Recognition of a Person with Alcohol Dependence: A Community-based Survey

Shiji Pazhampallial Jose¹, Supriya Hegde², Neetha Kamath³

ABSTRACT

Aims: The aim of the study was to identify the alcohol dependents in selected communities.

Methods: Community-based descriptive survey was conducted. A total of 330 men who are residing in selected communities of Dakshina Kannada, were selected using the purposive sampling technique. The Alcohol Use Disorders Identification Test (AUDIT) tool was used to gather the data. Descriptive and inferential statistics were used to analyze the data.

Results: Majority (279) of men were categorized as alcohol dependents and about 51 were nonalcohol dependents out of 330 men based on AUDIT score. There was a significant association between AUDIT scores and demographic variables like family support.

Conclusion: Nowadays alcohol use is becoming the major public health concern as it affects not only the victim but also the entire family, which destroys the family life. So steps should be initiated to stop alcohol use.

Keywords: Alcohol dependence, Alcohol use, Prevalence.

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INTRODUCTION

Alcohol is a social beverage and a relaxation facilitator. But when the same alcohol is misused, turns into an evil, which is sufficiently inflammable to burn the individual, family, society, and country as a whole.¹

Alcohol addiction is one of the major problems of developing countries like India. Alcohol is the most widely consumed psychoactive substance in India.² India's alcohol beverage industry is one of the biggest alcohol industries across the globe. India is demographically one of the youngest users with around 50% of its population below the age of 25 years and around 65% below the age of 35 years consuming alcohol beverages. The majority of alcohol volume is consumed by people between the ages of 18 and 40 years.³ Alcohol consumption in India amounted to 5.4 billion liters in 2016 and was expected to reach about 6.5 billion liters by 2020. The steady increase in consuming alcoholic beverages can be attributed to multiple factors including the rising levels of disposable income and a growing urban population among others.⁴

Global consumption of alcohol beverages was estimated to be approximately 235.4 billion liters in 2017 and expected to reach 244.62 billion liters by 2021.⁵ Alcohol dependence is the most severe form of alcohol abuse and it involves inability to manage drinking habits. Individuals are struggling with alcohol addiction experience that they cannot function normally without alcohol every day. The addictive behavior of an individual will have great impact on professional goals, personal matters, relationships, overall health status, and gradually the person will suffer from various physical diseases as well as organ damage.⁶

A cross-sectional study was conducted to explore the prevalence of alcohol consumption and the associated risk factors among university students. A total of 3,456 students belonging to 24 years age-group (males: 1,301 and females: 2,155) were recruited for the ¹Department of Community Health Nursing, Father Muller College of Nursing, Mangaluru, Karnataka, India

²Department of Psychiatry, Father Muller Medical College, Mangaluru, Karnataka, India

³Department of Community Health Nursing, NITTE Usha Institute of Nursing Sciences, NITTE (Deemed to be University), Mangaluru, Karnataka, India

Corresponding Author: Supriya Hegde, Department of Psychiatry, Father Muller Medical College, Mangaluru, Karnataka, India, Phone: +91 09845338287, email: aroor.supriya@gmail.com

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study. Results proved that the prevalence of alcohol consumption in the previous 30 days was 20.3% (males: 36.0% and females: 10.8%). The alcohol consumption was significantly higher among males. So the researcher proposed that the effective campus-based counseling, peer education, and national surveillance systems that can monitor risky drinking behaviors among university students should be implemented.⁷

With all the abovementioned literature review, researcher felt the need to identify the person with alcohol dependence in the community area. Early identification of addiction behavior will help the individual to overcome various future consequences.

AIMS AND OBJECTIVES

• To identify the person with alcohol dependence in selected community.

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• To find the association of alcohol dependence with selected demographic variables.

MATERIALS AND METHODS

A community-based descriptive survey was conducted to identify the person with alcohol dependence in the Surathkal and Bantwal areas of Dakshina Kannada District. Prior to the data collection, permission was obtained from the District Health Officer and institutional ethics committee.

Participants

Subjects comprised of all adult men residing in the Surathkal and Bantwal area. A house-to-house survey was conducted to select 330 men using purposive sampling technique.

Instruments Used

- General pro forma to collect the sociodemographic variables
- Alcohol Use Disorders Identification Test (AUDIT) tool is a standardized, valid, and reliable free-to-use instrument consisting of 10 items with five options scored (0–4) to identify the alcohol dependents. Maximum score can be 40 and scores in the range of >8 represented individuals considered as alcohol dependents.

Analysis of Data

The data gathered were tabulated, and statistical analysis was done by using SPSS version 23. The descriptive and inferential statistics were used to analyze the data and depicted in tables and figure (Fig. 1).

Results

Section I: Identification of Alcoholics by Using AUDIT Screening Tool

This section deals with the identification of alcohol dependents from selected communities by using the AUDIT screening tool that categorizes the subjects as alcohol dependents and nonalcohol dependents based on the scores.

The data presented in Table 1 show that out of 330 men, majority (279) of the subjects were alcohol dependents. Only 51 subjects were nonalcohol dependents based on the AUDIT scores.



Fig. 1: Doughnut diagram showing the distribution of subjects according to AUDIT score

Table 1: Identification of alcohol dependents according to obtainedAUDIT score (n = 330)

AUDIT score	Alcohol dependents	Nonalcohol dependents
>8	279	—
<8	—	51

Table 2: Frequency and percentage distribution of alcohol dependents according to their demographic characteristics (n = 279)

SI. No.	Variable	Frequency (f)	Percentage (%)
1	Age in (years)		
	<20	0	0
	20–25	2	0.7
	26–30	25	8.9
	31–35	80	28.6
	36 and above	172	61.6
2	Religion		
	Hindu	238	85.3
	Muslim	15	5.3
	Christian	26	9.3
3	Educational status		
	No formal education	45	16.1
	Primary school	137	49.1
	Secondary school	57	20.4
	High school	36	12.9
	PUC	1	0.3
	Graduation	2	0.7
	Postgraduate and above	1	0.3
4	Type of family as per incon	ne	
	APL	65	23.26
	BPL	214	76.7
5	Occupation		
	Homemaker	0	0
	Daily wagers	176	63.08
	Business	73	26.1
	Technical	28	10.0
	Professional	01	0.3
6	Monthly income of the fan	nily (in rupees)	
	Less than 5,000	2	0.7
	5,000–10,000	89	31.8
	10,001–15,000	114	40.8
	>15,000	74	26.5
7	Type of family		
	Nuclear	114	40.8
	Joint	99	35.48
	Extended	66	23.6
8	Place of residence		
	Rural	119	42.6
	Semiurban	121	43.3
_	Urban	39	13.9
9	Circle of friendship		_
	Nonalcoholic friends	4	1.4
	Friends drinking alcohol	40	14.3

	Alcoholics and	230	82.4
	nonaiconolics (both)	r	1.0
10	No friends at all	5	1.8
10	Family support	21	7.5
	Not at all	21	7.5
	Alittle	108	38.7
	Moderately adequate	110	39.4
	Good support	40	14.3
11	Duration of alcoholism (i	n years)	
	<1	3	1.07
	1–5	76	27.2
	6–10	105	37.6
	>10	95	34.05
12	Duration of marital life (i	n years)	
	<5	16	5.7
	5–10	76	27.2
	>10	187	67.02
13	Number of children		
	None	20	7.1
	One	75	26.8
	Two	121	43.3
	3 and above	63	22.5
14	Primary decision-maker	in the family	
	Husband	101	36.2
	Wife	0	0
	Mutual consent	178	63.8
15	Type of drink you consur	ne	
	Brandy	30	10.7
	Whisky	24	8.6
	Arrack	222	79.56
	Rum	3	1.0
16	Amount of drink you con	sume on an averag	e in a day (mL)
	60-80	123	55.3
	90 and above	156	44.7

Section II: Description of Sample Characteristics

This deals with the description of baseline characteristics of 279 alcohol dependents.

Data presented in Table 2 revealed that the majority (172) (61.6%) of subjects belonged to the age-group of 36 years and above and least in the age-group of 20-25 years (2) (0.7%). Most of them are Hindus (238) (85.3%). Highest percentage of the subjects (137) (49.1%) had primary education and only 1 (0.3%) had postgraduate and above level of education. Most (214) (76.75%) of the subjects belonged to BPL category. About 176 (63.08%) of them were daily wagers. Majority (114) (40.8%) of them had a monthly income of Rs.10,001-15,000 and only 2 (0.7%) had less than Rs. 5,000 as their monthly income of the family; and maximum percentage (114) (40.8%) belonged to the nuclear family. Majority (121) (43.3%) of them were from semiurban and 119 (42.6%) are residing in rural areas. Most of them (230) (82.4%) had both alcoholic and nonalcoholic friends. About 110 (39.4%) of the subjects had moderately adequate and 108 (38.7%) had a little family support. Majority (105) (37.6%) of them had 6-10 years of duration of alcoholism. About 187 (67.02%) of the subjects had more than 10 years of marital life. Highest percentage (121) (43.3%) of them had

Table 3: Frequency and percentage distribution of alcohol dependents according to their AUDIT item-wise responses (n = 279)

ltem No	Items	Frequency (F)	Percentage (%)
AUDIT 1	How often do you have	a drink conta	aining alcohol?
а	Never (score—0)	27	9.7%
b	Monthly or less (score—1)	120	43.0%
с	2–4 times a month (score—2)	122	43.7%
d	2–3 times a week (score—3)	10	3.6%
e	Or more times a week (score—4)	0	0
AUDIT 2	How many alcoholic dr cal day when you are d	inks do you ł rinking?	nave on a typi-
а	1 or 2 (score—0)	3	1.1%
b	3 or 4 (score—1)	32	11.5%
с	5 or 6 (score—2)	162	58.1%
d	7 to 9 (score—3)	81	29.0%
e	10 or more (score—4)	1	0.4%
AUDIT 3	How often do you have occasion?	e six or more	drinks on one
а	Never (score—0)	1	0.4%
b	Less than monthly (score—1)	44	15.8%
с	Monthly (score—2)	149	53.4%
d	Weekly (score—3)	84	30.1%
e	Daily or almost daily (score—4)	1	0.4%
AUDIT 4	How often during the p that you drank more of intended?	oast year hav for a longer	e you found time than you
а	Never (score—0)	4	1.4%
b	Less than half-yearly (score—1)	66	23.7%
с	Monthly (score—2)	121	43.4%
d	Weekly (score—3)	88	31.5%
e	Daily or almost daily (score—4)	0	0
AUDIT 5	How often during the p do what was normally your drinking?	bast year hav expected of y	e you failed to /ou because of
а	Never (score—0)	4	1.4%
b	Less than monthly (score—1)	85	30.5%
с	Monthly (score—2)	149	53.4%
d	Weekly (score—3)	40	14.3%
e	Daily or almost daily (score—4)	1	0.4%
AUDIT 6	How often during the p drink in the morning to heavy drinking session	oast year hav o get yourself ?	e you had a f going after a
а	Never (score—0)	27	9.7%
b	Less than monthly (score—1)	42	15.1%

(Contd...)

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Table 3: (Con	td)				
Item No	Items	Frequency (F)	Percentage (%)		
с	Monthly (score—2)	132	47.3%		
d	Weekly (score—3)	77	27.6%		
е	Daily or almost daily (score—4)	1	0.4%		
AUDIT 7	How often during the or remorseful after d	e past year have rinking?	e you felt guilty		
а	Never (score—0)	7	2.5%		
b	Less than monthly (score—1)	65	23.3%		
с	Monthly (score—2)	137	49.1%		
d	Weekly (score—3)	68	24.4%		
е	Daily or almost daily (score—4)	2	0.7%		
AUDIT 8	How often during the able to remember wh because of your drinl	e past year have nat happened t king?	e you been un- he night before		
а	Never (score—0)	27	9.7%		
b	Less than monthly (score—1)	72	25.8%		
с	Monthly (score—2)	109	39.1%		
d	Weekly (score—3)	68	24.4%		
e	Daily or almost daily (score—4)	3	1.1%		
AUDIT 9	Have you or anyone o your drinking?	else been injure	ed as a result of		
а	No (score—0)	27	9.7%		
b	Yes, but not in the past year (score—2)	188	67.4%		
с	Yes , during the past year (score—4)	64	22.9%		
AUDIT 10	Has a relative, friend, doctor, or healthcare worker been concerned about your drinking, or suggested that you cut down?				
а	No (score—0)	12	4.3%		
b	Yes, but not in the past year (score—2)	188	67.4%		
с	Yes, during the past year (score—4)	79	28.3%		

Table 4: Range, mean, median, SD, and mean percentage of subjects according to AUDIT score (n = 279)

Group	Range	Mean	SD	Median	Mean (%)
Alcohol dependents	11–29	21.06	2.842	21.00	52.64

two children and 63 (22.5%) had three and more children. Most of the subjects (178) (63.8%) had mutual consent for taking decision in the family. Most of the subjects (222) (79.56%) had taken arrack as a type of alcohol consumed. Majority (156) (44.7%) of them had drunk 90 mL and above and 123 (55.3%) of them had 60–80 mL in a day.

Section III: Description of AUDIT Responses of Subjects

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This section deals with the description of AUDIT tool item-wise responses of 279 alcohol dependents.

SI No	Variable	Mean	SD	Df	Effect	n value
1	Age in (years)	mean	50		5120	pvalue
	20-25	20.90	3 1 9	1	0.728	0.000
	26-30	20.90	3 1 9			NS
	31-35	20.90	3 1 9			
	36 and above	21.16	2.61			
2	Beligion	21.10	2.01			
2	Hindu	21 10	2 74			
	Muslim	20.80	2./ 4	1	0.001	0.656
	Christian	20.00	2 / 1	1	0.001	
2		20.80	5.41			112
3	No formal adjugation	20.71	2.04			
	Drimory school	20.71	2.94			
	Fillindly School	21.29	2.05	h	0.005	0 504
	Secondary school	20.89	2.82	2	0.005	0.504 NC
		20.89	2.82			INS
	PUC	20.89	2.82			
	Graduation	20.89	2.82			
4	lype of family as per	income	2			0.007
	APL	21.28	2.801	1	0.004	0.297
_	BPL	20.99	2.86			NS
5	Occupation					
	Daily wagers	21.15	2.52			
	Business	21.01	3.37	2	0.009	0.302
	Technical	20.62	3.27			NS
6	Monthly income of th	ne family	/ (in rup	ees)		
	Less than 5,000	21.14	2.94			
	5,000–10,000	21.14	2.94	2	0.001	0.879
	10,001–15,000	21.03	2.68			NS
	>15,000	21.00	2.99			
7	Type of family					
	Nuclear	21.14	2.97			
	Joint	20.93	2.60	2	0.002	0.764
	Extended	21.11	2.99			NS
8	Place of residence					
	Rural	21.36	2.71			
	Semiurban	20.84	2.69	2	0.012	0.213
	Urban	20.79	3.60			NS
9	Circle of friendship					
	Friends drinking alcohol	20.82	2.92			
	Alcoholics and nonalcoholics (both)	21.11	2.83	1	0.001	0.681 NS
10	Family support					
	A little	20.88	2.94			
	Moderately adeguate	21.05	2.65	2	0.038	0.007 S
	Good support	21.68	3.02			
11	Duration of alcoholis	m (in ve	ars)			
	1–5	20.81	3.25			
	6–10	21.15	2.78	2	0.001	0.895
	>10	21.16	2.55			NS

Table 5: Association of AUDIT scores with sociodemographic variables



12	Duration of marital life (in years)					
	5–10	20.65	3.00			
	>10	21.26	2.75	1	0.008	0.159
						NS
13	Number of children					
	One	20.73	2.46			
	Two	21.47	2.95	2	0.012	0.211
	3 and above	20.78	3.10			NS
14	Primary decision-mak	er in the	family			
	Husband	21.12	2.77			
	Mutual consent	21.02	2.89	1	0.001	0.704 NS
15	Type of drink you con	sume				
	Brandy	20.65	2.89			
	Whisky	20.38	3.21	2	0.023	0.056
	Arrack	21.23	2.78			NS
16	Amount of drink you consume on an average in a day (mL)					
	60–80	21.07	3.27			
	90 and above	21.04	2.46	1	0.001	0.559
						NS

Data presented in Table 3 show the item-wise response of subjects indicating how often they were taking alcohol.

Data presented in Table 4 show the range, mean score, median, standard deviation (SD), and mean percentage (11–29, 21.06, 2.842, 21.00, and 52.64) of alcohol dependents according to AUDIT score, respectively.

Section IV: Association of AUDIT Scores with Demographic Variables

This section deals with association of AUDIT scores with demographic variables. The following null hypothesis was stated.

 $\rm H_{\rm 01:}$ There is no significant association between the AUDIT scores and demographic variables.

Data presented in Table 5 show that there is a significant association between AUDIT scores and demographic variables such as family support (*p* 0.007). Hence, the null hypothesis is rejected and research hypothesis and rest of the variables are not having any significant association; so, the null hypothesis is accepted and research hypothesis is rejected.

DISCUSSION

The present community-based study was conducted to identify the person with alcohol dependence in two selected communities of Dakshina, Kannada districts. A house-to-house survey was conducted to find out the alcohol-dependent individuals, and a total of 330 men were screened using AUDIT tool out of which 279 of them were found to be alcohol dependents.

In this study, we found majority of the subjects (172) (61.6%) belong to the age-group above 36 years and majority of them were having primary education (137) (49.1%). Similarly in another cross-sectional study, community-based survey was conducted to identify the prevalence of alcohol consumption, pattern of drinking, and its effect on people's health and social consequences. Using cluster sampling method study, participants selected from 850 households were 2,551, of which 1,352 were male and 1,199 were female. Results revealed that the overall prevalence of alcohol use among \geq 18 years

of age was 9.7% and exclusively among males was 17.1%. The highest prevalence (17.1%) was among 46–55 years age-groups. 2

The present study also proved that majority of the subjects belongs to Hindu religion (238) (85.3%) and among them, 121 (43.3%) were residing at semiurban area. Another descriptive study was conducted to determine the prevalence and determinants of harmful or hazardous alcohol use and possible dependence as per the AUDIT score 8 and above. A total of 1,119 subjects were selected for the study using systematic sampling method. Results proved that the mean age (SD) of all respondents was 39.10 (12.06) years. The prevalence was likely higher in men, $X^2 = 38.7$; p < 0.001; among the Christians, $X^2 = 49.3$, p < 0.001; employed, $X^2 = 9.8$, p = 0.002; among smoker, $X^2 = 11.6$, p = 0.001; and higher in the rural setting, $X^2 = 13.5$, p = 0.001.⁸

Another cross-sectional study was conducted in rural and urban field practice areas to assess the impact of prolonged alcohol use on different systems of the body leading to various health problems. Results proved that majority of the regular alcohol users were suffering from different liver diseases like fatty infiltration (60) (56.08%), alcoholic hepatitis (25) (23.36%), and alcoholic cirrhosis (10) (9.35%). In cardiovascular system assessment, 23 subjects (21.50%) were suffering from severe hypertension.⁹

The present study proved that there is a significant association between the AUDIT scores with family support (*p* 0.007). Similarly, a community-based cross-sectional study was conducted among the adult population to estimate the pattern of alcohol consumption and to determine its correlation. A total of 99 (*n* = 99) adult (\geq 18 years) men and women were selected as study subjects using Lot Quality Assurance Sampling (LQAS) technique. Results showed that the prevalence of low-risk drinking or abstinence (Zone I) was 65.5% (95% CI 55.5–75.5%), the prevalence of alcohol use in excess of lowrisk (Zone II) was 17.6% (95% CI 7.6–27.6%), the prevalence of harmful and hazardous drinking (Zone III) was 8.5% (95% CI 0–18.5%), and the prevalence of alcohol dependence (Zone IV) was 8.4% (0–18.4%). Association between risk level of hazardous and harmful use of alcohol with various sociodemographic factors shows that there is a statistically significant association ($\chi^2 = 32.675, p$).¹⁰

CONCLUSION

Alcoholism is one of the emerging and major public health problems of the developing country like India. Study findings revealed that being a healthcare provider it is our responsibility to take various measures in order to educate the public regarding the consequences of chronic alcoholism through sensitization programs and collaborative health education campaigns.

ORCID

Shiji Pazhampallial Jose in https://orcid.org/0000-0002-7945-0789

REFERENCES

- 1. Dhandargi UN. A study to assess the effectiveness of street play on alcoholism among young adults in selected area. Indian J Psychiatry 2007;11–12.
- Ramanan VV, Singh SK. A study on alcohol use and its related health and social problems in rural Puducherry, India. J Family Med Prim Care 2016;5(4):804–808. DOI: 10.4103/2249-4863.201175. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5353818/.
- India alcoholic beverages market overview. Available from: https:// www.goldsteinresearch.com/report/india-alcoholic-beveragesmarket-analysis.

- 4. https://www.statista.com/statistics/727026/consumption-of-alcoholicbeverages-india/#:~:text=Alcohol%20consumption%20in%20 India%20amounted,growing%20urban%20population%20among %20others.
- Consumption of alcoholic beverages worldwide 2017–2021. Available from: https://www.statista.com/statistics/726990/alcoholic-beverageconsumption-worldwide/.
- 6. https://www.alcoholrehabguide.org/alcohol/.
- Htet H, Saw YM, Saw TN, et al. Prevalence of alcohol consumption and its risk factors among university students: a cross-sectional study across six universities in Myanmar. PLoS One 2020;15(2):e0229329. DOI: 10.1371/journal.pone.0229329.
- Lasebikan VO, Ayinde O, Odunleye M, et al. Prevalence of alcohol consumption and alcohol use disorders among outdoor drinkers in public open places in Nigeria. BMC Public Health 2018;18(1):400. DOI: 10.1186/s12889-018-5344-6.
- 9. Singh G, Mitra Y, Singh J, et al. Prevalence of health problems among the regular alcohol users (chronic alcoholics) in urban and rural area of district Amritsar: Punjab: India. Public Health Rev: Int J Public Health Res 2019;6(1):35–40. DOI: 10.17511/ijphr.2019.i1.05.
- Sau AP. AUDIT to estimate the pattern and correlates of alcohol consumption among the adult population of West Bengal, India. J Clin Diagnost Res 2017;11(4):LC01–LC04. DOI: 10.7860/JCDR/2017/ 23587.9559.

