

## INCIDENCE OF ALCOHOL CONSUMPTION AND SMOKING IN THE PATIENTS ADMITTED IN GENERAL MEDICINE DEPARTMENT OF A TERTIARY CARE TEACHING HOSPITAL

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Article Received on  
10 May 2018,

Revised on 01 June 2018,  
Accepted on 22 June 2018

DOI: 10.20959/wjpr201813-12453

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### ABSTRACT

**Objective:** This study was conducted to know the smoking and alcohol consumption pattern among patients admitted in general medicine department of a tertiary care teaching hospital. **Methods:** An observational, prospective study was conducted for a period of six months (October 2017 to March 2018) among 200 patients; demographic details, social habits, diagnosis and drug details were recorded. The social habits was analyzed by specially interacting with the patients. **Results:** The majority of the patients (33.5%) were in age group of 40-49 years. Male gender was in more number than female patients who were consuming alcohol were 111(55.5%) and smokers were 89 (49.5%). Most commonly diagnosed diseases in alcoholics and smokers were liver cirrhosis 62 (31%) followed by chronic

pancreatitis 49 (24.5%) and alcoholic gastritis 32(16). Alcoholism is affecting most productive age group i.e. 20-40 years, so it is of utmost importance to increase awareness about hazards of alcoholism.

**KEYWORDS:** Alcohol consumption, smoking, social habits.

### INTRODUCTION

Unhealthy behaviors such as smoking, drinking, often begin during adolescence. These behaviors are closely related to increased morbidity and mortality and represent major public health challenges. Smoking is one of the leading causes of preventable death globally.

Smoking is a practice in which a substance, most commonly tobacco or cannabis, is burned and the smoke is tasted or inhaled. This is primarily practiced as a route of administration for recreational drug use, as combustion releases the active substances in drugs such as nicotine and makes them available for absorption through the lungs. According to the World Health Organization (WHO), smoking kills nearly 6 million people annually, an average of one person every six seconds, and accounts for 6 and 12% of all female and male deaths respectively.<sup>[13,14]</sup> In addition, in 2014, World Health Organization after the revision of relevant data concerning smoking, reports that tobacco use is the direct cause of more than five million deaths, while more than 600,000 deaths are attributable to second-hand smoking.<sup>[4]</sup> The biggest impact of smoking is through non communicable diseases, although it may also increase the risk of communicable diseases such as tuberculosis and lower tract respiratory infections.<sup>[5]</sup> It is responsible for 87% of all lung cancer deaths<sup>[8]</sup>, 42% of chronic respiratory diseases and nearly 10% of cardiovascular diseases.<sup>[9]</sup>

### **Tobacco and Disease**

- Smoking is responsible for 30% of all cancer deaths; it is linked to cancers of the lung, mouth, larynx, esophagus, bladder, kidney and pancreas
- Smoking greatly increases the risk of heart attack and stroke.

### **Women and Smoking**

- Smoking among women is linked to lower fertility, cancer of the cervix and osteoporosis
- Pregnant women who smoke have higher rates of miscarriage, stillborn babies, premature birth, low birth weight babies and babies who die of Sudden Infant Death Syndrome (SIDS)
- There is a higher risk of developing breast cancer for women who start smoking in their early teens.
- A woman smoker who takes birth control pills is more likely to develop blood clots

Alcohol is the most widely abused psychoactive drug and it has long been known as a risk factor for disease. It is one of the most popular drugs for youth as well as adults. Although many people think of alcohol as a “pick-me-up”, it is in fact a “depressant” and slows down the activity of the central nervous system. The effects of alcohol can be very serious. In 1990 Global Burden of Disease (GBD) study (Murray and Lopez 1996a, 1996b) identified alcohol as one of the major global risk factors, accounting for 1.5% of global deaths. Alcohol is a contributory factor to more than 60 different known diseases.<sup>[15]</sup> Accidents associated with its

use are additional to these. For many common diagnoses in patients in medical wards, alcohol may be a contributory factor to the hospitalization.

### **Alcohol and Disease**

#### **Heavy, regular drinking is seen as a risk for developing**

- inflamed stomach or pancreas
- cirrhosis of the liver
- certain cancers of the gastro-intestinal tract and mouth and esophagus
- stroke and heart disease
- osteoporosis (alcohol interferes with calcium and bone building).

### **Women and Alcohol**

#### **Women are more susceptible to the effects of alcohol because of**

- Percentage of body fat to body water. Women generally have more fat, less water. Alcohol is very soluble, so less water in the blood means higher blood alcohol concentration
- Less active alcohol dehydrogenase, this begins to break down alcohol in the stomach lining. Fewer enzymes mean more alcohol in the system.

Women who drink regularly more than 10 drinks a week have an increased risk of developing breast cancer. Women who drink while they are pregnant risk having a baby with fetal alcohol effects/syndrome (FAE/FAS). While the risk increases with the amount they drink, no safe level of drinking has been established.

### **MATERIALS AND METHODS**

**Methodology:** This study was a record based observational, prospective study conducted in departments of general medicine in a tertiary care hospital. The study was conducted for a period of six months (October 2017 to March 2018). The ethical clearance for the study was obtained from Institutional Ethics Committee of Sri Padmavathi School of Pharmacy. Patients were recruited into the study were given clear explanations about the purpose and nature of the study in a language they understood. Written informed consent was obtained before inclusion in the study. From the case records of the enrolled patients' demographic details, education, occupation, diagnosis, drug details were recorded.

**Inclusion Criteria**

- Gender of both sexes.
- Patients over 18 years who had been electively or non-electively hospitalised on the medical wards.

**Exclusion Criteria**

- Patients unwilling to participate in the study.
- Patients unable to communicate.
- Out patients, ICU patients.
- Immunocompromised Patients,
- Viral Hepatitis B And C Positive And
- Hemodynamically Unstable Patients

**Sample Size:** A total of one hundred and fifty patients were included in the study. The participants reported their demographic data (age, gender, and education). Smoking and alcohol habits were identified with the aid of questions about the average number of daily cigarettes and alcohol consumption. At the end of the questionnaire, the participants were asked whether they had been questioned about smoking or alcohol use during their hospitalization period (yes/no/ don't know – don't remember). They were also asked whether they had been advised to cut down/quit smoking/alcohol use during their hospitalisation period (yes/no/don't know – don't remember).

The foremost diagnosis for the admission in question was retrieved from each participant's patient records. The socio-demographic data were calculated and expressed as percentages. The summarized results were arranged and put into a table form with the use of Microsoft word 2010.

**RESULTS****Table 1: Age Wise Distribution OF Smoking And Alcoholic Patients.**

S. No	Age in Years	Number of Individuals	Percentage
1.	20-9	11	5.6
2.	30-39	32	16.5
3.	40-49	67	33.5
4.	50-59	61	30.5
5.	60-69	22	10.5
6.	70-79	4	2

The demographic data in figure-1 shows that the majority of the patients were in the age group of 40-49 years 67 (33.5%), followed by age group of 50-59 years 61 (30.5%); the lowest number of patients 4 (2%) were in the age-group of 70-79years.

**Table 2: Gender Distribution of Smoking and Alcoholic Patients.**

S. No	Gender	Number of Patients	Percentage
1.	Male	193	96.5
2.	Female	7	3.5

Out of the total 200 patients, 193(96.5) were males and 7(3.5) were females.

**Table. 3: Number of Patients with Smoking and Alcohol Habits.**

S. No	Social Habits	Number of Patients	Percentage
1.	Alcohol Intake	111	55.5
2.	Smoking	89	49.5

Among 200 patients, patients who were consuming alcohol was 111(55.5%) followed by smokers 89(44.5).

**Table. 4: Most Commonly Diagnosed Diseases in Alcoholics and Smokers.**

S. No	Disease Condition	Number	Percentage
1.	Liver Cirrhosis	62	31
2.	Chronic Pancreatitis	49	24.5
3.	Alcoholic Gastritis	32	16
4.	Cva	22	11
5.	Dcmp With Dm With Htn	19	9.5
6.	Lrti With Bronchitis	9	4.5
7.	Tuberculosis	7	3.5

From the study it was evident that among the sample population of 200 patients suffering from different disorders liver disorder was most commonly observed with 62(31%) followed by chronic pancreatitis 49(24.5%), alcoholic gastritis 32 (16%), cerebro vascular accident (CVA), Decompensate cardiac myopathy with diabetes mellitus with hypertension, followed by lower respiratory tract infection with bronchitis (LRTI), and tuberculosis 7(3.5).

**Table. 5: Alcohol and Smoking Questionnaire.**

Attribute	Number	Percentage
1. Why did you start consuming alcohol	57	28.5
peer pressure	139	69.5
Because you felt like it	0	0
Influence of an adult	4	2
2. How often do you drink?	97	48.5
Every day	49	24.5
3-5 times a day	19	9.5
once a week	24	12
on weekends	11	5.5
3. Are you always able to stop drinking when you want to?	118	59
Yes	82	41
No		
5. Do you ever drive after drinking?		
Yes	77	38.5
No	123	61.5
6. DO YOU HAVE A HISTORY OF ALCOHOL OR DRUG PROBLEMS IN YOUR FAMILY?		
YES	108	54
NO	92	46
7. Purpose Of Smoking		
Recreational purposes	93	46.5
Stress relief	107	53.5
8. Are you aware of the negative health impacts of smoking, such as lung cancer and asthma?		
Yes	109	54.5
no	91	45.4
9. Are you aware of the fact that passive smoking kills millions of people per year?		
Yes	191	95.5
No	9	4.5

## DISCUSSION

With respect to the study criteria patients who are smokers and alcoholics with different diagnosis were admitted in the general medicine department of a tertiary care teaching hospital was included in the study. Demographics, history and prescription details were collected by using specially designed proforma.

The study revealed that majority of patient hospitalized were in the range of 20-29 years were 11(5.5%) patients followed by 30-39years were 32 (16%), 40-49 years were 67(33.5%), 50-59 61(30%), 60-69 years were 22(10.5) and age group of 70-79 years were 4 (2%) patients respectively showing that majority of the hospitalized patients fall under the age group range of 40-49 with 67 patients the results were comparable to the findings made by Rajesh

venkataraman et.al<sup>[3]</sup>, in which majority of patients were in the age group of greater than 80 years.

Among 200 patient's males were 193 (96.5%) where as females were 4 (2%) indicating male patients predominance over female which is similar to the study conducted by Rajesh venkataraman et.al<sup>[3]</sup>, where reports of their study reveals that the males are in higher number than females smokers and alcoholic patients. Out of 200 patients no of patients with alcohol consumption was 111(55.5%) and number of patients with smoking habits was 89(44.5%).

The morbidity pattern in our study was commonly found to be Liver cirrhosis were 62 (31%) patients followed by Chronic pancreatitis 49 (24.5%), Alcohol gastritis 32 (16%) and cerebrovascular accident (CVA) 22(11%), Decompensat cardiac myopathy with hypertension with diabetes mellitus(DCMP with HTN with DM) 19 (9.5%), followed by Lower respiratory tract infection(LRTI) with bronchitis 9(4.5%) and tuberculosis were observed in 7(3.5%) patients. as expected, increasing amount of alcohol intake was strongly associated with increasing risk of alcoholic liver cirrhosis and with a risk of alcoholic liver disease overall the highest risk was observed among the most heavily drinking participants: as compared with nondrinkers it can be comparable with Janne Schurmann Tolstrup study.

Among 200 patients who were smokers and alcoholics, majority of patients were consumed alcohol due to curiosity 139 (69.5), followed by peer pressure 57 (28.5%), and influence of adult 4(2%). Most of the patients consume alcohol every day was 97(48.5%) followed by 3-5 times a day 49(4.5) and once in a week is 19(9.5).119 patients were able to stop alcohol consumption and were as 82 were not able to impede alcohol consumption. About 92 (46%) patients have experienced memory loss after brisk alcohol consumption 123(54%) patients do not drive after consuming alcohol and 77(38.5) patients had an history of driving after alcohol consumption. Among 200 patients most of the patients smoke in favor of stress relief 107(53.5%) and remaining patients for recreational purpose 93(46.5). 109(54.5) patients have aware of the negative health impact and 91 patients has no aware about the ill effects of smoking and alcohol consumption. About 191(95.5) patients had aware of the passive smoking and 9 patients had no awareness about passive smoking health hazards (4.5%).

## CONCLUSION

One thing is strikingly clear in the present study that alcoholism is affecting most productive age group i.e. 20-40 years, so it is of utmost importance to increase awareness about hazards

of alcoholism at hospital level and at public places through media to curb this grave disease. Clinical pharmacist have to collaborate and work together with physicians in eradicating the smoking and alcohol consumption habits.

### ACKNOWLEDGEMENT

Mere words of thanks can never deliver the burden of our indebtedness and gratefulness to many individuals who in one way or other contributed and extended their precious support and assistance in planning, conduct and completion of this study.

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