# POST DISCHARGE DROPOUT OF ALCOHOLICS - A NATURALISTIC STUDY IN A GENERAL HOSPITAL SETTING 

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#### Abstract

In a naturalistic longitudinal design 133 consecutive inpatients with alcohol dependence syndrome were followed up for one year following discharge from the hospital. 59 patients (group 1) paid follow up visit at regular intervals whereas 28 subjects (group 2)never returned despite three consecutive postal intimations. Rest of the patient were irregular in follow up. The individuals in group 1 were compared with those in group 2 on various sociodemographic and clinical variables with the aim of delineating the characteristics that could define the alcoholics who dropped out following discharge. It was found that such patient were relatively younger with lower level of education, less frequently married. had earlier onset of problem drinking with poor social support and higher rates of mental problems. It was concluded that post discharge attrition of alcoholics could be a social as well as a clinical problem in any setting rendering long treatment for alcoholism.


Key words: alcohol dependence, treatment dropout, long term follow up.

Dropout from treatment following discharge from the hospital in mental health care is well known in almost all types of settings. However in the field of alcoholism this could be a matter of serious concern due to several reasons. Alcoholism is a chronic relapsing disorder (WHO Expert Committee on Drug Dependence, 1993) and so needs therapeutic attention over a time far beyond the initial intervention for a few days to weeks. Secondly, inpatient treatment of alcoholic patients in any set up is fairly expensive and in unaided organizations the cost is often borne by the individual himself. Dropping out early in the treatment naturally renders the endeavour cost ineffective. Finally, the patients lose an opportunity to change their harmful habit and recover from alcohol related tissue damage, at least, for the time being

Normally the phenomenon of attrition is accepted as an unavoidable part of the naturalistic longitudinal studies in alcoholism. This could be the reason why the problem has not been
systematically studied by the researchers. However, considering the fact that post discharge dropout invariably introduces an element of uncertainty to the parameters of outcome of alcoholism the matter could be resolved in two ways. One is by paying home visits and actually finding out about the status of drinking behaviour of the patients. The second way is to look back at the defining characteristics, if any, of the individuals dropping out from the treatment. The information is likely to alert the clinicians to recognise these individuals early and offer them additional help to make them stay in treatment for the desirable length of time. The present study was carried out with the sole objective of finding out whether the patients who drop out following discharge have certain social or clinica! characteristics in common.

## MATERIAL AND METHOD

The study was conducted in the Department

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of Psychiatry,Kasturba Medical college, Manipal. Patients with alcoholism are referred from other medical departments of this hospital as well as other hospitals. The patients are usually treated in an inpatient setting by a multi-disciptinary team consisting of psychiatrists, clinical psychologists and psychiatric social workers

The design of the study was naturalistic, longitudinal and prospective Patients ( $\mathrm{N}=133$ ) with alcohol dependence syndrome consecutively admitted over 1993 to 1995 and followed up for one year were considered for the study. Patients with multiple drug use (excepting nicotine) were excluded from the study.

Alcohol dependence syndrome and mental comorbidity were diagnosed according to ICD-10 criteria (WHO, 1992). A semistructured interview schedule was used to collect information on : (i) socio-demographic data viz, age, religion, marital status, education and occupation. (ii) age of onset of problem drinking: this was determined following the method of Babor et al( 1992) i.e. averaging the ages at four milestones in the drinking career of the individual viz, daily drinking, heaviest drinking or getting intoxicated, development of dependence and first diagnosis of dependence (iii) previous days of abstinence, (iv) previous times of treatment undergone for alcoholism and alcohol related problems. Presence or absence of family history of aicoholism was decided according to Family History Fesearch Diagnostic Criteria \{Andreasen et al, 1977). Alcohol related psychosocial problems (Interrpersonal, occupational, legal and sexual) were rated according to Quantitative Inventory of Alcohol Disorders (QIAD) (Stinnett and Schechter, 1983) in order to indicate the severity the total score obtained for an individual was further graded as absent (0),mild(1-4), moderate (5-8) and severe (9-12). Social support for an individual subject was graded on a four point scale (Very poor to very good) according to the clinician's assessment of the economic status of the individual and the family and the sources of emotional and material support. Medical and neurological diagnosis were made according to the physician's reports obtained in the liaison
services for every patient.
Following detoxification, all patients were offered a multimodal treatment package.

The latter consisted of disulfiram treatment (advised for at least a year), behaviour (aversion) therapy, psychoeducative group therapy and counselling for the individual as well as the key family members The package was modified according to the patient's physical state or when a written informed consent could not be obtained. Prior to discharge all the patients along with the relatives were explicitly instructed to visit the outpatient clinic for continued counseiling and disulfiram treatment monitoring. Follow up was planned once in two weeks for the first one month then once a month for two months and subsequently once in two to three months. Postal intimation was sent to those who did not turn up for follow up Home visits were not feasible and were not paid in our setting.

59 patients (designated as group 1) completed regular follow up for one year. 28 patients (group 2) never turned up for any follow up following discharge from the hospital. This was in spite of the postal communications sent to them over three consecutive months. The remaining 46 patients were irregular in follow up i.e. either dropping out after few visits or resuming follow up in response to postal intimation. They were not considered for the purpose of the present study. The patients of group 1 and 2 were compared on socio-demographic and clinical variables using appropriate statistical tests of significance.

## RESULTS

Of the six socio-demographic variables (Table 1) three could discriminate the patients of group 1 from those of group 2 . The patients who dropped out were found to be significantly younger, less frequently married and educated for less number of years than those who were regular in follow up. Out of six parameters related to alcohol misuse and related problerns (Table 2) the groups could be distinguished on only two .

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TABLE 1
COMPARISON OF PATEENTS IN GROUP 182 ON SOCIO-DEMOGRAPHIC ANO CLINICAL VARIABLES

| Variables | $\begin{aligned} & \text { Group } 1 \\ & (N=59) \end{aligned}$ | $\begin{aligned} & \text { Group } 2 \\ & (\mathbf{N}=28) \end{aligned}$ |
| :---: | :---: | :---: |
| Socio-demographic variables |  |  |
| 1.Age (Meants.d.) | $\begin{aligned} & 42.5 \pm 8.4 \\ & t=2.327 \end{aligned}$ | $\begin{aligned} & 37.9 \pm 8.8 \\ & p=.02^{*} \end{aligned}$ |
| 2.Marital status |  |  |
| Unmarried | $\begin{aligned} & 4(6.8 \%) \\ & x^{2}=9.61 . \end{aligned}$ | $\begin{aligned} & 9(32.1 \%) \\ & \mathrm{p}=001^{\circ} \end{aligned}$ |
| 3. Education Below SSLC | 24(41\%) | 21(75\%) |
| SSLC or bbove | $\begin{aligned} & 35(59 \%) \\ & x^{2}=14.59 \end{aligned}$ | $\begin{aligned} & 7(25 \%) \\ & p=0.04^{*} \end{aligned}$ |

*signiticant
TABLE 2
COMPARISON OF PATIENTS IN GROUP 1 \& $20 N$ VARIABLES OF ALCOHOL USE AND RELATED PROBLEM

| Variables | Group 1 $(N=59)$ | Group2 $(N=28)$ |
| :---: | :---: | :---: |
| A Ae at onset of | $36.5 \pm 7.5$ | 32.147.4 |
| Problem drinking | $t=2.52$ | p<0.02* |
| Previous days of abstinence(life time) | $\begin{aligned} & 193.7 \pm 507.2 \\ & t=0.13 \end{aligned}$ | $\begin{aligned} & 192.84574 .8 \\ & p=0.99 \end{aligned}$ |
| Previous Treatmex |  |  |
| (No | 30(50.8\%) | 18(64.3\%) |
| Taken | 29(49.2\%) | 10(35.7\%) |
|  | $x^{2}=1.06$ | $\mathrm{p}=0.63$ |
| Eamily history of alcoholiem |  |  |
| Present | 36(81\%) | 18(64.3\%) |
| Absent | 23(39\%) | 10(35.7\%) |
|  | $\mathrm{x}^{2} \times .0086$ | $\mathrm{v}=0.26$ |
| Psychosociat Probrems. |  |  |
| Aabsent | 25 | 13 |
| jMild | 25 | 8 |
| Moderate | 8 | 6 |
| Severe | 1 | 1 |
|  | $x^{\mathbf{2}} \mathbf{= 2 . 0 0}$ | d.f. $=3$ |
|  |  | $v=0.9$ |
| 'Social support |  |  |
| Very good | 23 | 0 |
| Good | 30 | 18 |
| Poor | 6 | 7 |
| ivery Poor | 0 | 3 |
|  | $x^{2} \pm 8.25$ | d.f. $=3$ |

TABLE 3
COMPARIBON OF PATIENTS IN GROUP 182 ON COMOREID PROBLEMS AND TREATMENT

| Variables | Group 1 $(N=59)$ | Group2 $(\mathbf{N}=\mathbf{2 8})$ |
| :---: | :---: | :---: |
| Combined Aldedical |  |  |
| Problems |  |  |
| Absent | 34(57.6\%) | 16(57.1\%) |
| Present | $\begin{aligned} & 25(42.4 \%) \\ & x^{2}=0.11 \end{aligned}$ | $\begin{aligned} & 12(42.9 \%) \\ & p=0.44 \end{aligned}$ |
| Comorbid neurologicad Problems. |  |  |
| Absent | 45(76.3\%) | 22(78.6\%) |
| Present | $\begin{aligned} & 14(23.7 \%) \\ & x^{2}=0.05 \end{aligned}$ | $\begin{aligned} & 6(21.4 \%) \\ & p=0.07 \end{aligned}$ |
| Comorbid Psychiatric Problems \& Complicated withdrawal states |  |  |
| Abssent | 41 (69.5\%) | 12(42.9\%) |
| Present | $\begin{aligned} & 18(30.5 \%) \\ & x^{2}=5.65 \end{aligned}$ | $\begin{aligned} & 16(57.1 \%) \\ & v<.0005 \end{aligned}$ |
| Treatment |  |  |
| a. Disulfirum treatment |  |  |
| Received | 52(88.1\%) | 9(32.1\%) |
| dld not receive | 7(11.9\%) | 19(67.9\%) |
|  | $x^{2}=26.15$ | $\mathrm{p}=.000^{\circ}$ |
| (b)Behaviour therapy |  |  |
| Received | 31(52.5\%) | 19(67.9\%) |
| did not receive | 28(47. \%) | 9(32.1\%) |
|  | $x^{2}=3.72$ | $\mathrm{p}=0.07$ |
| (c) Group therapy |  |  |
| Received | 20 | 10 |
| did not receive | 39 | 18 |
|  | $x^{2}=0.027$ | N. 3 |

*significant
Probtem drinking had started significantly earlier among those who dropped out. The level of social support was generally judged significantly better for those who reguiarly paid follow up visits Presence of mental illness (Table 3) were more frequently associated with those who dropped out whereas having a medical or a neurological illness was found to be rather inconsequential. Most interestingly, being on disulfiram treatment significantly determined return to follow up treatment.

## DISCUSSION

More than one fifth of our subjects did not turn up for follow up at all. This is not necessarily

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an alarming rate of attrition. However, in view of the fact that attrition continues to occur throughout the follow up period $21 \%$ drop out of the very outset could, indeed, be hard to overlook

Patients ( $\mathrm{N}=46$ ) who were irregular in paying follow up visits were deliberately kept out of the analysis of the present study. Rather, we compared only those who stood at the extremes of folliow up behaviour so that their differential characteristics coutd stand out clearly.

Previous studies done in tertiary general hospital centres like ours report higher rates of dropout from inpatient treatment viz, $36 \%$ (Nigam et at 1990) and $69 \%$ (Samantray et al 1997) of the patients with heroin dependence left the inpatient detoxification programme. Our study is different from these reports in the sense that we wanted to look at the problem of post discharge dropout among alconolics. Another study (Abraham et al 1997) on outcome of alcoholics did recognize drop out as a major problem but did not provide any data on the problem. The results in this study show that patients who oropped out (group 2) were young individuals with lower level of education (Table 1). They were less frequentiy married and had significantly ( $p<0.01$ )more persons with poor social support. They had earlier onset of problem drinking (Table 2) with higher rates of mental problems (Table3). Before these could be dismissed as common sense findings we would like to raise two issues from these observations. If young men with alcoholism with lower level of education and poor social support fail to engage themselves in long term treatment process then to what extent the matter remains in the hands of the clinician is a matter of debate. In other words one can argue why this should not be viewed as a purely social problem. A recent commentary has alluded to the social dimensions of alconolism in developing countries (Saxena. 1997). The second issue is clinical. On closer examination it was found that of the 16 patients with mental problems (group 2), 12 had delirium tremens during inpatient stay. Probably this was the reason of temporarily withholding disulfiram treatinent in majority of these patients, It is likely that they would have
benefited with longer inpatient stay and more intensive counselling with the family members. However, once again this could have been limited to a certain extent by socio-economic factors.

The phenomenon of treatment drop out has been explained in different ways by different authors. For example, Kravitz et al (1999) have proposed that impulsive behaviour indicated by increased novelty seeking traits among the patients with alcoholism could be the reason of drop out form clinical trials. The problem could also arise as a result of poor matching of the patient characteristics and the treatment structure (Nielsen et al, 1998). Finaliy, Peteet et al (1998) looked at the problem as a failure in movement from action to maintenance phase in the model of change proposed by Prochaska and Di Clemente (1982). It is known that to a certain extent, the matter of dropout is a function of the service resources available in a centre for maintaining post discharge contact with the chents. Paying home visits was not feasible due to certain practical reasons and so remains a limitation of the study.

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