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Effectiveness of Motivational Enhancement Therapy on Self-efficacy among Patients with Substance Dependency: A Quantitative Analysis

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Abstract

Background:*Motivational Enhancement Therapy is permeated as a suggestive, client-focused interventional approach that supports modifying behavior by assisting patients in recognizing and sorting out the ambivalence for a change in oneself.* **Objective:***The present study explored to evaluate and contrast the Motivational Enhancement Therapy's effectiveness on Self-efficacy of patients having multiple substance dependencies before and after intervention using a control group.***Methods:***A purposive sample of 30 patients, meeting the ICD-10 diagnostic criterian was chosen from an indoor drug treatment center in Bhubaneswar. The study adopted a Randomized Control Group Designpriorto intervention. In Experimental group, 15 patients were received Motivational Enhancement Therapy for 10 sessions as well as counseling as normal. On the other hand, the Control group 15 patients were only received counseling as normal; and at the end of the intervention post level of Self-efficacy was assessed using the adopted standardized Odia version General Self-efficacy Scale developed by Fakir Mohan Sahoo (2006).* **Results:***The result showed that Motivational Enhancement Therapy tried to reduce ambivalence to increase the level of Self-efficacy which directs the patients to maintain sobriety from multiple substance dependencies.*

Keywords: Substance Dependency, Motivational Enhancement Therapy, Self-efficacy

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Introduction

A large enumerate of people in the entire population ache with issues related to addiction, which are constituted in the DSM-IV (4thEdition,Revised version), APA, 2000. Approximately 22.5 million persons aged 12 and abovefulfilled Diagnostic and Statistical Manual-IV diagnostic criteria for addiction or dependency (National Survey on Drug Use and Health, 2009 & Substance Abuse and Mental Health Service Administration, 2010). Recent researches advocate that while 23.5 million individuals aged between 12 years and above needed management of addiction, in 2009, only 2.6 million or 11.2% acquired it.

It has been reflected that there is a variety of factors are essential in the treatment of substance use disorder with a significant percentage as well. Concerningthe data in the year 2006-2009, the most revealed factors for not seeking management for a drug-associated

concern was not being equipped to prevent consuming, or the absence of motivation to stop consuming. However, some basic attempts focused on escalating motivation to change might be an advantage in diminishing the level of addiction and rising the level of self-efficacy by providing proper intervention. As stated by Albert Bandura (1977), Self-efficacy is the efficaciousness of individuals. In other words, it implies a sense of belief in one's abilities to implement certain behavior to produce desired outcomes. Research reveals that individuals having a tough feeling of General Self-efficacy view provocating situations as tasks to be mastered, they prosper extensive attention in the activities where they take part, form a deeper feeling of commitment to their

interests and activities, and can recover quickly from substance abuse. From another point of view, individuals having a fragile feeling of Self-efficacy normally keep away

from performing difficult challenges, just think that difficult activities and situations are out of their potential, provide attention to private shortcomings and pessimistic end products, and can rapidly lose self-confidence in personal qualities as well. The effectiveness of Motivational Enhancement Therapy on the desire to quit drugs using 35 inpatients were assessedand the result showed that Motivational Enhancement Therapy increases the craving to quit drug use (Rani et al., 2014). Combating pharmacological management, and suitable psychosocial therapies focusing on a particular problem of clients provides stronger treatment outcomes. Another stydyexamined to study the effectiveness of motivational enhancement therapy on the self-efficacy of individuals with alcohol dependence using a sample of 40 participants and the results revealed that after the end of the intervention, the result revealed that the level of self-efficacy among the alcoholics belonged to experimental group improved compared to the control group (Kumar et al., 2021).

In terms of developmental stages, adolescenceand adulthood period are very crucialin the entire life span. Many people with detrimental use of substance or being diagnosed with substance disorders usually started using substances in adolescence or early adulthood period (for instance, curiosity, peer pressure, issues of relationship, family disruptions, imperfectmanagementskills, those people staying in slum). Besides that, a research examined where self-efficacy was measured between predominantly crack-cocaine-taking inhabitants in the course of management with one-month follow-up treatment and the feasibility of a brief level of Self-efficacy was measured over a telephonic interview and the results revealed that Self-efficacy increased in the course of management and was found higher for those clients reporting abstinence one-month following management (Coon et al., 1998). Apart from this, it has been found that different drug treatment centers in Odisha place more importance on counseling while

ignoring the tremendous role of motivational enhancement therapy in the management of such addictive disorders. So, the present study focused on bringing a trend in the

management of these disorders by administering motivational enhancement therapy in drug treatment centers for the betterment of patients to a large extent.

Objective:

To studt the effect of Motivational Enhancement Therapy on Self-efficacy among patients with substance use prior-to intervention with a control group.

METHODOLOGY

Design

The current study adopted a Randomized Control Trial design and was conducted between January to June 2022. The variables included in the study were General self-efficacy followed by Motivational Enhancement Therapy respectively. 30 multiple substance abusers were selected for the study meeting various inclusion and exclusion criteria. Subsequently, the participants were randomly assigned into experimental and control groups (15 in each group). Those who belonged to the experimental group receivedthe intervention (MET) along with placebo and those in the control group only receive the normal course of treatment (placebo) i.e., counseling.

Sample:

The present research was an interventional study in nature by administering Motivational Enhancement Therapy as an intervention. A small sample of 30 subjects, multiple substance-dependent patients meeting ICD-10 norms identified using a purposive sampling technique. The age range of the participants varied between 18-35 years.The criterion for selecting the sample was based on participants giving written consent to participate in the study. Apart from that, the participants who presently have substance dependence with co-morbid psychotic disorders and have previously undergone any psychotherapies, especially Motivational

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Enhancement Therapy were not included as participants. For diagnosis, the ICD-10 was followed and to screen, ASSIST V3.0 was administered before including them as participants.

Tools used:

- **Socio-demographic Data Sheet**

A semi-structured and pre-tested proforma was used to collect information about age, gender, caste, qualification, religion, marital status, and occupation status.

- **Intervention Therapy (MET)** (Miller, Zweben, DiClemente, and Rychtarik, 1995)

In the current research, Motivational Enhancement Therapy was administered only to an experimental group of participants for effective management of substance use disorder. This was a standardized therapy and the manual developed by Miller, Zweben, DiClemente, and Rychtarik (1995), National Institute of Alcohol and Alcoholism (NIAAA).

- **General Self-efficacy Scale** (Sahoo, F.M., 2006)

In order to assess the level of Self-efficacy the Odia-adapted version of the General self-efficacy scale developed by Sahoo, F.M. (2006) was used which was originally developed by Jerusalem, M. & Schwarzer, R. (1992). The scale was standardized and consisted of 10 statements having a 4-point rating. The internal reliability of the scale was between 0.76 and 0.90 respectively.

Ethical Considerations

The current research is ethically approved by the Institutional Ethics Committee, Utkal University (Reference Number: IEC/UU/2021-02).

Procedure

After getting the ethical clearance from the Institutional Ethics Committee, Utkal University (Reference Number: IEC/UU/2021-02) the data collection process was started. Participants of both groups were given their written informed consent to be part of the research. 15 Experimental groups of participants were administered General Self-efficacy Scale before and after exposure to MET along with normal treatment in the center i.e., Counseling (placebo) for 10 sessions. The ten periods of Motivational Enhancement Therapy consisted of topics such as Intrinsic and Extrinsic Motivation, lifestyle, craving management and coping skills, decisional balance technique, pros and cons of substance use, supporting self-efficacy, cognitive restructuring skill techniques such as OARS (asking open-ended questions, affirmation, reflective listening, and summarizing), 4D's techniquewhich included(delay, deep breathing, drink plenty of water, and distraction), FRAMES technique which included (feedback, responsibility, advice, menu of options, empathy and self-efficacy), crisis intervention, relapse prevention and management, negative impacts of substance on health, etc. On the other hand, 15 Control Group participants were also administered the same General Self-efficacy Scale only and exposed to a placebo i.e. Counseling in the present research and stay with follow-up. After completion of the intervention pre and post-test scores of both the experimental and control group were statistically analyzed for significance using SPSS V20 respectively. The period of research was between January 2022 to June 2022.

Statistical Analysis

Data were coded and entered in Statistical Packages for the Social Sciences (SPSS) V20. Quantitative data were expressed in terms of Frequency, Mean Score, Standard Deviation, and 't' value of the participants concerning General Self-efficacy score (pre-test and post-test) respectively.

RESULTS

Table 1: Analysis of Socio-Demographic Variables between Thirty Substance Abusers

Variables	Level	Experimental Group (15)	Control Group (15)
Age	18-23	4 (27%)	2 (13%)
	24-29	4 (27%)	3 (20%)
	30-35	7 (47%)	10 (67%)
Marital Status	Married	6 (40%)	6 (40%)
	Unmarried	9 (60%)	9 (60%)
Employment Status	Self-employed	3 (20%)	5 (33%)
	Currently Unemployed	10 (67%)	8 (53%)
	Full-time Employed	1 (7%)	1 (7%)
	Student	1 (7%)	1 (7%)
Education Status	Illiterate	1 (7%)	1 (7%)
	Middle Class	2 (13%)	2 (13%)
	Secondary	5 (33%)	4 (27%)
	Higher Secondary	5 (33%)	2 (13%)
	Graduate	2 (13%)	6 (40%)
Domicile	Urban	5 (33%)	6 (40%)
	Rural	10 (67%)	9 (60%)
Type of family	Joint	9 (60%)	4 (27%)
	Nuclear	6 (40%)	11 (73%)

Table 2: Displaying Mean, SD, and 't' Value with respect to Self-efficacy prior-to intervention between Experimental and Control Groups (at baseline and the end)

BEFORE INTERVENTION					
Variable	Group	Mean	SD	't' value	Significance Level
Self-efficacy	Experimental (MET + Counseling)	54.26	2.53	0.04	0.963
	Control (Counseling)	54.21	3.49		
p>0.05 non-significant					
AFTER INTERVENTION					
Self-efficacy	Experimental (MET + Counseling)	61.72	2.64	2.79	0.005
	Control (Counseling)	55.18	3.41		
**p<0.05 significantly different					

The result table-2 revealed that the Mean score of Self-efficacy before the Motivational Enhancement Therapy intervention in the Experimental Group was 54.26 and in the Control Group was 54.21, which indicated no significant difference

exists between both the groups (p>0.05). Also suggested that the Mean value of Self-efficacy after Motivational Enhancement Therapy intervention in the Experimental Group was 61.72 and in the Control group was 55.18, which indicated a significant difference exists between both groups (p<0.05) respectively.

This has pictorially been represented in Figure I and Figure II respectively.

Figure I: Showing Comparison of the Level of self-efficacy Before and After Intervention in theExperimental Group (Motivational Enhancement Therapy)
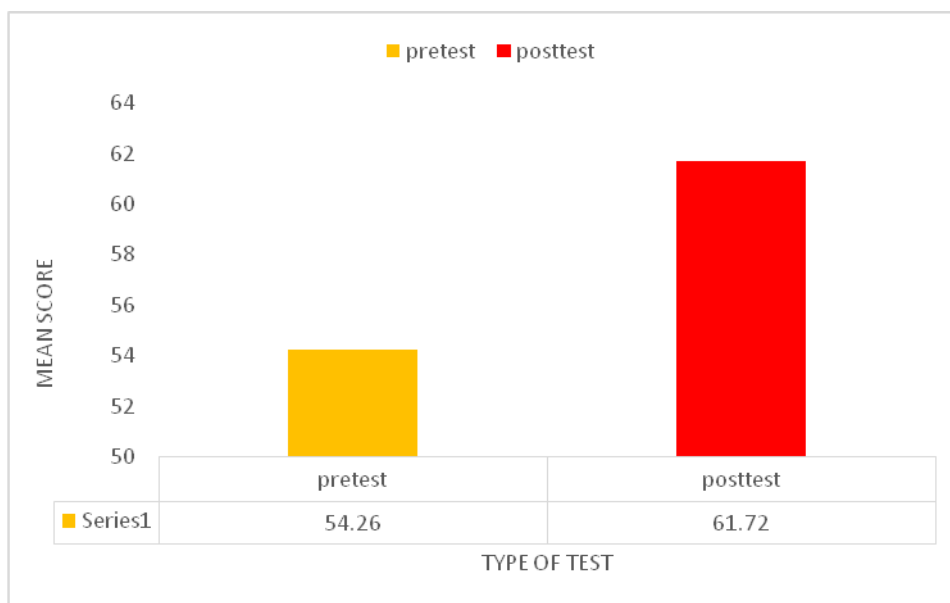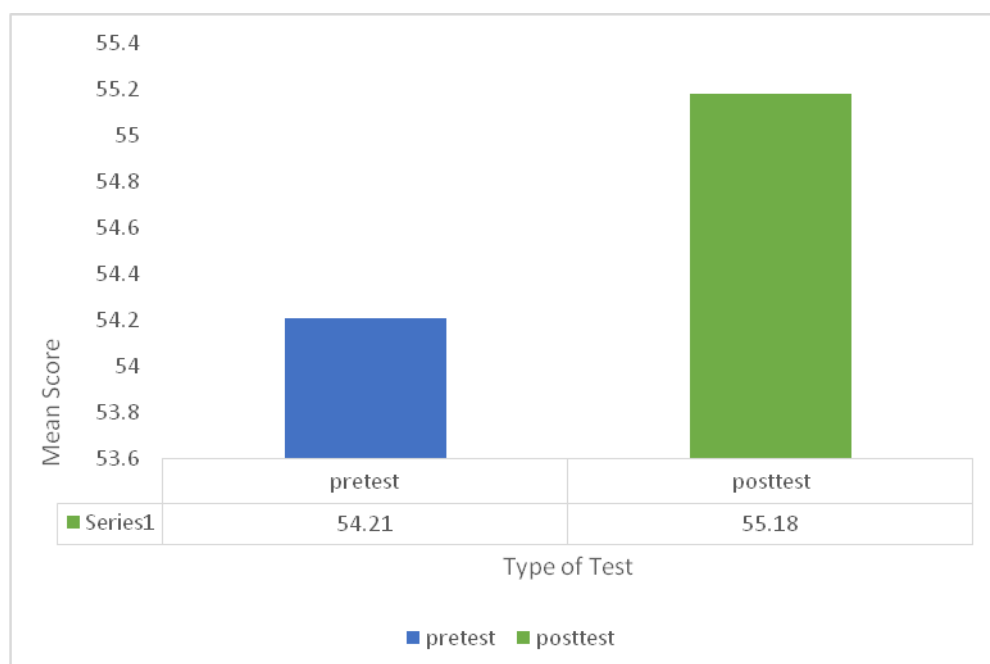

Figure II: Showing Comparison of Self-efficacy Before and After Placebo inthe Control Group (Counseling)

DISCUSSION

The present study proposed to evaluate and compare the effectiveness of motivational enhancement therapy on the level of self-efficacy in patients who use substances before intervention. The result findings revealed that the average of self-efficacy in the experimental group (both MET and Counseling) before intervention was 54.26 with a standard deviation of 2.53 and the average of self-efficacy in the experimental group after the intervention was 61.72 with a standard deviation of 2.64. while on the contrary, the average of self-efficacy in the control group (counseling) before intervention was 54.21 with a standard deviation of 3.49, and the average of the control group after receiving the placebo was 55.18 with a standard deviation of 3.41 respectively. While comparing,the result itself revealed that after Motivational Enhancement Therapy intervention, there was a significant difference found (p-value: 0.005), in the mean than self-efficacy values with the group where only a placebo was given. As the Motivational Enhancement Therapy sessions comprised of 4D techniquesto control the urges by looking at wine shops/substances again, and strategies to avoid the substance-consuming old peers. The technique of FRAMES. The OARS technique, Crisis Intervention Strategies, Relapse prevention, and management, etc. creates a positive impact on the patient's mindset; as a result, their level of self-efficacy has increased as compared from pre-test to post-test scores. All the above-mentioned techniques helped in restructuring the cognitive skills of the abusers. The term Motivation also has a positive impact on the thought process of the patients; for being severely addicted to maintaining a sobriety and healthy lifestyle having a high level of confidence to achieve the goal (e.g. looking into family members, starting a new work life, living like a normal individual in the society). The result after motivational enhancement therapy intervention in the experimental group the level of self-efficacy increased which is consistent with other research conducted on

thirty-five in-patients who were given a single period of Motivational Enhancement Therapy compared with fifty-two patients who received a placebo before intervention and after three months follow-up. Those groups get motivational enhancement therapy interventions evidenced by enhanced self-efficacy for abstinence to go along with the client's transformation about preparation/action stages of change (Prochaska and DiClemente, 1986).

Last, but not the least, the above research clearly stated that Motivational Enhancement Therapy is an effective psychological intervention for the management of substance use disorder and importantly the different drug-treatment centers should be focused on applying the different tchniques of the particular therapy instead of applying the principles of psychological counseling by the trained mental health professionals, and therapists for the betterment of the clients.Because of therapy itself has a better effectiveness compared to counselling (Kumar, Srivastava, Yadav, and Prakash, 2021).

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