

A STUDY OF PREVALENCE AND COMORBIDITY OF DEPRESSION IN ALCOHOL DEPENDENCE

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ABSTRACT

Depressive symptoms are wide spread in alcohol abusing patients of all ages and are much more common than diagnosable depressive disorder. Studies have reported that depression diagnosed in the current episode of alcoholism remits after two weeks of abstinence and detoxification from alcohol. Despite the high prevalence of depression in alcohol dependent individuals, the nature of the relationship between depressive disorder and alcohol abuse have been difficult to define. The present work was undertaken with the aim to study the prevalence and comorbidity of major depression in alcohol dependence. The sample comprised of 34 (32 males and 2 females) DSM-IV alcohol dependent patients admitted in the Psychiatry ward of T.U. Teaching Hospital, Kathmandu during one year study period. Diagnosis of major depressive episode was made according to DSM-IV criteria. Severity of dependence on alcohol was assessed with the Severity of Alcohol Dependence Questionnaire and severity of depressive symptoms was rated on Hamilton Rating Scale for Depression. Repeat assessment was done on day 14. A high prevalence of major depression (41.7%) was found for the episode of drinking which led to hospitalization. However, within a few days of detoxification from alcohol, only few of them had depressive symptoms amounting to major depression (17.64%). There was no significant correlation between severity of alcohol dependence and depression. The findings suggest that the nature of depression found in those patients with alcohol dependence needs further exploration. It appears that clinicians exercise appropriate judgement in not prescribing antidepressant treatments for symptoms which may change within days, providing that alcohol is not consumed.

Key words : Alcohol dependence, major depression, prevalence, comorbidity, abstinence

Depressive symptoms are widespread in alcohol abusing patients of all ages and are much more common than diagnosable depressive disorder. People dependent on alcohol are prone to depression (Tyndal, 1974; Nakamura et al, 1993). Estimates of alcohol abuse and major depression, in clinical samples of alcoholic vary from 12% to 68% (Halikas et al, 1981; Powel et al, 1982; Dorus et al, 1987; Hasin et al, 1988; Herz et al, 1990; Gorman, 1992). In the general population, criteria for depressive disorder at some time in life are met in half the females

rated as having an alcohol disorder, and in a third of the men (Davidson & Ritson, 1993).

Despite the high prevalence of depression in alcohol dependent individuals, the nature of the relationship between depressive disorder and alcohol abuse have been difficult to define (Davidson, 1995). Alcohol abuse and major depression appear to be independent entities, but symptoms of depression may develop during the course of alcoholism and some patients with affective disorder may drink when they are ill (Schuckit & Monteiro, 1988). Studies in which

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the index episode of depression is limited to the current episode of drinking have been more successful in clarifying the relationship between alcohol dependence and depression. Depression may be better classified if the severity of depression is assessed both during an episode of drinking and during abstinence. The present work was undertaken with the aim to study the prevalence and comorbidity of major depression in alcohol dependence.

MATERIAL AND METHOD

The sample for the present study comprised of all consecutive alcohol dependent patients admitted in the Psychiatry ward of Tribhuvan University Teaching Hospital, Kathmandu during one year study period. Inclusion criteria were: patients between the age of 18-65 years and belonging to either sex, fulfilling the diagnostic criteria of alcohol dependence according to DSM-IV (APA, 1994), willing to undergo alcohol detoxification and giving informed consent. Those having known history of psychiatric illness other than depressive disorders or any concomitant substance dependence, gross brain damage as reflected by gross cognitive impairment, severe medical complication or evidence of drinking during the hospital stay were excluded.

A self-designed semi-structured proforma was used to record the sociodemographic details, history of illness including age of onset of drinking, past history and medical details, family history, personal history, physical examination and mental state examination. Diagnosis of alcohol dependence and major depressive episode was made according to DSM-IV criteria. Severity of dependence on alcohol was assessed with the Severity of Alcohol Dependence Questionnaire [SADQ] (Stockwell et al, 1979) and severity of depressive symptoms was rated on Hamilton Rating Scale for Depression [HDRS] (Hamilton, 1960). No medication except benzodiazepines and vitamins including thiamine were allowed during the two-week study

period. Repeat assessment was done on day 14 using DSM-IV diagnostic criteria for major depression and HDRS.

Data was compiled in SPSS 7.5 for Windows statistical software. Student's t test was used to assess the difference between the mean HDRS score on day 0 and day 14. Pearson's product moment correlation coefficient was used to assess the correlation between the severity of alcohol dependence and depressive symptoms.

RESULTS

A total of 36 subjects fulfilling the alcohol dependence criteria of DSM-IV were selected for the study. Two subjects were dropped from the study because one subject developed delirium tremens and another took discharge before day 14 assessment could be completed. Finally 34 subjects completed the study out of which 32 were males and 2 females. Table-1 shows the sociodemographic profile of the subjects. Maximum number of subjects were in the age-group 26-30 years and 41-45 years (23.53% each) followed by 36-40 years (17.65%). Majority of them were married (82.35%) and unemployed (44.12%). Education-wise majority of them were either educated up to primary level or were graduate and above (26.47% each). Maximum subjects hailed from middle socio-economic status (58.82%) followed by lower (35.29%) and upper class (5.88%). Out of the 34 subjects who completed the study, 14 (41.7%) subjects had depressive symptoms severe enough to be diagnosed as major depression on the day of admission (day 0). Mean Hamilton Depression Rating Scale score on day 0 was 18.36 ± 8.05 . On day 14, only 6 (17.64%) patients were having depressive symptoms severe enough to be diagnosed as major depression. Hamilton Depression Rating Scale was readministered and mean score was found to be 10.57 ± 10.28 . There was a statistically significant reduction in the mean Hamilton Depression Rating Scale score

between day 0 and day 14 ($t=2.1604$; $df=13$; $p=0.00134$). Severity of Alcohol Dependence Questionnaire score in these 14 patients was 19.92 ± 8.67 and there was a positive correlation with Hamilton Depression Rating Scale score but it was statistically not significant (day 0 $r=0.339$; day 14 $r=0.481$).

DISCUSSION

The principal focus of the present study was depression in the current episode of alcohol dependence. A diagnosis of major depression is found to depend very strongly on drinking status. A high prevalence of major depression (41.7%) was found for the episode of drinking which led to hospitalization. However, within a few days of detoxification from alcohol, only few of them had depressive symptoms amounting to major depression (17.64%). Results are in keeping with the findings of Brown and Schuckit (1988) who reported that during the first week of abstinence more than 40% subjects had depressive symptoms comparable to those seen in patients hospitalized for primary depression. For the majority, however, depressive symptoms remitted by second week of treatment. Residual depression after this time, present in 6% to 15% of patients, suggests a comorbid disorder. Dackis *et al* (1989) found that depression diagnosed in the current episode of alcoholism remits after 2 weeks of abstinence and detoxification from alcohol. Only 5% of alcohol abusing men and 15-25% of alcohol abusing women have a history of depressive disorder predating their alcoholism (Atkinson & Kofied, 1982). However, Hasin *et al* (1988) found that 68% of male and female alcoholics met Research Diagnostic Criteria for lifetime major depressive disorder after detoxification while Davidson (1995) reported that for the episode of drinking that led to admission, a diagnosis of major depression was found in 67% patients. The fact that both the studies report approximately the same prevalence highlights the potential confusion which may arise if the current diagnosis and

lifetime diagnosis are not differentiated. Discrepancies in the prevalence of diagnosis found in different studies could be partly due to the timing of the assessment in relation to detoxification or abstinence from alcohol and to the diagnostic instrument used (Hasin & Grant, 1987; Brown *et al*, 1995).

The results of the present study as well as earlier reports show that though nearly half of the patients experience depressive symptoms during active drinking, the symptoms remit within two weeks after abstinence in majority of the cases, and only few patients finally have comorbid depression during abstinence. Though no straightforward conclusion may be drawn, the plausible reasons may be many. It is possible that the process of hospitalization itself leads to decrease in the severity of depression, as individuals are removed from the impact of the problems they may be experiencing into an environment where there is an expectation of change for the better. Alternatively, the rapidity and the direction of change in diagnosis of depression might suggest that alcohol-induced depression is a major contributor to the prevalence of depression in an alcohol dependent population, but the relative importance of neurochemical and psychosocial factors is not established (Davidson, 1995). Some investigators hypothesize that subclinical depression or a potential depressive diathesis may be manifested by evanescent depressive symptoms in early sobriety or even alcoholism itself. As such, this underlying depressive disorder may be a risk factor for relapse of alcoholism. It might be presumed that if alcohol may induce depression, it may have a relationship with the amount of alcohol consumed. However, no significant correlation was found between the severity of alcohol dependence and depressive symptoms neither in the present study nor other studies (Valgum *et al*, 1987).

The findings of the present study suggest that the nature of depression found in those patients with alcohol dependence needs further

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exploration. Depression in the absence of alcohol dependence does not remit within a week after admission to hospital, whereas a diagnosis of depression accompanying alcohol dependence largely remits with abstinence from alcohol. It appears that clinicians exercise appropriate judgement in not prescribing antidepressant treatments for symptoms which may change within days, providing that alcohol is not consumed.

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