A Survey on Awareness of Oral Hygiene Maintenance among Dental Undergraduate Students

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ABSTRACT

The aim of the study was to assess the knowledge and awareness of dental undergraduate students regarding oral hygiene maintenance. A self-administered validated structured questionnaire consisting of 21 questions on knowledge, attitude and awareness regarding oral hygiene maintenance was distributed among 200 students belonging to first year and second year of study of saveetha dental college, saveetha university, chennai. The data extracted were tabulated, statistically analyzed and results obtained. 99% students had good awareness on causes of common oral diseases and importance of oral hygiene maintenance. 96% have knowledge on fluoridated tooth paste and preferred them. 95% use dental floss after brushing. 2nd year students showed higher results than the 1st year students. Dental students had excellent knowledge and awareness regarding oral hygiene maintenance. Students were very positive in their attitude towards maintaining their oral hygiene and were practicing good oral hygiene maintenance measures.

Keywords: Awareness, dental students, oral hygiene, maintenance, brushing, knowledge, attitude, practices.

INTRODUCTION

World Health Organization states oral hygiene and oral health as a state of being free from chronic mouth and facial pain, oral and throat cancer, oral sore, birth defects such as cleft lip and palate, periodontal disease, tooth decay, tooth loss and other diseases and disorders that affect the oral cavity. Risk factors for oral diseases include unhealthy diet, tobacco use, harmful alcohol use and poor oral hygiene maintenance.1

Oral hygiene is the practice of keeping the mouth clean and healthy by brushing and flossing to prevent tooth decay and gum disease. There are various oral hygiene measures for maintenance such as various brushing techniques, dental floss, mouth wash, fluoridated pastes and various other dental instruments.2

Dental students have a major role in promoting and executing oral hygiene maintenance thereby rendering optimal oral health. They are a role model for the population.3 This study was done to assess the knowledge of undergraduates towards their self-oral hygiene maintenance as this will have a direct impact on the efficacy on their clinical practice. The rationale of this study was to evaluate the knowledge and awareness on oral hygiene measures among first year and second year (pre-clinical undergraduates) students of our dental college.

METHODS

A cross sectional study was conducted during the academic year in January 2017 among the undergraduate dental students of Saveetha Dental College, Saveetha University, Chennai. 200 students belonging to 1st year and 2nd year of undergraduate dental course [pre-clinical level] were enrolled in the study. All students in the study voluntarily completed a validated self-administered questionnaire consisting of 21 closed ended questions. The questions in the questionnaire were designed to assess their knowledge, awareness, attitude and practices regarding oral hygiene maintenance. Data collected, Statistical analysis done and results obtained.

Questionnaire regarding Awareness of Oral hygiene maintenance

<table>
<thead>
<tr>
<th>S.NO</th>
<th>Question</th>
<th>Response Options</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Gums problem and dental caries are 2 common problem caused by inadequate oral hygiene.</td>
<td>A) Yes; B) No</td>
</tr>
<tr>
<td>2</td>
<td>Gum bleeding means inflamed gum.</td>
<td>A) Yes; B) No</td>
</tr>
<tr>
<td>3</td>
<td>Regular brushing of teeth can protect oneself from gum bleeding.</td>
<td>A) Yes; B) No</td>
</tr>
<tr>
<td>4</td>
<td>Dental plaque means soft debris on teeth.</td>
<td>A) Yes; B) No</td>
</tr>
<tr>
<td>5</td>
<td>Do you use tongue cleaner while brushing?</td>
<td>A) Yes; B) No</td>
</tr>
<tr>
<td>6</td>
<td>Carious or decayed teeth can affect teeth appearance?</td>
<td>A) Yes; B) No</td>
</tr>
</tbody>
</table>
Do you think frequent consumption of Sweets affect the teeth adversely? A) Yes; B) No

Do you think frequent consumption of aerated drinks affect the teeth adversely? A) Yes; B) No

Do you think Using fluoride have protective function on teeth? A) Yes; B) No

General body health has a relationship to oral health and dental diseases. A) Yes; B) No

Dental flossing decreases accumulation of food? A) Yes; B) No

Do you know any other aids for oral hygiene maintenance? A) Yes; B) No

How many times you will brush daily? A) Once; B) Twice; C) After every meal

Time spent for brushing? A) 1–2 minutes; B) 2-3 minutes; C) 3-4 minutes; D) <5 minutes

What tooth paste do you use? A) Fluoridated; B) Non-Fluoridated; C) No Idea

If you have the initial signs of dental caries do you prefer to get treated immediately? A) Yes; B) No

Do you think dental check up is necessary in every 6 months? A) Yes; B) No

How frequently you change your tooth brush? A) Once in 3 Months; B) Once in 6 Months; C) After it get spoiled

What kind of tooth brush do you use? A) Hard; B) Medium; C) Soft; D) Ultrasoft

RESULTS

In our study 100 students were from 1st year and 100 students were from 2nd year. According to our study 99% students had good awareness on causes of common oral diseases and importance of oral hygiene maintenance (Fig 1). 96% have knowledge on fluoridated tooth paste and preferred them (Fig 2). 98% students undergo regular dental check up every 6 months and brushes teeth twice daily. 97% of students spend 1-2 minin brushing and 3% spend 2-3 min in brushing. 95% use dental floss after brushing. 99% use medium tooth brush for brushing (Fig 3). 2nd year students showed higher results than the 1st year students (Fig 4).

Figure 1: Awareness on causes of oral diseases
Figure 2: Awareness on preventive dentistry
Figure 3: Self-Oral hygiene maintenance habits
DISCUSSION

Dental health behaviours have been categorized according to brushing frequency, brush type, regular dental check-ups and sugar intake behaviour. The positive oral health behaviour are proper brush usage—medium brush, soft brush - if inflamed, flossing technique, frequency of brushing (twice daily), tooth paste to be used –(fluoridated / non fluoridated pastes), time spent for brushing (2 -3 minutes). The negative oral behaviour are improper maintenance (halitosis, oral debris, calculus, dental caries), frequent consumptions of sugars, accumulation of food particles (causes dental caries), frequent consumptions of aerated drinks (causes erosion of tooth).  

Gum diseases like gingivitis or periodontitis occur due to food accumulation, debris, plaque and calculus formation. Hence there should be regular dental check up every 6 months to prevent dental caries or treat any other oral health problems at the earliest.

In our study more than 95% of students had good knowledge about the causes of common oral diseases and were aware about the importance or oral hygiene maintenance.

In a Comparative Study of Oral Health Knowledge, Attitude and Behaviour of First and Final Year Dental Students of Udaipur City, Rajasthan© found that the students had good knowledge, attitude and practice towards oral hygiene maintenance and concluded that they may need more knowledge on preventive methods.  

In their study final year dental students had better knowledge than first year students but in our study preclinical students had excellent knowledge. In a study by Daya et al© clinical students had better knowledge than preclinical students. But in our study preclinical students had good knowledge. Dagli et al© in their study showed that there was no significant difference in knowledge levels between clinical and pre-clinical students.

Kocovski et al in their study on Oral Hygiene Level Maintenance among Dental Medicine Students found fifty-two percent had plaque index of 0.6 to 1.9 which meant that they maintained good oral hygiene. They also mentioned that they should take adequate measures to still promote their oral hygiene. The results showed that cases of oral health have a major impact in improving the habits and manner of maintaining oral hygiene among students. They reported unsatisfactory level of oral hygiene among 2.5% of the students, which is similar to our study in which only 1% of students had unsatisfactory oral hygiene levels.

In our study second year students had better knowledge and awareness regarding oral hygiene maintenance than the first year students which is similar to the studies by Kocovski et al© and Ahamed et al.© Several studies©, 6, 8, 9 have reported that Knowledge increases from 1st to final year and final year students have good oral hygiene maintenance practices and positive attitudes towards oral health when compared to 1st year students.

In this study majority of students showed positive attitude towards oral hygiene maintenance and had excellent oral hygiene practices. In a study by Yildiz et al., 10 the rate of usage of dental floss among preclinical students was only 19% and among the clinical students it was 31%, but in our study 95% of pre-clinical students used dental floss.

In a study, 11 which assessed Dental Knowledge and Awareness of Oral Hygiene among medical Undergraduates at a Tertiary Care Hospital, reported medical students had a moderate level of dental knowledge and exhibited good oral hygiene habits. Findings from their study justified the inclusion of oral health in the medical curriculum and more emphasis to be laid on this topic in the dental curriculum also.

Knowledge about oral health has important role in maintaining oral hygiene and reducing the level of plaque and decay teeth among dental students. As knowledge and awareness levels increases their oral health improves. The attitude and behaviour toward oral health.
maintenance of the dental professionals reflect their understanding of the preventive oral health measures, and this is very important for the improvement of their patient’s oral health.\textsuperscript{12}

**CONCLUSION**

Dental students had excellent knowledge and awareness regarding oral hygiene maintenance. Students were very positive in their attitude towards maintaining their oral hygiene and were practising good oral hygiene maintenance measures. Dental students are the future dentists and have a major role in promoting and executing oral health in the community.

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