Outcome of Alcohol Dependence Syndrome Cases Managed in Armed Forces

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Abstract

Background: Army Order for Alcohol Dependence Syndrome gives a structured and strict approach towards disposal of such cases in Indian Armed Forces. Four years have passed since the implementation of the above order. This study was conducted to assess the outcome after implementation of the said order.

Methods: 231 male soldiers reporting for review after six months and one year of initial treatment were included in the study. Data was obtained from history, physical examination, mental state, laboratory and other investigations. The data was analyzed and compared with previous study.

Result: 231 patients were reviewed in this period of four years, of which 149 patients were reviewed after six months and 77 after one year. Five patients were reviewed beyond one year. 50 - 53% patients have shown complete improvement after the initial treatment and 23.5 - 31% have shown partial improvement after the initial treatment. The rest did not show much improvement. The results are better than the previous results from study conducted before implementation of the new Army Order.

Conclusion: The study strengthens the validity of the present Army Order, which is structured and may be having a deterrent value, leading to better prognosis.

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Key Words : Alcohol dependence syndrome; Alcoholism; Outcome

Introduction

Alcoholism is one of the most severe and chronic illnesses and is widely prevalent. The average alcohol dependent person decreases his life span by 10 to 15 years. It is also a major cause for accidents and suicides [1]. Management of alcoholism in Armed Forces has changed significantly following implementation of the present Army Order which says that such cases are incompatible with military service and all such cases should be invalided out of service unless the patient shows an unequivocal determination to give up the use of alcohol/drug for good in the shortest time span. It allows keeping an individual in low medical category, after initial treatment, for a maximum period of one year. If he relapses in between, he has to be invalided out of service, otherwise if he remains abstinent he will be reviewed and upgraded to being psychiatrically fit after one year. If subsequently he has a relapse he will be invalided out of service without any further chance of retention in service. Similar instructions are given for officers in a separate Army Order.

Prior to the implementation of the current Army Order on alcohol, the disposal of such patients was not structured and usually more chances were given and

more number of relapses were accepted, the focus was more patient oriented than service oriented. This study aims at finding out whether there is any change of outcome pattern of such patients after the implementation of the new Army Order.

Material and Methods

The study included all the patients of Alcohol Dependence Syndrome (ADS) diagnosed as per ICD 10 [2], who reported for review after the initial management. All were male and serving soldiers. These patients had been initially managed as inpatients with enforced abstinence, detoxification, individual and group therapy sessions, treatment of complications and co-morbidity, if any, besides other supportive measures. Some patients were also put on anti-craving medication like Acamprosate and Naltrexone, which reduce the chances of relapse [3,4]. Duration of inpatient stay for the initial management for each case was about six weeks. They were explained about the disposal as per Army Order and discharged to unit in low medical category. Subsequently they were reviewed in the psychiatry centre after six months and one year or frequently, if they were posted nearby.

During the review, patient history was taken and medical documents alongwith the administrative report initiated by his unit commanding officer was perused. Patients were

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hospitalized for observation to detect craving and/or development of withdrawal features. Thorough physical examination was carried out for any target organ involvement. Mental state examination was regularly carried out for any psychopathology. Laboratory investigations included mean corpuscular volume, serum uric acid, gamma-glutamyl transferase, aspartate aminotransferase and alanine aminotransferase. Ultrasonography of liver, gall bladder, pancreas and spleen was done to detect any alcohol related changes. In each review, patients were offered individual and group therapy as reinforcements. If any patient was found to be in relapse during this process, he was invalided out of service as per the Army Order. Patients once upgraded and declared psychiatrically fit, if went into relapse, were invalided out of service without further chances. A total of 231 reviews were done in this period of about four years. Their socio-demographic and occupational data with the level of response to treatment were noted. The data so obtained was compared with data from an earlier study on course and outcome of ADS in Indian Armed Forces [5], which was conducted during 1995-2000, prior to the implementation of the present Army Order.

Results

A total of 231 male patients were reviewed in the age group ranging from 20-55 years. Age distribution of the patients are shown in Fig. 1. The figures show that ADS is most prevalent in the age group of 35-45 years. Fig. 2 shows that the maximum number of patients are between 11-25 years of service with most patients in the service group of 16-20 years. Fig. 3 shows most patients are in the rank of senior non commissioned officer (NCO). Out of 149 patients reviewed after six months, 74 (50%) had completely improved, 46 (31%) had partially improved, i.e., they were able to reduce their drinking and were functioning in a better way and 29 (19%) patients did not improve, who were invalided out of service. Out of 77 patients who were reviewed after one year, 41 (53%) showed complete improvement, 18 (23.5%) showed partial improvement and 18 (23.5%) did not show any improvement. Five patients had relapse after they were made fit after one year of surveillance (Table 1). 51 patients were counted twice, once after six months and once after one year.

Fig. 1 : Age distribution of the patients

The results of the study were compared with the results of the earlier study [5] in which 146 patients were reviewed after six months of which 24.6% patients were abstinent, 35.6% were in partial improvement and 39.7% in relapse. In the same study when reviewed after one year, out of 57 patients reviewed, 38.7% were in complete improvement, 38.7% in partial improvement and 22.4% in relapse.

The results of the present study shows that 50% patients had completely improved when reviewed after six months and 53% patients completely improved after one year. 31% patients partially improved when reviewed after six months and 23.5% partially improved when reviewed after one year. The treatment success rate is higher than that of the previous

Table 1

Follow up status of alcohol dependence syndrome patients

Alcohol status	Review after 6 months; n (%)	Review after 1 year; n (%)	Relapse after 1 year; n (%)
Complete improvement	74 (50)	41 (53)	-
Partial improvement	46 (31)	18 (23.5)	-
No improvement	29 (19)	18 (23.5)	5 (100)
Total	149 (100)	7 (100)	5 (100)

Fig. 2 : Length of service of the patients

Fig. 3 : Rank distribution of the patients

At six months $\chi^2 = 16.7$; df-2; $p < 0.001$

At one year $\chi^2 = 5.7$; df-2; $p < 0.05$

Fig. 4 : Comparison of outcome of the present study with the previous study.

study conducted before the implementation of the present Army Order. This result indicates that more strict and structured approach of the present Army Order may be acting as deterrent for relapse (Fig. 4).

Discussion

Various studies have been conducted on alcoholism in Indian Armed Forces [6-9]. The previous study conducted in 1995-2000 [5] has given valuable data for comparison with the present study. The data shows significantly better outcome post current Army Order on alcohol abuse.

Various international studies have shown that it is a long term illness and there may be periods of temporary abstinence. But their data include patients who do not participate in any form of therapy and there are a number of favorable prognostic signs. These are absence of antisocial personality disorder or any other co-morbid substance abuse, general life stability, having a job, continuing family support, absence of serious legal problems and initial inpatient treatment for few weeks. The combination of these attributes predicts at least a 60 % chance for one or more years of abstinence. Researchers agree that one year abstinence rates are associated with a good chance of continued abstinence over an extended period [10-12].

Medical treatment in armed forces offers a unique opportunity of follow up of patients through long periods. The prognosis of the present study is comparable with outcome of other international studies. It shows that long term prognosis of these patients was good.

Conflicts of Interest

None identified

Intellectual Contribution of Authors

Study Concept : Col P Sarkar

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