Summary

166 DWI "problem drinkers" were prospectively examined for the presence of a major psychiatric disorder using DSM-III criteria. Major depression was present in 2.4% of the sample, and schizophrenia in 0.6%. No one was manic. 9% experienced alcohol hallucinosis. 36% had been convicted of non-traffic offenses in the past. Major psychiatric disorder is present in this population at rates similar to the general population. However, those who do suffer from major psychiatric illness require psychiatric treatment as part of their treatment for alcoholism.

Vast numbers of individuals arrested for drinking while intoxicated (DWI) are referred for court ordered treatment. While in virtually all locals these individuals receive alcohol counseling, what is the additional need for psychiatric services for those who are arrested and referred for treatment? Clearly, many of these offenders suffer from other problems than alcohol abuse, and a variety of studies show an increased incidence of mental illness among alcoholics.

Pottenger, et. al. (1978) in a survey of 61 patients admitted to a mental health center for treatment of alcoholism found that 59% were depressed using depression check lists. In this group, 67% had required prior psychiatric care. Interestingly, half of the patients were followed for one year, and 60% were depressed at one year follow-up, suggesting their depressed mood was a persistent problem. In another study of hospitalized patients, 58.3% were depressed, documented by the Feighner criteria (Lewis, et. al., 1982). The lifetime prevalence of major depression in hospitalized alcoholics using both DSM-III criteria developed by the American Psychiatric Association and the NIMH Diagnostic Interview Schedule to be 23%. These studies suggest overwhelming incidence of major depression among alcoholics.

However, Schuckit (1979), 1983a) criticized studies of depression in alcoholics arguing that alcoholism produces sadness in many individuals. This sadness may not be the same as an independently occurring major depression. He suggested making a distinction between primary alcoholism which a secondary depression occurring later and a primary depression with associated alcoholism (where depression occurs unrelated to bouts of heavy drinking, or before the individual developed alcoholism). With this distinction, the incidence of depression in alcoholics drops dramatically. Schuckit (1983b) demonstrated in 285 patients admitted to VA hospital, only 3% had a primary diagnosis of major depression. Patients with primary alcoholism (and only secondary depression) seemed very much like those with alcoholism only without symptoms of depression (Schuckit, 1983b; Woodruff, et. al., 1973). Other studies showed similar findings. O'Sullivan, et. al. (1983) found that in 300 male alcoholics
admitted to psychiatry service 11% had a primary affective disorder. Summarily, Powell, et. al. (1987) found 42% of males admitted to an alcoholism treatment center had a major depression, but only in 4.2% did symptoms of depression antedate the alcoholism.

The sum of this data suggests that while many alcoholics may be depressed a smaller number suffer from a primary major depression. Also studies carried out in treatment centers may not be representatives of the alcoholism population as a whole. Door to door surveys of psychiatric disorders in a number of communities has bee done as part of the Epidemiologic Catchment Area (ECA) study (Meyers, et. al., 1982). In the survey, victims of alcohol abuse of dependence were 1.7 times as likely to have a major depression compared to the general population (Helzer and Pryzbeck, 1988).

The prevalence of other psychiatric disorders in a alcoholics is not as well studied. mania, the other pole of bipolar disorder, has been noted to occur at rates greater than the general population. Michie, Hesselbrock, et. al. (1985) found that 2% of their hospitalized alcoholics had a history of mania, and another 2% had schizophrenia. Helzer and Pryzbeck's (1988) summary of Epidemiologic Catchment Area Survey data shows alcoholics were six times ore likely to have mania, and four times more likely to have schizophrenia than the general population.

Antisocial personality disorder, not ordinarily considered a "major" psychiatric disorder, must be considered in studying any group that comes court referred. Several studies have documented very high rates of this personality disorder in their study populations. Victor Hesselbrock, et. al. (1985) found antisocial personality disorder in 52% of their hospitalized male alcoholics and Michie Hesselbrock, et. al. (1985) found the same disorder in 41% of hospitalized alcoholics of both sexes. In their door to door survey, Helzer and Pryzbeck (1988) found that alcoholics were 21 times more likely to have antisocial personality disorder that their neighbors who were not alcoholic.

The assortment of studies points to an abundance of psychiatric pathology in alcoholics. More carefully designed studies diminish the incidence of psychiatric pathology, but nonetheless, eve in these studies, prevalence rates remain above rates for the general population. With this in mind, if DWI offenders are referred for treatment by the courts, how many of them will require psychiatric treatment for a major mental illness? We sought to answer this question in our study.

METHOD:

166 "problem drinkers" arrested for drinking while intoxicated (DWI) were consecutively and prospectively evaluated between 1984 and 1986. This group represented all subjects referred tot he senior author, and approximately half of those referred to the Alaska Naive medical Center, Anchorage, Alaska, USA. All patients were Alaska natives eligible for care through the Indian Health Service.

Before their initial appointment, all subjects were classified "problem drinkers" by the Anchorage Alcohol Safety Action Program, a part f the Judicial Branch of the Anchorage municipal government, and ordered to undergo alcohol treatment. "Problem drinkers" had a prior DWI in the last five years or a
blood alcohol concentration determined by breathylyzer to be 0.2 or above at time of arrest or scored greater than 40 points on the Mortimer-Filkins test (Jacobson, 1976). A minor could be classified as a problem drinker at the discretion of the courts. Approximately 80% of those arrested for DWI in this jurisdiction were deemed "problem Drinkers." To independently verify that individuals were problem drinkers, all subjects were administered the Michigan Alcohol Screen Test (Selzer, 1971, Hedlund and Vieweg, 1984) at the time of their initial psychiatric interview.

At the initial clinical psychiatric interview conducted by the senior author, all subjects were screened for the presence of major depression, bipolar disorder or schizophrenia, using DSM-III (American Psychiatric Association, 1980) criteria. In addition, subjects were asked about any suicidal ideation, and the history of alcohol hallucinosis was obtained as well. Alcohol hallucinosis was defined as the presence of hallucinations after the decrease of cessation of alcohol lasting days to 2 weeks which did not recur without the subsequent use of alcohol. A distinction between hallucinations occurring in clear consciousness and hallucinations occurring in an alcohol related delirium could not be made because of the retrospective nature of the alcohol history. A history of psychiatric care int he past other tan care for alcoholism was also obtained.

We did not formally asses the presence of antisocial personality disorder in our patients, but tried to assess the extent of past antisocial behavior by reviewing the legal history for each patient provided by the courts.

Males represented 75.3% of the subjects. The average age was 29.8 years, with males 929.1 years) being slightly younger than females (31.9 years).

RESULTS:

Independent administration of the Michigan Alcohol Screening test confirmed the diagnosis of alcoholism in 89.2% of the sample. Two-thirds of the sample (66.3%) admitted to at least one alcohol blackout int he past, quite similar to another survey of alcoholics (Goodwin, et. al., 1969) which documented blackouts in 64%.

Major depression was present n 2.4% of the sample at the time of interview, not different form the incidence i the general U.S. population (see Table 1). No subject was manic. Schizophrenia was present in 0.6% of the subjects, again not different from the general incidence of schizophrenia in the general population (see Table 1).

3% of the subjects admitted to suicidal ideation at the time of the interview, but no subject expressed active suicidal intent and none required any emergency psychiatric intervention at the time of the interview such as crisis counseling or emergency psychiatric hospitalization.

Surprisingly, 9.0% of the subjects experienced alcohol hallucinosis in the past. This incidence is far greater that the combined incidence of the major mental illnesses which can produce psychotic symptoms (major depression, mania, and schizophrenia). Few of the patients who experienced alcohol hallucinosis, however sought psychiatric care for their condition, recognizing the symptoms as being substance induced and transient.
Past psychiatric histories for each subject showed 23.5% had received outpatient psychiatric care other than alcohol counseling in the past. 3.6% had required inpatient psychiatric hospitalization, not simply residential alcohol counseling, in the past.

While we did not directly measure the presence of antisocial personality disorder, a review of convictions for non-traffic offenses produced a prevalence of antisocial behavior similar to other studies of antisocial personality disorder cited in the introduction. 36% of the sample had been convicted of non-traffic offenses. 12% of the study group had been convicted of assault, 10% of disorderly conduct, 6% of repassing, and 4% of theft or burglary. A variety of other offenses occurred less frequently. No doubt, many of these other arrests were also alcohol related. Breathalyzer blood alcohol level at time of DWI arrest was no different between DWI "problem drinkers" who had a prior criminal record and in those who did not (0.21 in both groups). Average Michigan Alcoholism Screening Test score was higher in subjects with previous non-traffic convictions 922.3) than in those without a prior criminal record (14.9).

DISCUSSION:

The prevalence of major psychiatric disorders in DWI "problem drinkers" is not different from the prevalence of these disorders in the general population. In fact, prevalence for psychiatric disorder presented in our group are slightly lower than prevalence previously reported in other groups of alcoholics. Several factory can explain this difference.

Our data represented only a point prevalence of any condition. Other studies reported the six month or even lifetime prevalence of these disorders. Our numbers, than, would necessarily be lower. Our subjects may not be as ill as those in other studies. Not only were all our subjects outpatients, but they were literally pulled form the street by the police and forced to attend alcohol treatment sessions. Hence, they may be less dysphoric than those voluntarily identifying a problem and seeking treatment. It would also follow that they would be less psychiatrically ill than those voluntarily presenting to psychiatric facilities. Also, those surveyed of course, kept their appointments. Few manic patients would have conscientiously kept their 8 or 9 a.m. appointment as the other subjects did. Finally, our group did not represent a random sample of alcoholics. They were able to pass driving test, and in most case could afford to operate and buy a car. Thus, they may be different from the population of those suffering from schizophrenia.

The high incidence of non-traffic related convictions requires further explanation. As we have demonstrated earlier, alcoholics in general are much more at risk for antisocial behavior than the general population. Moreover, since our population by definition ha been arrested it is no surprise they have been arrested for other offenses. Gusfield (1985) estimates there are 200-2000 occurrences of driving while intoxicated for every arrest, and so it is quite possible hat those who are identified by the police may behave in a more antisocial manner helping their chance of an arrest. However, since the prevalence of non-traffic convictions is a bit less than the incidence of antisocial personality disorder in other studies it may represent an accurate reflection of antisocial pathology present in alcoholics.
Alcohol hallucinosis in our sample occurred three time more often than major depression and schizophrenia combined. This surprising incidence dictates that alcohol hallucinosis should be the first disorder ruled out in the evaluation of any alcoholic suffering a psychotic illness. Hallucinations among alcoholics are far more likely to be due to the toxic effects of alcohol than to the primary psychiatric disorder.

Finally, while our data suggests that major psychiatric disorder does not occur more often in DWI "problem drinkers" than the general population, it does not mean that they need psychiatric help less. 23.5% of the group received psychiatric care in the past. There can be little doubt that those alcoholic afflicted with a major mental disorder would require psychiatric treatment for their mental illnesses to achieve abstinence. Abstinence is difficult to achieve ordinarily, and would be all the more difficult in the presence of a major psychiatric disorder. Thus, alcohol counselors should be able to identify and refer for psychiatric treatment those patients suffering from both alcoholism and major psychiatric disorder. These "problem drinkers' have more than one problem, and require more than one kind of care.

BIBLIOGRAPHY


**TABLE 1**

<table>
<thead>
<tr>
<th>Prevalence in DWI &quot;Problem Drinkers&quot;</th>
<th>Average Prevalence in 3 ECA Communities (Myers, et. al., 1984)</th>
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<tbody>
<tr>
<td>Major Depression</td>
<td>2.4%</td>
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<tr>
<td>Mania</td>
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<tr>
<td>Schizophrenia</td>
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