

# Study on Alcohol Consumptions and its Impact on Academics in Medical Students of Hyderabad Telangana

K Srinivasulu<sup>1</sup>, Punyala Kavya Sree<sup>2</sup>, Aarti Prodduku<sup>3</sup>, Gaddam Sreenidhi Yadav<sup>4</sup>,  
Nikhitha<sup>5</sup>, M Eshwar<sup>6</sup>

<sup>1</sup>Dept of Forensic Medicine Malla Reddy Institute of Medical Sciences, Hyderabad,  
<sup>2</sup>3rd MBBS part 1, Dept of Forensic Medicine Malla Reddy Institute of Medical Sciences, Hyderabad,  
<sup>3</sup>3rd MBBS part-2, Dept of Forensic Medicine, Malla Reddy Institute of Medical Sciences, Hyderabad,  
<sup>4</sup>3rd MBBS part 1, Dept of Forensic Medicine, Malla Reddy Institute of Medical Sciences, Hyderabad,  
<sup>5</sup>Internee Dept of Forensic Medicine, Malla Reddy Institute of Medical Sciences, Suraram, Telangana,  
<sup>6</sup>3rd MBBS part-2, Dept of Forensic Medicine Malla Reddy Institute of Medical Sciences, Hyderabad.

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## Abstract

Cross sectional and prospective study on alcohol consumption and its impact on academics in medical students of Hyderabad Telangana were conducted in a medical college Hyderabad. 100 medical students, both male and female who consumed alcohol had participated in the study. Socio demographic and academic details were collected from each participant after obtaining an informed consent. Study results revealed that majority of the students consuming alcohol were from urban area, high socio-economic background and whose family members also consume alcohol. Majority of the students were from educated and nuclear families. Social, fun and curiosity were being the top reasons for consuming alcohol. Students suffering from various psychiatric illnesses were also reported in our study. Alcohol consumption had a great impact on their academics (39%) was noticed in our study. Similar results were found in studies conducted in other states of India. Constant supervision by parents, awareness programs by their peer group and regular psychiatric counseling will help to minimize this habit among medical students.

**Key words:** Alcohol, Academic impact, Medical students, socio demographic profile.

## Introduction

The term alcohol in common use refers to ethyl alcohol. Alcohol is produced by the fermentation of sugar by yeast. It is a CNS depressant, primarily depresses reticular activating system, it inhibits the inhibitory neuronal transmitters which result in

excitement. The frequency of crimes committed by persons under the influence of alcohol is not due to failure to realize the nature and consequences of the acts but to the repression of those inhibitory influences that in sober persons prevent the commission of such acts<sup>1</sup>.

**Corresponding Author:** K. Srinivasulu, Professor and HOD, Dept of Forensic Medicine & Toxicology, MRIMS, Hyderabad, Telangana.

**E-mail:** drksrinivas1968@gmail.com

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Alcohol consumption in adolescent age group is increasing worldwide. Alcohol is most widely and commonly used substance abuse among college students which includes professional colleges. A study conducted in US<sup>2</sup> on alcohol abuse among students reveals that there were 1,825 students between the age of 18 and 24 during the period from 1998 to 2005 who died from unintentional injuries due to alcohol. In another study at US<sup>3</sup> states that every 1 in 4 college students report different types of academic consequences like missing classes, bad academic performance due to alcohol abuse. Alcohol and substance abuse is a growing public health problem in India. Alcohol and tobacco are most frequently used substances in India. The prevalence of alcohol use among medical students<sup>4</sup> is high, even though they understand the dangers of its use. Factors such as increase independence, reduced parental supervision, academic stress and frequent social contact predispose the use and abuse of alcohol. Nearly 150 million adults (15 years and above) in India drink Alcohol, according to the NFHS<sup>5</sup> (National Family Health Survey) 2021. Alcohol consumption among 15 years & above in women is 1.3% and for men is 18.8%. In Telangana the overall prevalence was found to be 16.29% in medical students.<sup>6</sup>

The aim of the study is to explain alcohol consumption and its impact on academics among medical students with an objective to assess various socio demographic and psychological aspects leading to alcohol consumption. This study will be helpful to understand the reason of alcohol consumption among medical students which in turn helps to take various preventive measures.

### Material and Methods

A cross sectional and prospective study on socio demographic, psychological aspects of alcohol consumption and its impact on academics among medical students was conducted in Hyderabad Telangana. 100 medical students, among 58 male and 42 female who had consumed alcohol were considered for the study. Study was conducted from 1<sup>st</sup> June 2023 to 15<sup>th</sup> July 2023, for a period of 45 days in a Medical college, Hyderabad. An informed consent was taken from each participant before commencement of the

study, names of the participants kept anonymous. Ethical permission was obtained from the institution.

Students from 1<sup>st</sup> year to final year who had an experience of alcohol consumption and willing to participate in the study were included and non-alcoholic students and students unwilling to participate were excluded.

The following socio demographic and academic details was collected

1. Gender. Age of the student. Locality (urban/ rural). Religion (Hindu/Muslim/Christian)
2. Residing (Hostler/ residing outside). Year of study
3. Personal habits other than alcohol (smoking/ substance abuse)
4. Personality (lonely (no friends) / social)
5. Family history:
  - Family type: Nuclear / joint. Occupation and education of parents
  - Family income According to modified BG Prasad classification.
  - Parents consuming alcohol (F / M / both / No). Siblings consuming alcohol (Y / N)
  - Close relatives consuming alcohol (Y / N)
6. History of Alcohol consumption:
  - Age started alcohol consumption. Frequency (Regular/ occasional/ quit)
  - Duration; since how long. Time of last consumption (days/ weeks/ Months/ years)
  - Reasons: (Peer pressure / Academic stress/ Love failure/ Social gathering/ Fun/ Curiosity/ Emotional disturbance/ multiple reasons). Brand of alcohol consume regularly (Beer/ wine/ Whisky, brandy, gin, vodka)
7. Academic impact of alcohol consumption: Poor Attendance/Poor concentration in the class/Effect on reading/ poor academic performance/ Fail in the exam.
8. History of Psychiatric illness (Anxiety/ Depression/ Any other to specify....)
9. Did it affect your physical health (Yes / No). Recent Road accidents (Yes / No).
10. Did it affect your social life in anyway (Yes / No)
11. Is your family aware of your habit (Yes/No)

The above data was collected from each participant into pre structured data sheet then into an MS excel sheet and statistical analysis was done by using SPSS software.

### Results and Discussion:

A Cross sectional and prospective study on alcohol consumption and its impact on academics in medical students of Hyderabad Telangana. Study

results reveals that the male participants were more in number (58%) because of exposure and peer pressure. Majority of the participants (94%) were in the age group of 20 to 25 years, most of the students were in that age group during their study period. 89% of the study group belong to Hindu community, 9% Christians and 2% from Muslim community was observed, highest number in Hindu community due to their major contribution in the general population.

**Table-1: Showing socio demographic details in relation to alcohol consumption in the study population.**

Variables	Frequency & Percentage	Variables	Frequency & Percentage
Study population	Male - 58% Female - 42%	Age	Less than 20 - 5% 20 to 25 years - 94% >25 years - 1%
Religion	Hindu - 89% Muslim - 2% Christian - 9%	Year of study in the study group	1 <sup>st</sup> MBBS - 2% 2 <sup>nd</sup> MBBS -21% 3 <sup>rd</sup> MBBS part 1-23% 3 <sup>rd</sup> MBBS part 2-38% Internees - 16%
Residence	Hostler - 37% Residing outside - 63%	Alcohol consumption started at age	<15 years - 8% 15 to 20 years -69% 21 to 25 years - 23%
Locality	Urban - 86% Rural - 14%	Personnel habits	None - 54% Smoking - 46%
Family type	Nuclear - 85% Joint - 15%	Personality	Lonely (No friends) - 28% Social - 72%

More number of the participants (86%) from urban locality. 63% of the students consuming alcohol was residing outside the campus whereas 37% were hostlers; students who are living outside are more accessible to social life. More number of students (38%) consuming alcohol are in final MBBS, 2% observed in 1<sup>st</sup> MBBS, 21% in 2<sup>nd</sup> MBBS, 23% in 3<sup>rd</sup> MBBS, our study revealed that the number of students consuming alcohol increased year by year. In regard to personnel habits, students smoking

along with alcohol were 46%, more number (54%) of students were without smoking habit. In the study group majority of the students (72%) preferred to be social and more interactive remaining 28% of students were alone and less interactive. First time alcohol consumption in relation to the age between 15 to 20 years was 69%, highest numbers were in the age group of early medical school life was noticed in our study.

**Table-2: Showing Family member's education, occupation and alcohol consumption details.**

Variables	Frequency & Percentage	Variables	Frequency & Percentage
Occupation of mother	Government - 10% Private - 23% Self employed - 5% Housewife - 62%	Occupation of father	Government - 23% Private - 33% Self employed - 44%
Mother's education	Up to inter mediate -19% Graduate - 62% Postgraduate - 19%	Father's education	Up to intermediate -9% Graduate - 64% Postgraduate - 27%
Parents consuming alcohol	Father - 38% Mother - 2% Both - 6%, None -54%	Family Income (BG Prasad classification)	Class-1 - 96% Class-2 - 2% Class-3 -1%, Class-4 -0 Class-5 - 1%
Close relatives consuming alcohol	Yes - 81% No - 19%	Siblings consuming alcohol	Yes - 37% No - 63%

Majority of the students consuming alcohol belong to nuclear family, self employed parents and educated family background. Family income in relation to the alcohol consumption among students according to modified BG Prasad classification was class-1 are 96%, majority of the students belongs

to higher income families. In regard to parents, siblings and relatives consuming alcohol showed proportional increase in number was observed in our study. Family members consuming alcohol will definitely have an impact on students.

**Table-3: Showing details of alcohol consumption pattern in study group and its impact on health and social life.**

Duration of alcohol consumption	Less than 1 yr - 43% 2 to 5 Yrs - 48% >5yeras -9%	Frequency of alcohol intake	Regular -16% Occasional - 77% Quit - 7%
Brand of alcohol	Beer - 8%, Wine -6% Vodka -21%, Whiskey, Brandy, Gin, Rum -21%, Multiple brands -44%	Day of last consumption	Days - 29% Weeks -38% Months - 29% Years - 4%
History of Recent road accidents due to alcohol	Yes - 5% No - 95%	Effect on physical health	Yes - 16% No - 84%
Are family members aware of their child alcohol consumption	Yes - 29% No - 71%	Effect on social life	Yes - 8% No - 92%

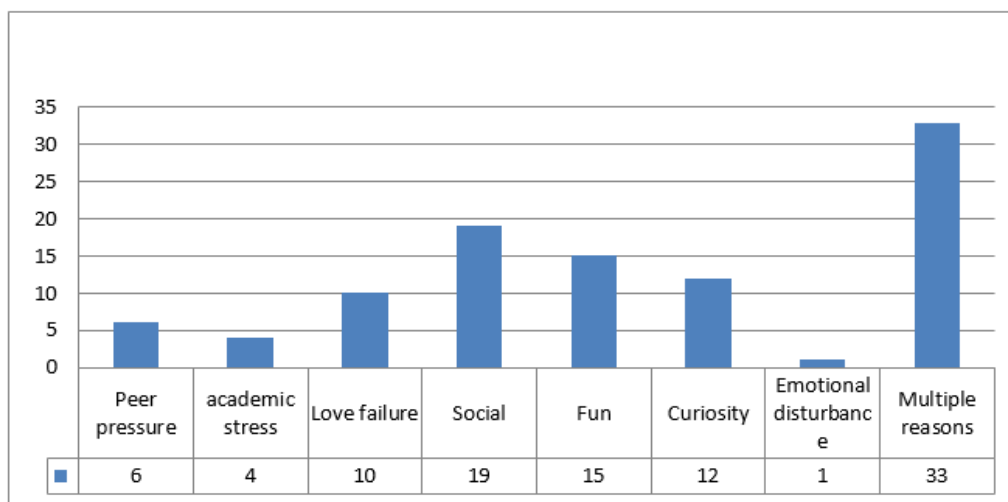
Types of alcohol beverages consumed in our study group were Vodka 21%, Whisky brandy Rum

and gin 21% and multiple brand beverages were 44%. Majority students consume alcohol occasionally 77%,

regularly consuming students were 16%. Duration of alcohol consumption was less than 1 year were 43%, 2 to 5 years were 48% and majority of students consumed alcohol in the past few weeks were 38%, days back were 29%. This shows how frequent they were consuming alcohol in the study population. Alcohol consumption did not effect on their physical health in 84% of study group, 5% of students met with road traffic accidents after consuming alcohol. Social life of students was disturbed in 8% of study group. 71% of student family members were not

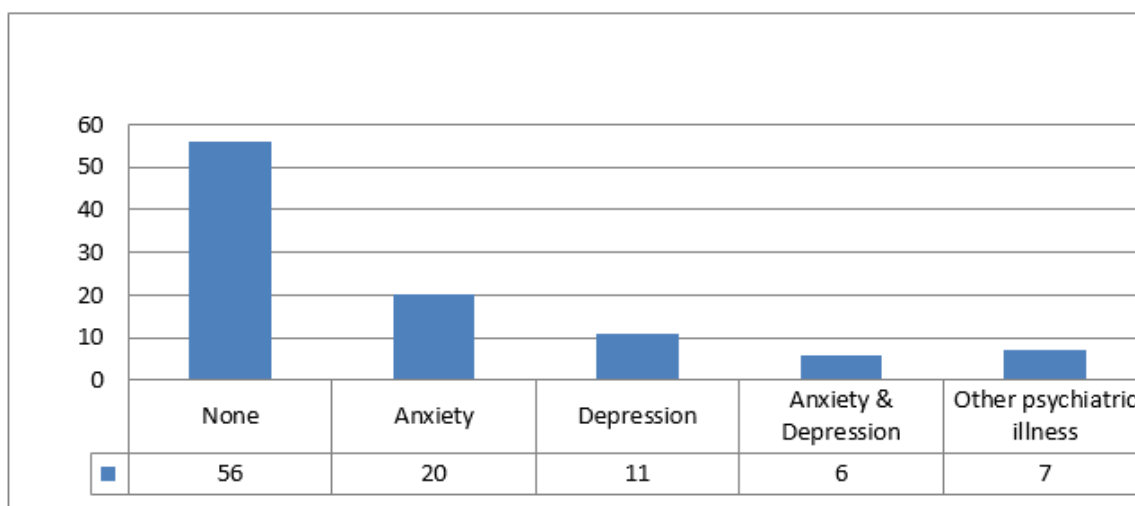
aware of alcohol consumption of their ward; this shows a serious lack of supervision and control by their parents.

**Figure-1:** Showing details of reasons of alcohol consumption in the study group. Majority were due to multiple reasons (33%) which include social gathering, peer pressure, curiosity, and love failure and for the sake of fun. Academic stress and emotional disturbance contributes very less.



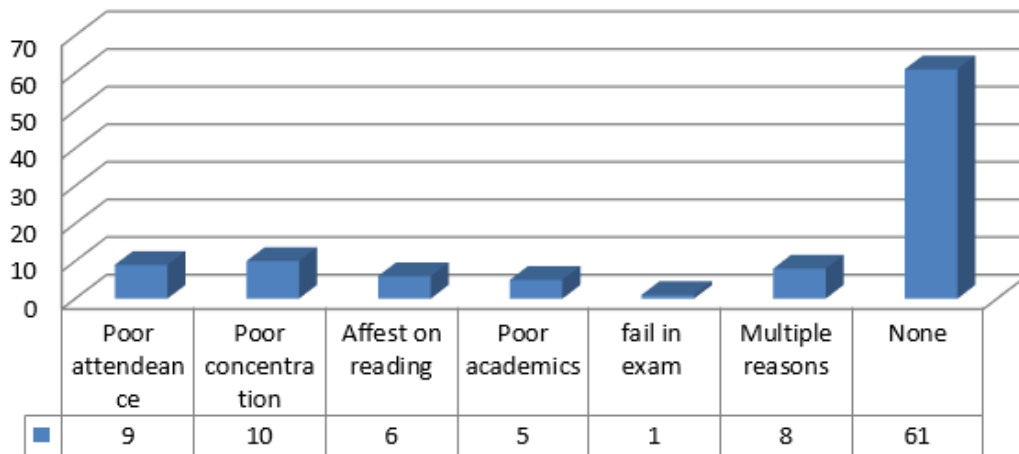
**Figure-2:** Showing details of History of psychiatric illness in relation to alcohol consumption was found in 44% of our study population whereas 56% of students were no history of psychiatric illness.

37% were suffering from anxiety and depression related issues and remaining 7% were suffering from other psychiatric illnesses.



**Figure-3:** Showing details of academic impact due to alcohol consumption in the study group. 61% of study group had no effects whereas 39% of students

had multiple academic issues like poor concentration, poor attendance and failure in examination.



Study conducted by Ningombam<sup>7</sup> S, Hutin Y, Murhekar MV on Prevalence and pattern of substance use among the higher secondary school students of Imphal, Manipur, India reveals that the prevalence of alcohol consumption among students was highest in student's whose family members and relatives also consume alcohol. Similar results were observed in our study. A study on illicit substance use by adolescent students in eastern India: Prevalence and associated risk factors by Dechenla<sup>8</sup> Tsering and Ranabir Pal shows major reason for alcohol consumption was for enjoyment and curiosity whereas in our study the most common reasons are social gathering, fun and curiosity. Alcohol use and its influencing factors among undergraduate students in Uttar Pradesh University of Medical Science in district Etawah, India. Jyoti Mehra<sup>9</sup>, Kripashankar Nayak reveals that average age was 20 and 61% are consumed for fun, similar results were found in our study.

### Conclusion

Alcohol consumption among medical students is increasing day by day. Prevalence of alcohol consumption was high among senior medical students with male preponderance and more among students of the urban area. Highest number was observed in students whose parents, siblings and relatives also consume alcohol. History of Psychiatric illness associated with alcohol consumption was observed in majority of the students. Academic impact was noticed in the study group. Majority of parents were

not aware of alcohol consumption of their children, this may be the reason for increased number. Constant supervision by parents and guardians, periodical psychiatric counseling and creating knowledge and awareness on alcohol consumption and its impact on academics and health by their peer group will help in curbing this social menace.

**Conflict of interest:** Nil

**Ethical clearance:** Yes. Reference No: MRIMS/DHR-IEC-MBBS/2023/107, dated: 25-05-2023.

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