Prevalence and characteristics of relapse in patients with Alcohol Dependence Syndrome

Sulochana Joshi,[1*] Anup Raj Bhandari,[2] Eloma Shrestha,[3] Rabi Shakya [4]

1. Assistant Professor, Department of Psychiatry, Patan Academy of Health Sciences, Lalitpur, Nepal
2. Assistant Professor, Department of Psychiatry, Patan Academy of Health Sciences, Lalitpur, Nepal
3. Medical Officer, Nidan Hospital, Lalitpur, Nepal
4. Professor, Department of Psychiatry, Patan Academy of Health Sciences, Lalitpur, Nepal

Abstract

Background

Relapse is an important but difficult phase of the management of alcohol dependence syndrome (ADS).

Objective

To study the prevalence and characteristics of relapse in patients with ADS.

Methods

This is a descriptive cross-sectional study on the patients with ADS presenting at the Department of Psychiatry, Patan Academy of Health Sciences, for the period of one year (June 2016 - May 2017). Data on the demographic and relapse characteristics were collected. Data were entered and analyzed in Microsoft Excel (MS Office 365, Microsoft Corporation, Washington, United States). Numerical variables were summarized with the median (Inter-Quartile Range [IQR]) and the categorical variables with proportions.

Results

Altogether, 105 patients with ADS were studied, among which 59 patients had a relapse (56.1%). All of them were male with a median age of 42 years (Interquartile range (IQR) 35 to 52). The majority were married (55, 93.22%), manual labor as an occupation (32, 54.24%), were Janjati by ethnicity (37, 62.71%), and had received secondary education (19, 32.20%). The median age of starting alcohol consumption was 18 years (IQR 15 to 20) and the median duration of consumption was 22 years (IQR 15 to 30). The most common reason for relapse was peer pressure (25, 42.37%).The majority had relapsed once before (26, 44.07%).Mostly relapsed after abstinence of 1 to 3 months (22, 37.29%) and abstinence maintained by self-motivation (30, 50.85%).Comorbidity and family history of substance use was present in higher proportions.

Conclusion

A high rate of relapse was found in our patients with peer pressure as the most common reason for the relapse.

Keywords

Alcohol dependence, Abstinence, Relapse,Treatment

*Correspondence Author

Dr. Sulochana Joshi

Assistant Professor
Department of Psychiatry
Patan Academy of Health Sciences,
Lalitpur, Nepal
Email: sulochanajoshi01@gmail.com
Contact No: 9843357958

INTRODUCTION

Alcohol Dependence Syndrome (ADS) is a public health problem with frequent lapses and relapses. Alcohol use disorder has been found to be 4.2% in our national mental health survey(1). Alcohol use disorder has a 12-month prevalence rates of 14% and lifetime estimates of 29%(2). Relapse is a multifactorial phenomenon where an individual returns to an earlier pattern of use of alcohol after a period of abstinence.(3)Despite long abstinence, relapse can occur for various reasons like biological, social,and psychological factors(3).It is a major problem in the treatment of ADS which commonly occurs and 90% relapse atleast once every four years(4).

Rates of relape vary as per the definition of relapse and treatment.The systematic review of the Indian studies showed wide range of relapse rates from 9.6% to 90%(5).A high rate of relapse(45–75%) within one year after treatment was found(6). A cross sectional study done on patients after 3months of receiving 10days deaddiction program showed 55.4% of relapses(7).The risk for relapse was shown to be greatest during the first two to three months following treatment initiation. At three months post-treatment, 40–60% of individuals in treatment for alcohol problems relapsed to a first drink, whereas by 12 months, this rate increased to 70–80%(8). In a retrospective

study, relapse was found to be 45%(9).Frequent relapses lead to numerous morbidity as well as mortality. The death rate was upto 11% in a follow-up study of patients with alcohol use disorder, where two third of this death were alcohol-related(10).Different factors like family history of substance use,problems with social support, comorbid psychiatric condition, the severity of alcohol dependence, cravings,stressful life events, and treatment issues have been found in resulting relapse(11,12).ADS and relapses cause severe problems related to public health, public security, family conflict, and individual health. Therefore, it is crucial to investigate the factors influencing relapse among patients with alcohol-induced psychiatric and behavioral disorders.Identification of the characteristics and factors for the causation of relapse of alcohol use help in understanding the phenomenon better as well as defining and developing treatment strategies.There is a dearth of literature in our context but the problem of ADS is hug. This study aimed to assess the prevalence and the characteristics of relapse thereby attempting to identify the risk factors for relapse to provide guidance for rehabilitative intervention and to decrease the occurrence of relapse.

Methods

This was a cross-sectional study carried out in the Department of Psychiatry, Patan Academy of Health Sciences over a 12-month study period from June 2016 to May 2017. The Patan Academy of Health Sciences is a tertiary care teaching hospital, and the Department of Psychiatry consists of a 25 bedded Psychiatry ward with 8 beds allocated for patients with substance use disorder. The inpatient ward is an open unit and an attendant is required for the admission of the patients.

All the inpatients with alcohol dependence syndrome (ADS) with alcohol withdrawal syndrome (AWS) presenting at the Department during the study period were included. The consecutive admissions of the same patient were considered independent admissions if they were separated by at least three months.Patients were admitted from the psychiatry outpatient department (OPD), emergency department, and transferred from other wards. ADS and AWS were diagnosed according to the International Classification of Mental and Behavioral Disorders (ICD) 10 Diagnostic Criteria for Research (DCR) for alcohol dependence syndrome(13). For the study,relapse and abstinence wereoperationally defined. Relapse was defined as the patients who had met the ICD 10 DCR criteria for alcohol dependence and were abstinent for at least 1 month (according to early remission criteria) after which they relapsed and are now fulfilling the ICD 10 DCR criteria for alcohol dependence for at least 1 month.Abstinence was defined as the

patients who had met the ICD 10 DCR criteria for alcohol dependence and is now abstinent for atleast1 month(13). We assessed for the last relapse in our patients of ADS with AWS before discharge with clinical interview by the consultant psychiatrist.Informed written consent was obtained from the patient and caretaker ensuring confidentiality. Comorbid personality disorder, other substance use disorder except nicotine and those not consenting/willing to participate in the study were excluded. A structured proforma was used to collect information on the demographics and clinical characteristics of the patients who relapsed.

Data were entered and analyzed in Microsoft Excel (MS Office 365, Microsoft Corporation, Washington, United States). Numerical variables were summarized with the median (Inter-Quartile Range [IQR]) and the categorical variables with proportions.

Results

Demographics

Of the 105 patients with ADS, 59 patients had a relapse (56.1%). All of them were male with a median age of 42 years (IQR 35 - 51). The majority were married (55,93.22%), manual labors an occupation (32,54.24%), were Janjati by ethnicity (37,62.71%),and had received secondary education (19,32.20%)(Table 1).

Table 1 Demographics of patients with relapse

Characteristics	Number	Percentage
Gender		
Male	59	100.00%
Female	0	0.00%
Marital status		
Married	55	93.22%
Single	2	3.39%
Widower	2	3.39%
Education		
Primary School	10	16.95%
Secondary School	19	32.20%
Bachelors	2	3.39%
Illiterate	18	30.51%
Masters	0	0.00%
Higher Secondary	3	5.08%
Literate	7	11.86%
Occupation		
Semi-skilled labor	11	18.64%
Manual labor	32	54.24%
Business	11	18.64%
Unemployed	0	0.00%
Skilled	4	6.78%
Foreign employment	1	1.69%
Ethnicity		
Brahmin	12	20.34%
Chhetri	10	16.95%
Janjati	37	62.71%

Clinical characteristics of relapse

The median age and duration of starting alcohol consumption were 18 years (IQR 15 to 20) and 22 years (IQR 15to 30) respectively.The majority had relapsed once before (26,44.07%) and occurred after abstinence of 1 to 3months (22,37.29%). The abstinence were maintained by self-motivation (30,50.85%).The most common reason for relapse was peer pressure (25,42.37%)The majority had comorbidities (40, 67.8%)(Table 2).

Table 2 Clinical Characteristics of patients with relapse

Characteristics	Number	Percentage
Reason for relapse		
Peer pressure	25	42.37%
Stress	12	20.34%
Culture and festival	11	18.64%
Craving	8	13.56%
Availability	2	3.39%
Frequency of Relapse		
Once	26	44.07%
Thrice	16	27.12%
Twice	11	18.64%
More than 3 times	6	10.17%
Duration of abstinence		
1-3 months	22	37.29%
7-12 months	16	27.12%
4-6 months	11	18.64%
More than 12 months	10	16.95%
Method of abstinence		
Self-motivation	30	50.85%
Hospitalization	21	35.59%
Family restriction	4	6.78%
Rehabilitation	3	5.08%
Alternative medicine	1	1.69%
Comorbidity		
Absent	19	32.20%
Medical	16	27.12%
Psychiatric	14	23.73%
Both	10	16.95%
Family history of substance use		
Absent	31	52.54%
Present	28	47.45%

Discussion

In the present study, more than half of the total patients (56.1%) had relapsed which is consistent with a high rate of relapse in the previous studies(7,10,14). However, studies have reported considerable variation in relapse rates which might be dependent on the definition of relapse, type of dependence, demographic characteristics of the patients, and the socio-cultural context(5,7). These factors need to be considered while formulating the treatment plan and rehabilitation strategies.

It has been found that alcohol consumption is related to age, gender, marital status, caste/ethnicity, education, and occupation(15).In the present study, all participants were middle-aged married males which is consistent with previous studies(5,10,16).This finding is consistent with that of the mental health survey where males of age 40 -59 years consumed the most alcohol(1).The reason could be that most of them got married by this age and due to their family pressure, they seek treatment for alcohol relapse. This shows that alcohol relapse is more common in men compared to women.In a few of the studies,the finding on marital status is contrary to our study(9,17). The possible explanation is that those who were married had better social support to prevent relapse as married men were brought for treatment by the family.Also, a study from Nepal showed alcohol consumption is significantly higher among males than females, hence it is obvious to have more males as relapsers(16).Also, the different patterns of alcohol consumption and subsequent relapse across genders could be related to social and cultural norms which accept male drinking behavior as normal behavior while in the case of females, it is an immoral act and has a social taboo.This also explains the male preponderance in our study(18). It is evident that significant proportions of females in Nepal consume home-brewed alcohol rather than industrially produced alcohol(19).But a study has shown similar relapse rates in both genders(10). However, with the changing lifestyles and changes in the socio-political context in Nepal, the perception and pattern of alcohol consumption are also changing which needs to be explored further.

In addition, our study findings of the majority of participants from janajati groups and manual labor could be related to the higher prevalence of alcohol use and related disorders in certain ethnic groups and men from low-caste groups(16). In Nepal, people from low-caste groups have limited access to resources, lower levels of education, and engage in manual labor work. Similar findings on a high rate of relapses were reported with the low level of education and manual work(15,17). This could be explained by the lack of information about harm from alcohol and stressful life events inciting relapses in them.

The mean age of starting alcohol consumption was 18 years and the median duration of consumption was 22 years. Similar finding on young age was found in other studies too as a predictor of relapse(10,20,21). Our study was in contrast to a few studies which had slightly older age of onset and shorter duration of alcohol drinking associated with relapse(9,21). The reason to start alcohol consumption at a young age might be age-related factors like curiosity, peer pressure, or coping with stressors.

In our study, the most common reason for relapse was peer pressure (42.37%) which was similar to different studies(7,22–25) but in contrast to a few other studies(14,26). Other factors such as stress, craving, and availability during cultural rituals also contributed to relapse in our study. Drinking alcohol because of festivals and cultural aspects has been a unique reason in our study. This could be explained by the ethnic group of our ie janjati, especially the Newar community accepting alcohol use religiously and traditionally in different festivals and celebrations.

Stress is a well-known factor to increase relapse risk directly and indirectly(27). This factor has also been reported by our study and others(14,21–23). Craving has been postulated as an important factor for relapse in various studies(7,14,25,28,29). This factor is also seen in our study. Also, factors increasing craving may increase relapse Various other studies showed that negative emotions, external pressures, and high-risk situations also contribute to relapses(21,22,25,30). Hence, it emphasizes various factors causing relapses and the need to understand them. It is recommended to focus on designing appropriate measures to address these issues during the management of alcohol dependence to prevent relapse. More specifically, psychological interventions focusing on social skills and assertiveness skills training should be incorporated into the management plan.

The abstinence was maintained mainly by self-motivation (50.85%) and hospitalization for medical problems.Other studies have shown the use of self-help groups for maintaining abstinence(23). This finding could be explained by the notion that one can handle the drinking problem oneself, the lack of awareness about alcohol problems as addiction, lack of awareness about the need for treatment for preventing relapses.

We found that 37.29% had maintained abstinence for about one to three months and 44.07% of the patients had relapsed once before. Arun et al found that the majority were abstinent for six months and with an increase in duration the relapse decreased significantly(9). There was a high number of past relapses and this was significantly associated with relapse (21,22,31).These findings highlight the importance of building intrinsic motivation to be sober for the long term. Hence, it is important to focus on including motivational enhancement therapy in the management plan both during the acute and maintenance phases of alcohol treatment.

A family history of substance dependence was significantly associated with relapse(5,21,22). Our study had a family history of substance use in 47.45% which is similar to other studies(23,32) This finding could reflect the high proportion of study participants being hospitalized for the treatment of alcohol-related problems.Knowledge of substance use by the family helps in the treatment prevention of relapses.

Our study showed the presence of comorbidity in 40(67.79 %) patients. Studies have shown medical comorbidity and withdrawal features were common in alcohol dependence(22). Similarly, the presence of depression was an important predictor factor for relapse(10). Also, anxiety disorder contributed to the maintenance of relapse as well as anxiety and alcohol disorders could each initiate the other(33).Driessen et al reported that anxious traits and co-morbid depressive and anxiety disorders and combinations also increased the risk of relapse(34). In addition, Potash et al reported comorbid affective disorders had a negative impact on various measures of alcohol treatment including increased rates of relapses(35). Hence given all these, the comorbidity in our study could have contributed to relapse occurrence and maintenance of relapse.

Limitations

There is a sampling bias as only hospitalized patients from a single center were enrolled, therefore limiting the generalizability of the findings. Also the inclusion of only hospitalized patients enrolled the severe cases of ADS which could have influenced our high relapse rate. The lack of follow-up of these patients prevented us from the information which could have added or influenced the relapses. The exclusion of comorbid personality disorders could have prevented the inclusion of one of the pertinent relapse precipitants. The severity of alcohol dependence was not assessed with any psychometric tools which could have further helped us in better understanding relapse and identification of causative factors.There was an insufficient sample to conduct a multivariate statistical analysis as the study was time bound.

Conclusion

A high rate of relapse was found in our patients with peer pressure as the most common reason for the relapse. The comorbidity, family history of substance use, and frequent relapses were present. There is a further need to explore the factors and their association with relapse. Consideration of the risk factors focused treatment strategies, rigorous follow-up, screenings, and policies and programs to delay, treat and prevent relapses are recommended.

Funding Source

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