



**TO STUDY THE PREVALENCE OF SUBSTANCE ABUSE AMONG MEDICAL STUDENTS OF BATCH 2014 AND 2016**

**Rijul Ranjan<sup>1</sup>, Anuradha Davey<sup>2</sup> and Arvind Shukla<sup>3</sup>**

<sup>1</sup>Tutor, Mulayam Singh Yadav Medical College, Meerut, U.P

<sup>2</sup>Associate Professor, Subharti Medical College, Meerut, U.P

<sup>3</sup>Assistant Professor (Biostatistics), AIIMS, Raipur

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**ABSTRACT**

**Introduction:** As per WHO, substance abuse refers to harmful or hazardous use of psychoactive substances including alcohol (more than 148ml/day) and illicit drugs.<sup>1</sup> Psychoactive substances use can lead to dependence syndrome- a cluster of behavioral, cognitive and physiological phenomenon that develop after repeated substance use and that typically include a strong desire to that drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance and sometimes a physical withdrawal state.

**Aims and Objectives:**

- To study the prevalence of substance abuse among medical students of batch 2014 and 2016
- To find out the determinants for substance abuse among medical students

**Material & Methods:** A Cross Sectional Study with Focus Group Discussion was conducted in Subharti Medical College in 1<sup>st</sup> and 3<sup>rd</sup> year MBBS students. 200 students, all students from 2 batches was included in the study, so the sample size is 200 students

**Result:** The students of 2014 batch were indulged more in substance abuse as compared to 2016 batch.

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**INTRODUCTION**

As per WHO, substance abuse refers to harmful or hazardous use of psychoactive substances including alcohol (more than 148ml/day) and illicit drugs.<sup>1</sup> Psychoactive substances use can lead to dependence syndrome- a cluster of behavioral, cognitive and physiological phenomenon that develop after repeated substance use and that typically include a strong desire to that drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance and sometimes a physical withdrawal state.<sup>2</sup>

Substance use and their associated problems are of global concern. WHO estimates show the burden of worldwide psychoactive substance use to be around 2 billion amongst alcohol users, 1.3 billion in smokers and 185 million in other drugs.<sup>3</sup>

Psychological drug comes from the reason the reason the user is addicted to drugs, as well as the changes that takes place in the brain. Chronic use of some drugs can lead to both short- and long-term changes in the brain, which can lead to mental

health issues, including paranoia, anxiety, depression, aggression, hallucination and other problems.<sup>4</sup> The effects of drug addiction also include the cost to the justice and health care systems.

Initially, many people start using drugs to cope with stress or pain. An effect of drug addiction is creation of a cycle where anytime the user encounters stress or pain they feel the need to use the drugs.<sup>5</sup>

This is one of the psychological effects of drug addiction involved in craving of the drug. Craving is an effect of drug addiction where the person is obsessed with obtaining and using the drug and belief of the person that he cannot function or handle life situations without the use of it.<sup>5</sup>

Other psychological effects include- wild mood swings, violence, depression, anxiety, complication of mental illness, hallucination, confusion, desire to engage in risky behavior, change in appetite and decrease in pleasure in everyday life.<sup>5</sup> Substances such as tobacco have also been shown to be widely abused by students for various reasons.

Adolescent drug abuse is one of the major areas of concern in adolescent and young people's behavior. It is estimated that, in India by the time most boys reach ninth grade, about 50% of them have tried at least one of the substances of abuse nature.

\*Corresponding author: **Rijul Ranjan**

Tutor, Mulayam Singh Yadav Medical College, Meerut, U.P

Alcohol is the commonest substance used (60-96%) followed by tobacco (30-40%) and then cannabis (4-20%)<sup>6</sup> Epidemiological surveys also revealed that 20-40% subjects above 15 years are current users of alcohol and 10% of them are regular or excessive users.

As of 2000, per the UNODC, prevalence of cannabis abuse in India was 3.2%. As of 2010, WHO released its global status report on alcohol health saying 30% people in India drink regularly above the age of 15 years. According to Global Adult Tobacco Survey (2016-2017), people aged between 15-24 years, tobacco prevalence is around 12.5%<sup>7</sup>

Mortality associated with tobacco, alcohol and illicit drug use ranges around 1-9%. Studies done worldwide<sup>8</sup> and from India have estimated the same to be around 20-30%<sup>9</sup>This study will hence focus on impacts which the course of MBBS is causing on the student's pattern of abuse, whether it is increasing or decreasing, and if possible, it will try and identify these factors and bring them under control as to further more control of substance abuse.

**MATERIALS AND METHODS**

**Study Settings:** Subharti Medical College

**Study Population:** 1<sup>st</sup> and 3<sup>rd</sup> year MBBS students

**Study Design:** Mixed design: Cross Sectional Study with Focus Group Discussion

**Sample Size:** 200 students, all students from 2 batches will be included in the study, so the sample size is 200 students

**Inclusion Criteria:** Students who were present during the time of study

**Exclusion Criteria:** Students who were not willing to participate during the time of study

**Data Collection:** Questionnaire tool to collect data that is pretested and pre-validated would be used. Focus group discussion will be conducted one from each batch to get insight reason for substance abuse.

**Sampling Technique:** Purposive Sampling

**RESULTS**

Table 1

	2014 batch	2016 batch	Total	Percentage
Are you currently involved in substance abuse or not?				
Yes	66	47	113	56.5
No	34	53	87	43.5
Distribution shoeing awareness about the ill-effects				
Yes	90	90	45	45
No	10	10	55	55
Distribution showing experience of any of ill-effects				
Yes	22	22	9	9
No	78	78	91	91
Ever try to quit				
Yes	16	24.2	17	36.1
No	50	75.8	30	63.9
Distribution showing students who approached for counselling				
Yes	6	9.1	7	14.9
No	60	90.9	40	85.1
Distribution showing students who advised any other person to use any of the substance				
Yes	12	18.2	5	10.6
No	54	81.8	42	89.4
Distribution showing discussion of substance abuse with family				
Yes	9	9	3	3
No	91	91	97	97

The given table shows that current use of substance abuse in 2014 batch; yes (66%), no (34%) and in 2016 batch; yes (47%), no (53%). Students in 2014 batch are more indulged in substance abuse. The ill-effects due to substance abuse in 2014

and 2016 batch Yes (67.5%) and No (32.5%). Any experience of ill-effect in 2014 and 2016 batch, Yes (15.5%) and No (84.5%). The students tried to quit in 2014 and 2016 batch, the majority of the student did not want to quit (70.9%) and 31.1% tried to quit. In 2014 and 2016 batch, students who approached for counselling were 11.5%.In 2014 batch (18.2%) and in 2016 batch (10.6%) of students advised substance abuse to another person. The students discussed about the use of substance abuse with family in 2014 and 2016 batch were 9% and 3% respectively.

Table 2

Substance	2014 batch		2016 batch	
	Freq	%	Freq	%
Are you currently involved in using one or more of the following substances?				
Cigarette, bidi smoking	43	65.1	26	55.3
Iodex, gel, thinner, drugs, codiene	4	6	1	2.1
Alcohol	48	72.7	32	68
Cannabis, ganja, charas, herbs	10	15.1	8	17
Heroine, cocaine, smack, LSD, dhatura, opioids	4	6	1	2.1
Chewing tobacco, pan-masala, kheni, supari	16	24.2	3	6.3
Which of the following you first started/tried?				
Cigarette, bidi smoking	26	39.4	24	51
Iodex, gel, thinner, drugs, codiene	0	0	0	0
Alcohol	30	45.6	20	42.5
Cannabis, ganja, charas, herbs	5	7.5	2	4.3
Heroine, cocaine, smack, LSD, dhatura, opioids	0	0	0	0
Chewing tobacco, pan-masala, kheni, supari	5	7.5	1	2.2

The majority of the students in 2014 and 2016 batch are involved in alcohol (72.7% and 68% respectively) after that cigarette smoking (65.1% and 55.3% respectively)is second most used in study group. In 2014 and 2016 batch, the majority of students first tried alcohol (45.6%, 42.5% respectively) and cigarette (39.4%, 51% respectively)

Table 3

Frequency	2014 batch	%	2016 batch	%
How frequently do you consume these substances?				
More than 2 times a day	14	21.2	2	4.2
1-2 times daily	20	30.3	3	6.4
Thrice a week	8	12.2	3	6.4
1-2 times weekly	8	12.2	10	21.3
Once a month	3	4.5	9	19.14
Occasionally	13	19.6	20	42.56

The given table shows that how frequently students consume these substances in this the majority of students of 2014 batch consume 1-2 times daily (30.3%) and in 2016 majority of student's batch consume occasionally (42.56%). Over all the majority of students consume substance occasionally.

Table 4

	2014 batch	%	2016 batch	%	Total %
Distribution showing the reasons for usage of these substances					
Relief from stress	44	66.6	25	53.1	66.12
Easy availability	15	22.7	9	19.1	21.23
Peer pressure	21	31.8	10	21.2	27.43
Reduce tiredness	18	27.2	8	17	23
Euphoria	3	4.5	23	48.9	23
For the sake of being in the company	12	18.2	16	34	24.77
Broken affairs	18	27.2	9	19.1	23.89
Any other	1	1.5	0	0	0.88

The reason for using substance in 2014 and 2016 batch, the majority of students do substance abuse to relief stress (66.12%) and second leading cause is peer pressure (27.43%).

**Table 5**

	2014 batch	%	2016 batch	%	Total %
<b>Distribution showing type of ill-effects experience</b>					
Problem in physical health	19	86.3	9	100	90.3
Problem in academic performance	13	59	2	22.2	48.3
Problem in mental health	4	18.8	4	44.4	25.8
Problem in social relationship	5	22.7	2	22.2	22.5
Problem in family relationship	2	9	3	33.3	16.1
Any other	1	4.5	0	0	3.2

Any experience of ill-effects in 2014 and 2016 batch, the majority of students have mainly physical health problem (90.3%) and second leading cause is problem in academic performance (48.3%).

**Table 6**

	2014 batch	%	2016 batch	%	Total %
<b>Distribution showing reasons for quitting</b>					
Do not enjoy	0	0	0	0	0
Ill-effects on health	10	62.5	8	47	54.5
Cost	0	0	1	5.9	3
Family pressure	4	25	5	29.9	27.3
Friend or partner	2	12.5	3	17.6	15.2
Moral/ethical reason	0	0	0	0	0
Any other	0	0	0	0	0

The reason for trying to quit substance abuse. In 2014 and 2016 batch, majority of students tried to quit substance abuse because of its ill-effects on health (54.5%) and family pressure 27.3%

**Table 7**

	2014 batch	%	2016 batch	%	Total %
<b>Distribution showing reasons responsible for not being able to quit</b>					
Lack of will power	1	6.3	2	11.7	9
Stress	8	50	5	29.6	39.4
Peer pressure	2	12.5	4	23.5	18.2
Not sure how to quit	2	12.5	4	23.5	18.2
Study/work load	3	18.7	2	11.7	15.2
Physical dependency	0	0	0	0	0
Any other	0	0	0	0	0

In 2014 and 2016 batch, the main reason of not able to quit substance abuse is stress (39.4%).

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