Effectiveness of Motivational Enhancement Therapy on Coping Skill and Quality of Life in Alcohol Dependency Syndrome Patients

Roshni Singh[1], Rohit Kumar Turi[2]

1.   Roshni Singh, M.Phil Scholar, Department of Clinical psychology, Central India Institute Dewada, Rajnandgaon, Chhattisgarh, India. Email:- rs8008665@gmail.com

2.   Mr Rohit kumar Turi, Assistant Professor, Department of Clinical psychology, Central India Institute of Mental Health and Neuro Sciences, Dewada, Rajnandgaon, Chhattisgarh, India. Email:- rohitkumarturi@gmail.com

Corresponding Author

Mr. Rohit Kumar Turi

Assistant Professor, Department of Clinical psychology, Central India Institute of Mental Health and Neuro Sciences, Dewada, Rajnandgaon, Chhattisgarh, India. Email:- rohitkumarturi@gmail.com

Abstract

Background: The Arabic word "AlKohol," which meaning "a fine impalpable powder with which Eastern ladies paint their eyebrow, and used lately to refer to anything of highest perfection," is the source of the English word "alcohol" (Skinner, 1970). **Aim:** The current study aims to evaluate and compare the quality of life and coping skills of patients with alcohol dependency Pre and Post applying application of motivational enhancement therapy. **Methods:** This was a quasi-experimental study with pretest-posttest design with control group. The sample consists 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 Quality of life questionnaire. **Results:** Result of the current study revealed that the experiment group of alcohol dependence patients improved in different domains of quality of life and coping after the application of motivational enhancement therapy treatment and exhibited enhanced quality of life 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 psychological flexibility and improving self motivation.

Key Words: Motivational Enhancement Therapy, Alcohol Dependence patients, coping skill and quality of life.

INTRODUCTION

The word "Alcohol" was borrowed from the Arabic word "AlKohol." In the past, people would play games when inebriated despite the known association between binge drinking and aggressiveness. Alcoholic drinks have been used in human civilization from ancient times. Alcohol consumption has also never been absent from Indian culture since the beginning of time. People have been drinking alcohol for thousands of years for a variety of reasons, including "social gathering," "spiritual reasons," "a symbol associated with ethnic, racial, and sub-cultural practices," "a medium of enjoyment and recreation," "a mode of gratification and toxic emotions (-anxiety, worry, and tension) buster," and probably thousands more. In the past, fervent supporters or drinkers have listed numerous advantages of alcohol as reasons to include it in their life. People were chatting away fervently about its antibacterial, nutritional, and therapeutic qualities as well as how it may benefit them. It has a significant impact on raising life satisfaction and quality. Alcohol may boost the enjoyment of eating, promote relaxation, and deliver chemical pleasure. Consequently, alcohol has always been abused by a sizable portion of the population, and frequent alcohol consumption has led to the eventual breakdown of many individuals.

Kalman b et al.(2004) conducted a descriptive study, investigated the relationship between alcohol dependence and health related Quality of Life in people with and without selected psychiatric disorders. 127,308 were selected respondents with a history of alcohol dependence plus one or more psychiatric disorders had significantly lower health related quality of life in domains pertaining to psychological and social functioning. The respondents with a history of alcohol dependence only had poorer health related quality of life than no history of alcohol dependence.

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 '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 l984 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. 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 quality of life between experimental and control group of patients with alcohol dependence syndrome.
2.   To study the application of motivational enhancement therapy in improving coping strategy 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 quality of life.
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 coping strategy 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, gender (both male and female)**,** 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 World Health Organization Quality of Life -BREF (WHOQOL –BREF, 1996)

Hindi version of the WHOQOL-BREF has been derived from the original World Health Organization Quality of life scale. The Hindi version WHOQOL-BREF scale is adopted by Saxena et al. (1998). WHOQOL-BREF is a short version of WHOQOL-100 questionnaires. WHOQOL-BREF has been tested in 15 centers including New Delhi and Chennai from India. WHOQOL-BREF contains 26 questions in 4 major domains (i.e. physical health, psychological health, social relationships and environment) to measure the quality of life. This scale emphasizes subjective experiences of the respondents rather than their objective life conditions. The alpha score of all domain ranges from 0.59 to 0.87, coronach alpha of the all domains are 0.87, the factor loading of the item ranges 0.52 to 0.84 WHOQOL-BREF is highly valid version across cultures.

The Brief Cope Scale:-The Brief COPE inventory was developed by Carver et al. (1989) to assess a broad range of coping responses. The Brief Cope Scale was developed by Carver in the year 1997. It is the abbreviated version of the Cope 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. Teat retest reliability is 0.42 to 0.89 in different scales with satisfactory construct validity.

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 no. 1 shows the socio-demographic characteristic of the sample. It is clear from the table that about 20% of the patient of the experimental group lies in the age range of 18-25 years, 20 % lies in the range of 26-35 years, 20% of the patient lies in the range of 36-45 years and 40% of the patient lies in the range of 46-50 years. Whereas 0% of the control group fall in the age range 18-25 years, 60% of the patient lies in the range of 26-35 years, 20% of the patient lies in the range of 36-45 years and 20% of the patient lies in the range of 46-50 years. The chi-square value of 3.000 indicates that there is no significant difference between age of the experimental and control group participants (df-3 and sig-.392).

Result indicates that education level of the participant was taken into consideration it was observed that 0% patient lies in the Primary level of education, 80% patient were having higher education and 20% patient were having above level of education. Whereas 20% of the patient of control group has Primary level of education, 40% of the patient has higher level of education and 40% of the patient has above level of education qualification. The chi-square value of 1.200 indicates that there is no significant difference between education of the experimental and control group participants (df-2 and sig-.549)

As per the table it was seen that 20% of the subject of experimental group fall in government job, 60% of the subject fall in private job and 20% of subject fall in other jobs. Whereas 40% of the subject of control group falls in government job, 20% of the subject falls in private job and 40% of subject fall in other jobs. The chi-square value of 4.333 indicates that there is no significant difference between occupation of the experimental and control group participants (df-2 and sig-.115)

While analyzing the marital status of the variable, the obtained chi-square value (.476) did not indicate any significant difference between groups of the marital status variable. Around 20% of the subjects of the experimental group were unmarried and 80% of the subjects were married. Whereas, 40% of the subject of control group were unmarried and 60% of the subject were married. (df-1 and sig-.490)

While the analyzing the variable of socio-economic status, it was seen that not any subject of experimental group belonging to lower socio-economic status, 40% of the subject belonging to middle socio-economic status and 60% of the subject belongs to higher socio-economic status. On the other hand in control group 40% of subject belonging to lower socio-economic status, 40% of the subject belonging to middle socio-economic status and 20% of the subject belongs to higher socio-economic status. On being matched on socio-economic status variables, it was seen that the chi-square value (1.200) indicates that there is no significant difference between socio-economic status of the experimental and control group participants (df-2 and sig-.549)

When area of residence was taken into account it was observed that 60% of subject of experimental group resided in rural area and 40% of subject resided in urban area. When the subject were taken into account it was observed that 40% subject of control group resided in rural area and 60% of the subject resided in urban area. When the subjects were matched on the variable of residence, the obtained chi-square value (.400) did not indicate any significant difference between both groups. (df-1 and sig-.527)

When family type has been taken into account it has been found that 40% of the patients of experimental group were from nuclear family and 60% of the patients were from joint family. While 20% patients of control group were from nuclear family and 80% were from joint family. Result shows the chi-square value (.476) which indicates that there was no significant difference between experimental and control group.(df-1 and sig-.490)

Table No 1: shows the comparison between experimental group and control group of ADS patients on socio-demographic variables.

Socio Demographic		Group		Chi	DF	Sig
		Experimental	Control	Square		
Age Range	18 to 25	1(20%)	1(20%)	3.000NS	3	.392
	26 to 35	1(20%)	2(40%)			
	36 to 45	1(20%)	1(20%)			
	45 to 50	2(40%)	1(20%)			
Education	Primary	1(20%)	1(20%)	1.200NS	2	.549
	Higher	3(60%)	2(40%)			
	Above	1(20%)	2(40%)			
Occupation	Government	2(40%)	1(20%)	4.333NS	2	.115
	Private	1(20%)	3(60%)			
	Other	2(40%)	1(20%)			
Marital Status	Unmarried	1(20%)	3(60%)	.476NS	1	.490
	Married	4(80%)	2(40%)			
SES	Lower	1(20%)	2(40%)	1.200NS	2	.549
	Middle	2(40%)	1(20%)			
	Upper	2(40%)	2(40%)			
Residence	Rural	3(60%)	2(40%)	.400NS	1	.527
	Urban	2(40%)	3(60%)			
Family Type	Nuclear	2(40%)	1(20%)	.476NS	1	.490
	Joint	3(60%)	4(80%)			

NS= not significant.

Table No.2 Comparison of difference between Baseline Assessment and Post Intervention Assessment of experimental group and control group among patients with ADS on Quality of life Scale.

**Significant at .01 level

Variables	Experimental Group		Control Group		Mann Whitney Test		Sig.
	Mean ±SD		Mean ±SD				
Domains	Pre	Post	Pre	Post	U	Z	
Physical Health	**11.800±3.271**	**24.200±2.387**	**12.400±5.412**	**16.400±5.727**	**2.500**	**-2.095**	**.036**
Psychological Health	**15.000±4.062**	**25.200±1.923**	**16.400±6.024**	**17.200±5.495**	**3.000**	**-2.015**	**.044**
Social Relationship	**13.400±6.024**	**24.600±3.130**	**16.000±5.612**	**18.000±5.049**	**3.000**	**-2.015**	**.044**
Environmental	15.600±6.066	23.400±4.037	14.800±5.357	17.200±5.069	3.000	-1.997	.0.46
Total score of QOL	**48.400**±7.924	97.400±9.476	51.000±12.510	58.800±11.606	**.000**	**-2.611**	**.009**

Following pre- and post-assessment, Table 2 displays the clinical variable status for the experimental and control groups. The base line scores for the experimental group domains of pre-test physical health (11.800±3.271), pre-test psychological health (15.000±4.062), pre-test social relationships (13.400±6.024), pre-test environment (15.600±6.066), pre-test quality of life scale total score (48.400±7.924), and post-test physical health (24.200±2.387), post-test psychological health (25.200±1.923), post-test social relationships (24.600±3.130), post-test environment (23.400±4.037), post-test quality of life scale total score (97.400±9.476) are shown in the current table. In contrast, the control group's Pre-test results for Physical Health were 12.400±5.412 points. Pretest scores for Social Relationships (16.000±5.612), Psychological Health (16.400±6.024), and Environment (14.800±5.357) The Quality of Life Scale total score was 51.000±12.510 before testing, and the total score was 58.800±11.606 after testing physical health (16.400±5.727), psychological health (17.200±5.495), social relationships (18.000±5.049), and environment (17.200±5.069). The experimental and control groups did, however, vary significantly (U=.000 & Z=-2.611, P value=.009).

Table No, 3 Comparison of difference between Baseline Assessment and Post Intervention Assessment of experimental group and control group among patients with ADS on Brief Cope Scale.

**Significant at .01level

Variables	Experimental Group		Control Group		Mann Whitney Test		Sig.
	Mean ±SD		Mean ±SD				
Domains	Pre	Post	Pre	Post	U	Z	
Physical Health	**11.800±3.271**	**24.200±2.387**	**12.400±5.412**	**16.400±5.727**	**2.500**	**-2.095**	**.036**
Psychological Health	**15.000±4.062**	**25.200±1.923**	**16.400±6.024**	**17.200±5.495**	**3.000**	**-2.015**	**.044**
Social Relationship	**13.400±6.024**	**24.600±3.130**	**16.000±5.612**	**18.000±5.049**	**3.000**	**-2.015**	**.044**
Environmental	15.600±6.066	23.400±4.037	14.800±5.357	17.200±5.069	3.000	-1.997	.0.46
Total score of QOL	**48.400**±7.924	97.400±9.476	51.000±12.510	58.800±11.606	**.000**	**-2.611**	**.009**

Following pre- and post-assessment, Table 3 displays the clinical variable status for the experimental and control groups. The base line scores for the experimental group domains of pre-test physical health (11.800±3.271), pre-test psychological health (15.000±4.062), pre-test social relationships (13.400±6.024), pre-test environment (15.600±6.066), pre-test quality of life scale total score (48.400±7.924), and post-test physical health (24.200±2.387), post-test psychological health (25.200±1.923), post-test social relationships (24.600±3.130), post-test environment (23.400±4.037), post-test quality of life scale total score (97.400±9.476) are shown in the current table. In contrast, the control group's Pre-test results for Physical Health were 12.400±5.412 points. Pretest scores for Social Relationships (16.000±5.612), Psychological Health (16.400±6.024), and Environment (14.800±5.357) The Quality of Life Scale total score was 51.000±12.510 before testing, and the total score was 58.800±11.606 after testing physical health (16.400±5.727), psychological health (17.200±5.495), social relationships (18.000±5.049), and environment (17.200±5.069). The experimental and control groups did, however, vary significantly (U=.000 & Z=-2.611, P value=.009).

DISCUSSION

In the present study, the socio-demographic details have been given in table 1 whereas the there is no significant difference on age, education, occupation, marital status, socio-economic status, residence and family types between experimental and control group**.**

Clinical profile of the sample, there was no significant difference on age of onset, duration of illness and course of illness between experimental group and control group of alcohol dependence syndrome.

In this present study, experimental group significantly increase after the application of motivational enhancement therapy on coping strategy. It is observed that there is a significant difference in the scores between experimental group and control group of alcohol dependence patients at after intervention. Present study supported by Luquiens et al. (2018) conducted a study on combine drinking characteristics and two measures, a) drinker identity and b) related coping strategy. The study aimed to assess the impact of alcohol use on coping strategy and to determine relevant profile to indicate prevention programs positive impact on coping strategy and academic results, and a strong drinker identity. Ego dystonic cluster indicated high level of alcohol consumption, mild negative impact on quality of life and academic results, It was concluded that subjective experience of the participants differs significant prevention strategies may have certain inadequacies when considered binge drinkers among students.

After MET motivation level was enhanced to action phase, improved quality of life and enhanced to recover from relapse. The significant difference was found on quality of life between experimental group and control group. Further it was found that interpersonal relationship had been improved. Gabriels et al. (2018) obtained findings of the present study have been supported by the findings of both the groups score low, on the basis of result it is clear that the patient of experimental group scores low in pre test of Quality of life scale and the other hand scores high in post test of quality of life. Patients of control group secured low score in pre test of quality of life and high scores in post test quality of life.

The group that receives motivational interviewing to enhance coping strategy sessions shows a shift in participants' self-efficacy for abstinence and a move toward the preparation and action phases of change. In a 2005 study, Braine et al. investigated whether clients receiving MET sessions and integrated motivational interviewing to enhance coping strategies in an outpatient context exhibit higher levels of self-efficacy following the MET session. The study conducted by San Diego Calif et al. (2003) examined how the MET intervention contributed to positive behavior change. The results showed an improvement in motivation and abstinence from substance use, as well as an increase in self-efficacy about the ability to ignore addictive agents. A previous study by Jonh U et al. (2002) examined the effects of individual counseling versus group treatment for alcohol-dependent in-patients as a motivational intervention for enhancing coping strategy. The purpose of the current study was to determine if three sessions of individual counseling for individuals with alcohol dependence were as beneficial as a two-week group treatment program scheduled during an inpatient stay at a psychiatric hospital.

LIMITATION

This study's limitations the tiny sample size of the time bond investigation restricts the generalizability of the results. So, a sizable sample size can be employed in subsequent research to produce results that can be applied to the overall population affected by schizophrenia. The index research was limited to institutionalized depression individuals who were conducted outdoors. Future research may also include the patients. Due to a lack of follow-up, the durability of motivational enhancement therapy could not be studied. There were only a few clinical and sociodemographic variables 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 depression disorder. The present study attempted to evaluate the effectiveness of MET on problem solving and coping skills in depression patients. The experiment 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.

REFERENCES

Biggs, A., Brough, P., & Drummond, S. (2017). Lazarus and Folkman's psychological stress and coping theory. *The handbook of stress and health: A guide to research and practice*, 349-364.

Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: a theoretically based approach. *Journal of personality and social psychology*, *56*(2), 267.

Carver, R. P. (1997). Reading for one second, one minute, or one year from the perspective of rauding theory. *Scientific Studies of Reading*, *1*(1), 3-43.

Dormal, V., Bremhorst, V., Lannoy, S., Lorant, V., Luquiens, A., & Maurage, P. (2018). Binge drinking is associated with reduced quality of life in young students: A pan-European study. *Drug and Alcohol Dependence*, *193*, 48-54.

Folkman, S., & Moskowitz, J. T. (2004). Coping: Pitfalls and promise. *Annu. Rev. Psychol.*, *55*, 745-774.

Jain, A., Chang, E. Y., & Wang, Y. F. (2004, June). Adaptive stream resource management using kalman filters. In *Proceedings of the 2004 ACM SIGMOD international conference on Management of data* (pp. 11-22).

Kar, N., Swain, S. P., Patra, S., & Kar, B. (2017). The WHOQOL-BREF: Translation and validation of the odia version in a sample of patients with mental illness. *Indian Journal of Social Psychiatry*, *33*(3), 269-273.

Liu, J., Lichtenberg, T., Hoadley, K. A., Poisson, L. M., Lazar, A. J., Cherniack, A. D., ... & Cope, L. (2018). An integrated TCGA pan-cancer clinical data resource to drive high-quality survival outcome analytics. *Cell*, *173*(2), 400-416.

Lorenzo, C., Okoloise, M., Williams, K., Stern, M. P., & Haffner, S. M. (2003). The metabolic syndrome as predictor of type 2 diabetes: the San Antonio heart study. *Diabetes care*, *26*(11), 3153-3159.

Skinner, B. F., & de la Mora, J. M. G. (1970). *Tecnología de la enseñanza* (pp. 17-23). Barcelona: Labor.

Völzke, H., Baumeister, S. E., Alte, D., Hoffmann, W., Schwahn, C., Simon, P., ... & Lerch, M. M. (2005). Independent risk factors for gallstone formation in a region with high cholelithiasis prevalence. *Digestion*, *71*(2), 97-105.

World Health Organization. (1996). *WHOQOL-BREF: introduction, administration, scoring and generic version of the assessment: field trial version, December 1996* (No. WHOQOL-BREF). World Health Organization.