Extrinsic Factors Influencing Relapse in Alcohol Dependence

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ABSTRACT

Introduction: Relapse is a common problem faced when alcohol dependence is treated. The present study was done to find the influence of extrinsic factors such as stressful life events, peer pressure and perceived social support on relapse in alcohol dependence, which will be useful to develop effective interventions to prevent it.

Material and methods: This cross sectional study conducted in tertiary care teaching hospital in Kottayam, included 60 subjects who were grouped into 30 Late Relapsers (who relapsed drinking after 3 months of abstinence) and 30 Early Relapsers-(who relapsed drinking within 3 months of abstinence). Mini-Mental Status Examination, Diagnostic Criteria for Research for ICD-10 (DCR-10) and the Stressful Life Inventory were used for each patient to collect their details.

Results: The mean age of onset of alcohol use of Early Relapsers was lower than that of the Late Relapsers. Also the number of stressful life events related to work, marriage, family and finance were more in the Early Relapsers compared to the other and the difference was statistically significant for the above mentioned factors.

Conclusions: Early age of onset of alcohol use and occurrence of stressful life events in 6 months preceding the relapse are associated with relapse in alcohol dependence. Community based studies with larger sample size are needed to substantiate the results of this study.

Keywords: Alcohol Dependence, Relapse, Stressful Life Events.

INTRODUCTION

Alcoholism is a serious social problem. It affects not only the alcohol dependent individual, but also their partner, children, family and also the whole society. Centuries back, references related to alcohol abuse has been made in the Holy Bible. According to the Global status report on alcohol and health, the harmful use of alcohol resulted in an estimated 3 million deaths (5.3% of all deaths) globally in 2016.[1]

Relapse is a common phenomenon among alcohol dependent patients undergoing de-addiction treatment. It is defined as the return to the previous pattern of use or dependent use following a period of abstinence.[2] A study suggests that, twelve-month relapse rates following alcohol or tobacco cessation attempts generally range from 80-95%.[3]

During the past several years, researchers and clinicians have being studying the factors influencing alcohol relapse. An influential theory about alcohol relapse was put forward by Jellinek.[4] According to him relapse was precipitated by craving. But later on the studies on relapse precipitants also showed the importance of exogenous factors such as environmental settings and stressful life events. Marlott and Gordon classified the causes of relapse in alcohol dependence into two broad categories: intrapersonal and interpersonal determinants, in which the interpersonal factors included relationship conflict, social pressure to use of substances and positive emotional states associated with some type of interaction with others.[5] Relapse can result from an interaction of client, family, social and treatment related factors.[2] The stress-vulnerability model of addiction relapse states that the impact of life stress on alcohol and other drug use is influenced by several types of psychosocial risk and protective factors.[6] Cognitive-behavioral theories emphasize contextual factors (e.g., environmental stimuli and cognitive processes) as proximal relapse antecedents.[3]

Alcohol dependents have a high rate of readmission secondary to relapse, which leads to excess expenditure of both manpower and financial resources of the nation. So knowing more about factors influencing the relapse drinking, would be useful in developing effective intervention in alcohol dependence. In this study we intended to explore the influence of extrinsic factors like stressful life events, peer pressure and perceived social support on relapse, by finding the association of these factors with alcohol dependent patients who had relapsed within 3 months of abstinence (Early Relapsers) and after 3 months of abstinence (Late Relapsers).

MATERIAL AND METHODS

The present study was conducted in the de-addiction clinic of psychiatry department of a tertiary care teaching hospital in Kottayam, Kerala state from 15th June 2011 to 15th December 2011 (6 months) after getting approval from the Ethics Committee of the Hospital. Sixty married male patients aged between 20-60 years with alcohol dependence as per the Diagnostic Criteria for Research for ICD-10 (DCR-10), who were employed in the past 6 months and had a past history

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Factors	Mean ± S.D	Group I (30)	Group II (30)	'p' value
Mean age (in years)	41.37 ±8.59	42.05±9.56	40.23±7.49	NS
Mean age of onset of alcohol use (in years)	27.27±5.76	30.57±5.211	23.93±4.201	<0.001
Mean period of Longest abstinence (in months)	13.69±17.32	15.40±15.60	11.97± 18.93	NS
Mean of number of alcohol related hospitalisation	2.48±3.90	3.00±5.30	1.97 ± 1.54	NS

Table-1: Comparison of clinical profile

Factors		Group I	Group II	'p' value
Peer pressure	No	19	16	NS
	Yes	11	14	
Perceived support from spouse	No	2	6	NS
	Yes	28	24	
Perceived support from parents and siblings	No	8	9	NS
	Yes	22	21	
Perceived support from friends and relatives	No	17	22	NS
	Yes	13	8	

Table-2: Comparison of peer pressure and perceived social support

Factors	Group I	Group II	'p' value
Mean of total life events (6 months prior to relapse) S.D.	1.17 ±0.747	3.53 ±1.943	<0.001

Table-3: Comparison of stressful life events

Factors		Group I	Group II	'p' value
Work	No	26	11	<0.001
	Yes	4	14	
Marital	No	28	9	<0.001
	Yes	2	21	
Family	No	27	12	<0.001
	Yes	3	18	
Financial	No	22	9	<0.001
	Yes	8	21	
Health	No	15	18	0.299
	Yes	15	12	
Bereavement	No	26	28	0.057
	Yes	4	2	
Legal	No	28	5	0.42
	Yes	2	5	

Table-4: Comparison of types of stressful life events

of de-addiction were recruited in the study. Those patients suffering from severe physical illness making psychiatric evaluation difficult, mental retardation, those with organic brain syndrome and cognitive impairment and subjects abusing other substances were excluded. An informed consent for the study was obtained from the patient and their relatives. A detailed psychiatric evaluation was completed and laboratory investigations to assess co-morbid medical disorders were done. Mini-Mental Status Examination[7] was administered to all subjects to rule out cognitive impairment. Then Stressful Life Inventory[8] was used for each patient to collect their details.

The subjects were classified in the following 2 groups:

Group I (Late Relapsers) - 30 subjects who are alcohol dependent as per DCR-10, with past history of de-addiction and who had relapse drinking after 3 months of abstinence.

Group II (Early Relapsers)- 30 subjects who are alcohol dependent as per DCR-10, with past history of de-addiction and who had relapse drinking within 3 months of abstinence

STATISTICAL ANALYSIS

The numerical variables were expressed as mean and standard deviation and categorical assessed by comparing the mean values of the study variables, Independent two sample t-test was applied for parametric variables and Independent Samples Mann-Whitney U test was applied for nonparametric variables. To obtain the association of study variables (stressful life events, peer pressure and perceived social support) with the groups, chi-square/Fischer's test was applied and p-value if <0.05 was considered as significant. IBM SPSS Version 16 was used for statistical analysis.

RESULTS

In this study we compared the association of extrinsic factors like stressful life events, peer pressure and perceived social support with Late Relapsers and Early Relapsers. The results obtained are given in the tables.

Both the groups included married males with mean age of 42.05±9.56 in Group I and 40.23±7.49 in Group II. So they were demographically similar. The mean age of onset of alcohol use of Early Relapsers was lower than that of the Late Relapsers (Group I = 30.57±5.211; Group II =23.93±4.201) and the difference was statistically significant. Even though the Early Relapsers had a lower mean period of longest abstinence and lower mean of number of alcohol related hospitalizations when compared to the Late Relapsers, the difference was not statistically significant. (Table-1)

Extrinsic factors which might influence relapse drinking like, peer pressure and perceived support from spouse, relative and friends were compared between the two groups but the difference was not statistically significant. (Table-2)

It was found that higher number of Early Relapsers had stressful life events related to work, marriage, family and finance when compared to Late Relapsers and the difference was statistically significant. (Table-3 and 4)

DISCUSSION

This study was undertaken as an attempt to compare the association of extrinsic factors like peer pressure, perceived support and stressful life events with Early Relapsers and Late Relapsers.

The mean age of onset of alcohol use was significantly lower in Early Relapsers (23.93±4.201) when compared to Late Relapsers (30.57±5.211) in this study. This is in keeping with an earlier study in which respondents who began drinking before age 14 years had more number of relapses when compared to those who began drinking at 21 years or older.[9] Some Indian studies also show that the smaller age of first use of alcohol may lead to heavier use in the long term.[10,11]

Patients in the late relapse group remained abstinent for a longer period of time (15.40 ± 15.60 months) as compared to Early Relapsers (11.97 ± 18.93 months) and it was also found that Late Relapsers sustained more number of health related life events (15) compared to Early Relapsers (12). This is in accordance with a previous study which stated that health related stressors discourages subsequent alcohol consumption.[12] Also it may be hypothesized that as the Late Relapsers had more number of alcohol related hospitalization, compared to the Early Relapsers which might have help them to remain abstinent for a longer period. This is supported by a study which found a better prognosis among patients who had relatively longer hospitalization.[13]

When the extrinsic factors were compared, it was observed that more Late Relapsers reported social support for abstinence from alcohol compared to Early Relapsers, and more Early Relapsers mentioned peer pressure as one of the causes of relapse. Though the results were in accordance to the previous studies the difference in the two groups was not found to be statistically significant.[14, 15, 16]

This study showed that the overall number of stressful life events in 6 months preceding relapse was much more among Early Relapsers. Work related adverse events were more in Early Relapsers (14) compared to Late Relapsers (4). The difference was statistically significant and in keeping with the results of previous studies.[17, 18] Marriage related stressful events were found in 21 Early Relapsers and 2 Late Relapsers. The difference was also found to be statistically significant. Marriage was considered as a protective factor against alcohol dependence.[19] But later many studies show that marital conflicts and other stressful marital events may also lead to excessive use of alcohol. Individuals who experienced divorce/separation were over two times more likely to have relapse.[20] These studies support our result.

It was also found that 18 Early Relapsers and 3 Late Relapsers had stressful events pertaining to family matters and the difference was found to be statistically significant. A study showed a positive relationship between family expressed emotions and the frequency of relapse.[21] Another study found that marital and family cohesion enhances response to treatment of alcohol use disorders in follow ups of as long as two years.[22] So, the result in the present study is similar to the above mentioned previous studies. Another significant finding in our study was that 21 Early Relapsers and 8 Late Relapsers had events related to financial matters. This result is in keeping with another previous study.[23] This study shows that adverse life events occurring in the past 6 months of patient's life were associated with alcohol relapse. The limitations of the present study were, it included married males attending the de-addiction clinic of a tertiary care hospital, so it may not represent the general population. Even though the subjects in this study were abstinent for the past few months, excessive use of alcohol earlier in turn might have led to higher incidence of stressful events in their lives. Subjective appraisal of stress, peer pressure and perceived social support might be influenced by factors like errors in retrospective recall and the presence of psychiatric co-morbidities.

CONCLUSION

In this study, the factors which were significantly associated with relapse of alcohol dependence within 3 months after a de-addiction therapy were young age of onset of alcohol use and occurrence of stressful life events related to work, marriage, family and finance in 6 months preceding relapse. From these findings it can be assumed that preventing alcohol use in a very young age and helping the patients to cope up with their stressful life events in the recent past might help in the management of relapse in alcohol dependent patients. Community based studies with larger sample size are needed to substantiate the results of this study.

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