



A LONGITUDINAL STUDY TO ASSESS ADHERENCE TOWARDS DE-ADDICTION TREATMENT IN ALCOHOL ADDICTED PATIENTS

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ABSTRACT **INTRODUCTION:** Adherence rates in alcohol dependent patients are very low. This research is an effort to find out factors responsible for low adherence rates.

MATERIALS AND METHODS: At the time of discharge of alcohol dependent patients, a survey was conducted. Total 73 patients were interviewed with semi-structured questionnaire. Patients were followed-up up to 12th week. On follow up visits, questions were asked regarding medication adherence. Survey tools, Medication diary and simplified medication adherence questionnaire were implemented. Data was analysed using SPSS 20 software.

RESULTS: Most common drug prescribed was Acamprosate (45, 61.6%), followed by Naltrexone (15, 20.5%), Disulfiram (8, 11.0%). And most common reason for lack of adherence, provided by patients was 'Self-decision that no further treatment required' (24, 32.9%), which was followed by 'Due to Adverse drug reaction (s)' (21, 28.8%) and 'any family related factor' (16, 21.9%).

KEYWORDS : treatment adherence, alcohol dependence

INTRODUCTION

Alcoholism is responsible for 4% of all global mortality and 4.6% worldwide DALYs (disability-adjusted life years).^[1,2] Alcohol use is leading risk factor for psychological and physical ill health. Until now, it has been observed that in the age group of 15-59 years, excessive alcohol use is linked with approximately 1.5 million deaths each year.^[3] according to National and Household Survey (2003) on alcohol and drug abuse, current users (used in last 30 days) of alcohol were found to be 21.4%.^[1]

There are several evidences that combined treatment with pharmacotherapy and psychotherapy are more effective that either approach alone.^[4] in previous studies treatment outcome were linked with several patient related factors i.e. emotions, efficacy of treatment, self-motivation, patient's willingness to abstain and adherence to medication. It has been also found that low adherence to advised medicines is one of the most important factor for treatment failure.^[5] Therefore, this current study was conducted to assess the pattern of anti-addiction medication and factor affecting adherence to them.

MATERIALS AND METHODS

This was longitudinal study, carried out to 1 year at a tertiary care hospital. Data collection was done using semi-structured questionnaire. To define, patients of alcohol dependence ICD-10 criteria were used. Inclusion criteria was patient's age should be more than 25 years and is currently receiving treatment for alcohol dependence in hospital. Patients with concurrent psychiatric disorder and other chronic organ system disorders were excluded.

Patient's socio-demographic data was collected when he was admitted in hospital. Data for de-addiction treatment and alcohol consumption recorded at the time of discharge and during follow-up up to 12th week. At the time of discharge, patients were advised to take their treatment consistently and they were also advised to maintain a drug diary to write information regarding treatment they consumed and tablets they missed. They were also requested to write reason for missed tablets and adverse effect experienced.

Adherence was assessed using patients' self-reported information, drug diary, and simplified medication adherence questionnaire (SMAQ). Patients level of adherence and persistence were also recorded. Patient follow ups were done in their clinic visit. Their old drug diary was replaced with new drug diary on every follow up visit.

SMAQ is pre-validated, structured six-point questionnaire, were filled to quantify medication adherence and to evaluate the extent of non-adherence.^[6] The six questions used in the study are given below and scoring consisted of Yes = 1 and No = 0 responses from patients:

1. Are you careless at times about taking medication?

2. Did you ever forget to take your medication?
3. Not taken medication in the last week?
4. More than 2 days medication was not taken in the last month
5. Are you not taking your medication in time?
6. Do you stop medication if you feel worse after taking medication?

SMAQ score of more than four was considered as non-adherent and reason for this was recorded. SPSS 20 software (IBM Corporation, Armonk, New York, United States) was used for data entry and data analysis. Descriptive statistics (number and percentages) was used for data representation.

RESULT:

A total of 73 patients were observed. Their mean age was 45.7 years (with SD 12.3 years).

They all (73, 100%) were male patients. Most of them (65, 89.0%) were married. By residence most of them were belong to urban area (42, 57.5%), followed by semi urban (18, 24.6%) and rural areas (13, 17.8%). [Table: 1]

Table 1: Demographic Profile Of The Patients

Parameter	Classification	Number (percentages) N=73
Gender	Male	73 (100%)
	Female	0 (0%)
Marital Status	Married	65 (89.0%)
	Unmarried	8 (10.9%)
Patients Residence	Urban	42 (57.5%)
	Semi-Urban	18 (24.6%)
	Rural	13 (17.8%)

Most common prescribed drug was Acamprosate (45, 61.6%), followed by Naltrexone (15, 20.5%), Disulfiram (8, 11.0%). [Table 2]

Adherence of drugs was 62.2% (28) for Acamprosate, 33.3% (5) for Naltrexone, 87.5% (7) for Disulfiram, 50.0% (1) for Baclofen and 0% for Topiramate and Ondansetron both. [Table 2]

Table 2: Medication Prescribed As De-addiction Treatment At The Time Of Discharge And Persistence Of Use After 12th Week Of Treatment

Medication	Prescribed at the time of discharge Number (% out of 73)	Adherent of Medication Number (% out of numbers in previous column)
Acamprosate	45 (61.6%)	28 (62.2%)
Naltrexone	15 (20.5%)	5 (33.3%)
Disulfiram	8 (11.0%)	7 (87.5%)

Baclofen	2 (2.7%)	1 (50.0%)
Topiramate	2 (2.7%)	0 (0%)
Ondansetron	1 (1.4%)	0 (0%)

Most common reason for lack of adherence provided by patients was 'Self-decision that no further treatment required' (24, 32.9%), which was followed by 'Due to Adverse drug reaction (s)' (21, 28.8%), 'any family related factor' (16, 21.9%), 'forgetfulness about medication' (12, 16.4%), 'Medicines are expensive' (6, 8.2%), 'Unavailability of medicines at local chemist' (4, 5.5%), 'Complicated treatment' (2, 2.7%) and no reason (2, 2.7%). [Table 3]

Table 3: Reasons For Lack Of Adherence Provided By Patients

Reason	Numbers N= 73 (multiple responses)	Percentages (out of 73)
Self-decision that no further treatment required	24	32.9%
Due to Adverse drug reaction (s)	21	28.8%
Any family related factor	16	21.9%
Forgetfulness about medication	12	16.4%
Medicines are expensive	6	8.2%
Unavailability of medicines at local chemist	4	5.5%
Complicated treatment	2	2.7%
Any Other Reason	2	2.7%

DISCUSSION:

The current study clearly showed that adherence of de-addiction medication reduces considerably over time. The pattern of de-addiction medication was in accordance by approved drug list by FDA.^[7]

Acamprosate (61.6% in current study) is most commonly drug used as de-addiction medication may be due to practically absence of any serious harmful effect of the drug.^[8,9]

In previous studies, the non-adherence rates were 20-60% for naltrexone, 53% for Acamprosate, and highest for disulfiram are reported.^[2]

The differences found in non-adherence rates of various de-addiction drugs may be due to patient related factors. In addition, a frequently reported barrier that we found was ADRs to prescribed treatments, similar to those reported in the recent Cochrane reviews.^[7,10]

CONCLUSION

The present study found that most common drugs prescribed for alcohol de-addiction were Acamprosate, Naltrexone and Disulfiram. And most common reasons for non-adherence were 'Self-decision that no further treatment required', 'Due to Adverse drug reaction (s)' and 'Any family related factor'.

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