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RESEARCH ARTICLE

A STUDY ON CLINICAL PROFILE AND NUTRITIONAL STATUS OF ALCOHOLICS VISITING TERTIARY CARE HOSPITAL

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ABSTRACT

Introduction: Alcohol is the most common substance of abuse and it is responsible for 4.4% of the global burden of disease. Alcoholism has been associated with a large number of nutritional and metabolic disorders. Alcohol is a leading cause of alcohol abuse, organ damage and malnutrition. It is also one of the most preventable causes of death. So we conducted a cross-sectional study to study the clinical profile and nutritional status of alcoholics.

Aims and Objectives: 1) To study the clinical profile of alcoholics visiting tertiary care center
2) To assess the nutritional status of alcoholics visiting tertiary care center

Methodology: This cross sectional study was conducted at K S Hegde Charitable Hospital. A total 100 patients were included in the study. The information was obtained by patients aged 18 or more years was interviewed by using a structured questionnaire on demographic details, per capita income, alcohol consumption details, and dietdetails. The nutritional status will be assessed by direct method that is by calculating the BMI and waist hip ratio for allpatients. The collected data was analysed using SPSS version 16

Results: Out of 100 study population 98% were male. 54% of the study population belonged to 31-50 years age group and 22% belonged to 20-30 years. According to Kuppuswamy classification 52% lower middle class.73% had more than five year history of alcohol consumption. Anthropometric measurements showed that 43% of users were overweight, 15% of users were obese and 79% of male study population had central obesity

Conclusion: The present study also showed significant correlation between quantity of alcohol consumption and waist to hip ratio. This might show significance in development cardiovascular diseases as they indirectly attribute to confounding risk factors. This can beas a means for early intervention and disease prevention.

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INTRODUCTION

Alcohol is the most common substance of abuse and it is responsible for 4.4% of the global burden of disease. Consumption is not decreasing and may be on the rise. Alcohol intake is just not limited to adults or elderly but teenage alcohol abusers are also on rise. They owe it to the new generation trend, peer pressure, decreased parental monitoring, media influence and better financial status. Alcohol related death rate is also on the rise. Sometimes alcohol abuse has been associated with some underlying disease also, example HIV infection (Sharma *et al*., 2010). Chronic alcoholics suffer from micronutrients deficiency. A study showed low circulating pyridoxyl phosphate (Gloria *et al*., 1997).

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Alcohol is the most frequent cause of liver disease and mortality due to liver cirrhosis is directly proportional to absolute alcohol consumption (Bosetti *et al*., 2002). The severity and prognosis of alcohol-induced liver disease depends on the amount, pattern and duration of alcohol consumption, as well as on the presence of liver inflammation, diet, nutritional status and genetic predisposition of an individual. Alcoholism has been associated with a large number of nutritional and metabolic disorders, both acute and chronic, but it is not known how often these are a consequence of an irregular or unbalanced diet, and when they should be accounted on ethanol ingestion per se. Alcoholism may interfere with nutritional status, but reports are often troubled by uncertainties about ingested diet and organ function, as well as by ongoing abuse and associated condition. Alcohol is a leading cause of alcohol abuse, organ damage and malnutrition. It is also one of the most preventable causes of

death. Since alcohol consumption and dependence is the main social issue and since not much is known about the relationship between alcohol related diseases or complications we conducted a cross-sectional study to study the clinical profile and nutritional status of alcoholics.

MATERIALS AND METHODS

This cross sectional study was conducted at K S Hegde Charitable Hospital, a teaching hospital attached to K.S.Hegde Medical Academy in Mangalore, Karnataka. The ethical clearance for the study was obtained from Institutional ethical committee. A total 100 patients were included in the study by convenient sampling method. The study sample comprised of patients who alcoholics are visiting de-addiction center and patients admitted in the ward for alcohol related diseases all of whom were selected after confirmed by the specialist. Patient in person was approached and explained about the study and the informed consent was taken. The information was obtained by interview method from both the subject and patient party. Patients aged 18 or more years was interviewed by using a structured questionnaire on demographic details, per capita income, alcohol consumption details, diet details. The questionnaire was based on the questionnaire for India, recommended by WHO and CDC. The nutritional status will be assessed by direct method that is by calculating the BMI and waist hip ratio for all patients, clinical methods and indirect method is by assessing the 24 hour dietary recall method (Report of WHO Expert Committee). The collected data was analysed using SPSS version 16.

Inclusion criteria: Alcoholics who are of the age 18 years or more

Exclusion criteria: Alcoholics who are not willing to participate or seriously ill will be excluded from the study

RESULTS

Out of 100 study population 98% were male and 2% were female. Age distribution of the study population comprised of 4% less than or equal to 20 years, 18% between 21-30 years, 26% between 31-40 years, 28%between 41-50 years, 16% between 51-60 years and 8% above 60years.

Table 1. Socio-Demographic distribution of study participants (N=100)

Gender	Number of subjects	Percentage
Male	98	98
Female	02	2
Age group (in years)		
Less than 20	4	4
21-30	18	18
31-40	26	26
41-50	28	28
51-60	16	16
>60	8	8
Socioeconomic status		
Lower class	11	11
Lower middle class	52	52
Upper lower	27	27
Upper middle	10	10
Nature of work		
Heavy	45	45
Moderate	19	19
Sedentary	36	36

According to Kuppuswamy classification 11% belonged to lower socioeconomic class, 52% lower middle class, 27% upper lower class and 10%belonged to upper middle class. Among the study participants 45% were heavy workers, 19% moderate workers and 36% did sedentary type of work.

Table 2. Distribution of study participants based on alcohol consumption history (N=100)

Duration (years)	Number of subjects	Percentage
<1year	2	2
1-5 years	25	25
>5years	73	73
Amount of alcohol consumption per day(ml)		
100-300	22	22
301-500	50	50
501-700	17	17
701-900	8	8
>900	3	3
Frequency(in days)/ week		
1-2 days	5	5
3-5 days	35	35
6-7 days	60	60

In the study population 2% subjects had less than one year history of alcohol consumption, 25% had one to five year history of alcohol consumption and73% had more than five year history of alcohol consumption. Among the study population 22% drank 100-300 ml alcohol per day, 50%drank between 301-500 ml, 17% between 501-700 ml, 8% between 701-900ml, 3% more than 900 ml per day. Frequency of alcohol consumption in a week showed 5% consuming 1-2 days in a week, 35% consuming 3-5 days in a week and 60% consuming 6-7 days in a week.

Table 3. Clinical Profile of study population (N=100)

Clinical Findings		Number of subjects	Percentage
Pallor	Present	2	2
	Absent	98	98
Icterus	Present	12	12
	Absent	88	88
Clubbing	Present	22	22
	Absent	78	78
Lymphadenopathy	Present	10	10
	Absent	90	90
Oedema	Present	47	47
	Absent	53	53
Cyanosis	Present	1	1
	Absent	99	99

Table 3 showed that 2% had pallor, 12% had Icterus,22% had clubbing, 10% had Lymphadenopathy and 47% had edema.

Table 4. Anthropometric measurements of study population (N=100)

BMI	Number of subjects	Percentage
Under weight	1	1
Normal	41	41
Overweight	43	43
Obese	15	15
Waist Hip ratio		
Normal	21	21
Central Obesity	79	79

Anthropometric measurements showed that 41% were normal, 1% was underweight, 43% were overweight, 15% were obese and 79% of study population had central obesity.

DISCUSSION

In the present study 54% of the study population belonged to 31-50 years age group and 22% belonged to 20-30 years. In a study conducted by Girish *et al.* more than two-thirds of the users were in the 26–45 years age–group and10% were adolescents and youth (16–25 years of age) (Girish *et al*., 2010). In the present study 45% of study participants were heavy workers i.e. coolie workers or farmers and 36% did sedentary type of work like beedi rolling. Ina study conducted by Girish *et al* majority of the rural alcohol users were either unskilled laborers or farmers (Girish *et al*., 2010). In the present study according to Kuppuswamy classification 11% belonged to lower socio-economic class, 52% lower middle class. Similarly, in a study conducted by Girish *et al*. nearly 40% of the study population reported an income below the poverty line and 65% of rural alcohol users reported an income twice the poverty level incomes (Girish *et al*., 2010). In the present study, 2% subjects had less than one year history of alcohol consumption, 25% had one to five year history of alcohol consumption and73% had more than five year history of alcohol consumption. Similarly, in a study conducted by N Girish *et al*. nearly two-thirds (62%) of the users were long-term users (for more than ten years) and 5% were recent users (within 1 to 2 years) (Girish *et al*., 2010). In the present study frequency of alcohol consumption by users in a week showed that 5% of users consuming 1-2 times in a week, 35% consuming 3-5 times in a week and 60% consuming 6-7 times in a week (almost daily). In a study conducted by Girish *et al*. 45% of the users in the rural areas consumedalcohol daily or every alternate day (Girish *et al*., 2010). The present study also showed that 36% heavy workers were also heavy drinkers and 38% belonging to lower middle socio-economic class were heavy drinkers. In a study conducted by Girish *et al*. the frequent heavy drinkers were more in the slum (50%) belonging to lower socio-economic class (Girish *et al*., 2010). Anthropometric measurements showed that 41% of users were normal, 1%of users were underweight, 43% of users were overweight, 15% of users were obese and 79% of male study population had central obesity. On correlating quantity of alcohol consumption with different parameters for nutritional assessment, it showed that there is a relation between quantities of Alcohol consumed and waist to hip ratio (p value = 0.049). A study done by Joana Teixeira to assess nutritional risk of alcoholic patients admitted for alcohol detoxification by using Malnutrition Universal Screening tool showed 57% of alcoholic patients admitted in de-addiction center were rated as being at medium or high risk of malnutrition (Joana Teixeira *et al*., 2011). A study conducted by Gerhardt *et al*. studied a relationship between BMI and alcohol consumption and food intake, an inverse relationship between alcohol consumption and BMI was demonstrated (Ashley et al., 2009). In the present study we did not get any statistical significance between BMI and quantity of alcohol consumed.

Conclusion

In present study identified the age distribution of study population who consume alcohol was maximum in 31-50years age group followed by 20-30 years age group. It also identified that more than half of the study population consumed alcohol daily and also more than half of study population belonged to lower middle socio-economic class. In the present study more than half of the study population was either overweight or obese. The present study also showed significant correlation between quantity of alcohol consumption and waist to hip ratio. This might show significance in development cardiovascular diseases as they indirectly attribute to confounding risk factors. This can be as a means for early intervention and disease prevention. On considering the determinants of health more than one-fourth of heavy workers were heavy drinkers and more than one-fourth of study population belonging to lower middle socio-economic class was heavy drinkers. This pattern can be attributed to inadequate literacy background and other social issues. Nearly half of heavy drinkers consumed inadequate calories and one fourth of participants belonging to lower middle socio-economic class consumed inadequate calories. This attributes to higher range of malnourishment among alcohol users.

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REFERENCES

Ashley N. Gearhardt and William R. Corbin. 2009. Body Mass Index and Alcohol Consumption: Family History of Alcoholism as a Moderator. Psychology of Addictive Behaviors. APA, Psychology of Addictive Behaviors, Vol 23(2), Jun, 216-225

Bosetti C, Levi F, Lucchini F, Zatonski WA, Negri E, La Vecchia C. 2007. Worldwide mortality from cirrhosis.an update to 2002. *J Hepatol*., 46:827-839

Girish N, R Kavita, G Gururaj, VivekBenegal. 2010. Alcohol Use and Implicationsfor Public Health:Patterns of Use in Four Communities. *Indian J CommunityMed*., Apr, 35(2): 238–244.

Gloria L(1), Cravo M, Camilo ME, Resende M, Cardoso JN *et al*. 19997. Nutritionaldeficiencies in chronic alcoholics: relation to dietary intake and alcoholconsumption. *Am J Gastroenterol*., 1997 Mar; 92(3):485-9.

Joana Teixeira, Teresa Mota and Joao Cabral Fernandes, 2011. Lisbon'sPsychiatric Hospital Center, Lisbon, Portugal. Nutritional Evaluation ofAlcoholic Inpatients Admitted for Alcohol Detoxification. Alcohol and Alcoholism Vol. 46, No. 5, pp. 558–560, Advance Access Publication 31 May 2011.

Report of WHO Expert Committee. Physical Status: The Use And Interpretation of Anthropometry. WHO Technical Report Series, 854.

Sharma HK, Tripathi BM, Pelto PJ. 2010. The evolution of alcohol use in India. *AIDS Behav*., 14 Suppl 1: S8-S17

Sobral-Oliveira MB, Faintuch J, Guarita DR, Oliveira CP, Carrilho FJ. 2011. Nutritional Profile of Asymptomatic Alcoholic Patients. *ArqGastroenterol*., v.48 – no.2 – apr./jun.

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