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Alcoholics
A Twenty Year Follow-Up Study

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Summary: A 20 year follow-up on 133 alcoholics was carried out. Tracing methods are outlined and the difficulties reviewed. A questionnaire was completed by 40 subjects concerning drinking outcome, aids to recovery and morbidity. Mortality data are outlined and discussed for the 53 subjects who died during the follow-up period.

Follow-up studies on chronic disorders have several purposes. Information about the natural history of a disorder, termed "completing the clinical picture" by Morris (1975), which includes morbidity and mortality data, is one. Also, therapists benefit from knowledge of the coping strategies of patients. In doing this long term follow-up study of patients with a diagnosis of alcoholism, we were interested in the following: (1) the problems of tracing in a retrospective study after such a long period of time; (2) the outcome as regards drinking pattern and other indices such as morbidity and aids to recovery; (3) information about mortality over a 20 year period.

Method

St John of God Hospital is a 200 bed private psychiatric hospital on the south side of Dublin. The patients were exclusively male until 1968. The hospital deals with all types of psychiatric disorder and is regarded as having a special interest in the treatment of alcoholism. The study group comprised first admissions to the hospital, in 1964, with a diagnosis of alcoholism. The cohort numbered 133. Changes of address, as far as possible, were noted using hospital charts and telephone directories. A letter was sent to each subject introducing ourselves and the project. We enclosed a stamped-addressed envelope to facilitate the return of the acceptance form. This form had a space for changes of address where applicable. We constucted a simple six-item questionnaire (Appendix).

Much effort was then employed in trying to trace non-responders. Telephone calls to these subjects, or other contacts, were made where possible. If contact was still not effected, the local Gardaí (police) were then contacted. They were of particular value in tracing people in rural locations. House calls to the original address to interview the current occupants and neighbours were sometimes useful. The general practitioners were useful in some cases. The Consular Section of the Department of Foreign Affairs was very co-operative, but unfortunately not very productive, in trying to help us trace subjects who had emigrated. Finally, the death certificate registration offices and coroners offices were consulted. Copies of death certificates were obtained for the subjects we knew were dead from our files and from the responses to our enquiries. Through the same agencies we also tried to determine if non-responders were deceased.

Results

We obtained a response of 93 (69.9%) of the cohort of 133. Of these, 53 (57%) were dead and the remaining 40 (43%) completed the questionnaire. One person refused to take part in the study because he claimed he had never been in the hospital. Our records showed, however, that he had been admitted twice to St John of God Hospital, once on a Temporary Certificate (Committal Order). He was not included in the response group although he was traced successfully. The average age of the study group in 1964 was 48 years (range 24–79 years). Forty people completed the questionnaire, as mentioned above, and their average age was 60.8 years (range 48–83 years).

Drinking behaviour

Of the 40 who responded to the questionnaire, 13 were still drinking. Six of these described themselves as social drinkers and seven as problem drinkers. Twenty-seven said they were not drinking and estimated the length of period of abstinence. Nine said that they had been sober for between one and five years; seven for between six and 10 years; two for between 11 and 15 years; and, of interest, nine for between 16 and 20 years (six of this group claimed sobriety for 20 years).

Hospital admissions

All but one of the 40 respondents had been admitted to hospital during the 20 year follow-up period. Thirty had been admitted to a psychiatric hospital. In this group 28 said they were admitted for alcoholism, with an average admission rate of 6.9. Two people had admissions for manic-depressive psychosis and two people for diazepam addiction. It is interesting to note that these latter four patients were sober for periods ranging from nine to 20 years. Of the group of 40, 30 said they had been admitted to a general hospital during the last 20 years. The average general hospital admission rate was 1.7. Altogether, seven had been admitted with injuries; six with central nervous problems; three with cardio-vascular problems; one with respiratory problems; 13 with gastro-intestinal problems; five with genito-urinary problems; and two with malignancy.

Morbidity

This section contained a list of four disorders often associated with alcoholism. Peptic ulcer disease was the commonest with eight of the 40 having suffered from it.

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Three had Tuberculosis diagnosed before admission to hospital in 1964. Liver disease was diagnosed in four subjects over the 20 year follow-up period and four had cerebro-vascular accidents. One person had alcohol related cerebellar ataxia and associated peripheral neuropathy.

Legal problems

Of the entire study group of 40, five said they had been convicted of drunken driving over the 20 year period. One was convicted of dangerous driving which was not alcohol related, one of being drunk while in charge of a vehicle and one convicted of embezzlement. None of those convicted of a crime served a prison sentence. The remaining 35 respondents said that they had no convictions during the follow-up period.

Marital status

In 1964, 33 of the original group were married and seven were single. All of the married group remained married (but one is now a widower). In the single group, three have remained single, one being a catholic priest, four of this group were married during the follow-up period but three are now separated.

Aids to recovery

Of the 40 respondents, 20 said AA helped: in this group, five of 18 were sober for 20 years; there was one problem drinker; and one was a social drinker. Twenty said that AA was of no value to them: in this group, there was only one of nine who was sober for 20 years; six were problem drinkers; and five were social drinkers. In the two groups, the average number of years sober was 10.9 and 3.7 years respectively. As regards psychiatric admission, 17 said they found this useful and 23 did not. Psychiatric advice, similarly, was found useful by 18 and not useful by 22. Twelve people found AA and psychiatric intervention of benefit. Only 10 people found the gp's advice useful. This group included three problem drinkers but also three who were sober for 20 years. Seven considered that the four forms of aid were useful; but they were considered unhelpful by 10 people. Among this group there were three problem drinkers.

Mortality

From our enquiries and from hospital records we identified 53 of the original sample who died during the follow-up period. The average age at death was 64.5 years. Death certificates were obtained for 46 of these and this figure was used to determine the percentages relating to the causes of death. Failure to obtain death certificates was due to emigration before death or lack of details necessary to obtain them. Of this group, 18 died of cardiac disorders, 15 of myocardial infarction. Malignant disease accounted for 11 deaths, the commonest type being carcinoma of the lung, with three cases. Three people died from cirrhosis of the liver. Three died from respiratory conditions; two of vascular disorders; three of stroke; one of peptic ulcer; two of accidents; and one of suicide. These deaths were compared, in percentages, with those for the Irish population (Annual Report, 1979). Twenty-four per cent of the study group died of malignancy, compared with 18% for the Irish population. The corresponding percentages for heart disaease and chronic liver disease and cirrhosis were 39% v 36%, and 6.5% v 0.3%, respectively.

Discussion

Our initial problem was tracing the subjects in the study. The importance of tracing in follow-up studies is discussed by Sims (1973) and he gives details of a comprehensive protocol he used. His experience refers to tracing in the British NHS setting. St John of God Hospital is a private psychiatric hospital and consequently has no catchment area. As a result, our subjects came from all over Ireland and 10% came from abroad. Our longer follow-up period probably means that our smaller percentage of tracings, 69.9% in our study as compared to 94.5% in Sims' study, is at least partly explained by the greater than expected number of changes of address, and deaths.

Recording telephone numbers and addresses of family members or friends where appropriate, at the time of admission, is extremely important for future successful tracing. When this type of information was available we found it very helpful. The Gardaí (police) provided the house calls in the areas outside Dublin where house calls would have been impractical for the research team.

As regards drinking outcome, of interest is that a significant proportion of the respondants, six described themselves as social drinkers. In a study by Edwards *et al* in 1983, it was noted that eight (11.8%) were in this category. These presumably comprise some subjects who were never really addicted or members of the small proportion of alcoholics who, as Edwards *et al* suggest, can return to a stable pattern of social drinking. Lemere (1953) in his examination of the life histories of 500 deceased alcoholics, found that three per cent returned to drinking moderately. These were the exceptions, he said, which make the alcoholic try again and again to drink normally.

Alcoholics Anonymous was found valuable in a greater proportion of our interviewees (50%) than in the Edwards *et al* study (22%). Perhaps this represents cultural differences between the two groups because of the spiritual component of the AA programme. Among our respondents 10 (25%) found the gp's advice useful. This compares with the Edwards *et al* study in which none of the subjects found the gp very useful and only 19% found this form of help moderately useful. The number of psychiatric admissions was similar in the two studies. There was an average of 6.9 admissions in 20 years in our study and an average of 3.3

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admissions in the Edwards *et al* study over an 11 year period.

Combining our morbidity information we find that 13 (14%) of the subjects about whom we obtained information suffered from malignant disease. Eleven (12%) died from this disorder. Malignancies of the GIT were the commonest overall. The association between alcohol and cancer is reviewed by MacSween (1982). He says that the association between cancer of the upper GIT and alcohol is epidemiologically well established, but smoking may also contribute to carcinogenesis in that area. Peptic ulceration occured in four subjects and complications of peptic ulceration were the main cause of death in another. The question of whether there is a causal relationship between alcohol consumption and peptic ulcers is reviewed by Chick (1982) and Langman & Bell (1982). Both reviews conclude that there is insufficient evidence for a causal link and that it is unlikely that alcohol causes peptic ulcers. In our study three were diagnosed as having liver disease and three died of cirrhosis. This topic is reviewed by Sherlock (1982). She draws attention to the fact that cirrhosis is on the increase. It is the fourth commonest cause of death in white American males and it has increased by 25% as a cause of death in the UK over the past decade. The prognosis, she says, is better than for other forms of cirrhosis. It depends on the subjects ability to abstain from alcohol as this significantly affects the outcome. In conclusion, this study attempted to clarify some issues about the long term follow-up and outcome of alcoholism. The problems concerning the bias due to non-response and the validity of self-reporting, as Clare (1977) points out, will need further work to solve. Also, the usefulness of the various approaches to treatment need continuing critical appraisal.

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Appendix

Study group number
Please tick appropriate answer

(1) Do you drink alcohol yes..... no.....
If yes, is it; (a) social drinking..... (b) problem drinking..... if no, how long have you been off alcohol (years).....

(2) Have you been admitted to hospital since 1964 yes..... no.....
If yes, please state: (a) psychiatric hospital (1) number of times..... (2) diagnosis..... (b) general hospital (1) number of times..... (2) diagnosis.....

(3) Have you suffered from or been diagnosed as having: (a) ulcers (i.e. stomach, gastric or duodenal ulcers) yes..... no..... (b) T.B. (tubeculosis) yes..... no..... (c) liver disease or cirrhosis yes..... no..... (d) stroke yes..... no..... (e) other, please state:.....

(4) Since 1964 have you (a) been convicted of drunken driving yes..... no..... (b) been convicted of anything other than drunken driving yes..... no..... If yes, please specify:.....

(5) Are you single.....; married.....; separated.....; remarried yes..... no.....; widowed.....; remarried yes..... no.....

(6) Did you find any of the following useful (please tick) Alcoholics Anonymous (AA) yes..... no.....; psychiatric admission yes..... no.....; psychiatic advice yes..... no.....; gp's advice yes..... no.....; other, please specify.....

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