

Impact of covert sensitization on recovery of alcoholics in Pakistan

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Objective: To ascertain efficacy of covert sensitization with alcoholics admitted in a drug rehabilitation center.

Methodology: As the study was exploratory in nature, case study method was used. The sample consisted of ten inpatient alcoholics, equally divided into two groups. The age range was 28-50 years. Both the groups received the regular treatment but the treatment group in addiction received covert sensitization.

Results: Participants in the treatment group

remained abstinent over a period of four weeks and those in the matched group could not abstain from alcohol for that long.

Conclusion: Covert sensitization is an aversive stimulus, which intends to help the person to protract recovery. It should be used with twelve step program to maximize the affectivity of the treatment and prevent relapse. (Rawal Med J 202;45:573-576).

Keywords: Alcoholics, psychological treatment, covert sensitization.

INTRODUCTION

Alcoholism has been defined as a physical, psychological, social and spiritual disease.¹ Their occupational, financial and familial aspects of life are marred significantly with the progression of the disease.² Some of the physiological effects are long term such as neurological impairment,³ cardiovascular problems,⁴ and psychiatric disorders.⁵ It was estimated that 79,000 deaths in a year were attributed to drinking or alcoholism and has been termed as the third largest cause of pre-mature death across the globe.⁶

Alcoholism leads to dis-inhibition, which may lead to unprotected sex and unintentional pregnancies.⁷ It results in road accidents.⁸ According to a study, 17.60 million adults had alcohol dependence in the United States and the number rose to 185 million over a period of two years.⁹ In Australia, 13% of total population had alcohol related problems.¹⁰ It is an epidemic across the globe.¹¹

According to one of the studies done in Pakistan there are approximately 10 million people who drink out of which one million are reported cases of alcoholism.¹² It has been reported that 20 million consume alcohol in Pakistan.¹³ Thus, it can be concluded that drinking is a growing problem in Pakistan.¹⁴ In Pakistan, people drink for recreation, to deal with relationship issues and social

influences¹⁵ and some medical students drink alcohol to deal with stress.¹⁶ Some other reasons are the unstable political condition, terrorism, and insecurity.¹⁸ In the recent years a growing number of women of high socio-economic society have been reported to consume alcohol in Pakistan.¹⁹ Males and Muslims and laborers and then businessmen were more involved in alcohol,^{20,21}

There are a host of treatment facilities in the Western World. The physiological intervention helps the alcoholics with their physiological withdrawal through the detoxification.²² Psychotherapy is recommended in conjunction with physiological treatment to enhance the recovery rate. All around the globe, the self-help groups called Alcoholic Anonymous (AA) are active in the treatment of alcoholism.²³ Some private medical facilities exist in Pakistan.²⁴

In the past, painful or disgusting methods were used to develop aversion towards alcohol, e.g., putting spiders in the drinks.²³ Emetine (an alkaloid) was used to produce nausea by adding it to the liquor. Some of these methods are still used such as naltrexone, acamprosate, disulfiram, and nalmefene.²⁰ Covert Sensitization, has been used with alcoholics leading to better prognosis.^{23,24} Even though treatments like twelve step program have shown to be effective for patients, relapse rate is up

to 90%.²⁴ Therefore, this research aims to investigate covert sensitization along with twelve step program for effective relapse prevention.

METHODOLOGY

Since the present study is an exploratory in nature a Case study method was used. The group under study was highly specific therefore it was deemed fit to use non-probability purposive sampling. The sample consisted of ten inpatient alcoholics, who were divided into two groups of five each i.e., "treatment group" and the "matched group". The age range was between 28-50 years and graduation was the minimum level of education.

The demographic questionnaire consisted of gender, age, education, economic status and family system. Michigan Alcoholism Screening Test (MAST) was developed by Selzer, consisting of 24-items with reliability of .83 to .93 and predictive validity of .87 to .88.²⁵

A clinical psychologist was recruited to conduct the preparatory and intervention phase of the study with the treatment group. Both groups received the regular twelve steps program employed at the treatment facility however; the treatment group in addition received covert sensitization. The study comprised of three phases.

Phase One (Pre-testing): The consent form was filled and demographic form and MAST were administered. **Phase Two (Intervention):** Only the treatment group received covert sensitization other than the twelve steps program of AA. The research assistant led the participant through the covert sensitization using the information of the scene received from the participants. The aversive stimuli were same for all the experimental group participants. They were nausea, vomiting, and appearances of family members during the covert sensitization imagery. The aversive stimulus was introduced in imagination just when the participant would raise the index finger of the right hand indicating the desire to drink. Each session consisted of three trials of covert sensitization. A total number of ten sessions of covert sensitization were conducted that spanned over three weeks. **Phase Three (Post-testing):** This was done by administering follow up drinking scale in both

groups and continued through the follow up sessions. The information of the participants' non indulgence in drinking behavior was also confirmed from the families who came four days a week to the facility for Al-anon meetings.

RESULTS

All participants were middle aged and married (Table 1). They all had nuclear family system, except one who was separated. All the men had their businesses of different sorts except the women. One woman's husband had a business too. All of them had done graduation. They preferred to use English as the language to communicate and all of the participants belonged to the high socioeconomic strata of the society. Case 4 of the experimental group followed up the most (N=39) in comparison to all individuals. The least number of follow up days were recorded for Case 8 (N=10). Overall, more follow up days were observed in the Experimental group (Table 2).

Table 1. Age of the participants of both Groups (n=5).

Variable	M	SD
Experimental Group		
Age	41.80	8.25
Comparison Group		
Age	41.60	8.90

Table 2. Number of days the participants came for follow up after discharge.

Experimental group	Follow up/Recovery
Case 1	40 days
Case 2	30 days
Case 3	43 days
Case 4	39 days
Case 5	36 days
Comparison group	
Case 6	19 days
Case 7	30 days
Case 8	10 days
Case 9	24 days
Case 10	22 days

MAST showed that all of the participants accepted loss of control over drinking and problems related to it. They were also mindful of the fact that their

family members were affected by the drinking and the behaviors related to it and wanted help. The participants agreed that they wanted to quit because of financial and relational losses. All participants scored more than 7 on MAST.

In the exercise of covert sensitization most of the patients smiled, and swallowed the saliva when liquor was introduced. When the noxious stimulus was introduced most of them crunched the face or frowned, some breathe fast, yet still some others choked. They also sat in upright position. The verbatim some of the statements that the patients regarding covert sensitization are given below: *I felt disgusted and felt like throwing up and felt even more embarrassed when my family was introduced in the scene who saw me in such a state."*

It was surprising for me that I felt ill. I was ashamed in front of my family that I let them down once again. I felt very disgusted and that I could smell the vomit even after the scene. I felt very disgusted and sickened when the noxious stimulus was inserted. I felt very repulsive when you talked about throwing up."

I felt like drinking when it was introduced but later felt disgusted and embarrassed especially when the family appeared in the scene. I felt very uncomfortable and actually felt as if I would throw up. I felt like vomiting. I found it very sickening and that I could even smell the liquor and then the vomit. I felt repulsive of drinking and it will help me."

All five of the patients in the treatment group who received twelve steps along with covert sensitization were in abstinence for four weeks. Some patients in the matched group who had received only the twelve steps program at the facility could not abstain from drinking for as long as the participants in the experimental group.

DISCUSSION

Alcohol drinking and alcoholism are not only a growing problem in the Western World but also in Pakistan. The number of treatment centers for addiction are seriously lacking in Pakistan.¹ We found that patients were accepting of their alcoholism and problems related to it. One explanation of this acceptance may be the reason that they had suffered relational and financial loss.

Our study indicates that most of the participants

were able to imagine vividly and complied with the instructions. Patients frowned, crunched the face, choked, sat up upright and breathed fast when the noxious stimulus was introduced during covert sensitization. One explanation could be that they were educated, which led to better imagination.

All the five participants in covert sensitization group were in abstinence for four weeks after being discharged from the facility, whereas, three from the matched group drank alcohol within four weeks. Out of the two who remained in abstinence, one of them suffered a sudden parental loss. This could have circumstantially aided as an aversive stimulus to stay abstinent.

Professionals have been skeptical about the imagery techniques. In our study however, covert sensitization gave promising results. The parameters that may have made covert sensitization work were, the participants' ability to imagine and to be compliant or due to high socio-economic class. Another pertinent factor may have been due to the very fact that they were admitted in an indoor facility. In order to answer some of the aforementioned points, more research in this area is needed.

The present study at the very least opens doors to further investigation and elaboration of this potentially essential underlying behavior principle in the treatment of alcoholism using covert sensitization along with twelve step program to mitigate relapse cases in Pakistan. Covert sensitization should be used with a bigger sample size to generalize the results.

CONCLUSION

Covert sensitization, is an aversive stimulus when used with twelve step program to maximized the affectivity of the treatment and prevent relapse.

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Drafting of the article: Suneel
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