Changing Pattern of Alcohol Abuse in the Army before and after AO 3&11/2001

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Abstract

Background: The Army Order 3&11/2001 was introduced to curb alcoholism and to weed out habitual alcoholics. Hence a study was carried out in a zonal referral hospital from 01 Jan 2001 to 30 Jun 2003 to assess its effectiveness.

Methods: The subjects consisted of officers, junior commissioned officers and other ranks who satisfied the International Classification of Diseases (ICD) 10 criteria for alcohol dependence.

Result: Out of 1023 consecutive admissions, alcohol dependent cases numbered 245 (23.95%). They were disposed as under: 57/245 (23.6%) in S1 (fit for all duties), 67/245 (27.35%) in S2 (fit for duties with few restrictions), 72/245 (29.39%) in S3 (fit for duties with more restrictions), and 32/245 (13.06%) in S5 (unfit for further service.)

Conclusion: The data showed that the percentage of cases disposed under fit for all duties had risen four times (23.80 vs 5.86), those invalidated out increased by two times (12.70 vs 6.64) and those retained in S2 had reduced (26.46 vs 41.21) after the new policy.

MJAFI 2007; 63 : 160-162

Key Words : AO 3 & 11/2001; DGAFMS memorandum 111/99; AFMSF 10; Alcohol dependence syndrome

Introduction

India features as low alcohol consuming country (0.94 litres of absolute alcohol) as against other countries (United Kingdom 9.25, Australia 9.68 and France 14.02 litres) (Global Status report on Alcohol (WHO 1999) [1]. However, the consumption of alcohol in India over the last two decades has increased by 106% vis a vis countries where the consumption of alcohol has declined. Armed Forces too had its share of problems with regard to alcohol dependence and loss of soldier days. The Army Order (AO) 3&11/2001 was introduced to curb alcoholism and to weed out habitual alcoholics [2,3]. Increased consumption of alcohol not only affects the individual but also disrupts his family, social and occupational life, from which recovery is difficult [4]. 20-35% of people seeking help have alcohol dependence [5]. The economic cost of dealing with the sociomedical sequel of alcohol abuse is high and more than 130 billion dollars are spent annually in the United States [6]. An Indian Armed Forces retrospective analysis of two years found that after two years of inpatient treatment, 31.35% alcoholic patients were abstinent, 35.49% showed partial improvement and 33.16% had relapses [7]. Similarly a long term follow up study of military alcohol treatment programme revealed that only 40% of the treatment

group was discharged from the service on normal grounds [8]. Therefore the overall, long term prognosis of alcohol dependence is at best guarded. AO 3&11/2001 [2] and DGAFMS memorandum No 111/99 [3], state that disposal of alcohol dependence and drug abuse cases will be strictly as per the instructions laid down "i.e. if the individual shows a favourable response after treatment, he will be retained in S3 (Temp) for 24 weeks. During this period of observation if he relapses or there is a derogatory AFMSF 10, he will be invalidated out of service. After 24 weeks of observation if the AFMSF 10 is complimentary, he will be upgraded to S2 (Temp) for 24 weeks. During this period if the individual shows signs of relapse and if he is admitted with a derogatory AFMSF 10, then also he will be invalidated out of service. If he has shown good improvement and is abstinent and the AFMSF 10 is favourable, he will be upgraded to S1. Even after upgradation to S1, if the individual shows signs of relapse, he will be invalidated out of service". It is in this context that the present study was planned to assess the impact of the new administrative instructions.

Material and Methods

The study was conducted during 01 Jan 2001 to 30 Jun 2003 at a zonal referral hospital. The subjects consisted of officers, junior commissioned officers (JCOs) and other ranks

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(ORs), who satisfied the following criteria i.e these patients abused alcohol and showed compulsion to drink on a continuous or periodic basis and abrupt withdrawal of alcohol produced withdrawal symptoms. None of these patients had organic brain dysfunction or major physical illness.

The results were then compared with the statistical returns from a zonal hospital of the same Command to exclude any inadvertent bias. Diagnosis of alcohol dependence syndrome was made as per the criteria incorporated in International Classification of Diseases (ICD) 10. All patients were subjected to abrupt and forced abstinence. Withdrawal symptoms were managed conventionally. Vitamin supplements were given to correct possible thiamin deficiency. Since maintaining sobriety involves change in the whole person (attitude, conduct and emotional make up), intensive re educative psychotherapy was effected for global change. The principles enunciated in Carl Rogers hypothesis were followed [9]. The instructions contained in AO 3&11/ 2001 were readout to all the patients for a clear understanding on the subject regarding their disposal. Subjects who were keen on abstinence, who showed motivation towards total abstinence were given S3 category for 6 months. Those already under observation were either upgraded to S2/S1 category, if the unit report stated that they were abstinent and clinical examination showed no signs of abuse or invalided out of service in S5 on unfavourable unit report or signs of relapse.

Result

Out of the 1023 consecutive admissions during the study period, 245 were alcohol related. The comparison of mean age, average length of service, and average length of stay of these cases is shown in Table 1. The present study was comparable to an earlier study conducted by the authors a decade earlier (Table 1). Alcohol problem is significantly higher among defence security corps (DSC) personnel. Though free issue rum was withdrawn in 1985, a soldier gets rum allowance and is issued rum on payment 8-12 times a month. Table 2 shows the breakdown of alcohol cases in various categories. Table 3 shows alcohol as the number one disability among the psychiatric disabilities to be invalided out from service. Table 4 shows the pattern of disposal as compared to that of

Table 1

Alcohol abuse

	Jan 01-Jun 03	Jul 88-Jun 99 (Saldanha et al. IJP 1992)
No of cases	245/1023 (23.95 %)	115 /822 (13.99 %)
Age	35.6/28.82 yrs	37.2 /29.8 yrs
Ser	15.3/10.5 yrs	16.3/10.6 yrs
ALS	19.72/16.87 days	17.72/15.37 days

Table 2

Alcohol cases (n=245)

Category	No	(%)
Officer's	=	18 (7.34)
JCOs	=	66 (26.9)
ORs	=	161 (65.7)
Total	=	245

an earlier study done by the authors before the AO. The number of up gradation went up by four times and those invalided out doubled. The low medical category also reduced by one third as compared to the figures before the AO (Table 7). To avoid the bias in the design of the study we included the figures available from another zonal hospital which are comparable to our study (Tables 5,6). Table 7 shows the figures from both zonal hospitals which reveal the real change that has taken place before and after the AO was introduced.

Discussion

Several studies have shown the efficacy of motivation [10], family therapy [11,12], group therapy [13] and alcohol anonymous [14,15,] in the treatment of alcoholism, but the long term prognosis of alcohol dependence in the armed forces at best is guarded [7,8].

Genetically determined differences in the activities of the hypothalamopituitary axis and endogenous opioid system determine a person's alcohol consumption level and vulnerability to alcoholism [16,17]. It is also postulated that anxiety- provoking situations may serve as cues for abusive drinking. Later on, the cue itself may elicit the drinking behaviour, avoiding anxiety altogether [18]. 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 [19]. The stressful environment in the armed forces appears to affect only the susceptible individuals, as shown in earlier study [20], where in subjects from field and high altitude areas accounted for 48.69% of cases as compared to 51.31% from peace locations.

Since conventional treatment at best cures only a third

Table 3

Invalidment (n=114)

Category	1998	1999	2000	2001	2002	2003 (upto 30 June)
Psychosis	6	5	11	10	10	2
Neurosis	6	2	4	6	1	-
Alcohol	4	6	8	15	13	3
Others	-	1	1	-		
Total	14	13	24	31	24	5

Alcohol cases invalided out during the last two and a half years 31/ 114 (27.19%)

Table 4

Pattern of disposal before and after the AO

Category	n=289		n=245	
	No	%	No	%
S1	20	4.15	57	23.26
S2	120	41.52	67	27.35
S3	123	42.56	72	29.39
S5	18	6.22	32	13.06
Drop outs	8	2.77	17	6.90

df =4, χ^2 50.917, p 0.002 S

Table 5**Disposal pattern from another zonal hospital B**

Category	n=232 (1998-2000)		n=131 (01- 6/03)	
	No	%	No	%
S1	17	7.32	33	25.19
S2	103	44.40	33	25.19
S3	96	41.38	49	37.40
S5	16	6.9	16	12.21

df =3, χ^2 50.917, p 0.002 S**Table 6****Comparison of disposal pattern with present study and the zonal hospital from the same command**

Category	n=245(2001- 6/03)		n=131 (01- 6/03)	
	No	%	No	%
S1	57	23.26	33	25.19
S2	67	27.35	33	25.19
S3	72	29.39	49	37.40
S5	32	13.06	16	12.21
Drop	17	6.90	2	2.19

df=4, χ^2 6.93, p 0.140 NS

of the alcoholics, greater emphasis needs to be placed on prevention. Kendell [21], regards alcoholism as a political problem, amenable to measures reducing its availability. The AO 2001 has addressed the retention of alcoholics for a limited period and not permanently. It is clear that the number of alcoholics who have/seem to have given up alcohol, has increased four times (23.26% vs 5.86%), the invalidment has doubled (12.70 vs 6.64%) and the cases in low medical category have reduced by one third (58.47 vs 82.81%), due to elimination of permanent category in the AO 3&11/2001. Some may consider these firm policies as punitive, nevertheless they have helped in changing the lifestyle of some alcoholics.

Conflicts of Interest

None identified

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Table 7**Pattern of disposal before and after the AO (figures of both zonal hospitals)**

Category	n=512 (1998-2000)		n=378 (2001-2003)		Change
	No	%	No	%	
S1	30	5.86	90	23.80	>17.94 (4 times)
S2	211	41.21	100	26.46	<14.75 1/3
S3	213	41.60	121	32.01	< 9.6
S5	34	6.64	48	12.70	> 6.06 (2 times)
Drop outs	8	02.77	17	6.90	

df =4, χ^2 80.3, p 0.000 S

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