

## Original Research Article

# Substance abuse among the medical students in Central India: an observational study

Priyesh Maraskole<sup>1</sup>, Sachin Parmar<sup>1\*</sup>, Rashmi Yadav<sup>1</sup>,  
Soumitra Sethia<sup>1</sup>, Leena Parihar<sup>1</sup>, Rinku Bhagora<sup>2</sup>

<sup>1</sup>Department of Community Medicine, <sup>2</sup>Department of Pathology, Nandkumar Singh Chauhan Government Medical College, Khandwa, Madhya Pradesh, India

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**\*Correspondence:**

Dr. Sachin Parmar,

E-mail: [dr.sachinparmar@gmail.com](mailto:dr.sachinparmar@gmail.com)

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### ABSTRACT

**Background:** Substance abuse is a pandemic among adults. We carried out this study to know the prevalence of tobacco and alcohol use among II prof MBBS students. The objective was to know the prevalence of tobacco and alcohol use among II prof MBBS students.

**Methods:** An observational study aimed find out the prevalence of alcohol and tobacco abuse. During the period of January 2015 to October 2015 and 100 student from 2nd professional of a medical college from Central India were interviewed using semi structured interview schedules for students.

**Results:** Total students in our study that ever tried alcohol smoking was 62%, among which 47% continued and 53% discontinued. Among 100 participants 55 were male and 45 were female. Out of 100 student 62 were tried alcohol/smoking once in their life time. 13 students were exposed to substance abuse at during their school life, 7 were started during preparation of medical entrance and 42 were started it after coming to college. 12 participants were who were regular using alcohol were belong to family where either one or both parents were doctors among them. Most of the participants were influenced by their friends, 27% were started it for their own gratitude and 9.6% were have seen their family members. 21% participant were involved in indisciplinary activities.

**Conclusions:** The substance abuse is highly prevalent among youngster and the prevalence of substance abuse among female were also significant which is highly alarming situation.

**Keywords:** Substance abuse, Alcohol, Smoking, MBBS students

### INTRODUCTION

Substance abuse is an Increasing global problem. According to the several research, the prevalence of substance abuse in the world varying between 10-30% and that also increasing every year.<sup>1,2</sup> Substance abuse lead to multiple effects on behavioral-cognitive systems of individual and even psychological symptoms may be present. This global pathological phenomenon, not only affect individual health, but can also have a detrimental effect on the psychological and even right minded state of

society as well as individual.<sup>3</sup> The prevalence of substance abuse is increased worldwide and in developing countries it rising swiftly.<sup>4</sup> The youth is the main population of each country jeopardize for substance abuse.<sup>2</sup> It can be taken as pandemic among young people and can have obstructive effects on their education and professional life. Substance abuse is more common in age group 18 to 25 years in the world.<sup>1</sup> Students constitute a large proportion of any country's youth and also decide its future. During the student life, unacceptable changes sometimes occur in the students' lifestyles. During the late

adolescent and early young hood period, students may experience freedom and liberation from parental supervision. It is a period of no direct parental control, academic pressure, living with people of different cultures, new with the academic system, new responsibilities and being in an environment with different values.<sup>3-5</sup>

As mentioned and proven in some study, the academic pressure can play an important role in the prevalence of addiction among students. Medical and paramedical students were more at risk of addiction than others because of the high job stress, insomnia, study pressure, long working hour and not preventive knowledge and attitudes about side effects of substance abuse. Approximately 10-15% of staff working in hospital or medical education institute experienced substance abuse.<sup>6,7</sup> Additionally, the rate of substance abuse was 20% higher among medical students than other staff, make us to think about the necessity for preventive care in the entry into medical fields.<sup>8</sup> Substance abuse among students may result in multiple personal-social, economic, educational and quality of life damages that can significantly affect the individuals' general health.<sup>9-11</sup>

## METHODS

An observational study aims find out the prevalence of alcohol and tobacco abuse. During the period of January 2015 to October 2015 and 100 students from 2nd professional of a medical college from Central India were interviewed using semi structured interview schedules for students.

### Target group

Medical students studying in 2nd professional of medical college were the target group.

### Sampling

Purposive sampling was done.

### Study design

The study design was an observational study.

### Study period

The study duration was January 2015 to October 2015.

### Study place

The study place was GRMC, Gwalior.

Appropriate test will be applied wherever required using <https://www.socscistatistics.com/tests/> and Microsoft excel.

### Inclusion criteria

All 2nd professional students ready to give consent to participate in study were included.

### Exclusion criteria

Students who were not willing to part of study or not given consent were excluded.

## RESULTS

Total students 100 MBBS students of 2nd professional junior batch were interviewed among 55 were male and 45 were female. In our study that ever tried alcohol/smoking was 62%, among which out of 62 participant 47% (29) continued and 53% (33) were discontinued. The substance abuse among female participant were 7%. 13 students were exposed to substance abuse at during their school life, 7 were started during preparation of medical entrance and 42 were started it after coming to college. 12 participants were who were regular using alcohol were belong to family where either one or both parents are doctor among them. Most of the participants were influenced by their friends, 27% were started it for their own reason and 9.6% were have seen their family members. 21% participants were involved in indisciplinary activities.

**Table 1: Gender of participants.**

Gender	No. of participants	%
Male	55	55
Female	45	45

The above table shows 55% participant were male and 45% were female.

**Table 2: Ever tried alcohol/smoking.**

Ever tried alcohol/smoking	No. of participants	%
Yes	62	62
No	38	38

The above table shows that 62% participants were tried alcohol/smoking 38% were never tried.

**Table 3: Continue the substance abuse after first try.**

Continue the substance abuse after first try	No. of participants	%
Yes	29	47
No	33	53

The above table shows 33 participants were discontinued after first try and 29 were continued.

## DISCUSSION

The prevalence of alcohol or smoking abuse was observed in our study was 29%. This was lower than the study done by Padhy et al where prevalence was 37.22%.<sup>12</sup> The abuse of tobacco and alcohol abuse in females were comparable with the findings of Padhy et al at 7.22% versus ours at 7%.<sup>12</sup> When we compared our study to study done by Kumari et al on male medical graduates, the prevalence of substance abuse was similar (29% versus 28.8%).<sup>13</sup> Substance (tobacco) abuse was also significantly higher in females at 7% versus 2.9% as stated by Chatterjee et al.<sup>14</sup> In our study 19.3% participants were having either or both parents doctor which can be compared with study done by Arora et al where father of 26.8% participants were doctors/paramedics and in 26.3% participants mother were either doctors/paramedics.<sup>15</sup>

## CONCLUSION

The substance abuse is highly prevalent among youngster and the prevalence of substance abuse among female were also significant which is highly alarming situation. In the present and similar studies. it is found out as a major finding that substance abuse in different forms have been prevalent among youngster especially boys. Given the adverse effects of the substance abuse, its consumption needs to be restricted by various methods by imparting knowledge and awareness regarding its adverse effects and measure to quit and restrict the consumption of alcohol and tobacco.

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