

ALCOHOL AND THE SOLDIER

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One hundred and fifteen cases of alcohol dependence syndrome admitted during a two year period in a zonal referral hospital were studied. The majority of the subject were between the age of 30 to 50 years and had more than 10 year's history of alcohol abuse. 19.26% of the subjects had to be invalided out of service. 66.09% remained under various categories of observation after the treatment. At the end of two year's follow-up only 12% of them had recovered completely. Preventive measures in the light of state policies are discussed.

Article 47: "The state shall endeavour to bring about prohibition of consumption except for medicinal purposes of intoxicating drinks and of drugs which are injurious to health".

The constitution of India : Directive principles of State Policy.

In establishing prohibition as a goal for the nascent Republic the founding fathers recognised a tragic truth : that alcohol has plagued human happiness since the beginning of recorded history (Chafetz, 1975). In practice, however, national policy in this respect has wavered between the two faces of Janus. The moral commitment to progressive prohibition of alcoholic beverages has coexisted with a phenomenal increase in their production and consumption. In 1973, 1974 and 1975 the Government of India approved a series of measures aimed at reducing alcohol consumption and preparing for total prohibition. These did not have the desired impact, and the Government resolved that from Oct 1975 a minimum programme for prohibition should be pursued by the states. By 1980, however, it had become evident that this goal had not been attained. In fact, as a "result" of implementation of the prohibition programme in the first year,

Punjab showed an increase of 30% in the consumption of country liquor. In view of such reports and the great revenue loss suffered by the State Governments on account of reduced (legitimate) production and sale of alcohol, the prohibition programme was revoked in most states by 1981 (Singh, 1984).

The potentially detrimental effects of alcoholism for the individual, his loved ones and society are legion. As Bengelsdorf (1970) points out, "its abuse has killed more people, sent more victims to hospitals, generated more police arrests, broken up more marriages and homes, and cost industry more money than has the abuse of heroin, amphetamines, barbiturates, marijuana combined". In recent years alcohol abuse has reached menacing proportions. In the UK alcohol consumption has roughly doubled over the last 20 years (WHO Euro Report, 1989). In the USA over 13 million people - 7% of the adult population are alcoholics. Alcoholism costs the Americans an estimated 43 million dollars annually in terms of lost industrial production, health-care, accidents and crime (US Dept of HEW, 3rd Special Report, 1979). It is a major contributor to half of the motor vehicle accident fatalities and nearly 30% motor vehicle related injuries. According to a

WHO report, India records the highest road fatality rate in the world at 61.1 deaths per 10,000 motor vehicles, compared to just 4.7 deaths per 10,000 vehicles in the USA (Singh, 1984). Although a number of factors are responsible for these accidents, the contribution of alcohol abuse in a large majority of these cases can not be ignored.

The differentiation between alcohol use and abuse is a complex one, and the general attitude is one of ambivalence. Many social groups establish specific contexts permitting and forbidding alcohol use, and alcohol tends to be abused least when norms for its use are narrowly defined and social punishment for abuse is strict (Miller, 1976).

Price, fiscal policy, licensing laws, advertising and health education are four areas in which a response to the alcohol problem can be considered. In recent years, alcohol consumption in France has fallen considerably because a member of the Cabinet has been entrusted with direct responsibility for alcohol related problems (Anderson, 1989).

The disappointing results of psychiatric treatment of alcoholism have turned greater attention towards prevention (Oxford & Edwards, 1979) and one of the methods proposed is the identification of those genetically predisposed to alcohol dependence. This does not, however, appear possible in the present state of our knowledge. Preventive psychiatry therefore needs to shift the focus back to controllable social variables which can be modified to reduce the risk to such genetically vulnerable potential alcoholics.

It was in this aforesaid context that the present study was conceived. The Armed Forces constitute an important subculture representing a cross section of the population wherein easy availability of alcohol coupled with an established tradition of social drinking and exposure to greater stresses, physical as well as psychological, provide a convenient environment for the development of alcohol dependence in susceptible individuals. A pilot study was therefore undertaken on a general hospital psychiatric population representing a cross-section of the services with the following aims:

- 1) To study the environmental variables affecting alcohol intake, and
- 2) To find out the outcome of therapy derived mainly from Carl Roger's client centered approach (Rogers & Sanford, 1989).

MATERIAL AND METHODS

The study was conducted in the department of psychiatry, Command Hospital, Western Command, Chandigarh (Now at Chandimandir) during Jul 88 to Jun 90. This 60 bed psychiatric unit of a 630 bed zonal referral hospital receives referred cases from fifteen peripheral hospitals and medical units, including those located at high altitude and in active operational areas. The patients who satisfied the following criteria were included in the study:

- a) The patients abused alcohol and showed a compulsion to drink on a continuous or peri-

odic basis ; abrupt withdrawal of alcohol produced withdrawal symptoms.

b) None of the patients had been hospitalised earlier, or had received treatment; review cases were excluded from the study.

c) None of the patients had abused other chemical substances, or received psychotropic drugs.

d) None of the patients had organic brain dysfunction or major physical illness; relevant investigations were carried out to exclude these.

Diagnosis of alcohol dependence syndrome was made as per the criteria incorporated in ICD-9. The patients were examined by two experienced psychiatrists independently, and on their unanimity in diagnosis of alcohol dependence syndrome a subject was included in the study. All patients were subjected to abrupt, forced abstinence. Withdrawal symptoms were managed along conventional lines. Vitamin supplements were given to correct possible thiamine deficiency. In most cases this initial phase of management (detoxification) had been completed along the above lines in the well equipped and staffed peripheral hospitals from which a majority of such patients were evacuated to our centre.

Since maintaining sobriety involves a change in the whole person (attitudes, conduct and emotional make up), intensive reeducative psychotherapy was undertaken to effect a global change in life style. It was based on Carl Roger's central hypothesis that "each person has within himself vast resources for self under-

standing and for constructive changes in ways of being and behaving, and that these resources can best be released and realised in a relationship with certain definable qualities" (Rogers & Sanford, 1989).

As a first step the life history of the patient was reviewed with him and the situational profile at the time of onset of drinking identified. The evolution of "social" drinking into "abuse" drinking, and then on to dependence was reconstructed with the active involvement of the patient. The situational stress or "cues" apparently responsible for problem drinking emerged from this discussion. The costs (social, economic, physical) of alcohol abuse to date were quantified, and a rough prediction for the future (if the current pattern of drinking continued) attempted. Therapist's own limitations in ensuring future abstinence was clearly stated. The vital role of the individual's own potential in this regard was emphasised. At this point the individual's self actualisation process was facilitated, and he was encouraged to make a here and now choice. He was to assume full responsibility for his life, without trying to find any situational scapegoats. The paths were plain, the choice was his. He could gather all his resources (social, psychological, spritual) and go the way of total, lifelong abstinence or he could let history repeat itself and, despite any situational alibis he might concoct, face the inevitable consequences. Regarding the first of these consequences the therapist could unequivocally assure the individual : inevitable invalidment from service if alcohol abuse continued.

The medical guidelines for the Armed Forces specify invalidment of individual who relapse repeatedly and who make no conscious effort to abstain from alcoholic drinks (DGAFMS, 1987). The patients were therefore made aware of the fact that they might stand to lose their livelihood if they did not make a sincere effort to abstain from alcohol once they were out of the hospital environment. It was made clear to them that sheltered appointment in low medical category (LMC) was not the end but a means to the end, i.e., total lifelong abstinence. Failing this they would be invalided out of services.

Follow up of treated cases in the Armed Forces is automatically ensured. A patient placed in low medical category (BEE or CEE) automatically reports for review to the hospital every six months, along with a report on a structured proforma ("AFMSF-10") from his CO (Commanding Officer) in respect of his behaviour, general conduct, efficiency etc over the preceding period. For individuals discharged from hospital in medical category "Aye" (fit for all duties), we have introduced a new proforma ("AFMSF-10-A") on which follow up data are obtained every six months. While such monitoring in medical category "0" (Observation) is still continuing (and we hope to report 5 year outcome data in a later communication), a period of two years after initial discharge from hospital was taken as the cut-off point for the purposes of this study.

OBSERVATIONS AND ANALYSIS

Out of a total of 822 consecutive admissions during the two year period, cases of alcohol dependence syndrome numbered 115.

The mean age of all psychiatric cases was 29.8, compared to 37.2 for the alcoholics. Average length of service of the psychiatric cases was 10.6 years compared to 16.3 for the alcoholics, and average length of stay was 15.37 days compared 17.72 for alcoholics. Not unexpectedly soldiers from the Arms (fighting elements, eg, infantry) are over-represented in the sample. This probably reflects the troop-mix (arm/services) in this operational Command (Table - 1). The alcohol problem seemed to be significantly higher among GREF (Border Roads Organisation) personnel who live for prolonged periods in isolated snow-bound border areas, where even basic facilities are at a premium. Defence personnel in general are exposed to considerably greater stresses, physical as well as psychological as compared to their civilian counterparts. Paradoxically, however, specific service stresses do not appear to play a significant role in the psychodynamics of alcohol abuse, as revealed in the percentage of alcoholics in HAA and field areas as compared to peace locations (Table - 2). This accords with earlier observations in respect of stress-related psychiatric morbidity among defence personnel (Goel, 1974; Goel, 1975).

As a part of military tradition rum used to be issued free to jawans on an average 8 to 12 times a month, and on special occasions (eg Independence Day, Republic Day and Corps Anniversary). In addition the soldier could buy liquor on payment within certain limits (2 large pegs) 2 to 3 times a week. Some enterprising souls were however, able to obtain it more frequently from various sources. Free issue rum has been withdrawn since 1985. Rum-allowance has taken its place. Liquor at concessional rates

Table - 1 : Service Profile

Defence Services	No. of Cases	Percentage
ARMY	38 (60.31%)	
ARMS SERVICES	25 (39.68%)	54.79%
AIR FORCE	24	20.87%
NAVY	00	00
GRAF	17	14.78%
DSC	9	7.82%
ITBP	1	0.87%
SCOUTS	1	0.87%

$$\chi^2 = 65.02, \text{d.f.} = 6, p < .01$$

Table - 2 : Environmental Factors

Locations	No of Cases	Percentage
HAA	15	13.04
FIELD	41	35.65
PEACE	59	51.31%

$$\chi^2 = 0.66, \text{d.f.} = 1, \text{N.S.}$$

Table - 3 : Significance of Rank and Age profile in Alcohol Dependence

Age Group	No of cases n = 115	OR	NCO	JCO
21 to 30 yrs	19 (16.57%)	13	6	00
31 to 40 yrs	47 (40.87%)	5	42	00
41 to 50 yrs	43 (37.39%)	06	28	9
51 and above	6 (05.21%)	5	00	1

$$\chi^2 = 14.78, \text{d.f.} = 3, p < .01$$

Table - 4 : Patterns of Disposal (Medical category) of Alcohol Dependence

Medical Categories	No. of Cases (115)	Percentage
"AYE" (Fit for all duties anywhere)	14	12.17%
	Cat "O"	("Observation")
"BEE" (Not to be posted at isolated location)	23	20%
"CEE" (Sheltered appointment near a psychiatric Centre)	53	46.09%
"EEE" (Permanently unfit for military duty)	21	18.26%
Drop outs	4	3.47%

$$\chi^2 = 87.4, \text{d.f.} = 4, p < .01$$

is, however, still available freely, and the Armed Forces remain a "permissive culture" in this regard. There was a preponderance of abuse of alcohol among the NCO's (66%) and the majority of these were in the age group of 36 to 50 years (Table - 3). The reasons which could be attributed are the ready availability of alcohol in NCO (Non Commissioned Officers) messes, and to their relatively longer length of service, which is also reflected in the longer duration of alcohol abuse; 53.91% had abused alcohol for more than 10 years. A significant number (19.26%) had to be invalided out of service due to poor response to treatment, while

it is gratifying to see that about 20% of the sample had abstained from alcoholic drinks for almost one year or so (Category BEE), only 12.17% of the sample were able to give up alcohol totally at the end of the two year period of observation. They continue to remain under observation in category "O" (Table-4). Four patients who were sent on sick-leave following recovery did not report back to this centre and hence they are shown as drop-outs. Alcohol dependence syndrome forms a significant group causing loss to the state : it emerges as the third most frequent cause of invalidment from service.

DISCUSSION

It is evidence that alcohol dependence constitutes a numerically significant group among the psychiatric population in the Armed Forces (15.35). Considering the fact that soldiers in the Armed Forces are required to remain sober and vigilant for the effective performance of their duty, alcohol abuse constitutes a grave potential threat to combat readiness. It is, therefore, the therapist's concern to identify such individuals, treat them intensively, and return them to duty with appropriate limitations on employability. Since there is no prize for the runners-up in war, the Armed Forces cannot be allowed to become sinecures for the weak-willed. It is, therefore, the therapist's unpleasant duty to weed out firmly those who are unable to remain abstinent after being given a reasonable chance.

This brings us to an area of darkness. The overall, longterm prognosis of alcohol de-

pendence is gloomy. There are no magic cures. Writings on the subject of alcoholism are full of high sounding but vacuous generalisations, of vague descriptions of treatment techniques such as "motivating the alcoholic", "family therapy with the alcoholic", "case work services with the alcoholic", as well as exhortations regarding the value of techniques such as group-therapy, psychodrama, and nondirective therapy. No therapeutic approach seems tailored specifically to the special requirements of the alcoholic. If he seeks professional help he will probably be treated either through dynamically oriented techniques in a one to one therapeutic situation, or in some form of group-therapy. A notable exception to this state of affairs is the attempt of behaviour therapists to develop techniques aimed at removing the behavioural cues of excessive drinking (Claude Stainer, 1971). Poorly substantiated and largely exaggerated claims are often made for the success of Alcoholics Anonymous ; in actual fact, however, only some impact on the drinking profile of regular members seems likely. Yet AA has been called the "single most effective method of treatment we have", and some of the more modest workers have cited a 34.6% improvement rate among AA members who attended at least 10 meetings (Smart *et al.*, 1989). Such a rate is not very different from that claimed for many clinical and hospital treatment modalities. Our figure of 32.17% (Cat AYE + BEE) in table 4 is a representative of this. It is likely that AA attracts and helps a different type of alcoholic from that seen in clinics and hospitals (Smart *et al.*, 1989). This factor can also perhaps obtain the highly optimistic (13 out of 14 "volunteer" alcoholics) results reported recently in a community based

study conducted in Sough India (Datta *et al.*, 1991). It is postulated that anxiety provoking situations may serve as cues for abusive drinking : situational cue -- anxiety -- excessive drinking -- anxiety reduction. In course of time the cue itself may elicit the drinking behaviour, avoiding anxiety altogether (Miller & Eisler, 1976). It has been suggested that the relationship between stress and alcohol consumption may be complex and related to individual characteristics, type of stress, and the context within which the stress occurs (Allman *et al.*, 1971). The stressful environment in the Armed Forces appears to affect only the susceptible individuals, as is evident from Table - 2 wherein field/high altitude areas (HAA) account for only 48.69% of cases compared to the subjects from peace locations who constitute 51.31%. One would have expected a higher percentage of alcoholics in the HAA and field areas because of the extremely cold climatic conditions and anxiety provoking/stressful situations which often serve as an "excuse" for the abuse of alcohol.

Since treatment at best cures only a third of the alcoholics, much greater emphasis needs to be placed on prevention. The most effective measures in this direction would be a steep rise in the price of alcohol. Kendell (1979) regards alcoholism as a political problem, amenable to measures reducing easy availability. Withdrawing the "time honoured" liquor concession from the defence forces offers a major strategy option in this regard. The benefits will be many. Canteen liquor prices will rise to the open market level, thereby plugging a major source of revenue loss to the state. The psychological impact on the soldier would, however, transcend the economic argument. State sub-

sidy automatically imparts an aura of social approval to the commodity so subsidised. Within the military fraternity alcohol has had a traditional seal of such approval. It is imperative that this contributory environmental factor be modified in keeping with the demands of time. In the gloomy alcohol scenario any avenue which offers even the slightest hope should be explored. Alternatively, "punitive" measures such as invalidment from service of subjects who relapse seem to be the only answer unless the state pursues a policy of total prohibition.

CONCLUSION

Alcohol Dependence Syndrome constitutes the third largest group among the psychiatric population in the Armed Forces. Preventive measures, forced abstinence, change in attitude towards drinking, and attempts to induce a global change in the individual's mental make up appear to have had a salutary effect only on 1/3rd of the alcoholics treated in this Centre. More stringent measures are needed to combat the preventable loss of human resource accruing from this socially accepted addiction.

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