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Alcoholism

A Two-year Follow-up Study of Patients admitted to the Psychiatric Department of a General Hospital

By MAELOR VALLANCE

The number of alcoholics admitted to mental hospitals in the United Kingdom has recently shown a sharp rise. In Scotland the admissions have risen from 732 in 1956 to 1,347 in 1961 (General Board of Control for Scotland) and in England and Wales from 1,285 in 1956 to 2,479 in 1960 (Registrar General). Figures for admission to general hospital units are not as yet available but they may well show a similar rise. Admission rates for alcoholism to Scottish mental hospitals are about four times higher than in England and Wales, and one-third of first admissions of middle-aged men to Scottish mental hospitals are suffering from alcoholism or alcoholic psychosis (Morrison, 1964). The rise in admission rates cannot be taken as indicative of a rise in prevalence; it may be that they reflect other changes, such as the attitude of the patients towards the acceptance of treatment, the attitude of the family doctor towards referral, and the availability of hospital beds.

The management of alcoholics, either in general hospital units or in mental hospitals, is often disappointing, On the one hand, the treatment offered is in all too many cases inadequate, particularly in relation to after-care. On the other hand, the alcoholic, whatever method is employed, is notorious for discontinuing his treatment prematurely. Some leave only to seek re-admission within a short time, but others disappear and the hospital staff are left to wonder what became of them. It was this situation which prompted a follow-up of a selected group of such patients some two years after discharge from hospital. It was hoped that this search would reveal more precisely what became of them in terms of their drinking behaviour and social adjustment and would lead to a better understanding of the influence, if any, that admission to hospital had made on the course of their disorder.

Method

The definition of alcoholism, in the absence of a better understanding of an aetiology and of diagnostic tests, is imprecise. In this study the following definition has been adopted ". . . alcoholics are those excessive drinkers whose dependence upon alcohol has attained such a degree that it shows a noticeable mental disturbance or an interference with their bodily and mental function, their interpersonal relations and their smooth social and economic functioning; or who show the prodromal signs of such developments. They therefore require treatment"(Alcoholism Sub-Committee of the Expert Committee on Mental Health, 1952). The Alcoholism Sub-Committee distinguishes two categories of alcoholics—alcohol addicts and habitual symptomatic excessive drinkers, i.e. non-addictive alcoholics, the distinguishing feature being the "loss of control" shown only by alcohol addicts. "Loss of control" is described as follows: ". . . drinking of alcohol starts a chain reaction which is felt by the drinker as a physical demand for alcohol" (Jellinek, 1952), or, to put it another way, "whenever an alcoholic starts to drink it is not certain that he will be able to stop at will" (Kellar, 1960). It is this feature which has been taken as the hallmark of alcohol addiction. "Loss of control" is not found in non-addictive alcoholics, but similar less well defined phases are found in the development of their drinking behaviour. The majority of alcoholics described in this paper are addictive drinkers, and the non-addictive

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alcoholics were at a corresponding phase in the development of their illness.

Sixty-eight male alcoholics admitted to the Psychiatric Department of the Southern General Hospital, Glasgow, during 1960 were studied. Ten of them were admitted twice in the year, so there were, in all, seventy-eight admissions. The intake for a complete year was used to avoid seasonal bias. Although patients were referred to hospital from various sources, half were sent in as urgent admissions by their own doctor, having asked him for help and being referred while their motivation was apparently good. Socio-economic and physical pressures were the factors of most immediate importance in determining requests for admission.

The approach to the patient in hospital was mainly that of psychiatric "first aid". The duration of stay was usually short—3·2 patient/weeks overall and 3·3 patient/weeks when first admissions alone were considered. This was partly due to pressure on beds and, perhaps more often than is recognized, to the hospital staff's ambivalent attitude to the alcoholic and his treatment. A history was taken over several interviews and on admission a physical examination was made. Where necessary, withdrawal symptoms were controlled with tranquillizers and parenteral or oral vitamins were given. The patients and their families were helped in socio-economic and interpersonal difficulties and were encouraged to attend Alcoholics Anonymous meetings in the hospital and were also taken to meetings outside the hospital in the company of other Alcoholics Anonymous members. Apart from Alcoholics Anonymous meetings in the hospital, the alcoholics were not cared for as a special group but mixed with the other patients and shared with them in various activities such as occupational therapy and relaxation classes. After-care in the form of regular visits to the Out-Patient Department was offered to those patients who were considered to be better motivated. Although such care was offered to half of the patients, less than a quarter attended.

The follow-up study was begun in 1962 when each patient was written to asking him to attend for interview. Evening and weekend clinics were arranged so that the patients would be inconvenienced as little as possible. Unless they could be traced and interviewed, information and impressions gained from less direct sources would have been more difficult to interpret. Since the response was poor, even after a reminding letter, a more intensive search had to be made. Patients were, therefore, visited wherever they could be found, in their homes, other hospitals, prisons and model lodging houses and the opportunity was taken, where possible, of interviewing available members of the patient's family.

For these interviews, a structured interview technique was used with questions relating to the drinking behaviour, social adjustment, work record, physical and mental health, re-admission to hospital and attendance at Alcoholics Anonymous meetings. Although these areas were considered separately in making an assessment of the patient, their inter-dependence is clearly understood.

The family doctor was asked for information on each patient's condition before admission and since discharge. In particular, he was asked about periods when the patient received sickness benefit, consultations because of the patient's drinking, and any other information which might have been given to him by the patient or his family.

A list of patients was then sent to mental hospitals and psychiatric departments of general hospitals in Glasgow, Edinburgh and other areas. They were asked to indicate which, if any, of the patients had been admitted or seen as out-patients since discharge from the Southern General Hospital. Additional information was obtained from many of these case sheets.

The picture was made more complete by the comments of Alcoholics Anonymous organizers who, by inference, were able to identify many of the patients and comment on their progress.

All the patients were traced. Eighty-four per cent. of the patients were interviewed and a member of the family in 40 per cent. of patients. Family doctors were consulted in 90 per cent. of patients. In all cases information was available from at least two sources, one of these sources being the patient or a member of his

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family. The minimum period of follow-up was two years.

Patient Data

Age

The average age on admission was 44 years (standard deviation 9·6 years). Half of the patients were first admissions and in this group the average age was 43·5 years. These ages are not significantly different from those found in other studies, but it should be remembered that they relate to hospital admissions and give no indication of how long it had taken to reach the stage of hospitalization.

Social Class (by Occupation)

Tradesmen formed the largest occupational group, accounting for about one-third of patients (Table I). Over one-third were employed in the professions, were business executives or owned their own business. A quarter were semiskilled or unskilled workers. Sixty per cent. had lost at least one job because of their drinking behaviour and 15 per cent. showed a clear decline in occupational level in the two or three year period before admission.

The implications of the higher admission rates from social classes one and two are unknown. Class differences in prevalence may exist but it is also possible that patients from social classes one and two are referred for treatment more readily.

Marital Status (Table II)

The marriage casualty rate was high and by the time of admission almost a quarter of the marriages had ended in separation or divorce. When first admissions alone are considered, the figures are, however, much lower. The marriage partners were only considered as having been separated when they had been apart for at least one week. In many cases separation was an attempt by the wife to manipulate her husband's behaviour and his admission to hospital often related to her withdrawal of support and his determination to persuade her to return.

Table I

	Social Class (by Occupation)				
	1	2	3	4	5
Percentage of patients	5·9	29·4	38·2	4·4	22·1
Percentage of Scottish Census ..	3	13	51·3	18·3	14·4

Table II

	Marital Status				
	Married	Separated	Divorced	Widowed	Single
Number of patients who improved over the two-year period	10	2	0	0	5
Number of patients who did not improve over the two-year period ..	20	7	1	1	1
Number of patients who worsened over the two-year period	7	2	4	3	5
Total	37 (54·3%)	11 (16·2%)	5 (7·4%)	4 (5·9%)	11 (16·2%)
Percentage of first admissions ..	61·8	11·8	0	8·8	17·6

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Family History of Alcoholism

A family history of alcoholism was very common and 35 per cent. of the patients had at least one alcoholic parent or sibling. Alcoholism in more distant relatives was not considered and where there was some doubt the history was ignored.

Physical Illnesses

During the period in which alcoholism was an admitted problem, the incidence of physical illness was high. In over half there had been at least one attack of delirium tremens or transient hallucinosis and a third complained of persistent paraesthesia and cramps in the limbs. Repeated respiratory tract infections were common and injuries, some of them serious, were frequent. Although dyspeptic symptoms are common in alcoholics, 15 per cent. of this series had objective evidence of peptic ulceration before the development of alcoholism.

Personality

The duration of stay was usually short and a detailed assessment of personality was not made in most cases. Even so, 42 per cent. gave a history of neurotic symptoms before the development of alcoholism. In terms of the Mental Health Act (England) 1959, over one-third were psychopaths and they were, as expected, heavily represented among those who subsequently deteriorated. Drug addiction was uncommon and only four were known to be addicts. The use of barbiturates at night was, however, very common and many of the more deteriorated patients often used hypnotics or amphetamines to augment or modify the effect of alcohol. Occasionally, accidental overdosage of these drugs combined with alcohol resembled suicide attempts.

Drinking History

Duration of Alcoholism (Table III)

Dependence upon alcohol had been obvious either to the patient or his family for at least 10 years in over 60 per cent. of cases and for a similar period in 44 per cent. of first admissions. There appeared to be little relationship between the duration of illness and progress over the two-year follow-up period. The problem had, however, been obvious for over five years in most cases and the relationship between duration of illness and prognosis might have been more apparent in patients with a shorter history.

Periods of Abstinence (Table IV)

During the above period most of the patients had made at least one apparently serious attempt at abstaining but the longest period of abstinence was less than one month in over half of the cases and less than six months in over

Table III

	Duration of Alcoholism (in years)					
	0–1	1–4	5–9	10–14	15–19	20+
Patients who improved over the two-year period	0	2	6	2	5	2
Patients who did not improve over the two-year period	1	5	5	4	7	8
Patients who worsened over the two-year period	0	4	3	6	2	6
Total	1 (1·5%)	11 (16·2%)	14 (20·6%)	12 (17·6%)	14 (20·6%)	16 (23·5%)
Percentage of first admissions ..	32·4		23·5	44·1		

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TABLE IV

	Periods of Abstinence (in months)					
	0–1	1–5	6–11	12–17	18–23	24+
Patients who improved over the two-year period	9	6	2	0	0	0
Patients who did not improve over the two-year period	15	6	3	3	1	2
Patients who worsened over the two-year period	12	5	3	0	0	1
Total	36 (52·9%)	17 (25%)	8 (11·8%)	3 (4·4%)	1 (1·5%)	3 (4·4%)
Percentage of first admissions ..	67·6	14	8·8	8·8	0	0

three-quarters. These figures include periods of abstinence in hospital, and where first admissions alone are considered, over 82 per cent. had been unable to remain abstinent for as long as six months.

Factors Associated with Drinking

Insufficient data were obtained to describe in any detail factors which influenced the development of the drinking behaviour and certainly nothing can be said here on aetiology. Nevertheless, in the interviews, patients, and where possible their families, were asked about factors which they considered had been of importance in perpetuating or modifying the drinking behaviour. Socio-economic factors were emphasized by over three-quarters of the patients. Often such social pressures as the threat of losing his wife, of police action, or of loss of employment, would exert to slow down the process or terminate a bout. Indeed, such pressures were often effective in manipulating the patient into accepting admission for treatment. On the other hand, the loss of some controlling figure such as a wife, mother or attentive landlady, might have the opposite effect and lead to rapid and total disorganization of behaviour.

Factors relating to health were thought to be of importance by half of the patients. Drinking for the relief of neurotic symptoms formed the largest group and physical illness or disability a much smaller group. Physical pressures commonly resulted in termination of a bout and admission to hospital.

About 15 per cent. of the series considered that the nature of their employment had had an adverse influence on the drinking history. This group was largely composed of salesmen, especially business representatives, expense account drinkers and drink trade employees, particularly barmen and whisky bond workers. In those who had been unemployed for some time, lack of money was obviously a limiting factor on alcohol consumption, but the lack of control exerted by regular hours seemed in many cases to offset this and their drinking behaviour, if anything, became less disciplined, the beverage taken changing from spirits to cheap wine as funds ran out. Only three cases regularly drank methylated spirits at some period in their drinking history. This seems nowadays to have been largely replaced by a mixture of cheap wine and cider. How much money was spent by an individual in any one day might give little indication of how much drink he had consumed. Even though unemployed, money was usually available, and apart from spending Assistance money and Unemployment Benefit, it was common for the earnings of those more fortunate in finding work to belong to the group rather than to any one individual.

The public image of the alcoholic as a solitary individual drinking alone was true of only a quarter of these patients. Although most of the

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alcoholics were capable of drinking alone at times, most of them belonged to a social group, albeit an abnormal group, and tended to seek out someone to accompany them in their drinking. At times, however, the impression was gained that, although in company, these alcoholics were really drinking alone, rather like young children at play. Escaping from such a group was often a major difficulty during attempts at abstinence and not only did the alcoholics have to stop drinking, but he had to be prepared to change in other ways and to break away from people and behaviour that had become associated with drinking in order to attain a reasonable social adjustment.

Results

Progress was assessed by comparing the two-year follow-up period with the patient's progress over a two-year period before admission to hospital. The areas of progress mentioned previously were considered separately and in addition a total assessment was made of each patient incorporating these areas and other factors peculiar to the individual case. The material was such that it was possible to divide it into only three grades of progress for each of the above areas—improved/not improved/worse.

Drinking Behaviour

Although over 40 per cent. were certainly improved in their drinking pattern, the quantity of alcohol consumed on each occasion, their behaviour whilst under the influence of drink, and insight into their drinking behaviour, only three cases were abstinent for the whole of the two-year period (Table VI).

Over 60 per cent. started drinking again within three months of discharge and almost 80 per cent. in less than six months. The position is, however, further complicated in that a patient may well have relapsed shortly after leaving hospital but for one reason or another remained abstinent ever since. They were asked, therefore, for the longest period of abstinence since discharge. Even here, the figures are not very different, although they may represent different patients (Table VI).

Table V

	Progress Over Two Years		
	Improved	Not Improved	Worse
Drinking behaviour	28 (41·2%)	27 (39·7%)	13 (19·1%)
Work record	11 (16·2%)	38 (55·9%)	19 (27·9%)
Social adjustment	16 (23·6%)	33 (48·5%)	19 (27·9%)
Health	14 (20·6%)	30 (44·1%)	24 (35·3%)
Total assessment (all patients)	17 (25%)	30 (44·1%)	21 (30·9%)
Total assessment (of first admissions only)	11 (32·4%)	16 (47%)	7 (20·6%)

Table VI

	Months				
	0–2	3–5	6–11	12–23	24+
Periods of abstinence from date of discharge	45	9	7	4	3
Longest period of abstinence during two-year follow-up	41	8	6	10	3

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Social Adjustment

Social attitudes and relationships were considered in terms of the state of the marriage and the patient's role in the marriage, acquisition of new friends or renewal of old friendships with people other than drinking companions, religious attitudes and how leisure time was spent. Arrests for drunkenness and other offences were also considered here. The results in these terms were even less encouraging than in terms of drinking behaviour.

Employment

The level of employment, attitude to work and workmates, loss of job or time through drink, show a similar pattern, but economic depression in the area may have played a part in this.

Physical and Mental State

Physical associations of alcoholism, intercurrent illness, and the mental state were such that over one-third of the patients were worse than they had been for the two years or so before admission and only a quarter improved. There were only two deaths in this period; both were suicides.

Alcoholics Anonymous

During their stay in hospital, almost all the patients had been introduced to Alcoholics Anonymous and were encouraged to continue at meetings after discharge. In fact half of them made no contact with Alcoholics Anonymous after discharge and over one-third made only very occasional contact. Only ten patients (14·7 per cent.) attended meetings regularly for most of the two-year follow-up period. Those who did attend regularly became so involved in the fellowship of Alcoholics Anonymous that it seemed almost to replace drinking as the central feature of their activities.

Re-admissions (Table VII)

More often than not, admission to hospital was followed by re-admission within two years, so that well over half of the patients had at least one re-admission and a third had at least two re-admissions within that time. In addition, ten patients were admitted to non-psychiatric beds because of such direct complications of alcoholism as gastritis, neuropathy and cirrhosis and for other conditions where alcohol had played some part in the cause or in the course of the condition, particularly accidents and respiratory infections.

Discussion

With few exceptions, the "first aid approach" has been the method of management of alcoholism in the United Kingdom. This study demonstrates how poor are the results of such an approach. In this series, patients usually relapsed in their drinking behaviour within six months of discharge and were unlikely to have more than a few months of abstinence within the next two years. The prospects of a better social adjustment, or of improvement in health,

Table VII

	Number of Times Re-admitted				
	0	1	2	3	3+
To psychiatric department of general hospital ..	39	19	7	1	2
To mental hospital	47	11	6	1	3
To either of above	30 (44·1%)	16 (23·5%)	8 (11·8%)	6 (8·8%)	8 (11·8%)
Percentage of first admissions re-admitted to either hospital	61·8	17·6	8·8	5·9	5·9

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were even gloomier and they had a 56 per cent. chance of being back in hospital at least once and a 33 per cent. chance of being back at least twice within the following two years. There was only a 25 per cent. chance of improvement and as much as a 30 per cent. chance of further deterioration.

A lack of objective and unambiguous criteria besets the problem of measuring the results of treatment. Such questions as what to assess, how long to wait before making assessment, and how to standardize such measurements, are all without satisfactory answer. Furthermore, evaluation of follow-up studies may be hampered by a lack of information concerning the socio-economic background of the patients and by lack of definition of the terms relating to the drinking behaviour. In such a follow-up, it may be inadequate to consider progress in terms of the drinking behaviour alone. For example, one of the patients who committed suicide had taken no drink from leaving hospital until his death about two years later, and abstinence during prolonged incarceration can hardly be considered as therapeutic success. Gibbins and Armstrong (1957) suggested other areas of behaviour which are subject to change and Mindlin (1959) described a rating scale based on improvement in four areas: (1) drinking, (2) work adjustment, (3) social adjustment and (4) emotional adjustment. Because of these differences in the selection of patients, the measurement of progress and the completeness of the follow-up, comparison of one follow-up study with another is difficult. Nevertheless, some comparisons can be made.

Glatt (1961) followed up ninety-four alcoholics for a minimum period of two years. The treatment programme included group psychotherapy sessions and emphasized prolonged and active after-care. Two-thirds of his patients had either had no relapse, or were at least improved, during the follow-up period and 90 per cent. of those who relapsed did so in the first six months. Although 50 per cent. of the patients belonged to socio-economic classes one and two, they were, in other respects, similar to the present series and it would seem reasonable to attribute the better prognosis in their cases to a more active treatment situation. Davies, Sheppard and Myers (1956) followed up fifty alcoholics over a similar period. Patients were admitted to hospital for two to three months and were established on treatment with Disulfiram. Thirty-six per cent. of the patients were abstinent for most of the two-year follow-up period; 42 per cent. indulged in light or heavy drinking for most of the time but suffered no gross or longstanding impairment of social efficiency and 20 per cent. spent most of the two years either in hospital or in a state of social incompetence. A higher proportion of their patients were first admissions and were probably more highly selected than the present series of patients in terms of motivation and previous personality.

So long as treatment facilities are limited, it would seem necessary to select those patients most likely to benefit from a particular approach With this in mind, follow-up studies may be of value in making such predictions by relating factors which can be observed after one or two interviews with the response to treatment. Davies, Sheppard and Myers suggested from their study that a more favourable outcome of treatment could be expected where the patient had been an intermittent drinker of good previous personality, with satisfactory work record, close personal ties to at least some one person, married and seeking help for the first time. Sex, age, duration of drinking, type of work and social class were among features of no prognostic significance. Of the features of prognostic significance mentioned by Glatt, psychopathic personality is stressed as carrying a particularly bad prognosis. Mindlin (1959) constructed and validated a prognostic index for use in selecting alcoholics most likely to benefit from out-patient treatment. The index is based upon eight characteristics. Four of those are socio-economic, including marital situation and socio-economic resources when applying for help, and four are psychological and include the quality of motivation in seeking treatment and the level of current intellectual functioning. All of these features showed statistically significant differences between out-patient failures and success.

A profile of the patient with good prognosis,

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similar to that described by Davies *et al.*, is suggested by the present data, i.e. first admission to hospital of a patient with good previous personality who is married and still living with his wife and who is willing to accept after-care either through attendance at the Out-Patient Department or in the fellowship of Alcoholics Anonymous. More active treatment might give these features greater statistical significance.

The National Health Service policy, encouraging the establishment of regional clinics for the treatment of alcoholism, will, no doubt, have its effect in due course. Although some beds will be required to initiate treatment in some cases, admission to hospital is frequently unnecessary and as Straus and Bacon (1951) point out, the Out-Patient Clinic is especially useful for the alcoholic whose social stability has not yet been substantially impaired. It would seem that the emphasis in management should be placed on out-patient care and an active after-care service for those patients who have been admitted to hospital to help them when they are no longer in a sheltered hospital environment. Alcoholics Anonymous have an important part to play in the rehabilitation of the alcoholic, but not all patients can accept their approach to the problem, and participation in the fellowship of Alcoholics Anonymous should not be made an essential part of the programme.

Summary

Sixty-eight male alcoholics who were admitted to a general hospital psychiatric department in one year were studied. Both addictive and non-addictive alcoholics were included. Patient data concerning socio-economic background and previous physical and mental health are given and these are examined for factors of prognostic significance. Progress is considered in terms of drinking behaviour, social adjustment, work record, re-admission to hospital, physical and mental health and association with Alcoholics Anonymous; comparing the two-year follow-up period with a similar period before admission. The results of "first aid" management of the alcoholic without adequate after-care are criticized, and the inadequacy of this common approach is emphasized by the poor results in this series where 30 per cent. suffered further deterioration and only 25 per cent. were improved.

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