Application of Motivational Enhancement Therapy in Group settings among Patients with Substance Abuse

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ABSTRACT

Background: Substance abuse is defined as the use of a drug or any other substance for a non-medical purpose with the aim of producing some type of "mind-altering "effect in the users. Motivational Enhancement Therapy (MET) is a systematic intervention approach for evoking change. It is based on principles of motivational psychology and is designed to produce rapid and internal motivation. Aims: Present study aims to assess and compare desire to quit substance use among substance users and the effectiveness of Motivation Enhancement Therapy on the desire to quit substance use in an experimental group. Sample and Sampling: A total number of 70 participants were selected using purposive sampling technique. The sample comprised of 35 from inpatient unit and 35 from the out-patient department of psychiatry, Kalpana Chawla Government Medical College and Hospital, Karnal, Haryana, India. Results and Conclusions: The present study suggests that comprehensive patient-friendly treatments are more effective in increasing the desire to quit substance use than the standard pharmacological treatment. Hence, combining pharmacological treatment with appropriate psychosocial interventions focusing on the specific problem of the patient may provide a better outcome than either one alone. Clinicians can arrange the clinical teaching regarding MET for a larger group at whole including family interventions.

Keywords: Motivation enhancement therapy, substance abuse

INTRODUCTION

According to the World Health Organization' there are 76.3 million people with alcohol use disorders worldwide. In addition, there are at least 15.3 million people who suffer from a drug use disorder, and injecting drug use is reported in 136 countries. [1] Substance abuse refers to the overindulgence in and dependence on a drug or other substance leading to effects that are detrimental to the individual's physical and mental health, or the welfare of others. There is strong evidence that a wide range of interventions is effective in treating alcohol problems.^[2] One economic analysis of the impact of treatment on alcohol problems suggested a benefit-to-cost ratio of 5:1^[3,4] and, overall, there seems to be favourable costeffectiveness.^[5] However, it is unlikely that

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treatment consistently provides such benefits because different treatment approaches do not work equally well^[6,7] there are gaps between what is known to be effective and what is currently practised ^[8] and the process by which the treatment is delivered contributes substantially to the outcome.^[9,10]

Psychosocial interventions embody a diverse group of treatment approaches, many of which are based on social learning theory [11] and are designed to help clients develop skills and self-efficacy to avoid drinking, to cope with cravings, or to achieve or maintain moderate alcohol consumption. [12] In their review of treatment outcome studies, Miller et al. [13] identified more than 30 different psychosocial approaches to the treatment of alcohol problems.

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Motivational Enhancement Therapy and Substance Abuse

Motivation plays important role in alcohol addiction 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. The process that a person goes through various stages when making a behavioural change are:

- o Pre-contemplation (i.e., not yet considering a change).
- Contemplation (i.e., considering a change but not taking action).
- o Preparation (i.e., planning to change).
- o Action (i.e., making changes in one's behaviour).
- Maintenance (i.e., changing one's lifestyle to maintain new behaviour) offers a new perspective on motivation and the process of behaviour change.
- o Relapse is often followed stage. [14,15]

METHODOLOGY

Aims and Objective: Present study aims to assess and compare desire to quit substance use among substance users and the effectiveness of Motivation Enhancement Therapy on the desire to quit substance use in an experimental group.

Sample and Sampling: Subjects who diagnosed as per the criteria for substance dependence according to International Classification of Disease, 10th revision, Diagnostic Criteria for Research (ICD- 10 DCR), [16] between 18-45 years of age and given consent to participate in the study were recruited. Subject with a family history of mental illness, mental retardation, epilepsy and physical illness and substance use or any other co-morbid psychiatric condition like - multiple substance dependence, mental illness, mental retardation, epilepsy and physical illness were excluded. A total number of 70 participants were selected using purposive sampling technique. The sample comprised of 35 patients from inpatient unit (intervention group) and 35 from the out-patient (control group) Department of Psychiatry, Kalpana Chawla Government Medical College and Hospital, Karnal, India were selected with their consent. Using Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES)^[16] before and after application of motivational enhancement therapy (six sessions for 5-6 weeks) assessment were conducted on substance users.

Stages of Change Readiness and Treatment Eagerness Scale developed by Miller & Scott^[17] is a 19-item experimental instrument designed to assess readiness for change in alcohol abusers. The instrument yields three factorials-derived scales: Recognition (Re), Ambivalence (Am), and Taking Steps (Ts). The SOCRATES differs from URICA (University of Rhode Island Change Assessment),^[18] also a stage of change measure, in that the SOCRATES poses questions specifically about alcohol or other drug use, whereas URICA asks about the client's "problem" and change in a more general manner.

Types and Techniques of Intervention

Psychoeducation: Psychoeducation was carried out with one session. The patients and their family members offered psychoeducation to make them aware about the nature of illness, course, treatment, prognosis and to Clearfield any misconceptions. This was done so that the patients got a better position to deal with the illness as they had no hope of getting better. Directions to reduce repeated medical consultations and investigations also provided.

Supportive Psychotherapy: Supportive Psychotherapy was carried out with one session. It was aimed at validating the distress of the patients and their family members who are undergoing treatment. The patients and their family members are given reassurance, support and his ability to cope with distress are reinforced.

Motivational Enhancement Therapy: It was carried out with six sessions for 5-6 weeks. Each session was continued for 45-60 minutes and delivered in the group setting with the aim to establish a firm therapeutic alliance with the patients, to increase the desire to quit substance use among substance users and to educate about the future compliance and treatment adherence.

First Session: In the first session after detailed discussion and assessment within themselves, the therapist provided to the patient with clear:

- Structured, personalized feedback concerning their drinking
- Frequency (number of drinking days per month)
- Drinking intensity (number of drinks per drinking occasion),
- Typical level of intoxication,
- The risk for negative consequences of alcohol use, results of liver function and neurological tests,
- Risk factors for alcohol problems (e.g., familial risk and tolerance symptoms).
- This information came from scores on various measures and diagnostic tests that the patient has completed before the session.
- Similarly, motivational interviewing techniques like FRAMES (Feedback of personal risks or impairment, Responsibility, Advice, Menu, Empathy, Self-efficacy)^[19] and DARES (Develop Discrepancies, Avoid Arguments, Roll with Resistance, Express Empathy, Support Sef-Efficacy)^[12] are continued in all sessions and on further these lines all the sessions were taken.

Second Session: Rationale for the intervention was presented to the patients. This session also discusses the special period of just beginning treatment, in particular with the idea that this is an emotionally scary and difficult time. It cautions that people are feeling particularly bad about themselves and the state of their lives, have recently used substances, and are at high risk for not returning to treatment. The central message is that this is all part of the normal process of change and that if they are patient, and allow themselves to establish their own pace; they will get through this time.

Third Session: The commitment to leave the substance was strengthened and guilt was induced and ill effects of the substance and their effects on all domains of life were discussed. This session also discusses the idea that while everyone in the group has, in general, had some struggle with addiction, it is important for each individual to examine for themselves the consequences of this use in their own life. The central idea is that each

person must conclude for themselves, based on this examination, whether they feel they have a problem that is worth making an effort to change, or not. The group focuses on identifying specific areas in individual's lives, to have them judge whether their substance use has produced a negative or a positive effect in that area (cost/benefit analysis). The idea that consequences can be negative or positive is central to allowing for an open, non-defensive examination of the role of substances in the group member's lives.

Fourth Session: In this session, the craving was discussed. Craving is broadly defined as the desire to use alcohol or other drugs; it increases the likelihood of use of these substances. Basically four causes of craving identified: (1) environmental cues (triggers): exposure to people, places, and things associated with prior drug-using experiences may cause immediate and overwhelming craving; (2) stress: addicted persons experience stress as craving; (3) mental illness; and (4) drug withdrawal: symptoms of both mental illness and withdrawal lead to craving if clients associate use with relief of these symptoms. Information related to craving was given and were explained to manage it and coping skills i.e. distraction techniques, coping card, sober were taught.

Fifth session: Behavioural self-monitoring and was taught to the patient, who wish to cut down on the amount of alcohol rather than stopping. Behavioural self-management includes

- Self Monitoring
- Setting drinking limits
- o Controlling rates of drinking
- o Identifying problem drinking situations
- o The self-reward for limited drinking

Sixth Session: Patients were reviewed. In this session, they were also educated about follow-up and medical adherence. During this session the patients gave feedbacks and unclarified concepts and its intervention strategies and the therapist does corrections and clarifies all concepts. After the session therapist explained to patients the importance of the regular practice of interventions guided in all sessions. At the end again as the post-intervention assessment was done.

RESULTS

Table 1: Socio-demographic Profile of Participants

Variables		Total	Experimental	Control	χ2	P value
_		N=70	N=35	N=35		1 varae
Age	18-24 yrs	27	15	12		
	25-31 yrs	25	10	15	2.000	.572
	32-37 yrs	12	06	06	2.000	.372
	38-45 yrs	06	04	02		
Education	Up to Primary	13	5	8		
	Up to Secondary	31	16	15	.878	.645
	Up to Senior Secondary	26	14	12		
Marital Status	Married	37	20	17		
	Single	32	15	17	1.368	.505
	Divorced/Separated	01	00	01		
Occupation	Employed	34	15	19		
	Unemployed	07	02	05	3.446	0.179
	Agriculture	29	18	11		
Type of Family	Joint	58	30	28	0.402	0.526
	Nuclear	12	05	07	0.402	0.526
Residence	Urban	23	08	15	2 172	0.075
	Rural	47	27	20	3.173	0.075
Monthly Family	less than 10000	34	14	20	2.050	0.151
Income	Above 10000	36	21	15	2.059	0.151
Monthly	Less than 5000	25	10	15		
Income	5001-10,000	23	09	14	6.632	0.036*
	Above 10,000	22	16	06		

^{*}Significant at .05

Table 2: Comparison of pretest and post test scores of control and experimental group

Group	Variable	Mean ± SD	Mean ± SD	't' value	P value
		Pre-Test	Post- Test		
Control group	Recognition	28.74 <u>+</u> 4.610	28.43 <u>+</u> 4374	.383	.704
	Ambivalence	15.80 <u>+</u> 3.22	17.43 <u>+</u> 2.684	-2.201	.035
	Taking steps	35.69 <u>+</u> 4.276	34.63 <u>+</u> 3.964	1.330	.192
	Total	80.23 <u>+</u> 6.589	80.49 <u>+</u> 6.839	1.413	.167
Experimental group	Recognition	28.06 <u>+</u> 5.269	31.20 <u>+</u> 4.438	-3.740	.001**
	Ambivalence	17.17 <u>+</u> 2.146	16.37 <u>+</u> 2.961	1.891	.067*
	Taking steps	33.34 <u>+</u> 5.599	37.49 <u>+</u> 3.450	-5.231	.000**
	Total	78.57 <u>+</u> 12.208	85.06 <u>+</u> 8.018	-4.688	.000**

^{*} Trend at .06, ** Significant at .001

Table 1 shows the socio-demographic characteristics of the variables. Both the groups were comparable at the baseline and found to be homogenous. Majority of the subjects belonged to age group 18-45yrs with education up to secondary level, married, and employed living within the joint family in a rural community with family income above 10,001 and individual income less than 5000.

Table 2 shows a significant increase in the desire to quit substance use in an experimental group. It also shows that patients who received motivational enhancement therapy had more recognition and high motivation for taking steps with low ambivalence than the control group, who had low recognition and motivation for taking steps with high ambivalence.

DISCUSSION

This study was planned to assess and compare desire to quit substance use among substance users and the effectiveness of motivation enhancement therapy on the desire to quit substance use in an experimental group. A total number of n = 70 participants were crosssectionally selected using purposive sampling technique. The sample comprised of 35 patients inpatient unit and 35 from the outpatient department of psychiatry, Kalpana Chawla Government Medical College and Hospital, Karnal, Haryana, India. Results indicate that the there is a significant difference in the means of the pre and post intervention. The present study shows a high level of recognition and taking steps for treatment with low ambivalence in inpatients received a combination and pharmacotherapy motivational enhancement therapy. The advantage of combining psychosocial management in the treatment of drug abuse is in line with the previous reports. At the beginning of the study both the groups scored low on two out of three factors of SOCRATES i.e. recognition and taking steps whereas both scored high on ambivalence. But after the MET therapy, the experimental group showed a rise:

- In recognition and taking, steps along with a fall in ambivalence whereas the recognition and taking steps of the control group remained almost at the same level with an increase in the ambivalence.
- Increasing recognition among the substance users is an important step of MET. Awareness raising is a process linked with movement from pre-contemplation to contemplation stages of change, according to the Trans-theoretical Model.^[20]

A multisite randomized trial to see the effectiveness of motivational enhancement therapy (MET) in comparison with counselling as usual (CAU) for an increase in retention and reducing substance use. There were no retention differences between the 2 brief intervention conditions. Although both 3-session interventions resulted in reductions in substance use during the 4-week therapy phase, MET resulted in sustained reductions during the subsequent 12 weeks, whereas CAU was associated with significant increases in substance use over this follow-up period. [15]

A study conducted by Dahl M. Helene^[21] on drug abuse and change readiness in prisoners concluded that motivational interviewing was effective among prisoners as measured by SOCRATES.

Limitation: The sample size was small to detect minor differences in the outcome between the two groups. Only male patients were included in the study. The therapist who assessed the progress of therapy was aware of the treatment provided. Future studies with larger sample size, randomization and with longer duration of follow-ups would provide more information on the efficacy of motivational enhancement therapy in the management of substance abuse problems.

Future Directions: Use of motivational interventions with motivation enhancement therapy can enhance patients' readiness to change substance use to better prepare them treatment programs. drug interventions might benefit from integration of the intervention with ongoing treatment to ensure that motivational gains are maintained. However, we have a good way to go in order to understand the complex nature of motivational readiness to change and its interactions with treatment efforts with respect to motivation enhancement therapy.

CONCLUSION

The present study suggests that comprehensive patient-friendly treatments are more effective in increasing the desire to quit substance use than the standard pharmacological treatment. Hence, combining pharmacological treatment with appropriate psychosocial therapies focusing on the specific problem of the patient may provide a better outcome than either of these therapies given alone. Clinicians can arrange the clinical teaching regarding MET for a larger group at whole including family interventions.

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