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Original Research Article

A study of prevalence of alcoholics dependence syndrome and role of alchoholics anonymous in prevention and deaddiction in a urban community of Jabalpur Cantonment, Madhya Pradesh, India

Rajendra Harnagle[1]* and Rajendra Kumar[2]

[1]Department of Community Medicine, Azeezia Institute of Medical Sciences and Research, Meeyanoor, Kollam District-691537, Kerala, India
[2]RHTC, Department of Community Medicine, Gold Field Institute of Medical Sciences and Research, Chhainsa, Ballabgarh,Faridabad, Haryana, India
**Corresponding author*

Keywords

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A B S T R A C T

About two billion people worldwide consume alcoholic beverages and one-third (nearly 76.3 million) is likely to have one or more diagnosable alcohol use disorders. Alcohol is attributed to nearly 3.2% of all deaths and results in a loss of 4% of total DALYs (58 million. It is acknowledged that countries which had low alcohol consumption levels are now witnessing an increasing consumption pattern. WHO estimates for the South East Asian countries indicate that one-fourth to one-third of male population drink alcohol with increasing trends among women. The study done in an urban community of Jabalpur Cantonment. It was a cross-sectional study undertaken in various wards of Jabalpur Cantonment in India. A simple random sampling methodology was adopted.. 8 wards were chosen to include town population. from Jabalpur Cantonment.. The primary sampling unit was the individual household. Trained research staff used pre-tested semi-structured questionnaire to collect information. Preliminary information was collected from a responsible adult (being aware of all family details) of the household. Focus of information gathering was on socio-demographic characteristics and alcohol use among individual adult male and female members. Of the 3586 about 434 (12.10%) were found to have an ALCHOHOL DEPENDENCE SYNDROME (ADS) i.e. 7.96 % of the total strength were found to be problem drinkers. Of the 434 taken up for the study only about 280 were persons improved at the end of 12 months by Alcoholic Anonymous counseling available for the complete follow up study i.e. 64.51%. The ADS had significantly reduced by Alcoholic Anonymous counseling at six months itself ($p<0.000$). This improvement not only sustained at 12 months but further improved upon ($p<0.004$). So the improvement was highly significant $p<0.000$). The prevalence of Alcohol Dependence Syndrome is increasing globally as well as in developing country like India. The ADS had significantly reduced by Alcoholic Anonymous counseling.

Introduction

In a study by Giriraj , it revealed overall, 13% of males and females consumed alcohol. Proportion of users was greater in town (15.7%) and among 26–45 years

(67.4%). Whisky (49%) and arrack (35%) were the preferred types and the preferences differed between rural (arrack) and urban (beer) areas. Nearly half (45%) of rural population were very frequent users (consuming daily or every alternate-days) as against users in town (23%) or slum (20%). Two-thirds were long-term users and the proportions were greater in the rural and town areas (Girish et al., 2010). It is imperative to know the patterns of alcohol consumption among different types of consumers to launch a well-planned nationwide programme for the prevention and control of this devastating social pathology (Ghosh et al., 2012)

Alcohol is one of the leading causes of death and disability globally and in India. Information on quantum and pattern of consumption is crucial to formulate intervention programs, about two billion people worldwide consume alcoholic beverages and one-third (nearly 76.3 million) is likely to have one or more diagnosable alcohol use disorders.(Girish et al., 2010) Alcohol is attributed to nearly 3.2% of all deaths and results in a loss of 4% of total DALYs (58 million) (Ghosh et al., 2012) It is acknowledged that countries which had low alcohol consumption levels are now witnessing an increasing consumption pattern.(Girish et al., 2010) WHO estimates for the South East Asian countries indicate that one-fourth to one-third of male population drink alcohol(Global Status Report on Alcohol 2004) with increasing trends among women.(Skinner et al., 1981).

Alcohol is like a double edged sword; on one hand it improves morale of those used to it, but on the other hand impairs efficiency of all among the consumers (Girish et al., 2010).

Alcohol is consumed by about 2 billion people the world over, approximately one third of them have diagnosable alcohol use disorders (Ghosh et al., 2012), and many of the harmful and problem drinkers in the asymptomatic primary care setting do not seek treatment for their alcohol related problems (Skinner et al., 1981; McQuad et al., 2000) , as they consider it as only a social problem or are ashamed to admit or they believe that treatment does not help or that they are not yet dependent but are just involved in adverse health or disciplinary behaviors (8). In India, the estimated numbers of alcohol users in 2005 were 62.5 million, with 17.4% of them (10.6 million) being dependant users(McQuad et al., 2000) and 20–30% of hospital admissions are due to alcohol-related problems.(Andreasson et al., 2000) Few studies have documented the pattern and profile of alcohol use and its impact in hospital- and population-based settings.(Chagas et al., 2003; Mohan et al., 2001).

In 1973,a National Alcohol Control policy was first mooted by WHO . It has since been suggested that future research should focus on implementation strategies to facilitate adoption of means of identifying and providing intervention for problem drinkers (Bertholet et al., 2005). Forced abstinence may bring about unhealthy practices and may work against group cohesion and discipline. (Amy et al., 2011).

Brief intervention given at primary care setting is not only effective in short term but also in long term treatment. (McQuade et al., 2000; Saldanh et al., 2007; Baggaley et al., 1993; Global Status Report on Alcohol 2004; Ogborne, 1974; Israel et al., 1996; Edwards et al., 1997). Alcohol use is often associated with stress, depression

and anxiety. Each one of them can either be the initiator or the perpetrator of alcohol use and at times a cause for relapse in a recovered alcoholic (Odd Nilssen, 2003; Seven Andreasson et al., 2000; Babor and Higgins-Biddle, 2001; .Moos et al., 1988-1989; Alexander and Duff, 1988; Zucker, 1998; Bethesda, 1998; Greenfield et al., 1988; Schneider et al., 2001). There have been very few studies that have tried to ascertain the role in the outcome of treatment of alcoholics with brief intervention (Merikangas et al., 1996).

Jabalpur, Madhya Pradesh Alcoholics Anonymous, is the largest self-help group in the world for people trying to kick their addiction to alcohol. Jabalpur Madhya Pradesh Alcoholics Anonymous includes men and women who suffer from alcoholism currently or who have suffered from it in the past. These people depend on each other to help themselves get rid of their addiction. At Jabalpur Madhya Pradesh Alcoholics Anonymous, they will teach you that the first step to kicking the addiction is to stop drinking as much as you can. Of course, it is simple to tell someone to cut back on alcohol, but the truth of the matter is that for an alcoholic this is very difficult because of the condition they suffer. This is why it is so important for those dependent on alcohol to seek support from other members of Alcoholics Anonymous for support. The core groups of people in Alcoholics Anonymous are those who are in the process of trying to kick their habit.

Materials and Methods

The study done in an urban community of Jabalpur Cantonment. It was a cross-sectional study undertaken in various wards of Jabalpur Cantonment in India. A simple random sampling methodology was adopted.. 8 wards were chosen to include town population. From Jabalpur Cantonment. Commercial establishment of Jabalpur Cantonment were excluded from the survey in all the areas during survey time.

The primary sampling unit was the individual household. Trained research staff used pre-tested semi-structured questionnaire to collect information. Preliminary information was collected from a responsible adult (being aware of all family details) of the household. Focus of information gathering was on socio-demographic characteristics and alcohol use among individual adult male and female members.

Inclusion criteria

Any individual with history of alcohol use in the 12 months prior to the date of survey was considered as an alcohol user for the purpose of this study.(10) Each household was classified as an alcohol user or alcohol non-user household for the purpose of this study.

The programme chalked out was as follows. Firstly all person above 18 years were screened using the questionnaire.

Firstly the principal worker addressed the person on the purpose of the questionnaire,. The principal worker assured them of not being admitted to hospital unless they were found to have some serious medical ailment. The questionnaire was asked to be filled up voluntarily. All the questionnaires were in Hindi.

Secondly, all questionnaires were checked then and there. They were then explained

about the educational programme that is to be implemented.

Thirdly, the average frequency of implementation of the programme was 1.3 times/ week when all persons are taken together. Analysis of data has not been done based on the frequency of implementation of the data.

The prevention programme of Alcoholic Anonymous counseling implemented was as follows:

Educational material in both Hindi and English were provided in print . A booklet in Hindi that detailed out the need for such a programme and how to implement it was given to each household. A Hindi booklet was handed out to the candidates included in the study. This contained information on Alcohol Anonymous, beside what is alcohol, how it acts in the body, how it adversely effects the body, mind and social fabric of the individual as also its effects on the individuals. It also contained material on how to reduce the amount of alcohol or to stop it all together. It contained evolution of an individual over various stages of alcohol abuse to dependency.

The study was started in various wards of cantonment. However, due to poor follow up as a result of the person moving out of location.(only five in followed up till the end and the requisite data was also collected). The data so collected was analyzed using standard statistical methods.

Results and Discussion

Initially a total of 08 wards in the cantonment were selected for the study, 04 ward at Ranji location and four at Sadar Cantonment location. The strength of the eight wards studied was 5448. Of these screening questionnaire was administered to 3586 personnel (65.82 %). This was administered at various times in different wards. A particular area was covered within 3 days. This was done to account for those who had been on various committments and could not fill up the Performa s initially.

Of the 3586 about 434 (12.10%) were found to have an ADS i.e. 7.96 % of the total strength were found to be problem drinkers.

Of the 434 taken up for the study only about 280 were persons improved at the end of 12 months by Alcoholic Anonymous counseling available for the complete follow up study i.e. 64.51%.
This study has evaluated the effects of an intervention programme, Alcoholic Anonymous counseling for alcoholics. It has been implemented by non medical staff within the Wards premises, while evaluation was done by the medical professional. The later also provided the necessary material and guidance to the persons.

Initially a total of 08 wards in the cantonment were selected for the study, four wards at Ranji location and four at Sadar Cantonment location. Of those screened for alcohol use, 434 subjects (7.96%) had been positive for ADS. Follow-up has been reasonably good at 64.51%.In a study of alcoholics in Kolkatta, the results revealed that 65.8% (150/228) were current consumers of alcohol; 14% were alcohol-dependents; 8% were hazardous or harmful consumers, and 78% were non-hazardous non-harmful consumers. The mean age of the respondents at the initiation of drinking

Table.1 Ward wise strength, number of persons screened, ads and follow up strength

	Total ward strength	**Number of persons Screened (%)**	**Number of persons with ADS (** (% Of strength)	**Number of persons improved at the end of 12 months by alcoholic anonymous counselling (% of study strength)**
ward1	786	490 (62.34)	58 (7.37)	46 (79.31)
ward 2	536	344 (64.17)	42 (7.83)	38 (90.47)
Ward3	823	454 (55.16)	78 (9.47)	58 (74.35)
ward 4	816	486 (59.55)	48 (5.88)	26 (54.16)
ward 5	630	210 (33.33)	38 (6.03)	10 (26.31)
ward 6	832	398 (47.83)	62 (7.45)	40 (64.51)
ward 7	187	169 (90.37)	22 (11.76)	12 (54.54)
ward 8	838	476 (56.80)	86 (10.26)	50 (58.13)
Total	**5448**	**3586 (65.82)**	**434 (7.96)**	**280 (64.51)**

Table.2 Change in alcohol dependence syndrome identification scale score

Periodicity	**t Test**	**SIG Level (Two tail)**	**Degree of freedom**	**Difference**
Initial & 6 Months	22.579	0.000	279	Significant difference
Initial & 12 Months	20.889	0.000	279	Significant difference
6 Months & 12 Months	2.914	0.004	279	Significant Difference

alcohol was 20.8+5.9 years. Eighty-six percent of dependents (n=21) took both Indian-made foreign liquor and locally-made alcoholic beverages. The proportions of alcohol consumers who drank alone among alcohol-dependents, hazardous or harmful consumers, and non-hazardous non-harmful consumers were 71.4%, 50%, and 7.7% respectively, and the difference was significant ($p<0.01$).(2) Grossberg et al found 17 % at risk alcohol use in a survey of 4861 adult patients and follow up evaluation revealed 93 % follow up at 12 months. He reported maximum change in the first 6 months and alcohol use had diminished to 40 to 50 % (Weiss and Rosenberg, 1985).

As seen in Table 2, the ADS had significantly reduced at six months itself ($p<0.000$). This improvement not only sustained at 12 months but further improved upon ($p<0.004$). So the improvement was highly significant ($p<0.000$). Kaner et al in an analysis of randomized controlled trials of brief intervention for alcohol found significant and sustained reduction in alcohol intake at one year follow up (King et al., 2003).

Berthout et al in a systematic review and meta-analysis of 19 trials also found that brief intervention is effective in reducing alcohol consumption at 6 & 12 months.

(Grossberg et al., 2004), while Whitlock et al reported a reduction of 13-34 % at 12 months (Kaner et al., 2007).

In the present study it was seen that only 5 % had abstained after starting the program. Further, 8.57 % of the 280 cases followed up. Among these 3.57 % had worsened since baseline evaluation and 5 % had improved but not enough. Apodoca et al in a meta-analysis of 22 studies that evaluated effectiveness of "bibliotherapy"- the provision of self help materials to motivate and guide the process of changing drinking behaviors, found it to be more effective in those who sought treatment than in those who were screened and then subjected to bibliotherapy (Bertholet et al., 2005).

There were no unscreened subjects in our study. Beich et al in a meta- analytical review of randomized controlled trials of studies that used screening as a procedure to brief intervention concluded that after all that effort only two or three people out of 1000 are going to benefit from it (Whitlock et al., 2004), whereas in our study we found that almost 4.9%-5% people screened benefited from the Alcoholics Anonymous intervention at 12 months. All of them have reported advantages of the programme like improvement in drinking pattern of problem drinkers.

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