MedCrave
Step into the World of Research

Journal of Liver Research, Disorders & Therapy

Research Article

Open Access

CrossMark

Factors affecting remission and relapse in alcohol dependence can they really predict?

Abstract

Objectives: Alcoholism is a chronic relapsing disorder. Alcohol dependence is characterized by a prolonged course of alcohol-related problems and a persistent vulnerability to relapse. Even though there is an improvement in multiple domains of life after alcohol treatment, the risk of relapse remains high following treatment. This prospective and retrospective study of 354patients with alcohol use disorders was done with a intent to assess various factors affecting remission and relapse and improve outcome for individuals with alcohol dependence. Demographic variables, clinical parameters and certain psychosocial factors were evaluated. Early identification of risk factors may help us in defining a more rigorous follow up protocol in these sub groups of patients.

Methods: Patients with ethanol related liver disease and alcohol dependence were enrolled after their presentation in gastroenterology clinic and followed thereafter at 1, 3, 6 and 12months. Initial assessments included USG abdomen LFT RFT, UGI Endoscopy and other relevant investigations. Semi structured clinical interviews, the Symptom Checklist 90-Revised (SCL90-R), Addiction Severity Index (ASI), the Beck Depression Inventory (BDI) were recorded. Patients were reassessed at six and twelve months to determine treatment outcome (abstinence status and duration of continuous abstinence). Data were coded, validated and analyzed using descriptive statistics.

Results: A majority of the sample 71percent (n=251) had significant psychiatric symptoms at intake: 20percent (N=71) presented with depressive symptoms, 15percent (N=53) with anxiety symptoms and 41percent (N=145) with combined depressive and anxiety symptoms. Thirty five percent of patients who presented with combined depression and anxiety symptoms were abstinent at six months. These patients had worse prognosis than less symptomatic cohort at intake, including those who presented with depression symptoms alone; in the latter group, 70percent were abstinent at six months. Key predictor variables included days in treatment, primary drug of abuse, frequency of drug use and report of concurrent depression or anxiety symptoms at intake.

Conclusions: Concurrent depression or anxiety symptoms, low education, lack of motivation for abstinence had a significant negative predictive effect on treatment out come. Craving was noted as most common cause for relapse in alcohol dependent patients. Higher relapse rate was seen in concomitant opioid dependence, high risk situations, previous relapses Positive predictors were more number of coping strategies, principally adaptive ones. There is significant association between age at first drink, age at dependence, duration of dependence, other Co-morbid diagnosis of patients and relapse. Early consideration of these risk factors and more rigorous follow up can help in reducing incidence of relapses.

Keywords: alcohol, co-morbid, relapse, prolapsed, lapse, UGI endoscopy

Volume 2 Issue 3 - 2016

Nagaich N,[1,2,3] Radha S,[4] Neeraj G,[5] Sandeep N,[1] Subhash N[5]

[1]Department of Gastroenterology, SMS medical College, India
[2]Department of Gastroenterology, Fortis Escorts Hospital, India
[3]Department of Gastroenterology, Metro MAS Hospital, India
[4]Department of psychiatry, SMS medical College, India
[5]Department of Gastroenterology, MG medical College, India

Correspondence: Neeraj Nagaich, Department of Gastroenterology, SMS medical College, A-9 shantinagar, Ajmer road, 302006, India, Tel 9194 1460 0141, Email drneerajn@gmail.com

Received: July 15, 2016 | **Published:** September 22, 2016

Abbreviations: SCL90-R, symptom checklist 90-revised; ASI, addiction severity index; BDI, beck depression inventory; WHO, world health organization; ECA, epidemiological catchment area

Introduction and objective

Alcoholism is a chronic relapsing disorder. Alcohol dependence is characterized by a prolonged course of alcohol-related problems and a persistent vulnerability to relapse. Even though there is an improvement in multiple domains of life after alcohol treatment, the risk of relapse remains high following treatment. That requires mental effort and is limited by a person's cognitive capacity.[1]

Relapse is a multi factorial phenomenon and most likely to result from a combination of factors like characteristics of the patient, the drug and environmental rein forcers.[2] One prominent feature noted before relapse in abstinent patients is craving or urge for alcohol. This urge may contribute to the risk of relapse. In alcohol dependents an unconscious learning process can lead to alcohol drinking in order to re-experience the positive mental state.[3] According to the cognitive processing model, alcohol use becomes a habit that requires little conscious effort or attention and craving is a non-automatic process. Alcohol dependence is a chronic disease, characterized by craving, tolerance, a preoccupation with alcohol, and continued drinking in spite of harmful consequences.[4,5] In addition to conditions wholly attributable to alcohol (e.g. alcoholic liver cirrhosis or alcoholic gastritis), alcohol is a contributory cause for many other diseases

(e.g. various forms of cancer or cardiovascular disease or epilepsy) and almost all forms of injuries.[6] The World Health Organization (WHO) recently reported that alcohol consumption was identified as an important risk factor for more than 60 different major disorders or injuries.[7]

Predictive factors for relapse in alcoholism include treatment drop out, anxiety symptoms, depressive symptoms and high craving for alcohol.[6] One of the most challenging aspect s of assessing treatment outcomes and relapse rates is the lack of consensus regarding the definition of "relapse." In general, characterizations of relapse vary between researchers, clinicians and more importantly, among clients. The term has typically been used to indicate the return to previous levels of symptomatic behavior, but definitions range from: a dichotomous outcome based on a single transgression,[8] to a continuous process defined by a series of transgressive behavior.[9]

Some have differentiated between lapse, relapse[10] and prolapse, to provide some indication of direction or severity of the transgression.[11] A "lapse" has been defined as an initial set-back, whereas a "relapse" could be described as a more severe return to previous behavior and a "prolapse" would indicate behavior that is consistent with getting back on track in the direction of positive behavior change. The ways in which clinicians quantify and qualify relapse may have major implications on the client's attributions of their behavior, particularly when the term "relapse" is associated with failure. Furthermore, the quantification of relapse may influence the evaluation and determination of treatment outcomes.[12]

Several authors have proposed relapse precipitant categorizations that incorporate the timing of the risk factor in relation to the transgressive behavior. Shiffman S[13] argued that distal risk factors in combination with intermediate background factors identify who will relapse, but not when the relapse will occur.[13] The when is determined by proximal precipitating factors. Distal risk factors may include: family history of alcoholism, the nature and severity of the alcoholism, co morbid psychiatric and substance abuse diagnoses, impaired cognitive capabilities or a tendency to be reactive towards alcohol related cues.[14] Proximal risk factors may include: situational threats to self efficacy, craving, social cue reactivity, affective states, stressful life events and the rapid deterioration of social support (e.g. loss of a friend) or acute psychological distress.[14] Thus, relapse as a central issue of alcoholism treatment warrants further study.[15] With this back ground we have conducted a study to find the various reasons for relapse in alcohol dependence patients attending the gastroenterology department of four hospitals in Jaipur.

This prospective and retrospective study of 354patients with alcohol use disorders was done with a intent to assess various factors affecting remission and relapse and improve outcome for individuals with alcohol dependence. Demographic variables, clinical parameters and certain psychosocial factors were evaluated. Early identification of risk factors may help us in defining a more rigorous follow up protocol in this subgroup of patients.

Materials and methods

Patients with ethanol related liver disease were enrolled after their presentation in gastroenterology clinic and followed thereafter at 1, 3, 6 and 12months. An informed consent was obtained. 354patients were selected based on inclusion criteria and accordance to ICD-10 criteria. The data was statistically analyzed employing the chi square test to find association between different variables and reasons for relapse.

Initial assessments included USG abdomen LFT RFT, UGI Endoscopy and other relevant investigations. Semi structured clinical interviews, the Symptom Checklist 90-Revised (SCL90-R), Addiction Severity Index (ASI), the Beck Depression Inventory (BDI) were recorded. Patients were reassessed at 6 and 12months to determine treatment outcome (abstinence status and duration of continuous abstinence). Data were coded, validated and analyzed using descriptive statistics failure. Furthermore, the quantification of relapse may influence the evaluation and determination of treatment outcomes.[12]

Several authors have proposed relapse precipitant categorizations that incorporate the timing of the risk factor in relation to the transgressive behavior. Shiffman S[13] argued that distal risk factors in combination with intermediate background factors identify who will relapse, but not when the relapse will occur.[13] The when is determined by proximal precipitating factors. Distal risk factors may include: family history of alcoholism, the nature and severity of the alcoholism, co-morbid psychiatric and substance abuse diagnoses, impaired cognitive capabilities or a tendency to be reactive towards alcohol related cues.[14] Proximal risk factors may include: situational threats to self efficacy, craving, social cue reactivity, affective states, stressful life events, the rapid deterioration of social support (e.g. loss of a friend) or acute psychological distress[14] Thus, relapse as a central issue of alcoholism treatment warrants further study[15] With this back ground we have conducted a study to find the various reasons for relapse in alcohol dependence patients attending the gastroenterology department of above mentioned hospitals in Jaipur.

Discussion

The socio demographic profile of the patient helps to understand their background and their possible influence on the relapse. Majority of the sample belonged to middle age group, this could be due to the reason that, most of them get married by this age and due to their family pressure they come to seek treatment for alcohol relapse. Among the sample, 94.7% were men and 5.3% were women. This shows that alcohol relapse is more common in men compared to women. In terms of mood, positive emotional states may be a risk factor and also a consequence of relapse among men, relative to women.

The employment status of alcohol relapse patients show that majority (88.4%) were employed, this could be due to their independent lives and free availability of money to buy drinks. Majority of the patient were married and have families. This is similar to a study done by Mattoo SK et al.[16] where 83.4% of patients undergoing treatment for substance dependence were married.[16] In family type, majority (97.9%) belonged to nuclear families. This could be due to more responsibilities; low bonding in family can cause a person to go back to drinking. Majority of the patients were dependent at above 35years of age. In a study done by Hingson RW et al.[17] in which it was found that Individuals who began drinking at younger ages were more likely to experience multiple relapse.[17] In duration of dependence majority were dependent for less than 4years, this could be due to the late age at dependence (after 35year) in our sample. Hingson RW et al.[17] also found that among ever drinkers, 14% first became dependent within 10years of drinking onset, 45% experienced an episode exceeding 1year and 33% had at least 6 of 7 potential dependence diagnostic criteria.[17] Similar findings were found in a study where 29.2percent of alcohol dependents had a mood disorder, 27.9percent had major depressive disorder and 36.9percent met the criteria for an anxiety disorder among people with alcohol dependence.[15] Majority of the

Citation: Nagaich N, Radha S, Neeraj G, et al. Factors affecting remission and relapse in alcohol dependence can they really predict?. *J Liver Res Disord Ther.* 2016;2(3):78–81. DOI: 10.15406/jlrdt.2016.02.00028

sample (56.3%) had abstinence for 2-6months, 38.9% were abstained for 7-12months, 2.1% for 13-18months, 1.1% 19-24months and 1.6% had abstinence for above 2years. It shows that duration of abstinence was less than a year for most of the sample. Most of the patients (44%) indicated craving as the reason for relapse. Similar findings with Monti PM et al.[18] showing higher levels of craving assessed in role play and cue reactivity are known as a risk factor for a worse outcome in alcoholism[18] and Oconnor PG et al.[19] have reported a higher dropout rate during alcohol withdrawal among out patients with an increased craving.[19] Significant association was found between age, gender & occupation and reasons for relapse. But for patient educational level and reasons for relapse no significant association was found. This finding is similar to a study done by Glenn & Parsons[20] which showed that Men were significantly more likely to relapse (48%) than women (29%).[20] Four studies reported that, women were less likely to relapse to substance use following treatment.[21] Graham K et al.[22] suggested that differences also are seen in the effects of alcohol and drugs by gender.[22] There is significant association between marital status of the patient and the reasons for relapse and no significant association was found between the patient's family type and the reasons for relapse. Similar findings were reported by of Connors GJ et al.[23] it was found that Marital and family issues are background characteristics as well as potential stressors, in terms, suggesting that marital functioning and partner drinking are influential in treatment outcome.[23]

Significant association was found between age at first drink, age at dependence, duration of dependence and reasons for relapse. Similar findings by Glenn and Parson showed that, younger the age at which people started to drink, the greater their likelihood of developing alcohol dependence within 10years of drinking onset and before age 25years and stronger the subsequent association with chronic relapsing dependence, characterized by multiple episodes, past-year dependence and among dependent persons, episodes of longer duration and a wider range of symptoms.[20]

There was significant association between the reasons for relapse and co-morbid diagnosis of patient s understudy. This could be due to the reason that patient with co-morbid anxiety and depressive disorders when exposed to social situations, self medicate themselves by drinking alcohol as a coping strategy to stress. The self-medication hypothesis Quitkin FM et al.[24] suggest that alcohol reduce the aversive anxiety symptoms, thereby increasing persistent and escalating use via negative reinforcement.[24] A large community-based Epidemiological Catchment Area (ECA) study by Regier DA et al.[25] reported that 12.2% of the population with an alcohol dependence had a co morbid anxiety disorder (OR=1.8).[25] Kushner MG et al.[26] concluded that anxiety disorder and alcohol disorder could each initiate the other and that the former can contribute to the maintenance of and relapse into pathological alcohol use.[26]

Depressed mood increases the relapse risk of abstinent alcoholics. Strowing reported that depressive symptoms were the most frequently endorsed relapse determinants reported retrospectively by men treated for alcohol addiction. Driessen M et al.[7] concluded that severe trait anxiety persisting after 3weeks of abstinence, co-morbid depressive and anxiety disorders and combinations of these with moderate or severe current anxiety and depressive states are associated with increased risk of relapse in alcoholics.[7] Potash JB et al.[27] concluded that co morbidity of alcohol dependence with affective disorders has a negative impact upon prognosis measured in terms of rates of remission, relapse and risk of suicide.[27]

No significant association was found between the duration of abstinence and reasons for relapse. This is in association with other studies which showed that abstinence is associated with increased alcohol self administration and increased. According to La Bounty LP et al.[28] a self-medicating style of drinking, appearing before or after alcoholism is established, can contribute to a relapse to problem drinking after a period of abstinence among co-morbid individuals.[28]

Results

A majority of the sample 71percent (n=251) had significant psychiatric symptoms at intake: 20percent (N=71) presented with depressive symptoms, 15percent (N=53) with anxiety symptoms and 41percent(N=145) with combined depressive and anxiety symptoms. Thirty five percent of patients who presented with combined depression and anxiety symptoms were abstinent at six months. These patients had worse prognosis than less symptomatic cohort at intake, including those who presented with depression symptoms alone; in the latter group, 70percent were abstinent at six months. Key predictor variables included days in treatment, primary drug of abuse, frequency. There is significant association between age (p-value=0.000), gender (p-value=0.004) and occupation (p-value=0.009) and reasons for relapse. But no significant association was found between educational level (p-value=0.082) and reasons for relapse drug use, and report of concurrent depression or anxiety symptoms at intake.

Conclusions

Concurrent depression or anxiety symptoms, low education, lack of motivation for abstinence had a significant negative predictive effect on treatment outcome. Craving was noted as most common cause for relapse in alcohol dependent patients. Higher relapse rate was seen in concomitant opioid dependence 'high risk' situations, previous relapses Positive predictors were more number of coping strategies, principally adaptive ones. There is significant association between age at first drink, age at dependence, duration of dependence, other Co-morbid diagnosis of patients and relapse. Early consideration of these risk factors and more rigorous follow up can help in reducing incidence of relapses.

The following conclusion may be derived on the basis of the observations of the present study:

a. craving was found to be the most common cause for relapse in alcohol dependent patients

b. craving is more commonly seen in patients who are in the age group of 31 to 45years, belong to male gender, married, having above intermediate level education, had their first drink between 21 to 25years, whose age at dependence was above 30years, duration of dependence was less than 5years and in patients who had co morbid psychiatric disorders like depression, generalized anxiety disorder, Bipolar affective disorder.

Our study signifies the need for development of focused strategies to enhance the patient compliance in those with alcohol dependence syndrome. Future studies should focus on the treatment of craving and subsequently to develop more effective clinical interventions.

Acknowledgements

None.

Conflict of interest

Author declares that there is no conflict of interest.

References

1. Tiffany ST. Cognitive concepts of craving. *Alcohol Res Health*. 1999;23(3):215–224.
2. Miller WR, Hester RK. Treating alcohol problems: toward an informed eclecticism. In: Hester, Reid K Miller, editors. *Handbook of alcoholism treatment approaches: Effective alternatives*. 2nd ed. USA: Allyn & Bacon; 1995. p. 1–11.
3. Singleton EG, Gorelick DA. Mechanisms of alcohol craving and their clinical implications. *Recent Dev Alcohol*. 1998;14:177–195.
4. Miller WR, Hester RK. The effectiveness of alcoholism treatment methods: what research reveals. In: Miller WR, editor. *Treating addictive behaviours: process of change*. New York: Plenum Press; 1986. p. 121–174.
5. Tempesta E, Janiri L, Bignamini A, et al. Acamprosate and relapse prevention in the treatment of alcohol dependence: A placebo-controlled study. *Alcohol Alcohol*. 2000;35(2):202–209.
6. Soyka M, Hasemann S, Scharfenberg CD, et al. New possibilities in treatment and rehabilitation of alcohol-dependent patients-a catamnestic study on the efficiency of outpatient treatment programmes demonstrated by a model procedure. *Nervenarzt*. 2003;74(3):226–234.
7. Driessen M, Meier S, Hill A, et al. The course of anxiety, depression and drinking behaviours after completed detoxification in alcoholics with and without comorbid anxiety and depressive disorders. *Alcohol Alcohol*. 2001;36(3):249–255.
8. Hasin DS, Van Rossem R, McCloud S, et al. Differentiating DSM-IV alcohol dependence and abuse by course: community heavy drinkers. *J Subst Abuse*. 1997;9:127–135.
9. Miller WR. What is relapse? Fifty ways to leave the wagon. *Addiction*. 1996;91(Suppl):S15–S27.
10. Larimer ME, Palmer RS, Marlatt GA. Relapse prevention: An overview of Marlatt's cognitive-behavioural model. *Alcohol Res Health*. 1999;23(2):151–160.
11. Marlatt GA. Taxonomy of high-risk situations for alcohol relapse: Evolution and development of a cognitive behavioural model of relapse. *Addiction*. 1996;91(Suppl):37–50.
12. Witkiewitz K, Marlatt GA. Modeling the complexity of post treatment drinking: it's a rocky road to relapse. *Clin Psychol Rev*. 2007;27(6):724–738.
13. Shiffman S. Conceptual issues in the study of relapse. In: Gossop M, editor. *Relapse and addictive behavior*. London, UK: Routledge; 1989. p. 149–179.
14. Donovan DM. Marlatt's classification of relapse precipitants: Is the Emperor still wearing clothes? *Addiction*. 1996;91(Suppl):S131– S137.
15. Petrakis IL, Gonzalez G, Rosenheck R, et al. Comorbidity of alcoholism and psychiatric disorders. National Institute on Alcohol Abuse and Alcoholism. 2002;26(2)
16. Mattoo SK, Varma VK, Singh RA, et al. Alienation, sensation seeking and multiphasic personality questionnaire profile in men being treated for alcohol and opioid dependence. *Indian J Psychiatry*. 2001;43(4):317–326.
17. Hingson RW, Heeren T, Winter MR. Age at drinking onset and alcohol dependence: age at onset, duration and severity. *Arch Pediatr Adolesc Med*. 2006;160(7):739–746.
18. Monti PM, Abrams DB, Binkoff JA, et al. Communication skills training, communication skills training with family and cognitive behavioral mood management training for alcoholics. *J Stud Alcohol*. 1990;51(3):263–270.
19. Oconnor PG, Gottlieb LD, Kraus ML, et al. Social and clinical features as predictors of outcome in outpatient alcohol withdrawal. *J Gen Intern Med*. 1991;6(4):312–316.
20. Glenn SW, Parsons OA. Prediction of resumption of drinking in post treatment alcoholics. *International Journal of the Addictions*. 1991;26(2):237–254.
21. Walitzer KS, Dearing RL. Gender differences in alcohol and substance use relapse. *Clin Psychol Rev*. 2006;26(2):128–148.
22. Graham K, Wilsnack R, Dawson D, et al. Should alcohol consumption measures be adjusted for gender differences? *Addiction*. 1998;93(8):1137–1147.
23. Connors GJ, Maisto SA, Zywiak WH. Male and female alcoholics' attributions regarding the onset and termination of relapses and the maintenance of abstinence. *J Subst Abuse*. 1998;10(1):27–42.
24. Quitkin FM, Rifkin A, Kaplan J, et al. Phobic anxiety syndrome complicated by drug dependence and addiction. *Arch Gen Psychiatry*. 1972;27(2):159–162.
25. Regier DA, Farmer ME, Rae DS, et al. Co morbidity of mental disorders with alcohol and other drug abuse. Results from the Epidemiologic Catchment Area (ECA) Study. *JAMA*. 1990;264(19):2511–2518.
26. Kushner MG, Abrams K, Borchardt C. The relationship between anxiety disorders and alcohol use disorders: a review of major perspectives and findings. *Clin Psychol Rev*. 2000;20(2):149–171.
27. Potash JB, Kane HS, Chiu YF, et al. Attempted suicide and alcoholism in bipolar disorder: clinical and familial relationships. *Am J Psychiatry*. 2000;157(12):2048–2050.
28. LaBounty LP, Hatsukami D, Morgan SF, Nelson L (1992) Relapse among alcoholics with phobic and panic symptoms. *Addict Behav*. 1992;17(1):9–15.

Citation: Nagaich N, Radha S, Neeraj G, et al. Factors affecting remission and relapse in alcohol dependence can they really predict?. *J Liver Res Disord Ther.* 2016;2(3):78–81. DOI: 10.15406/jlrdt.2016.02.00028