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## Evaluation of oral hygiene awareness and practice among medical students

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### Abstract

The aim of this study is to compare oral-health knowledge, attitude and self-care practice behavior among medical students.

**Materials and Methods:** A cross sectional study was carried out on 1<sup>st</sup> year MBBS students. All the students present on the day of data collection were included in the study. Data was collected by pretested questionnaire and analysed using percentages.

**Results:** Awareness among students about oral hygiene was good. All students in our study were brushing the teeth at least daily with toothbrush and paste. Only few students (6.92%) were using fluoride toothpaste and 93.07% were unaware of fluoride content. Nearly all students restrained from Alcohol Consumption and Tobacco Use. About 23.84% students had Pain /Discomfort in Past 12 Months and 16.15% consulted dentist. About 57% students visited dentist in last 5 years and most common reason was toothache.

**Conclusions:** The better result among medical students could be due to their better knowledge and socioeconomic conditions. Developing countries show lack of awareness and poor oral hygiene habits among large sections of the population, increasing the risk of oral health problems. More awareness should be created among general population to improve the oral health.

**Keywords:** awareness, oral hygiene, dental, medical health students

### Introduction

Oral diseases are a major public health concern owing to their high prevalence and their effects on the individual's quality of life <sup>[1]</sup>. The possible etiological factors leading to these oral diseases are genetic predispositions, developmental problems, poor oral hygiene and traumatic incidents <sup>[2]</sup>. Oral hygiene behavior and seeking oral health care depend on a number of factors. People comply better with oral

health care regimens when informed and positively reinforced. Lack of information is among the reasons for non adherence to oral hygiene practices. Further, oral health attitude and beliefs are significant for oral health behavior <sup>[3]</sup>. Keeping a healthy oral profile requires joint efforts from the dentist as well as the

patient himself. One of the most important factors that decide the dental health of a population is the outlook of its people toward their dentition <sup>[4]</sup>.

Oral health knowledge is considered to be an essential prerequisite for health related behavior, although only a weak association seems to exist between knowledge and behavior in crosssectional studies, nevertheless studies have shown that there is an association between knowledge and better oral health <sup>[5]</sup>.

Hence the present study was conducted to evaluate oral hygiene awareness and dental health problems in medical students.

### Methods

The study was conducted at a private medical college in Uttar Pradesh. This was a cross sectional study and purposive sampling method was used to select 1st year MBBS students as study subjects. All the students who were willing to participate were included in the study. Those who were not willing to participate were excluded from study. After taking their informed consent total of 130 students present on the day of data collection were included in

the study. Data was collected by pretested questionnaire and analysed using percentages.

## Results

**Table 1:** Awareness about oral hygiene

	Response	Number	Percentage
State of your teeth	Very Good	24	18.46
	Good	81	62.30
	Average	20	15.38
	Poor	5	3.84
Brushing of teeth	Once a day	108	83
	Twice a day	19	14.61
	More than twice a day	3	2.3
How do you brush your teeth	Toothbrush	130	100
	Wooden stick		
	Chewstick		
	Charcoal		
Use of toothpaste	Yes	130	100
	No		
Use of fluoride toothpaste	Yes	9	6.92
	No		
	Don't know	121	93.07
Tobacco use	Yes	3	2.30
	No	127	97.69
Alcohol consumption	Yes		
	No	130	100

**Table 2:** Dental Health Problems

	Response	Number	Percentage
Last visit to dentist	0-12 months	21	16.15
	>1year	24	18.46
	>2years	6	4.61
	>5years	23	17.69
	Never	56	43.07
Reason for last dentist visit	Pain	40	30.76
	Treatment	36	27.69
	Routine checkup	15	11.53
Pain in past 12 months	Don't remember	6	4.61
	Yes	31	23.84
	No	93	71.53
Problem of teeth during last 12 months	Don't know	6	4.61
	Very often	6	4.61
	Sometimes	15	11.53
	No problem	109	83.84

## Discussion

Oral hygiene is linked to general awareness regarding healthy habits. All students in our study were brushing teeth at least daily with toothbrush and paste. Similar results were observed in study by Sugumari on dental students. More number of Dental students was brushing teeth twice daily compared to our students. This difference may be due their profession [6, 7]. These results were in contrast to study by Punitha *et al.* among rural children where less use of tooth brush (51%) and tooth paste (45%) was observed mainly due to the lower awareness and economic condition [8].

The frequency of brushing is linked to oral hygiene. Many studies have shown that less frequent tooth brushing was associated with high probability of having poor oral hygiene

[9].

Fluoride is necessary for mineralization of teeth. Many Studies have shown that fluorides prevent and arrest dental caries [10]. In our study very few (6.92%) students used fluoridated tooth paste and many were unaware of fluoride content of toothpaste whereas Lavanya *et al.* reported 44.58% of the dental students and staff, regularly used a fluoridated tooth paste for brushing [6].

Smoking is a life style disease and many young people are addicted to smoking. In our study fortunately 97.69% students did not use tobacco. Similar results were observed by Lavanya *et al.* where 93.6% of the dental students and staff, were found to be non-smokers [6]. According to a study conducted by Gopinath *et al.* 18.1% of dental professionals had used tobacco at some point or the other [11]. In contrast study conducted by Arthie *et al.* showed 24% of dental patients were smokers. Many studies have revealed that smoking has a negative effect on periodontal health [12, 13].

Oral health is always a last priority unless it troubles the patient in the form of pain, caries or gum problems etc. People visit dentist only when there is a problem. In our study toothache was the most common reason for visit to dentist. A study conducted in Norway among adults by Sarah *et al.* showed that only 28% visited a dentist when in pain or lost a filling and 51% visited a dentist regularly [14]. Another study in Southern Poland among adults by Wojciech *et al.* observed only 8% visited a dentist for regular check-up and 53% visited a dentist only in case of a tooth ache [15].

## Conclusion

The large variation in results could be because of difference in dental awareness among different societies around the world. The better result among medical students could be due to their better knowledge and socioeconomic conditions. Developing countries show lack of awareness and poor oral hygiene habits among large sections of the population, increasing the risk of oral health problems. Thus, more awareness should be created among general population to improve the oral health.

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