

# Compulsory treatment of 50 alcoholic drunken drivers

## A follow-up study

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### Summary

Fifty alcoholic drunken drivers receiving treatment as part of a suspended sentence were studied to assess the efficacy of compulsory treatment. Twenty-six showed improvement in drinking behaviour, 12 did not co-operate and were referred back to court, 7 were re-arrested on further charges of drunken driving and 4 were committed to long-term rehabilitation centres (1 patient died too early to allow for adequate follow-up). The results compare favourably with improvement in alcoholics treated voluntarily. When regarded as their own controls, patients who had previously been arrested for drunken driving but had not been referred for treatment showed considerable improvement in their behaviour, as did patients who had had previous unsuccessful voluntary treatment. This programme appears to be worth while, at least for the duration of the suspended sentence. It also encourages early identification of alcoholics and their referral for treatment.

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Alcoholics often come into conflict with the law,<sup>1-3</sup> and the threat of punishment has been used to motivate them to participate in rehabilitation programmes.<sup>4-7</sup> It was considered that the value of a suspended sentence should be assessed in the treatment of alcoholism, as some studies have indicated that enforced treatment<sup>8</sup> and a history of arrest for driving<sup>9</sup> are associated with a poor prognosis. A panel of psychiatrists and social workers has been in operation in Cape Town since 1971 for selection of alcoholic driving offenders for treatment, and an earlier follow-up study indicated that it might be possible to select those who would benefit most.<sup>5</sup>

A sequential series of 57 alcoholic drunken drivers referred by the courts for treatment at the Department of Psychiatry of the University of Cape Town between 28 January 1974 and 15 October 1975 was selected for follow-up study. Of these, 7 were excluded because the period of suspension was less than the minimum of 3 years considered necessary. Suspension of sentence was always conditional upon co-operation with treatment,

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and failure to co-operate would result in re-referral to the court and possibly imprisonment.

The treatment approach has been described elsewhere<sup>8,10</sup> but in general consists of detoxification and a 3-week period of intensive inpatient care followed by long-term outpatient after-care with re-admission as and when necessary. All patients sent by the court are also carefully followed up by a psychiatric community nurse and a probation officer.

### Clinical features

Forty-nine of the patients were males and 1 was female, which is a higher proportion of males than is generally found among alcoholics. The patients tended to be younger, of lower-socio-economic status and less well educated than other patients at the same unit (Table I). Most (84%) had a drinking problem of over 5 years' duration, compared with 64% of unselected patients at the same unit, and 23 had had treatment for alcoholism and 1 for depression prior to the present conviction.

Using the criteria for the diagnosis of alcoholism of the American National Council on Alcoholism,<sup>11</sup> 47 patients displayed major criteria, 36 major criteria on level 1 or sufficient criteria on level 2 to make the diagnosis of alcoholism mandatory, and the

TABLE I. CHARACTERISTICS OF STUDY GROUP COMPARED WITH UNSELECTED GROUP

	% of study group (50 subjects)	% of 797 unselected patients at the same unit <sup>8</sup>
<b>Age at referral</b>		
< 25	4	3
25 - 30	22	11
31 - 40	26	34
41 - 50	32	30
> 50	16	22
<b>Occupational class (General Register Office, 1966)</b>		
Professional	2	2
Intermediate	26	49
Skilled/partly skilled	64	47
Unskilled	8	2
<b>Educational level</b>		
Primary school	6	4
High school	80	51
University entrance	6	22
University	2	5
Not known	6	18
<b>Duration of problem drinking</b>		
< 5 yrs	16	36
5 - 10 yrs	52	34
11 - 15 yrs	14	14
> 15 yrs	18	16

remainder sufficient major criteria on level 2 to make the diagnosis of alcoholism likely.

Thirty-two patients were admitted for assessment at the time of sentence, and the remainder were treated as outpatients from the outset although some required a period of admission later.

The main criterion used by the courts in referral was a previous history of convictions for drunken driving; 44 of our patients had had such convictions (20 had had one such conviction and 24 more than one), while 14 had a history of offences such as theft or fraud. Only 3 had not had prior convictions. A personality disorder was diagnosed in 48 of the 50 patients, 12 of whom were diagnosed as sociopathic.

## Results at follow-up

Patients were assessed after all had been in treatment for at least 2 years and some for as long as 3 years and 9 months. In 7 cases the court order had already expired. Patients who were imprisoned or institutionalized during the follow-up period were assessed as at the period immediately preceding this event. One patient could not be assessed as he died a few months after the court order, i.e. too early for adequate follow-up.

Twenty-one patients showed a marked improvement in their drinking pattern, i.e. they drank less in amount or less often, and 5 showed moderate improvement. Twenty-two showed minimal or no change and 1 was drinking more. Thirteen patients had been continuously sober and a further 10 had short slips, but not more than 3 times a year. Seven patients were drinking intermittently and 19 often or continuously. These results compare favourably with Gillis's<sup>8</sup> follow-up study at the same hospital, in which 18% were continuously sober and showed marked improvement and 39% showed improvement. Another (although less reliable) index of improvement is change in employment status. Of 40 cases where this could be assessed accurately, there was improvement in 9 and deterioration in 5.

Thirty patients attended after-care regularly and did well, and attendance was intermittent in 5 and poor in 8. Seven patients dropped out of the programme altogether. The co-operation of the 18 patients who had previously attended for voluntary treatment at the same unit was interesting in that in 11 there was a marked or moderate improvement in attendance, in 5 there was no change and in only 2 cases was attendance less good. The effect of a suspended sentence combined with treatment in those patients who had had previous voluntary treatment at various institutions but who had continued to drink was also scrutinized. Of the 23 patients who had had previous treatment at various institutions, 5 showed marked improvement in drinking behaviour, 4 moderate improvement and 4 minimal improvement; 10 did poorly. The results of treatment of the 44 patients in this

study who had had previous convictions for drunken driving without compulsory treatment at the time of the offence were analysed. Ten of these patients showed marked improvement in drinking behaviour, 14 showed moderate improvement, 7 showed minimal change and 13 remained unimproved.

Gillis and Keet<sup>8</sup> have shown that prognosis as assessed by the therapist at the beginning of treatment correlates well with improvement in drinking behaviour. This was also true of the present study, 80% of patients with a favourable prognosis doing well compared with 44% with a poor prognosis (Table II).

We found that no real benefit was derived from a preliminary period of inpatient admission in that 52% of the patients so treated did well compared with 47% of those who began and continued as outpatients. Patients with a diagnosis of severe personality disorder did less well, as expected,<sup>8,12</sup> 25% of clearly sociopathic patients showing improvement in drinking behaviour compared with 53% of patients with less severe personality disorders.

We found it necessary to send 12 patients back to the courts, and 7 were re-arrested on further charges of drunken driving. Prison sentences were imposed on 10 (of whom 1 subsequently re-attended voluntarily for treatment and did well), and 4 were committed to long-term rehabilitation centres. One patient committed suicide after arrest on a drunken driving charge, and 4 were re-referred by the courts after their sentence had been resuspended.

Five patients died during the follow-up period. Two died in motor vehicle accidents while driving under the influence of alcohol, 2 committed suicide, 1 after re-arrest as previously mentioned, and 1 after killing his wife, and 1 died of 'natural causes'. The death rate is similar to the expected rate of 11% for an unselected group of patients over the same period in Gillis's study,<sup>13</sup> but the rate of death from unnatural causes is much higher.

## Discussion

Approximately 60% of the 50 alcoholic driving offenders treated while under suspended sentence did well as regards all measures of improvement. Co-operation with treatment was generally associated with improvement in drinking behaviour, although a few patients did not show benefit despite co-operation and were referred for long-term institutional treatment. In general, the results compare favourably with those in patients who attended the same hospital on a voluntary basis and indicate that a programme of compulsory treatment is worth while. The favourable results reported by Rosenberg and Liftik<sup>7</sup> for the Boston Alcohol Safety Program are confirmed, although in the present study the period of compulsory attendance was much longer. Inpatient

TABLE II. PROGNOSIS AND DRINKING BEHAVIOUR AT FOLLOW-UP OF 49 SUBJECTS

Prognosis at commencement of treatment	Drinking with		Mainly drinking	Continuous drinking
	Sober	occasional slips		
Good	3	1	1	0
	80%			
Fair	6	3	6	3
	50%			
Poor	4	3	5	4
	44%			
Not known	1	3	2	4

admission at the beginning of the programme appears to make no difference to the outcome of treatment, a finding similar to that of Ritson and Hassall.<sup>12</sup> It must be stressed that close liaison between the courts and the treatment centre is essential, not least to ensure that the programme is not abused to avoid punishment.

It is clear that many patients should have been referred for treatment earlier, for 84% had had a drinking problem for over 5 years, 93% had easily recognizable symptoms of alcoholism, and there was a high rate of previous conviction for drunken driving. It is considered that an experienced social worker using a simple format based on the American National Council on Alcoholism Criteria Committee's inventory could diagnose alcoholism reliably in drunken drivers and assess patients for treatment, particularly since motivation as assessed in early interviews is a good predictor of outcome and 'sociopathy' is associated with a poor outcome, although not invariably.

It could be argued that the study does not finally resolve the issue of whether treatment of alcoholic drunken drivers produces better results than no treatment, with or without court sanction. However, as these patients had been specifically referred by the courts a control 'non-treatment' group would not have been possible; the courts would not have accepted such a protocol, particularly at such an early stage in the programme.

In any case, some patients could be regarded as their own controls. The results show that half of the patients who had had either previous voluntary treatment or conviction without compulsory treatment improved during the course of this study. Of the 23 previously treated voluntarily at other units, 9 now showed improvement; of the 18 previously treated at our unit, 10 showed moderate to marked improvement; and of the 44 who had had one or more previous convictions without compulsory treatment, 24 showed improvement. The findings may be biased by cumulative 'frequency of contact' in all these groups, but they strongly suggest that, for this type of patient at least, the combination of conviction and a suspended sentence with compulsory treatment produces better results than either punishment alone or voluntary treatment.

The compulsory nature of the treatment and the high prevalence of severe personality disorder did not seem to have the expected negative influence on the overall results. This is probably because supervision and follow-up were thorough and because of the deterrent effect of the suspended sentence. The high prevalence of sociopathy in the group suggests that alcoholic drunken drivers constitute an identifiable subgroup among alcoholics generally. Selzer and co-workers<sup>14,15</sup> have shown that alcoholic drivers involved in accidents have serious sociopathic traits and especially violent, paranoid and suicidal traits. Smart and Schmidt<sup>16</sup> have noted the correlation between suicide and alcoholic traffic offences, and MacDonald<sup>17</sup> had suggested that suicide is attempted in automobiles more frequently than is generally known. In our group, 2 of 5 deaths were in motor

vehicle accidents and 2 were by suicide. This extremely high rate of unnatural death emphasizes the need to suspend driving licences during the treatment period and to aim therapy at global improvement in personality function in general and at depression in particular.

As is the case with the treatment of alcoholism generally, a variety of therapeutic facilities is required for this group. Short-term inpatient therapy and outpatient aftercare or outpatient care alone did not fulfil all the needs, and a few patients had to be referred for long-term institutional care. As mentioned previously a 3-year period of suspension was the minimum considered necessary for effective therapy, but it is not certain just how long the good results will endure. Experience has suggested that once the period of suspension has expired many subjects lose motivation and drop out of treatment.<sup>7</sup> A further follow-up study on the same cohort will be necessary to clarify this.

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