

# A study on oral hygiene among medical students in Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research, Melmaruvathur

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## ABSTRACT

**Background:** Oral hygiene is essential for person's health. The oral hygiene plays a key role for the maintenance of normal oral health and to prevent from some oral diseases like dental caries. The knowledge and practices among oral health are still grossly inadequate among many doctors. Hence, the awareness of oral hygiene among doctors should be improved to improve the oral health among the general population. **Objectives:** The objectives of this study were to know the knowledge of oral health and their cleaning methods among the 2<sup>nd</sup> year undergraduate medical students in Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research. **Materials and Methods:** A descriptive, institution-based study was conducted among the 2<sup>nd</sup> year undergraduate medical students of Melmaruvathur Adhiparasakthi Institute of Medical College and Research, from September 2014 to January 2015. The data were collected among 142 2<sup>nd</sup> year medical students in the department of community medicine using pretested questionnaire. After that, the study subjects were examined for the oral cavity. **Results:** A total of 142 medical students were participated in this study. Out of them, 72 (50.70%) were male and rest 70 (49.29%) were female. The overall prevalence of dental caries was 14% (20). **Conclusions:** We found that the presence of dental caries, bleeding gums, dryness of mouth, and bad breath high among medical students. At this stage, the maintenance of oral hygiene is very important to prevent further progression. This highlights the need for increasing the awareness on oral hygiene practices and dangers they may pose.

**KEY WORDS:** Dental Health; Oral Hygiene; Teeth Cleaning Technique


## INTRODUCTION

Oral hygiene is essential for person's health. The oral hygiene plays a key role for the maintenance of normal oral health and to prevent from some oral diseases like dental caries. The oral and systemic health is closely associated with each other, so the systemic diseases will exaggerate if oral disease is left untreated.<sup>[1]</sup>

According to the American Dental Association, "oral health is a functional, structural, esthetic, physiologic, and psychosocial state of well-being."<sup>[2]</sup> According to the WHO, it seems that most of the adult in the world have dental caries.<sup>[3]</sup> The significant morbidity and mortality seem to be seen among poor oral health individuals.<sup>[4]</sup>

Oral hygiene plays an important role in the reduction of dental caries and periodontal diseases. Hence, knowledge among oral hygiene is essential for medical students regarding oral health behavior. Good oral health also helps in reduction of stroke and some heart diseases.

The knowledge and practices among oral health are still grossly inadequate among many doctors.<sup>[5]</sup> Hence, the awareness of oral hygiene among doctors should be improved to improve

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the oral health among the general population.<sup>[6]</sup> Hence, it is essential to assess their knowledge and practices of oral health. The objectives of our study were to know the knowledge of oral health and their cleaning methods among medical students.

**MATERIALS AND METHODS**

A descriptive, institution-based study was done among the 2<sup>nd</sup> year undergraduate medical students of Melmaruvathur Adhiparasakthi Institute of Medical College and Research, Melmaruvathur, from September 2014 to January 2015. The institutional ethical committee is given the ethical approval to conduct the study. The 2<sup>nd</sup> year undergraduate medical students aged 18 years and above, of both genders, who gave informed consent were participated in the study.

The study tools are predesigned, pretested, structured self-administered questionnaire. The data were collected among 142 2<sup>nd</sup> year undergraduate medical students in the department of community medicine. In spite of repeated visit, only 142 medical students were present during the data collection days, out of 150 medical students. Before filling the questionnaire, the written consent was obtained from the medical students. The questionnaire was developed to assess the cleaning methods of oral cavity, awareness of bad breath, frequency of bleeding gums, dental caries, and dryness of mouth among medical students.

Then, they were instructed to fill the questionnaire completely. After that, the oral cavity was examined at the Department of Community Medicine with the help of dental, Adhiparasakthi Dental College and Hospital, Melmaruvathur. Data were entered into Excel Sheet and analyzed using the SPSS 18<sup>th</sup> version. Results expressed in percentages and frequencies.

**RESULTS**

A total of 142 medical students were participated in this study. Out of them, 72 (50.70%) were male and rest 70 (49.29%) were female. Regarding the age distribution, 53 (37%), 74 (52%), and 15 (11%) medical students constitute 18, 19, and 20 years of age, respectively. Table 1 shows the age distribution.

Among the 142 medical students, 113 (80%) students were brush their teeth every day. 139 (96%) students used toothpaste and toothbrush. 67 (47.30%) students used mouthwash. 57 (40.30%) students used tongue cleaner. 55 (38.70%) students brushed their teeth before going to sleep. 85 (60%) students knew the correct method of brushing technique (vertical and circular).

The overall prevalence of dental caries was 14% (20). The dental caries was seen to be more among females 13 (65%) than male 7 (35%) medical students. Figure 1 shows the prevalence of dental caries among medical students.

Among the 142 medical students, 7 (5%) students had bleeding gums. Figure 2 shows the prevalence of bleeding gums among medical students.

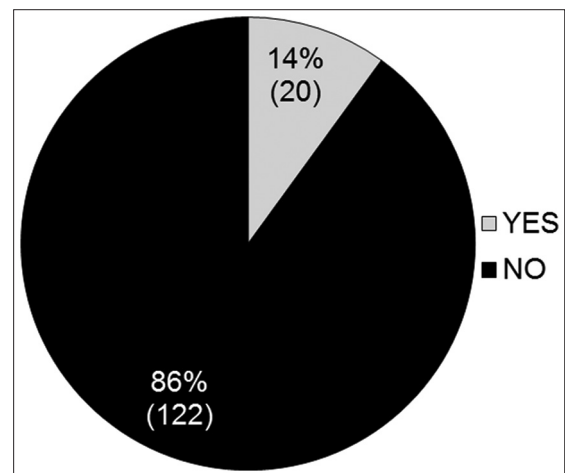
Among the 142 study subjects, 11 (8%) medical students had dryness of mouth. 17 (12%) students had bad breath. Only 6 (4%) students had an examination for bad breath by dentist. 3 (2%) students had bad breath interfere with their social life at place of work. 121 (85%) medical students visited the dental hospital in the past 1 year.

**DISCUSSION**

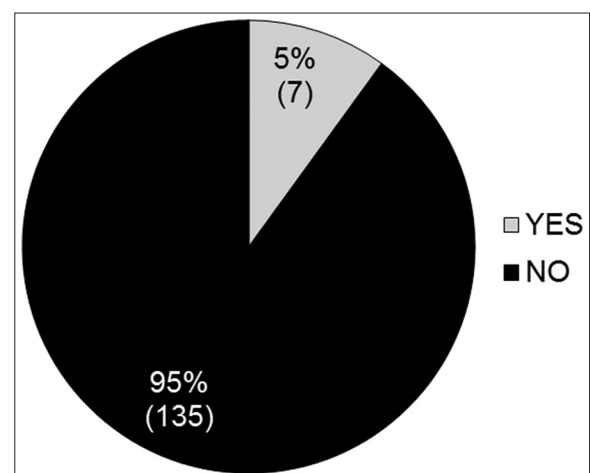
The study was conducted in a sample of 142 medical undergraduate students. This study assessed the oral

**Table 1:** Age distribution

Age distribution (years)	Frequency 142 (%)
18	53 (37)
19	74 (52)
20	15 (11)



**Figure 1:** Prevalence of dental caries among medical students



**Figure 2:** Prevalence of bleeding gums among medical students

hygiene behavior and dental health problems in the medical undergraduate students. As a future medical professional, their attitudes and beliefs play a key role in the oral health among the general population.<sup>[7]</sup> Out of them, 72 (50.70%) were male and rest 70 (49.29%) were female. 113 (80%) students were brush their teeth every day. 85 (60%) students knew the correct method of brushing technique (vertical and circular). The overall prevalence of dental caries was 14% (20). 7 (5%) students had bleeding gums. 121 (85%) medical students visited the dental hospital in the past 1 year.

In the present study, 113 (80%) students were brush their teeth every day. The results are in accordance with Kamble *et al.* study who demonstrated 79% of medical students brushed once daily.<sup>[8]</sup> According to Lukacs and Largaespada, women show the higher prevalence of dental caries among women than men,<sup>[9]</sup> this finding is similar to our study. This gender difference was seemed to be due to factors like lifestyle modifications.<sup>[10]</sup> The present study reported that 85% of medical students visited the dental hospital. Doshi *et al.* also reported that 79.4% of the medical students had visited the dental clinic in the previous year.<sup>[11]</sup>

The limitation of the study is that it is an institution-based group and there is no comparative group.

## CONCLUSIONS

From the present study, the significance of oral health among medical students is very much highlighted. We found that the presence of dental caries, bleeding gums, dryness of mouth, and bad breath high among medical students. This indirectly indicates the failure of primary preventive measures which include health promotion and specific protection. At this stage, the maintenance of oral hygiene is very important to prevent further progression. This highlights the need for increasing the awareness on oral hygiene practices and dangers they may pose.

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