

is secret, public safeguards appear to be prejudiced and justiciary investigation of circumstances hampered by lack of authority to assess the alcohol factor in every case.

Death and mutilation occurred in several instances in this series. The handicap of deficient evidence was manifest in that in no case was a charge of driving under the influence of drink proffered.

Summary

Evidence is presented that alcohol is a factor in many accidents requiring hospital attendance. The preponderance of accidents in relation to the evening licensing period and the high percentage of "unsafe" drivers during this period is referred to, and the protection from police investigation afforded to drunken drivers in hospital is discussed.

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SUICIDE IN ALCOHOLICS

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Many alcoholics kill themselves. Though this association between alcoholism and suicide is widely recognized it is poorly documented.

Reports of the frequency of suicide in alcoholic populations are rare. Gabriel (1935) reported that 21% of a group of inebriates subsequently committed suicide, and Dahlgren (1945) found 34 (20%) suicides out of 174 alcoholics for whom the cause of death was known. Lemere (1953) collected from patients narratives of 500 deceased relatives whose drinking had constituted a problem; 55 (11%) had committed suicide. Norvig and Nielsen (1956) found 15 (7%) suicides during a five-year follow-up of 220 male alcoholics discharged from hospital. Reversing the procedure, Robins *et al.* (1959) obtained histories in 119 out of a consecutive series of 134 suicides and discovered that 31 (26%) had been chronic alcoholics. Sullivan (1900) demonstrated high suicide rates in occupations where alcoholism was rife and also anticipated Bandel's numerous observations (summarized by Freudenberg, 1931) of parallels between regional and secular fluctuations in alcohol consumption and male mortality in general and suicide in particular.

The Investigation

Here we report the incidence of suicide in two series of chronic alcoholics. The first consists of 131 consecutive voluntary patients discharged from the Maudsley Hospital after treatment of alcohol addiction; the features of this population have been described by Davies *et al.* (1956), and one of us (N. K.) had at some time attended most of them. Follow-up was from 12 months to 11 years after discharge, the mean being five and a half years. There were 110 males and 21 females, all first admissions to the hospital. The second series comprised 87 patients (62 males and 25 females) admitted to St. Pancras Observation Ward in London, not always for the first time. Their case notes were necessarily less full, but no patient was included in the

series unless at least five years of excessive drinking was recorded. Follow-up in all cases in this series was between four and five years. A few patients were fortuitously common to both series; these included two suicides.

Follow-up information was to hand for most of the Maudsley cases but not for the St. Pancras series. Alcoholics are elusive, frequently changing address, so that even their immediate kin may not know their whereabouts; therefore the laborious process of tracing them often ends in failure. As we were concerned only with suicides, whenever our information was incomplete we searched the quarterly alphabetically arranged death registers in the General Register Office. Where a death was entered corresponding in name and age to one of our subjects we purchased a copy of the death certificate, making sure from the additional data thereon that it did refer to our subject. When necessary the information about the cause of death was supplemented by obtaining a transcript of the inquest proceedings. By this method, apart from changes of name, we made sure of tracing all deaths in England and Wales. Our results for suicide are minima, however, because we would not know of deaths in Scotland, Northern Ireland, or abroad.

All except four of the cases we have counted as suicide were so recorded on the certificate. Our detailed knowledge of the circumstances surrounding the four exceptions allowed us, however, to come to a firm conclusion that the subjects had encompassed their own deaths. Two of these subjects were cases of paraldehyde poisoning, one was a case of coma of unknown origin, and the fourth, who had during a six-months period been admitted several times to different hospitals after suicide attempts, was found drowned a few days after his latest discharge. We have not included the unnatural deaths of two subjects who met their end in road accidents, nor that of another found dead with two empty port wine bottles beside her bed.

No woman committed suicide. Of the men 9 (8%) of the Maudsley series and 4 (7%) of the St. Pancras series killed themselves (Table I). This is some 75 to 85 times the expected figures for males of their ages in Greater London, calculated from the Registrar-General's (1960) report (Table II). The suicides were of similar age to the other alcoholics but younger than the generality of suicides in London.

TABLE I.—*Deaths Among Alcoholics*

	Maudsley Series		St. Pancras Series	
	Men	Women	Men	Women
No. of alcoholics	110	21	62	25
Suicides	9	—	4	—
Other deaths:				
Road accidents	1	—	1	—
Found drunk and dead ..	—	—	—	1
Anaesthetic death	—	—	—	1
Natural causes	3	1	2	—
Total deaths	13	1	7	2

TABLE II.—*Age of Male Alcoholics and Suicides Expected and Observed Number of Suicides*

Age	Maudsley Series. Average Follow-up 5½ Years						St. Pancras Series. Average Follow-up 4½ Years			
	15–	25–	45–	55–	65+	All Ages	25–	45–	55+	All Ages
No. of male alcoholics ..	1	77	24	7	1	110	35	22	5	62
No. of suicides	—	6	3	—	—	9	2	2	—	4
Expected No. of suicides in Greater London during same period as follow-up	0.0002	0.0585	0.0318	0.0144	0.0325	0.1074	0.0218	0.0238	0.0066	0.0522
Ratio of observed to expected suicides (all ages)						86 : 1				76 : 1

We could find no feature which distinguished, during their stay in hospital, the subjects who committed suicide from the other alcoholics. We know, however, for the Maudsley series that all but one of the suicides had reverted to heavy drinking.

The length of time between discharge and suicide is of interest for the Maudsley subjects, all first admissions. The figures in months are: 2, 11, 13, 13, 19, 21, 32, and 45. The 15 suicides reported by Nørvig and Nielsen all occurred within three and a half years of discharge from hospital.

Discussion

Our concern has been to show the very high risk of suicide for the alcoholic. Two different groups of chronic alcoholics—one composed of people voluntarily subscribing to treatment for addiction and the other of people committed to an observation ward for a variety of causes of which attempting suicide was one—have similar high rates. Both groups had come to psychiatric notice, but it is not safe to believe that such patients have a higher suicide rate than other alcoholics. The alcoholic suicides in the series of Robins *et al.* included many who had recently been in hospital, more often receiving general medical than psychiatric care. Of their alcoholics who committed suicide 77% had previously disclosed their intention. They conclude: "The high frequency of suicidal communications in . . . alcoholics suggests that public education concerning the seriousness of this behaviour . . . may be helpful in reducing the suicide rate." Certainly the seriousness of the risk of suicide has to be appreciated, and our findings indicate that it is particularly important that male patients, especially those who revert to drinking, should be observed closely for some years after discharge. Usually it is just these "failures" who escape follow-up.

Whether there is an underlying psychopathology common to excessive drinking and suicide is a matter only for speculation. Such a belief is often expressed: for example, Wallinga (1949) writes: "An underlying personality disturbance which finally was brought to medical attention through an attempt at self-destruction has been previously evidenced for a prolonged length of time by the refuge in alcohol." Menninger (1938) has more tersely referred to alcoholism as "chronic suicide." Such psychologizing tergiversations are unnecessary here, but our results disprove the corollary that because heavy drinking is a substitute for suicide alcoholics rarely commit it.

Summary

In two series of 131 and 87 chronic alcoholics, 8% and 7% respectively of the males killed themselves within a few years of discharge as in-patients.

A simple technique of follow-up to ascertain the number of subjects who are dead is described.

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Draft regulations published by the Ministry of Labour require occupiers of certain factories and other premises in Great Britain to nominate a responsible person to be always available during working hours to summon an ambulance. The premises to which these regulations apply are blast furnaces, copper mills, iron mills and foundries, metal works, saw mills, factories in which articles of wood are manufactured (where any of these places employs 500 or more people), and all chemical works. They replace a requirement under the Factories Act, 1937, that occupiers of factories shall provide and maintain an ambulance unless they have made arrangements for one to be obtained. (Draft Blast Furnace and Saw Mill's Ambulance (Amendment) Regulations, 1961, H.M.S.O., price 3d. net, and Draft Chemical Works Ambulance (Amendment) Regulations, 1961, H.M.S.O., price 2d. net.)