CHANGES IN PSYCHOLOGICAL SYMPTOMS DURING AMBULANT DETOXIFICATION

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Abstract — Reports suggest a high prevalence of psychological symptoms in alcohol-dependent patients, but there are difficulties in evaluating their significance. To elucidate these relationships, the effect of withdrawal from alcohol on psychological symptoms in men and women detoxifying on an ambulant basis was examined. A prospective study of 65 patients was carried out using a standardized interview which included sociodemographic indices, measures of alcohol dependence and problems. Psychological symptoms were measured using the General Health Questionnaire at three different time points. The majority of alcohol-dependent patients presented for treatment with co-existing psychological symptoms, but, for both men and women, these decreased rapidly after a 10-day detoxification period. For patients who remained abstinent over the next 6 weeks there was a further decline in psychological symptoms to almost asymptomatic levels. For those who resumed drinking, no such improvement was apparent. The clinical implication is that treatment for what may at first appear to be an independent co-morbid disorder may not be necessary once the patient has been withdrawn from alcohol and has achieved a period of abstinence.

INTRODUCTION

The majority of patients with alcohol problems, perhaps as many as 80%, present with symptoms of anxiety and depression (Raimo and Schuckit, 1998). There has been debate about the significance of these symptoms, centring on whether they are important in either the cause or consequence of alcohol problems (Schuckit and Monteiro, 1988). When a prospective design is used, there are indications that psychological symptoms decline rapidly during in-patient detoxification in male patients with a primary diagnosis of an alcohol problem, (Brown et al., 1991) and in young, physically healthy male patients (Hamm et al., 1979). The aim of the present study was to examine this effect in a mixed sex group who have complex difficulties presenting for detoxification on an ambulatory basis. Women with alcohol problems have been described as more psychologically impaired than their male counterparts (Oppenheimer, 1991) and this aspect was examined. Finally we describe some procedures for managing psychological symptoms co-morbid with an alcohol problem.

SUBJECTS AND METHODS

Subjects

The subjects taking part in this study (n = 65) have been described in a previous paper which examined ambulatory care for a series of consecutive attenders undergoing detoxification from alcohol at home and a consecutive series of attenders detoxifying in a day patient setting, both from within the same service (Allan et al., 2000). During home detoxification, the patient was visited by a specialist community psychiatric nurse on a regular basis to monitor withdrawal symptoms and advise on the use of medication, which was chlordiazapoxide in a dose range between 30 and 100 mg per day, depending on the patient’s needs, and tailed off over a 7–10-day period. Patients were breathalysed daily and persistent failure to remain abstinent resulted in termination of treatment. Support was provided for patients and carers and treatment planning was undertaken. The hospital group attended the Alcohol Problems Treatment Unit on a daily basis and received medication on the same basis as the home group during withdrawal. Patients were breathalysed daily and failure to remain abstinent or frequent non-attendance resulted in exclusion from the programme. Key workers (usually psychiatric nurses) helped to plan further treatment. There were generally up to 15 other patients detoxifying at the same time, forming a ‘peer group’ for patients.

The home detoxification sample consisted of 29 patients, 20 men (69%) and nine (31%) women. The mean ± SD age was 46.4 ± 12.2 years, 35% were married and 62% were unemployed. Two-thirds of the group scored >30 on the Severity of Alcohol Dependence Questionnaire (SADQ) which is the cut-off point indicating severe dependence (Stockwell et al., 1983). Patients reported drinking a mean of 178 units of alcohol (the equivalent of 5.5 bottles of spirits) in the week before detoxification. (A UK unit is equivalent to a glass of wine, or a public bar measure of spirits, or to 0.5 pint of beer, each unit containing ~1 cl/7.9 g of absolute alcohol.) Thirteen (45%) had required assistance to detoxify previously, and of these, six (21%) had episodes of in-patient detoxification.

The day hospital group (n = 36) had the same proportion of men and women. The mean ± SD age was 45.1 ± 9.8 years, 37% were married and 82% were unemployed. There were no statistically significant differences between the two groups on sociodemographic indices. In terms of units, this group reported consuming 194 units in the week before detoxification. A higher proportion of day hospital patients were in the severe dependence category (81%), although there was no statistically significant difference in overall SADQ scores. Twenty-six patients (72%) had previously required help to detoxify, 14 (39%) of whom had been detoxified as in-patients. On the Alcohol Problems Questionnaire (APQ) (Drummond, 1990) both groups reported major difficulties, although the hospital group reported more problems. This reached statistical
significance in the case of general problems, also on a separate measure of social disruption (Smart, 1979), but not for other indicators. Despite the severity of problems described, both types of detoxification proved effective for withdrawing patients from alcohol and, at 10 days, 79% of the home group and 78% of the hospital group were successfully detoxified.

At 60 days, the following outcome categories were used. ‘Good’ indicated complete abstinence from alcohol, or drinking <8 units per week and no return to alcohol-related problems reported by direct interview with the patient and confirmed by breathalyser and an independent source (a relative or, if none available, referral agent or treatment staff). ‘Improved’ indicated that, if drinking had occurred, this did not exceed 21 units per week, dependence was not reinstated and the APQ was zero. The final category was ‘unimproved’, which contained patients drinking in excess of 21 units per week or who were once more physically dependent and reporting alcohol-related problems.

As would be expected in groups with such severe problems, attrition rates were high and, by 60 days, 65% of home detoxification patients and 56% of the day hospital group were successfully re-interviewed in person. In terms of outcome, 45% of the home group and 31% of the hospital group were in the good outcome category and a further 17% and 3% were in the improved category respectively. A further 28% of the home group and 44% of the day group were in the unimproved category and 10% (n = 3) and 19% (n = 7) respectively were completely lost to follow-up. One patient in the hospital group died from causes unrelated to detoxification. When considering longer-term outcome, the general indications are that, given the initial levels of severity, outcome is similar to that reported for comparable UK studies (Stockwell et al., 1990; Bennie, 1998).

Patients who had attended for treatment after the conclusion of detoxification had significantly superior outcomes. For the home group, the most frequently used treatment was further individual sessions with the CPN, followed by attendance at a City Centre Alcohol Day Service. For the hospital group, attendance at a structured Alcohol Day Programme, which operates within the same premises as the detoxification service, was the most likely treatment option to be taken.

Methods

Patients were interviewed at the beginning of detoxification and follow-up interviews were conducted at 10 days and 60 days by a research assistant not involved in the delivery of treatment. The schedule consisted of a structured interview and self-report questionnaires (see Allan et al., 2000 for full details) which included a measure of psychological symptoms which were assessed by using the shortened version of the General Health Questionnaire (GHQ), which consisted of 28 items (Goldberg and Hillier, 1979). A threshold score of ≥5 was used by Goldberg and Hillier (1979) to indicate ‘a case’. There are a number of major difficulties in accurate diagnostic assessment when individuals are drinking heavily for long periods of time and experiencing regular withdrawal symptoms (Raimo and Schuckit, 1998). Because of this the aim was rather to record the level of psychological symptoms and to observe the effect of periods of abstinence or periods of heavy drinking on their severity and frequency rather than to establish a diagnosis.

Results

Psychological symptoms during the 10-day detoxification period

Mean ± SD GHQ scores at the start of detoxification were 15 ± 10.1 for the home group and 17 ± 11.0 for the hospital group. Seventy-two per cent of the home detoxification group and 89% of the hospital group reached criteria for ‘caseness’ using a cut-off point of ≥5. The relationship of psychological symptoms to alcohol dependence and problems was examined by using correlational analysis. The Pearson’s product-moment correlation between the total GHQ score at the beginning of detoxification and the total SADQ score was $r = 0.4$ ($P < 0.002$) indicating that levels of psychological distress were associated with increased dependence on alcohol. Indices of alcohol-related problems on the APQ ($r = 0.4$, $P < 0.002$) and social disruption ($r = 0.6$, $P < 0.0001$) were also significantly correlated with GHQ scores.

Seventy-nine per cent of home patients and 78% of the hospital group were successfully detoxified at 10 days and examination of GHQ scores indicated that a further reduction to $11.7 ± 9.9$ and $11.0 ± 8.5$ respectively occurred during this period.

To examine if type of detoxification or gender were important, a two-way mixed ANOVA design was employed where sex and type of detoxification setting were between-subjects factors, and GHQ scores at beginning of detoxification and at 10 days were a within-subjects factor. Subjects ($n = 51$) still in treatment at 10 days and for whom there were complete data were included in the analysis. Results indicated that the main effects of sex [$F(1,47) = 0.86$, $P < 0.36$], type of detoxification [$F(1,47) = 0.57$, $P < 0.45$] or an interaction between the two [$F(1,47) = 3.7$, $P < 0.06$] were not statistically significant. Examination of the within-subjects factor indicated that there was a statistically significant change between GHQ scores at the beginning of detoxification and at 10 days [$F(1,47) = 30.96$, $P < 0.0005$], indicating a significant improvement in psychological symptoms during detoxification. In specific terms, 68% of home detoxification patients and 69% of day detoxification patients still met the criteria for caseness.

Outcome and psychological symptoms

Achieving longer-term abstinence was much more difficult and, by 60 days, only 45% of the home group and 31% of the day hospital group had maintained this state. As there appeared to be no major differences between the two samples in terms of psychological symptoms, the data were pooled to examine the relative effects of abstinence and resumption of problematic drinking. Patients (irrespective of detoxification setting) were divided into two groups, based on the previously described outcome criteria ‘improved’ and ‘not improved’. The improved group was formed by amalgamating the ‘good’ and ‘improved’ groups, providing a dichotomous outcome category of ‘improved’ and ‘not improved’. GHQ scores at two points were examined: 10 days after the start of detoxification and again at 60 days (Fig. 1). Subjects ($n = 39$) for whom there were complete data at 60 days were used in the analysis. A one-way mixed ANOVA was used with the outcome categories as the between-subject factor and GHQ score at two time points (day 10 and day 60) as the within-subjects factor. Results indicated that there was a significant effect between outcome
categories \(F(1,37) = 8.7, P < 0.006\), and there was a significant effect for the within-subjects factor reduction in GHQ scores \(F(1,37) = 4.9, P < 0.03\). There was also a significant interaction between outcome and GHQ scores \(F(1,37) = 7.9, P < 0.008\). This is presented graphically, indicating that in the ‘improved’ group (where patients had remained abstinent or virtually abstinent) there was a significant decline in psychological symptoms to almost asymptomatic levels. For those who resumed drinking after the 10-day detoxification period, no further improvement in GHQ scores occurred. In all, 77% of this group met criteria for ‘caseness’, as compared to the improved group where only 21% were in this category.

**DISCUSSION**

Psychological symptoms were pervasive amongst the group studied, with the majority of patients reaching the criteria for ‘caseness’ at the beginning of detoxification. Psychological distress was associated with increased severity of dependence and alcohol-related problems, a finding confirmed with a large cohort by Schneider et al. (2001). There was also clear evidence that these symptoms decreased markedly with a sustained period of abstinence, and beneficial changes were observable within the first 10 days. For those who resumed drinking after the 10-day detoxification period, the initial reduction in symptoms was not maintained.

The women included in this study reported rates of psychological symptoms similar to those of the men, and similar improvements occurred in both groups. It is possible to speculate that much of the previous work carried out on women was anecdotal or based on patients attending psychiatric in-patient facilities involving women who may be unrepresentative of female problem drinkers (Allan, 1991).

A further difficulty in this area has been the lack of an explicit theoretical position from which robust predictions can be made (Allan, 1995). Translating this into clinical terms, if alcohol misuse is secondary to a psychological condition, removal of alcohol through detoxification should either increase the psychological symptoms, as the coping response is no longer available, or should have little effect as the coping response (i.e. drinking) is largely ineffective. Conversely, if psychological symptoms are secondary to an alcohol problem, detoxification and a sustained period of abstinence should result in a significant decrease in the symptoms. Results from this study would indicate that the latter was a frequent occurrence for many patients, although some improvement may be due to use of psychotropic medication in association with abstinence.

Findings such as these can be translated into clinically relevant guidelines for the assessment and management of alcohol-dependent patients with complex presentations. This includes the recognition that most alcohol-dependent patients present with psychological symptoms, but, with even a brief period of abstinence supported by detoxification procedures, these will decrease rapidly. Previous research indicates that a minority of patients, perhaps as low as 10%, may then be left with more persistent symptoms which appear to constitute an independent clinical disorder (Brown et al., 1991), although in our study the rate of caseness in the ‘improved’ group at 60 days was 21%. These patients can be treated using pharmacological or cognitive–behavioural approaches. The benefits of using antidepressant or anxiolytic medication must be balanced against the increased risk of side-effects or adverse reactions in people who continue to misuse alcohol or who have sustained physical complications (Scott et al., 1998). We are unable to specify which other treatments the patients in the ‘improved’ group had received.

The shape of services for those with co-morbid difficulties continues to be the subject of debate (Johnson, 1997) and has led to the call for the establishment of a psychiatric super-specialty to deal with patients who have these complex presentations. Other workers have suggested that a more realistic solution would be to support and inform staff in specialist mental health and addiction services about the assessment and management of the commonest and most remediable co-morbid disorders (Hall and Farrell, 1997).

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**REFERENCES**


