, Källmén H (2010). Patients with comorbid alcohol dependence syndrome and migraines can improve better emotionally and physically functioning through MET intervention Moore M, Flamez B, Szirony GM(2018); Twohig et al., 2017; Dindo et., 2014).

The present study also attempted to evaluate the enhancement of MET on problem solving skills in ADS patients. The experiment group of ADS patients improved in different domains of problem solving such as problem solving confidence, approach Avoidance style and personal Control after the application of motivational enhancement therapy treatment and exhibited enhanced problem solving skill as compared to control group These results are consistent with earlier studies, Dindo et al., (2017) revealed the MET model also helps the growth of increased awareness of one's actions and if those actions are working in terms of effectively solving the problem and advancing one towards desired goals (Gloster et al., 2020; Isarizadeh et al., 2022). Perepletchikova, F., Krystal, J. H., & Kaufman, J. (2008). found the person with a depressive disorder tries to manage or avoid their unpleasant emotions through the MET intervention. Similar results were reported by A-tjak et al., (2020) MET encourages patients to have a positive outlook toward their lives, to accept negative experiences, to deal with the present, and to adopt appropriate behaviors to cope with negative thoughts and feelings.

### LIMITATION

Limitation of this study it is time bond study sample size was small which limits the generalization of findings. Thus a large sample can be used in the future study to obtain the result which can be generalized to schizophrenia population. The index study was conducted only outdoor institutionalized depressive patients. The in patients can also be included in the future study. Durability of Motivational Enhancement Therapy could not study as no follow up was done. Limited socio demographic and clinical variable were included in the study.

### CONCLUSION

The MET-based treatment protocols used in this study and empirical evidence show the MET is very usefulness intervention of the alcohol dependence syndrome. The present study attempted to evaluate the effectiveness of MET on problem solving and coping skills in ADS patients. The experimental group of alcohol dependence syndrome patients improved in different domains of problem solving and coping after the application of motivational enhancement therapy treatment and exhibited enhanced problem solving and coping skills as compared to control group. MET allows patients to have an optimistic attitude on life, accept difficult events, deal with the present, and adopt suitable behaviors to cope with negative thoughts and feelings by enhancing psychological flexibility.

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