Management of alcohol abusing patients in accident and emergency departments

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Summary

A pilot study was undertaken in the Accident & Emergency (A & E) departments of two central London teaching hospitals to determine if patients who were abusing alcohol and had not received any prior medical treatment or counselling for their drinking problem were amenable to offers of help. During the 24-month study period 104 patients were identified as having a previously untreated alcohol problem, and of these 46% attended an appointment to discuss their drinking habits. The group identified was much smaller than would be expected from the number attending the A & E departments during the study period and the reasons for this are discussed. However, the important observation from the study is that almost half the patients identified as having an alcohol problem returned to the department the following day to seek advice. This suggests that A & E departments are an appropriate place to offer patients initial help about their drinking habits.

Introduction

Alcohol abuse is a common problem[1]. One and a half million people in Britain are drinking at levels that are definitely harmful and seven million are drinking more than the amounts considered safe! Alcohol causes 28 000 deaths each year in England and Wales and is a major causative factor in road traffic accidents[2]. Ten per cent of all road accidents causing injury result from drivers with excess blood alcohol and 25% of all road accident fatalities have blood alcohol levels greater than 80 mg%[2]. Alcohol is associated with industrial accidents, deaths from fires, deaths by falls and death by drowning. It is also implicated in the majority of assaults and half the instances of domestic violence.

Estimates suggest that between 40-80% of evening attenders at A & E departments have positive breath alcohol tests. A recent study by Rhodes *et al.*[3] reported that 14% of patients attending the A & E department of Newcastle General Hospital had a blood alcohol level of greater than 50 mg/ml. Some of these patients will already be known to their general practitioner and will have received advice about their drinking behaviour. However, a proportion of patients will not be known to the medical services for alcohol abuse.

Attending an A & E department may help a patient to accept that they have a problem with alcohol abuse, which otherwise they would deny.

The aim of this pilot study was to identify those patients presenting at A & E with an alcohol related problem that was previously unknown to the medical services and to determine if they would accept help.

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Method

The study was conducted in the A & E departments of St Mary's Hospital (seeing 49 000 new patients/year) and St Charles' Hospital (W10; seeing 23 000 new patients/year) between November 1988 and October 1990 inclusive.

All patients over the age of 16 who were judged by the attending casualty officer to have an alcohol related problem unknown to the medical services were eligible for inclusion in the study, if they were fit to be discharged. Patients whose condition necessitated hospital admission were excluded. The judgement of whether a problem was alcohol related was based on whether the patient smelled of alcohol. Holt *et al.*[4] have demonstrated the formal measurement of blood alcohol is of no greater clinical value than for the examining doctor to merely smell alcohol on the patient's breath.

Each patient who met the above criteria was given an information sheet (Figure 1) by the A & E doctor asking them to attend a review clinic appointment to discuss their alcohol consumption with the A & E Consultant or registrar. Appointments were for 10 am on the next working day. Patients who attended the review clinic were asked by reception to complete a quantitative questionnaire regarding their alcohol consumption (Figure 2).

They were than interviewed by the A & E Consultant or registrar who completed CAGE and modified Michigan Alcoholism Screening Test (MAST) questionnaires to assess whether they had an alcohol problem[5,6]. The CAGE questionnaire has only four items and is easy to use (Figure 3). It is a sensitive detector of alcohol abuse if a two or three-item positive response is accepted as the criterion. The brief, 10 item version of the MAST questionnaire (Figure 4) performs as well as the 25-item version. By quantifying

You attended our Accident and Emergency (Casualty) Department because of an injury or illness.

It would appear you had been drinking.

It may well have been that alcohol is a problem for you - witness your attending here (even though the incident may well not have been your fault).

We want to help you with your alcohol drinking.

Therefore our consultant, Mr Robin Touquet, would like to see you in his Review Clinic at . . . o'clock on . . ., or the following day, if this is not convenient (Monday-Friday).

BRING THIS SHEET WITH YOU AND SHOW IT TO RECEPTION IN CASUALTY

Figure 1. Form initially given to patients

How old were you when you started drinking?

(Age in years) .....

How often do you drink (circle)

Daily
2/3 times a week
Once a week
Weekends only
Once a month
Less

What do you drink?

Beer - specify type
mild
bitter
lager
stout

Spirits
sherry
wine
cider

Other - specify type
home brew
tonic wine, etc.

How much do you drink? - specify	Per day	Per week
Pints of beer		
Measures of spirits or part of bottle		
Glasses of sherry, wine, cider or part of bottle		

Used you to drink more than this regularly? Yes No

Have you ever deliberately cut down on your drinking? Yes No

Figure 2. Form given to patients by reception

Have you ever felt you ought to cut down on your drinking?

Have people annoyed you by criticizing your drinking?

Have you ever felt bad or guilty about your drinking?

Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover? ('eye opener')

Figure 3. Modified CAGE score

Do you feel you are a normal drinker?	Yes	No (2 pts)
Do friends or relatives think you are a normal drinker?	Yes	No (2 pts)
Have you ever attended a meeting of alcoholics anonymous?	Yes (5 pts)	No
Have you ever lost friends or girlfriends or boyfriends because of drinking?	Yes (2 pts)	No
Have you ever got into trouble at work because of drinking?	Yes (2 pts)	No
Have you ever neglected your obligations, your family or your work for more than 2 days in a row because you were drinking?	Yes (2 pts)	No
Have you ever had delirium tremens (DTs), severe shaking, heard voices or seen things that were not there after heavy drinking?	Yes (5 pts)	No
Have you ever gone to anyone for help about your drinking?	Yes (5 pts)	No
Have you ever been in hospital because of drinking?	Yes (5 pts)	No
Have you ever been arrested for drunken driving or driving after drinking?	Yes (2 pts)	No

Figure 4. Modified MAST score (pts=points)

the extent of the alcohol abuse on the CAGE and MAST scores it was ensured that a set of standard questions were asked in the review clinic, thereby providing consistency of assessment. If the patient was diagnosed as having a drinking problem and wanted to stop drinking they were referred to the alcohol clinic run by a senior registrar in psychiatry.

Results

One hundred and four patients entered the study (Table 1). Forty-eight patients attended the review clinic and were assessed by the A & E Consultant or registrar. Two patients attended at the wrong time and then failed to attend their subsequent appointments.

Of the 48 review clinic attenders, 40 (83%) were referred to the psychiatrist for treatment of their alcohol problem. The remainder were not considered suitable for psychiatric referral either because they were found to have had treatment previously or because they did not want further treatment. Of the 40 patients referred to the alcoholic clinic, 22 attended, i.e. 55%. Four of the patients were inappropriate referrals as they were found to have already been in contact with the medical services for their drink problem. The most frequent outcome of the clinic appointment was referral to the non-statutory treatment agencies with 46% of the patients being advised to contact AA and Accept. Of the patients 38% were referred to the regional alcohol unit for alcohol detoxification. The remainder were followed up at the alcohol clinic or refused any further help. All groups had comparable MAST and CAGE scores.

Discussion

Alcohol abuse is a major health problem. The Advisory Committee on alcohol report suggested that there was an increased chance of treatment succeeding if it was commenced prior to the development of advanced physical, psychiatric or social problems. The A & E department is the point of entry to healthcare for many patients and could have an important role in the detection of alcohol-related problems and the referral of patients to appropriate treatment agencies.

Table 1. Characteristics of 104 patients

	No. of patients	MAST score 0-32		CAGE score 0-4	
		Average	Range	Average	Range
Did not return to review clinic	56	–	–	–	–
Total attending review clinic	48	16.0	0-32	3.0	0-4
Attended review clinic but not referred	8	16.1	4-30	2.7	0-4
Referred to psychiatrist but did not attend	18	14.4	4-32	2.9	2-4
Referred to a psychiatrist and attended	22	17.3	0-32	3.2	0-4

Previous attempts to make such interventions in A & E departments have had mixed results.

Yates *et al.*[7], attempted to identify the characteristics of patients with alcohol related problems attending two A & E departments during a 2 week period. Blood alcohol concentration tests did not detect the majority of heavy drinkers and clinical assessment of drunkenness was often inaccurate. A combination of blood alcohol concentration and a questionnaire was more accurate.

Robertson *et al.*[8] assessed all patients attending the A & E department of the Edinburgh Royal Infirmary with a new complaint during a week in November 1987. Patients were asked to complete a health questionnaire which included questions about their alcohol consumption. The attending doctor also made an assessment of whether the patients presentation was related to or complicated by alcohol use and whether the patient smelled of alcohol. The study found that patients under the influence of alcohol were more than twice as likely not to fill in simple questionnaires and not to perceive their alcohol consumption as different from non-drinkers. The authors concluded that A & E departments were not the optimal site for motivating drinking patients to alter their drinking behaviour.

A different approach was used by Brooks[9]. In this study patients attending the A & E department of Kent and Canterbury Hospital were given an information card if their attendance was presumed to be alcohol related. The card detailed local agencies providing help and advice. Of the patients given cards 30% were subsequently found to have attended the agencies, suggesting that this might be a useful method of introducing patients to the services available.

The present study confirms this observation, as 46% of the patients invited to an appointment to discuss their drinking behaviour subsequently attended. It appears that the use of cards to offer follow-up to this group of patients is a more appropriate intervention than asking them to complete a questionnaire when under the influence of alcohol. The advantage is that this method is not dependent on the patient's compliance when intoxicated. In fact, in the present study, many of the patients who were intoxicated, had the sheet offering an appointment tucked into an item of their clothing, to be found when the effect of the alcohol had worn off.

A problem apparent in this pilot study is the small number of patients who were included given the large number of attenders at the two A & E departments during the study period. In 24 months 144 000 patients would be expected to attend. If, as previous work suggests, approximately 14% have a raised blood alcohol level then 20 160 patients would have an alcohol related problem. However, only 104 patients were given review clinic appointments, i.e. *c.* 0.5%.

The study excluded all patients who had previously received medical treatment or counselling for their drinking problem, all patients who were admitted, and all patients who lived outside the district. Patients either for organic reasons, because of the amount of alcohol in their bloodstream, or for their own personal reasons are not always honest about the fact that they have seen a doctor previously about their alcohol problems. Some patients may have felt if they admitted this they would have received no further help from the hospital. These patients who had already been in contact with the medical services for their drink problem were referred to a community alcohol counselling service.

Some patients were not included because of the frenetic work practice in A & E and because the department is staffed 24 h/day by senior house officers who change job every 6 months. Patients who attend with alcohol related problems, are not only in difficulty, they are also often difficult for the staff to handle, especially when waiting times are prolonged. This contributed to the rather small number of study patients.

This study was performed without the benefit of a research worker and without any additional funding. This was deliberate in order to give a realistic appraisal of the number of patients who could be detected as part of a normal A & E work practice. Similarly, no additional psychiatric sessions needed to be funded. The results of the study are therefore applicable to other A & E departments who do not receive extra funding for this type of work.

Any service that can identify patients early on in the natural history of alcohol abuse and offer appropriate help, is to be encouraged, especially when the provision of that service is of low cost and is made part of a general hospital work practice.

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