

## A Cross Sectional Study on Patients' Perceptions towards Allopathy and Alternative Therapies for Alcohol Use Disorder

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### Abstract

**Background and Objectives:** No studies from India have reported perceptions of patients regarding use of alternative therapies along with allopathy for Alcohol Use Disorder (AUD). The present study was conducted to assess perceptions of patients regarding treatments of AUD.

**Methodology:** Patients treated for AUD for 3 or more months were enrolled in a cross-sectional study after Institutional Ethics Committee permission and written informed consent from a deaddiction centre of a tertiary care hospital. They were interviewed using a pre-validated questionnaire for pattern of use and perceptions about allopathy and alternative medicines. Data was analysed using descriptive statistics.

**Results:** Of 100 male patients between 31-50 yrs of age, 97 were dependent on alcohol for over 2 years. A total of 86 received only allopathy treatment whereas 14 took combination of alternative and allopathy therapies. All were offered counselling at the deaddiction center.

Out of 14 patients who took combination of allopathy and alternative therapy, 10 found allopathy to be more effective overall while 4 found both allopathy and alternative therapy equally effective. Regarding the perception and experience about the deaddiction treatment, 34/86 reported abstinence was possible due to treatment, 31/86 reported decrease in withdrawal symptoms, 15/86 stated decreased craving with allopathy treatment. Almost half the number of patients taking combination therapy (6/14) reported decrease in craving and 4/14 reported abstinence. Lorazepam was used in all cases as a part of initial detoxification treatment.

**Conclusion:** Allopathy drugs were perceived to be more effective even in patients who were on combination of allopathy and alternative therapy. Use of alternative therapies was not prevalent and favoured as compared to allopathy.

**Keywords:** Alcohol Use Disorder, De-addiction centre, Craving, Questionnaire, Alternative therapy.

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### 1. Introduction

According to Diagnostic and Statistical Manual of Mental Disorders fifth edition (DSM-5) alcohol abuse and alcohol dependence, are now considered into a single disorder called alcohol use disorder (AUD) with mild, moderate, and severe sub-classification [1,2]. About two billion people worldwide consume alcoholic beverages and

one-third (nearly 76.3million) are likely to have one or more diagnosable alcohol use disorders. [3] According to global status report of WHO in 2014, 7.5% of population belonging to age 15 years and older especially in European countries was affected with AUD and 7.6% of male deaths and 4.0% of female deaths in 2012 were due to AUD [4,5] AUD is a serious health problem in India. The production,

availability, consumption and drinking patterns of alcohol have all undergone phenomenal changes in India. There is evidence from literature that some sections of the population such as young users, those with family history of alcoholism, impulsivity, hyperactivity, etc. are more vulnerable to develop AUD [6].

In a study conducted by Basu, *et al*, prevalence of alcohol use was found to be between 48% to 59 % in north India.[7]

According to National Mental Health Survey conducted in 2016, the overall prevalence of alcohol use disorder in India is 4.6%. [8].

Current drugs used in treatment of alcohol addiction are disulfiram, naltrexone, acamprosate, lorazepam and topiramate. [9] These drugs are not free from side effects and have limited efficacy. Acamprosate is associated with gastro intestinal side effects. Naltrexone is also reported to have adverse effects like nausea, headache, depression, dizziness, fatigue, nervousness, insomnia, vomiting and anxiety. [9,10] A metanalysis conducted by Streeton *et al* showed that naltrexone had a high relapse rate of 40%. [11]

For drugs like Disulfiram which is otherwise effective in compliant patients, one has to carefully look into patient selection and adverse effects. Disulfiram is reported to have significant adverse cardiovascular effects like myocardial infarction, arrhythmia, congestive heart failure. According to the COMBINE study, Acamprosate showed no significant effect on drinking as compared to placebo, either by itself or with any combination of naltrexone, cognitive behavioral intervention (CBI), or both.[12] The high relapse rate of naltrexone, adverse effects of disulfiram and acamprosate and less efficacy of combination therapies indicates that there is no effective treatment available till date for alcohol addiction.[9-12]

There are alternative therapies available that claim to increase abstinence in patients suffering from AUD and control the withdrawal symptoms. These include use of herbal and Ayurvedic medicines, Homeopathy, Chinese herbs, Behavioural therapy and Accupressure. [13-15].

In clinical practice, we find that patients tend to take treatment from alternative medicines along with allopathy for many chronic clinical conditions. As alcoholism is a chronic problem, patients may not be satisfied by allopathy treatment and may seek treatment from alternative systems.

A survey study by Bardazzi *et al*, showed that Complementary Medicine (CM) could represent a possible new method to personalize the treatment of alcohol dependent patients. CM has advantages of low cost and no or minimal side effects from treatments like acupuncture and homeopathy. There may be reduction in drop-out rate, increased treatment compliance and improved quality of life after treatment of AUD with CM.[15]

Considering the rising alcohol abuse, high rate of relapse, inadequacy of current allopathy drugs, there is a need of proper curative and preventive treatment approaches. It was of interest to find out whether patients seeking treatment at the deaddiction centre also seek treatment from alternative medicine. We planned this study to observe the pattern of use of alternative therapy in the patients attending Deaddiction Center for treatment of AUD and to assess perceptions of patients towards use and effectiveness of alternative and allopathy medicines.

## 2. Materials and method

A cross sectional questionnaire based survey was conducted at the Drug Deaddiction Center of the Department of Psychiatry in Seth GS Medical College & King Edward Memorial Hospital (KEM), Parel, Mumbai. This was a pilot study which was initiated after obtaining permission from the Institutional Ethics Committee. Patients diagnosed with AUD and attending the Deaddiction Center during the study period (June – November 2016) were included. Written informed consent was obtained from every patient before enrollment in the study. Patients in the age range of 18 to 60 years of either sex, willing to sign written informed consent, diagnosed as alcohol dependent and undergoing treatment continuously or intermittently for a period of minimum 3 months and taking/ had taken alternative therapy continuously or intermittently in last 5 years were enrolled. Patients who were diagnosed with any psychiatric/psychological condition/s other than AUD were excluded from the study.

The patients were interviewed using a validated questionnaire. The questions pertained to use of allopathy as well as alternative therapies, perception about their effects and any adverse events associated with the use of both the therapies. The following variables were recorded from the data collected using the questionnaire:

- 1) Number of patients using / who have used alternative therapy/ies for alcohol addiction alone/ in combination with allopathy drugs in last 5 years
- 2) Type of alternative therapy/ies
- 3) Number of patients using different allopathy drugs
- 4) Perception of patients regarding use and effectiveness of allopathy drugs and alternative therapy/ies

The data was analyzed with descriptive statistics (frequencies and percentages) by using Microsoft Excel Worksheet Software version 2010

## 3. Results

One hundred males between 31-50 years with a mean age of 50.43±1.05 were enrolled in the study. Ninety seven patients were chronically dependent on alcohol for more than 2 years while only 3 patients were dependent for 1-2 years (Figure 1).

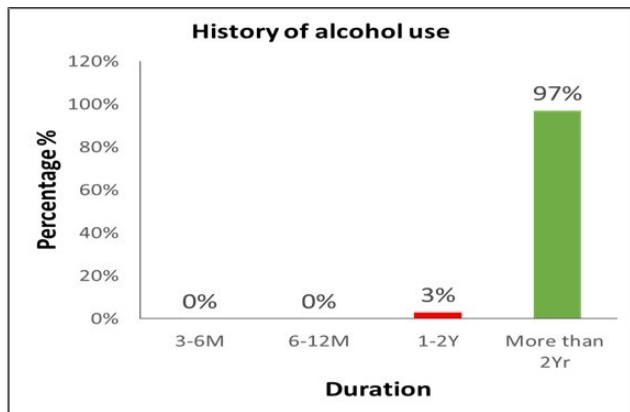


Figure 1: Duration of Alcohol Use

All were offered counselling as a part of the treatment of AUD. Out of 100, 86 patients received only allopathy treatment whereas 14 patients took combination of alternative and allopathy therapies. Out of 14 taking combination therapy, 6 patients took Ayurvedic treatment, 7 patients took unidentified medicines from nonregistered practitioners and only one patient was on Homeopathy treatment for less than 3 months. Only one patient continued Ayurvedic treatment of Shirodhara with Ashwagandha and Shatavari as medications for a period of 2 years (Figure 2).

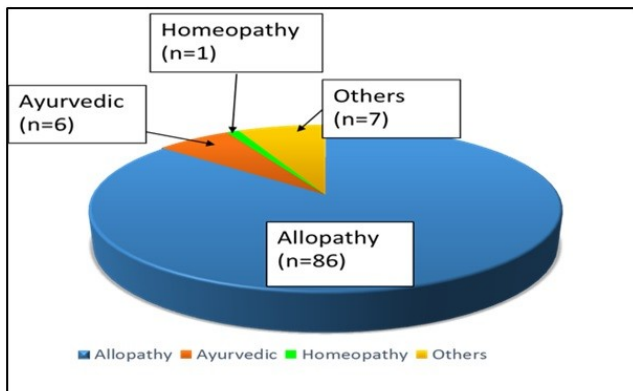


Fig 2: Pattern of Use Allopathy/Combination Therapy in alcohol addiction

We found that 87 patients were taking lorazepam which was started to control withdrawal symptoms as part of detoxification process. A total of 13 were found to receive combination of lorazepam and acamprosate at the time of the study. 6 patients were on lorazepam and baclofen while 4 patients received lorazepam and naltrexone. We also found that a total of 23 patients received acamprosate, 7 were on baclofen, 5 were taking naltrexone alone while only one patient was found to be taking disulfiram (Figure 3.1 and 3.2).

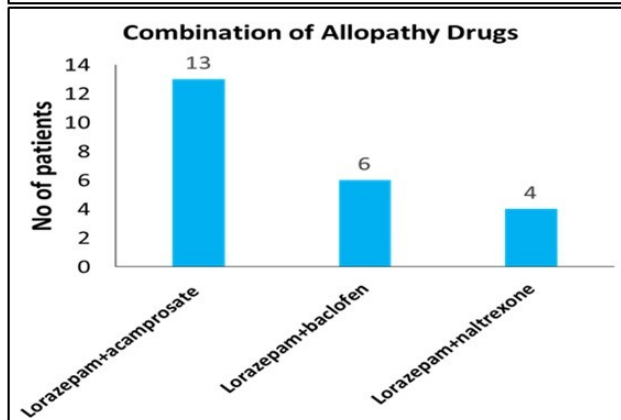
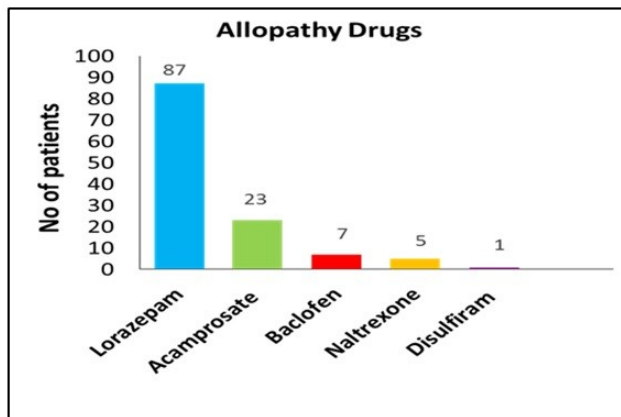


Figure 3.1 and 3.2: Pattern of use of allopathy therapy

Of the 100 patients who were receiving treatment 92 patients found allopathy to be effective and 4 found combination to be effective whereas remaining 4 did not comment (Figure 4) When patients were asked about how is the current therapy as compared to previous one, out 14, 10 answered allopathy to be more effective while 4 found both equally effective. When they were asked about recommending the alternative therapy, 3 answered no and 1 answered yes.

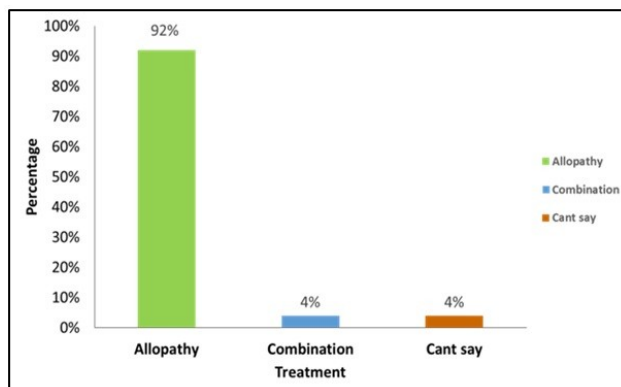


Figure 4: Perception of Patients regarding Treatment

Patients were assessed with respect to withdrawal symptoms and craving observed during the therapy. Of them, 34 reported decrease in withdrawal symptoms, 21 reported decrease in craving and 38 reported abstinence. In

patients who were taking allopathy alone 3 reported decreased withdrawal symptoms, 6 reported decreased craving and 4 abstinence.

**Table 1: Perception of patients on treatment with respect to relief of symptoms**

Type of therapy	Decrease in symptoms (n=34)	Decrease in craving (n=21)	Abstinence (n=38)	Can't say (n=7)
Allopathy (n=86)	31	15	34	6
Combination (n=14)	3	6	4	1

#### 4. Discussion

The present pilot study is first of its kind and was planned to observe the pattern of treatment given to patients of AUD attending deaddiction center and to assess their perceptions towards use and effectiveness of alternative medicines and allopathy drugs.

In our study, maximum numbers of patients were on lorazepam (87) which was given to manage withdrawal syndrome as a first step of detoxification process in alcohol dependent patients; followed by acamprosate (13), baclofen (7), naltrexone (5) and disulfiram (1) which were given as anti-craving and deterrent drugs for long term pharmacotherapy.

In a study conducted by Chand *et al.*, at National Institute of Mental Health and Neurosciences in 464 patients, diazepam (38.1%) was the commonest agent used for management of withdrawal symptoms followed by lorazepam (21.1%). For long term relapse prevention, acamprosate (44.3%) was the most commonly prescribed drug followed by disulfiram (28.5%), naltrexone (10.2%), ondansetron (9.4%) and topiramate (7.5%). [3] While diazepam was used as principle agent to control withdrawal symptoms in the above study, lorazepam was most commonly used drug in our study. Acamprosate was the most commonly used drug for long term relapse prevention in both the studies.

From the study, it was apparent that very few patients were taking alternative therapy in combination with allopathy. Of these patients who took combination therapy most of them preferred allopathy over alternative treatment. A sole study from Italy about use of complementary medicines with allopathy too mentioned that only 1% of alcohol health services used complementary medicines as principal method of treatment. [15]

In the same study, 16.5% (50/303) of alcohol health services had used complementary therapy in the past. Of these, 71.45% used acupuncture, 10.08% took phytotherapy, 15.36% took homeopathy and 0.68% took Ayurvedic medicine for treatment of alcohol addiction. [15]

This study also showed that 97% individuals continued to remain addicts despite of 2 years of initiating treatment which indicated low efficacy and/ or high non-compliance rate on the deaddiction treatment approaches followed in the study.

Our study is limited by the fact that we have recruited patients from allopathy hospital where majority patients would be on allopathy. Hence we could collect data of only a few patients. Patients attending tertiary care hospital and seeking allopathy treatment may hide details about alternative therapies to doctors at the centre due to fear. Moreover, perception of patients may have been affected due to inability to recall past treatment experience. Future prospective studies in different deaddiction centers and alternative medicine hospitals using larger sample size should be conducted to collect more information on pattern of use of alternative drugs for alcohol dependence and patients' perceptions. This will help in identifying potential agent/therapy for further evaluation in order to generate more evidence about alternative therapies for alcohol de-addiction.

#### 5. Conclusion

Majority of patients were found to use allopathy over alternative therapies for treatment of alcohol use disorder. This preliminary study gives data on use of alternative medicines in a tertiary care centre in India for the first time. It may be worthwhile to generate more data and scientifically evaluate alternative therapies to incorporate them in the treatment plan with allopathy medications if found effective.

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