



# Physician's Perspective on Alcohol Use among Patients of Tertiary Care Hospital Abbottabad Pakistan

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## Abstract

Alcoholism is a chronic brain disorder having a propensity of causing addiction, which afflicts communities through social, financial and health burdens. The objective of this work was to explore Physician's Perspective regarding cases of alcohol dependence among OPD and ward patients, seeking medical services at tertiary care hospital Abbottabad region. We conducted a cross sectional, questionnaire based study in different OPD and wards in tertiary care hospital. A questionnaire was circulated among physicians and their perspective regarding alcohol use and associated challenges were acquired. Data was analyzed by using SPSS® software. A questionnaire was disseminated among 225 physicians out of whom 99 physicians gave their opinion. About 63% doctors opined that one out of ten patients seeking medical help is using alcohol. Additionally, 70% physicians reported that alcoholic patients were in the age range from 29 years to 48 years and 25% of the physician responded that alcoholism is gradually affecting even younger population. More than 73% physicians agreed that alcohol adds to disease burden and prolong the stay of patients in hospitals. These findings imply that the problem of alcohol abuse is rising in Abbottabad region, affecting primarily young population, which augments the disease burden and enhances the patient's hospitalization rate and time.

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**Keywords:** Physician's perspective; Alcohol use; Alcohol dependence; Tertiary care hospital

## Introduction

Alcoholism is a leading and pervasive form of addiction worldwide characterized by world's 3<sup>rd</sup> major cause of pre-mature deaths and continuous health deterioration [1]. Similarly, 5.1% of overall Disability-Adjusted Life Years (DALYs) in 2016 were caused by alcohol (almost 132.6 million) [2]. Pakistan, being an Islamic state, alcohol preparation, trade and drinking are strictly prohibited by law. But in spite of such laws its use among younger male Pakistani population is increasing [3,4]. In the past decade multiple reports have shown a dangerous and significant rise of substance use among Pakistani population.

By exploring physician's opinion and experience regarding use of alcohol among patient population seeking medical support have a huge significance for health care system and health care policy makers [5]. By virtue of Physicians' knowledge and experience regarding alcohol use policy makers can assess, which population is predominantly affected and can better quantify the level of relationships between alcohol use and associated co-morbidities [6]. Epidemiological data provided by health care professionals also improve patient outcomes through improved and goal directed health policies made and implemented by government [5].

Very limited literature can be found on the alcohol use in Abbottabad Khyber Pakhtunkhwa Pakistan population, so, this questionnaire based cross sectional study was designed and conducted to explore Physician's perspective regarding the alcohol use in patient seeking medical assistance at a tertiary care hospital. We also tried to explore Physician's opinion regarding the role of alcohol use on overall disease burden and hospital stay.

## Materials and Methods

### Study setting

This hospital based cross-sectional study was conducted at a tertiary care hospital in Abbottabad region. Abbottabad is the capital city in Hazara division located in the eastern region of Khyber Pakhtunkhwa Pakistan (KP). The study area has a population of 1.333 million. The tertiary care hospital of Abbottabad region also provides healthcare facilities to the nearby local residents as well as patients, referred from other districts. The study was conducted during October, 2017 to February, 2018 and was approved by the Research Ethics Committee, department of Pharmacy COMSATS University Islamabad, Abbottabad Campus, under registration code PHM.Eth/cs-M04/11-36.

### Data collection

Pre-designed questionnaire was distributed among physicians of different departments i.e. Medical, Gastroenterology, Pulmonology, Urology, Cardiology, Psychiatry and Dentistry. The questionnaire covers participant's perception regarding their patient's sociodemographic characteristics, alcohol consumption and its related habits, and family history of alcohol consumption. A questionnaire was distributed among 225 physicians out of whom 99 physicians completed the questionnaire.

### Statistical method

Data were analyzed using IBM SPSS<sup>®</sup>, version 24.0. Descriptive statistics were applied for evaluation of data.

## Results

Overall, we collected 99 physicians opinion about alcohol use in their OPD/ward patients. Doctors were approached in their duty place (Government Hospital) and also in their private clinics. Collectively 63% physician's perspective was that out of 10 patients 1 patient reported in OPD with some co-morbid condition was alcoholics. Remaining 37% doctors did not respond to this query by reason of privacy and confidentiality of their patients (Table 1).

Patients presented with a variety of physical and psychological complaints to the physicians in OPD within a different time span were shown in Figure 1. From our data, we found that 29 (29.3%) doctors come in contact with alcohol exposed patients in their consulting room on a monthly basis. Similarly 7 (7.1%) physicians responded that they attended such patients on a daily basis, 12 (12.1%) reported finding at least alcoholic on a weekly basis, while 17 (17.2%) stated it once in 6 months and 26 (26.3%) physicians take a history of alcoholic patients once in a year. Only 8 (8.1%) doctors were found none responsive to these questions.

According to physicians' outlook alcohol abusing patients have a clear positive family history of alcohol use. By referring to Table 2, over three quarters of the Physicians (85%) believe that alcohol dependence leads to other complications like liver disease, pancreatitis, gastrointestinal problem and immune system dysfunction etc., which increases the total treatment cost and patient stay in hospitals. Also, 62% responding Physicians agreed that alcohol trend is increasing in Abbottabad region.

By analyzing our data, we found that 42 (42.4%) doctors think that the approximate percentage of alcohol dependent patients in Abbottabad region is about 10%. Remaining physician's opinion is also documented in Table 3.

**Table 1:** Physician's perspective of alcohol use among OPD patients in tertiary care hospital.

Rate out of ten	Physicians Frequency	Percent (%)
No response	37	37.4
43840	34	34.3
43871	16	16.2
43900	5	5.1
43931	1	1
43961	1	1
43992	1	1
44022	3	3
44053	0	0
44084	1	1

**Table 2:** Percentage of physicians agreed on the increasing trend of alcohol, family history involvement, and increase in treatment cost and patient stay in hospital.

Statement	% age of Agreed Physicians
Family history is involved in alcohol dependence	0.63
Alcohol trend increases in Abbottabad region	0.62
Alcohol dependence adds to disease burden	0.85
Alcoholism adds to the overall treatment cost	0.82
Alcohol dependence increases the stay of patients in hospital	0.73

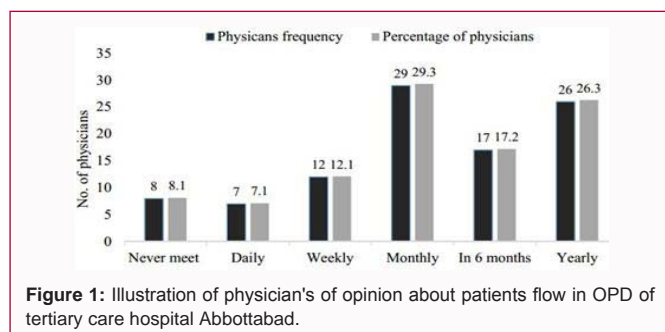
**Table 3:** Physician's perceptions of approximate percentage of alcohol dependent patients in Abbottabad region.

Alcohol Dependent Patients (%)	Physicians Frequency	Percentage (%)
0	10	10.1
10	42	42.4
20	16	16.2
50	5	5.1
Above 50	26	26.3

**Table 4:** Physician's perspective about age and socioeconomic status of alcohol drinking patients visited into outpatient departments.

Variables	Physicians Frequency	Percentage (%)
<b>Age</b>		
No response	2	2
18-28	25	25.3
29-38	38	38.4
39-48	32	32.3
49 and above	2	2
<b>Socioeconomic status</b>		
Very poor	1	1
Poor	17	17.2
Middle class	23	23.2
Upper class	51	51.5
First class	7	7.1

Alcohol drinking pattern is more in communities in the age ranges from 29 years to 48 years and this trend is more directed towards young people in view of 25.3% doctors. On the other way around more than half of the physicians (58.6%) noted that most of



**Figure 1:** Illustration of physician's of opinion about patients flow in OPD of tertiary care hospital Abbottabad.

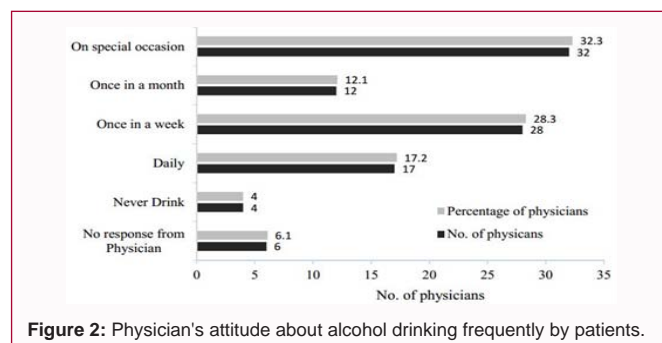
the patients visiting OPD with alcohol addiction belongs to upper class families. Likewise 18 (18.2%) medical doctor said that they belong to the poor class. And 23 (23.2%) opine that these patients belongs to middle class society (Table 4).

Nearly one third (32%) of physicians reported that alcohol is a recreational drink and people drinks only on special occasions. A further 17 (17.2%) doctors marked option daily, 28 (28.3%) said once in a week, 12.1% said once in a month and remaining 11.1 percent either didn't respond or they have never observed alcoholic patients (Figure 2).

## Discussion

This study, for the first time depicts physician's perspective of alcohol use among patient population seeking medical care in tertiary care hospital in Abbottabad region. Abbottabad is the second largest district of Hazara division situated in Khyber Pakhtunkhwa having a total population of 1.333 million [7]. It's pertinent to mention that 63% responding physicians report the prevalence as 10% among patients seeking medical assistance which can be even higher in the general population (Table 1). Although Pakistan is an Islamic country in which alcohol trade and consumption is prohibited by the law. Alcohol drinking is considered as a social stigma; earlier finding showed that 96% of the populations do not drink [3]. Currently, a limited doctors' perception implies alcoholism is growing problem in our society, but still there are very less data on the prevalence of alcohol dependence and the available data covers only few major cities of Pakistan [8,9] (Table 2). In an earlier cross-sectional study it was reported that, next to cocaine and amphetamine, alcohol is the 3<sup>rd</sup> most prevalent substance of abuse in Karachi [10]. Another study reported that about 10 million alcoholic are present in Pakistan; out of which 1 million have alcohol associated medical complications [11]. (6) Similarly, in a two separate studies conducted in professional institutes of Pakistan, alcohol prevalence was found 6% among medical students [12,13]. In our study, we found that collectively 63% of physicians in their clinical practice reported 1 out of 10 patients as alcoholic, while taking patient history, which comes to seek treatment for any health related issues and its number is increasing with the passage of time. The approximate percentage of alcohol dependent patients in our study locality are shown in Table 3 in which a major portion of doctors observed it as 10% and such type of studies are warranted in other parts of the province.

Alcoholism has many proponents that lead to its progression in society and a study reported that 49.77% patients have at least one alcoholic contact or family member [14]. Likewise, John et al. [15] reported that a positive family history of alcohol addiction is one of the prime aspects of alcohol use in communities. We found that 63% of the responding Physicians authenticate the associations of positive



**Figure 2:** Physician's attitude about alcohol drinking frequently by patients.

family history and alcohol dependence as shown in Table 3.

Globally alcohol related emergency calls are growing at an exponential rate than overall emergency visits and signify a rising burden on hospital services [16]. In our study, more than 80% of the responding physicians categorized alcoholism as major proponents for secondary complications which enhances patient's hospital stay and ultimately increased the overall cost of the health care needed (Table 2). These findings corroborate with earlier findings from other countries regarding prolonged hospital stay and overwhelming treatment costs [17,18]. The growing trend of alcoholism demands earlier detection and management at primary care level [19,20].

Regarding physicians' perceptions, the prevalence of alcohol abuse is higher in young adults and in the last few years, this trend is changing to teen ages [3,21]. In observation of general physicians, people of age group 29 to 48 years are commonly involved in alcohol drinking. Similarly, one fourth (25%) of physicians experienced patients exposed to alcohol are in younger age. The finding of the present study is in accordance to a WHO study group on "young and drugs", which stated that most of the new drug users initiate drinking while they enter adolescence. The notion was further supported by witnessing more severe cases of alcohol use disorders in advanced ages [22].

In developed countries, there is no association between alcohol exposure and economic condition of the people, but both in developing and poor countries, there is a positive correlation between these two variables [23,24]. According to the WHO report, alcohol consumption rates are markedly higher in wealthier class of people as compared to poorer communities [24]. From our study, we found variable perceptions from respondents regarding socioeconomic status of patients. About 58% physicians reported that alcohol trend is more common in upper class communities, 23% physicians reported it in the middle class and 18% physicians experience it in lower class people (Table 4). Socio economic disparities and other social pressures, aligned with weaker social and economic support from state collectively leads to more psychological problems including addiction [25]. These people think of alcohol as an escape proposal from stress full and traumatic life events [10].

In order to overcome alcohol and substance abuse related issues, a national health policy are requisite, which could regulate and control the production, assembling, purchase, transport, and availability of alcohol containing drinks. For example: US Policies 2013 has a well-built national policy on alcohol consumption, which regulates all aspects pertaining to alcohol [26]. To enhance public awareness regarding the health hazards of alcoholism a national level awareness campaign needs to be initiated using print, electronic and social media, primarily focusing on socioeconomically vulnerable classes of

society and youth in general [27].

## Study Limitations

This study has certain limitations that are, no specialty was focused while distributing questionnaire and physicians were sampled randomly from different wards that's why patients flow to a specific ward can't not be determined from our study. Also from our study, it cannot be concluded that how many patients go to the treatment phase for detoxification, as this question was not included in our survey instrument. Similarly, physicians were asked to rate their alcoholic patients out of 10, which make the data least specific. The data could be more precise if they rate it out of 100 instead of 10. Another limitation of our study is that it didn't stipulate that whether the use of alcohol is more in rural or urban areas of Hazara division. Likewise, our study was conducted in Abbottabad region and this study demands that other parts of the KP need to be evaluated for the prevalence trend.

## Conclusion

In conclusion, our study depicts physician's opinion regarding the significant increase in alcoholism, which augments the disease burden and also multiplies treatment costs.

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