



ORIGINAL RESEARCH PAPER

Psychiatry

TO STUDY THE PREVALENCE, AWARENESS OF HARMFUL EFFECTS AND REFERRAL OF ALCOHOL AND NICOTINE ABUSE IN MALE PATIENTS ADMITTED IN GENERAL MEDICAL WARD

KEY WORDS: Alcohol & Nicotine Abuse, Prevalence, Awareness, Motivation.

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ABSTRACT

BACKGROUND: Alcohol and nicotine use is an important public health problem especially in developing countries like India. As most patients get admitted in general medical ward, we aimed at studying the prevalence of alcohol and nicotine abuse in them and also assessed the severity & awareness of alcohol and nicotine related problems and degree of motivation to quit.

METHODS: 109 male patients selected, Semi structured proforma used to collect data regarding sociodemographic details, AUDIT, Leeds dependence questionnaire, Fagerstrom nicotine dependence scales were used to assess dependency and severity of alcohol and nicotine use.

RESULTS: The prevalence of alcohol use was 39.45% and nicotine was 45.87% .The awareness related to harmful effects was known to 55.8% of alcohol and 60% of nicotine users. Only 20.9% of alcohol & 20% of nicotine users were either motivated to quit or referred to psychiatrist.

CONCLUSION: Prevalence of alcohol and nicotine abuse is significantly high among inpatients of general medical ward. Even though majority of alcohol and nicotine users are aware of harmful effects only minority of them are referred to psychiatrist.

INTRODUCTION:

Alcohol use is an important public health problem, especially in developing countries like India. There was a marked variation between World Health Organisation sub-regions on average volume of alcohol consumption and patterns of drinking. A recent study highlighted that in India, health loss from alcohol will grow even larger, unless effective interventions and policies are implemented to reduce these habits (1).

Very few community-based studies have been conducted on the prevalence of alcohol use in India (2,3,4,5). Research from other countries largely supports the finding that inpatients are more likely to have problems with alcohol(6-8). The importance of identifying these patients lies in the possibility of providing some form of intervention aimed at reducing alcohol as well as nicotine consumption and thereby reducing the risk that the patient will subsequently develop complications of alcohol and nicotine misuse. (9)

We aimed at studying the prevalence of alcohol and nicotine abuse in male patient admitted in general medical ward as most of the patients visit for general medical assessments and

not for mental health problems. Also we assessed the severity alcohol and nicotine related problems, awareness of alcohol and nicotine related problems and degree of motivation to quit.

MATERIALS AND METHODS:

This is a cross sectional study conducted at Govt. Rajaji Hospital, Madurai from 109 male patients admitted in general medical ward during second week of June 2015 after excluding patients who were uncooperative (drowsy, unconscious or acutely ill) and those less than 18 yrs. After obtaining informed consent, consecutive male patients who got admitted in general ward were interviewed with a semi-structured proforma that covered socio-demographic data , history of alcohol and nicotine use, awareness about harmful effects, motivation or referral to quit/treatment .A subject who consumed alcohol in the past 12 months was taken as the criteria for defining alcohol use and then Leeds dependent questionnaire to assess the level of dependence, AUDIT (Alcohol Use Disorders Identification Test) to assess alcohol related problems and Fagerström Test for Nicotine Dependence. was applied. Data were entered into the SPSS program and analyzed using descriptive statistics.

RESULTS:

TABLE 1: CHARACTERISTIC PROFILE OF ALCOHOL/NICOTINE USERS

		ALCOHOL			NICOTINE		
		AGE IN ACTUAL VALUE	AGE OF 1ST INTAKE OF ALCOHOL RAW SCORE	DURATION OF REGULAR INTAKE RAW SCORE	AGE IN ACTUAL VALUE	AGE OF 1ST USE OF NICOTINE RAW SCORE	DURATION OF REGULAR INTAKE RAW SCORE
N	Valid	43	43	50	50	50	43
	Missing	0	0	0	0	0	0
Mean		41.70	21.60	10.00	45.46	20.72	19.10
Std. Deviation		11.761	7.349	9.212	10.818	7.530	12.380
Minimum		19	8	1	24	8	2
Maximum		60	40	40	65	45	50

The mean age of alcohol users under study is 41.7years while that for nicotine users is 45.46years. The mean of 1st intake of alcohol is 21.6 years and nicotine is 20.72years. The mean duration of alcohol intake is 10 years and for nicotine is 19.1years.

TABLE 2: AUDIT & LEEDS SCORE Vs UNITS OF DRINKING

UNITS OF DRINKING/day	No of patients (N=43)	Mean AUDIT/ LEEDS value for N	F	Sig.	
AUDIT- RAW VALUE	1 10 & ABOVE UNITS	7	28.43	8.200	.000
Vs UNITS OF DRINKING	2 7-9 UNITS	4	17.50		

	3 5-6 UNITS	26	16.08		
	4 3-4 UNITS	6	9.17		
	Total	43	17.26		
LEEDS-RAW VALUE	1 10 & ABOVE UNITS	7	15.14	10.321	.000
Vs UNITS OF DRINKING	2 7-9 UNITS	4	7.00		
	3 5-6 UNITS	26	6.92		
	4 3-4 UNITS	6	2.33		
	Total	43	7.63		

There was a significant correlation between units of alcohol intake and Leeds dependent & AUDIT score.

TABLE 3: FAGERSTORM NICOTINE SCORES Vs NICOTINE INAKE IN PIECES/DAY

NICOTINE INTAKE IN PIECES	N	MEAN FAGERSTORM SCORES	F	Sig.
1 31 OR MORE	4	8.25	10.736	.000
2 21-30	9	7.00		
3 11-20	20	5.95		
4 10 OR <10	17	3.35		
Total	50	5.44		

There was a significant correlation between nicotine intake in pieces/day and Fagerstorm nicotine scores.

TABLE 4: PERCENTAGE OF AWARENESS ABOUT HARMFUL EFFECTS OF ALCOHOL/NICOTINE

		ALCOHOL		NICOTINE	
		Frequency	Percent	Frequency	Percent
Valid	1 YES	24	55.8	30	60.0
	2 NO	19	44.2	20	40.0
	Total	43	100.0	50	100.0

TABLE 5: PERCENTAGE OF REFERRAL TO PSYCHIATRY

	ALCOHOL		NICOTINE	
	Frequency	Percent	Frequency	Percent
1 YES	9	20.9	10	20.0
2 NO	34	79.1	40	80.0
Total	43	100.0	50	100.0

DISCUSSION:

The mean age of 109 participants included in the study was 44years with minimum age of 19 and maximum age of 67 and that among alcohol users was 41.7years and nicotine users was 45.46 years. The family history of alcoholism among study patients was 38.5% and that among alcohol users was 55.8%. Similarly family history of nicotine use among general patients was 26.6% and that among nicotine users was 28%.

In our study the prevalence of alcohol use was found to be as high as 39.45% (N=43). Leeds dependence score identified nearly 62.8% as low dependence (Leeds score <10) and 37.2% as moderate dependence among alcohol users. (Leeds score 10-22). AUDIT score identified 86% among alcohol users as hazardous drinkers evidenced by AUDIT scores 8 & above while study from vellore reported hazardous alcohol use of 14.2% and villupuram as 30%(10). The reason for high percentage in our study could be that ours is a hospital based study where patients come for specific problems as compared to general population. The awareness related to harmful effects was known to 55.8% among alcoholics and most common awareness are problems related to GIT such as gastric ulcers, carcinoma stomach followed by problems related to liver and kidney. None of them reported awareness about psychiatric complications. Among the alcoholics only 20.9% were motivated to quit or referred to psychiatry then or in previous admissions.

In our study higher prevalence of nicotine use was 45.87% (N=50). Fagerström Test for Nicotine found 30% as highly dependent (Fagerstrom Score 31 & ABOVE), 34% as moderately dependent (Fagerstrom Score 21-30), 22% as low to moderately dependent (Fagerstrom Score 11-20) and 14%

as low dependent among nicotine users (Fagerstrom Score 10 Or Less). The awareness related to harmful effects was known to 60% among nicotine users and most common awareness are problems related to respiratory system such as carcinoma, breathing difficulty followed by problems related to GIT. None of them reported awareness about psychiatric complications. Among the nicotine users only 20% were motivated to quit or referred to psychiatry then or in previous admissions.

CONCLUSION:

Only by knowing the prevalence of alcohol and nicotine abuse/dependence in a general hospital, we know the need for a specialized liaison service to identify and treat these patients and thereby reduce the risk of complications of alcohol and nicotine misuse.

REFERENCES:

- Ramadas K, Sauvaget C, Thomas G, Fayette Jm, Thara S, Sankaranarayanan R. Effect Of Tobacco Chewing, Tobacco Smoking And Alcohol On All-Cause And Cancer Mortality: A Cohort Study From Trivandrum, India. *Cancer Epidemiol.* 2010;34:405-12.
- Ghosh S, Samanta A, Mukherjee S. Patterns Of Alcohol Consumption Among Male Adults At A Slum In Kolkata, India. *J Health Popul Nutr.* 2012;30:73-81.
- John A, Barman A, Bal D, Chandhy G, Samuel J, Thokchom M, Et Al. Hazardous Alcohol Use In Rural Southern India: Nature, Prevalence And Risk Factors. *Natl Med J India.* 2009;22:123-25.
- Gaunekar G, Patel V, Rane A. The Impact And Patterns Of Hazardous Drinking Amongst Male Industrial Workers In Goa, India. *Soc Psychiatry Psychiatr Epidemiol.* 2005;40:267-75.
- Krishnan A, Shah B, Lal V, Shukla Dk, Paul E, Kapoor Sk. Prevalence Of Risk Factors For Non-Communicable Disease In A Rural Area Of Faridabad District Of Haryana. *Indian J Public Health.* 2008;52:117-24.
- Ryder D, Lenton S, Harrison S, Dorricott J. Alcohol-Related Problems In A General Hospital And A General Active: Screening And The Preventive Paradox. *Med J Austral* 1988;149(3):355-60.
- Moore Rd, Bone Lr, Geller G, Mamon Ja, Stokes Ej, Levine Dm. Prevalence, Detection And Treatment Of Alcoholism In Hospitalized Patients. *Jama* 1989;261(3):403-7.
- Chick J. Alcohol Problems In The General Hospital. *Brit Med Bull* 1994;50(1):200-10.
- The Frequency Of Smoking And Problem Drinking Among General Hospital Inpatients In Brazil - Using The AUDIT And Fagerström Questionnaires Alcohol And Drug Research Unit, Department Of Psychiatry, Universidade Federal De São Paulo/Escola Paulista De Medicina, São Paulo, Brazil.
- Prevalence And Pattern Of Alcohol Consumption Using Alcohol Use Disorders Identification Test (Audit) In Rural Tamil Nadu, India Ganesh Kumar S., Premarajan K.C., Subitha L., Suguna E., Vinayagamoorthy And Veera Kumar.