



Original Article

## Knowledge, Attitude and Practices of oral hygiene among Government Industrial Training Institute Students in Begur, Chamarajanagar

Gayathri Ramesh<sup>1</sup>, Supreetha Shamarao<sup>2</sup>, Shreyas Orvakonda<sup>3</sup>, Ramesh Nagarajappa<sup>4</sup>

<sup>1</sup>Associate Professor, Department of Dentistry, Chamarajanagar Institute of Medical Sciences, Yadapura, Chamarajanagar

<sup>2</sup>Professor, Department of Public Health Dentistry, Farooqia Dental College and Hospital, Mysuru.

<sup>3</sup>Assistant Professor, Department of Dentistry, Chamarajanagar Institute of Medical Sciences, Yadapura, Chamarajanagar

<sup>4</sup>Professor and Head, Department of Public Health Dentistry, Oxford Dental College and Hospital, Bengaluru

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### Corresponding Author:

**Dr Ramesh Nagarajappa**

Professor and Head, Department of Public Health Dentistry, Oxford Dental College and Hospital, Bengaluru

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### ABSTRACT

**Background:** Oral health is an integral aspect of general health, both being complementary to each other. Adolescence has been identified as a time when personal oral health behaviours may be internalized and become habits as, parents become increasingly less directly involved in their children's care. Hence it becomes important at this age to practice proper oral hygiene methods as this can have a lasting impact on permanent teeth as well as general health of the individual. This study was carried out with an aim to assess awareness, attitude and practices regarding oral health among students at Government ITI college, Begur, Chamarajanagar.

**Material and Methods:** A cross-sectional study using a close-ended pretested structured questionnaire was designed to assess the oral health awareness, attitude and practices of the study participants. The collected data was coded and analysed using r software. Descriptive analysis was carried out to assess the coded data.

**Results:** Of the total 175 study participants, 68% of the students were aware of oral diseases, 57.1% knew about dental caries and 81.7% knew that sweet foods and beverages can adversely affect teeth. 52% study participants did not know that fluoride prevents tooth decay. 49.7% participants answered that they brushed their teeth twice a day. Forty percent of the study participants feared to visit a dentist and majority of 92.6% responded that routine dental check-up was important.

**Conclusion:** In conclusion, this study highlights the awareness, attitude and practices regarding oral health among students of Government ITI college, Begur, Chamarajanagar. Although the participants demonstrated good awareness regarding oral health, particular gaps especially with regards to usefulness of fluoride in preventing decay was evident. Conducting oral health screening camps and oral health education by means of health talks, audio visual aids and demonstrations will help to bridge the existing gap between oral health and practice, learn and reinforce healthy oral hygiene practices and maintain better oral health.

**Keywords:** Knowledge, Attitude, Practices, oral hygiene, human.

### INTRODUCTION

Health is basic human necessity for a productive and satisfied living. Awareness is a prerequisite for well-being of an individual. Mindfulness of appropriate health practices, as well as positive attitude towards health enhances the quality of life of the individual.

Oral health is an integral aspect of general health, both being complementary to each other. Many studies have revealed that oral health has consequential impact on general health of an individual. Good Habits formed early in life are nurtured. In the early stages of life, healthy behaviours are inculcated into lifestyle of an individual by parents. However,

as an individual approaches adolescence the onus of continuing the taught healthy practices lies on the individuals themselves.

Adolescence has been identified as a time when personal oral health behaviours may be internalized and become habits as, parents become increasingly less directly involved in their children's care. Their increased autonomy may also mean that they fail to practice adequate oral home health care. They may tend to consume more snacks, and beverages between meals.[1] Hence it becomes important at this age to practice proper oral hygiene methods as this can have a lasting impact on permanent teeth as well as general health of the individual.

With this background, the present study was carried out with an aim to assess awareness, attitude and practices regarding oral health among students at Government ITI college, Begur, Chamarajanagar.

## MATERIAL AND METHODS

The present cross-sectional questionnaire study was conducted among students of Government Industrial Training Institute, Begur, Chamarajanagar between May 2024- December 2024. This study was the first of its kind carried out in ITI College, Begur, Chamarajanagar.

Ethical approval was obtained from ethical committee of Government Medical College, Chamarajanagar. Prior to the study, permission was obtained from the principal of the selected college and consent was taken from the students. All the students who were present on the day of the study and who consented to participate formed the study participants.

A close-ended pretested structured questionnaire was designed to assess the oral health awareness, attitude and practices of the study participants. Questionnaires were distributed to the study participants and if required assistance was given to understand the question. Questions were explained whenever necessary, and the participants were given assurance regarding confidentiality of their responses and were requested to mark their answers and complete it individually. This procedure was carried out by an examiner and an assistant under the supervision of a staff member. The assistant helped the examiner in distributing the questionnaire, and the examiner gave instructions to the students regarding the questionnaire

The collected data was coded and analysed using r software. Descriptive analysis was carried out to assess the coded data.

## RESULTS

Of the total 175 study participants, 68% of the students were aware of oral diseases, 57.1% knew about dental caries and 81.7% knew that sweet foods and beverages can adversely affect teeth. 52% study participants did not know that fluoride prevents tooth decay. 135 students responded that oral health affects general health and 94% answered to have searched internet regarding information on oral health and disease. This is as shown in Table 1.

As shown in table 2, in response to oral hygiene practices, 49.7% participants answered that they brushed their teeth twice a day, 48 students brushed their teeth for 2-5 minutes, 96% used toothpaste for brushing teeth and 78 participants changed to a new toothbrush once in 3-4 months. A combination of vertical, horizontal and circular motion of tooth brushing was chosen as tooth brushing method by 59.4% of the respondents. Majority 92.6% participants answered that they rinse their mouth after each meal. Regarding usage of dental floss, 65.7% answered not to have used a floss and 44% replied to have used mouthwash to date. Only nineteen participants replied that brushing contributes to gum health. Eighty-three participants answered that cavities can be prevented by tooth brushing.

With regards to attitude towards oral health, 76% and 57.7% answered that they were worried about teeth colour and bad breath respectively. Forty percent of the study participants feared to visit a dentist and majority of 92.6% responded that routine dental check-up was important. This is as shown in table 3. 71.4% acknowledged as being guided by someone to take care about their oral health. In response to immediate contact to manage teeth or gum problems, 49.1% students answered they would visit a dentist.

**Table 1: Oral Health knowledge among study participants**

Knowledge about oral health	Yes (%)	No (%)
Aware of any oral disease	107 (61.14)	68 (38.85)
What dental caries is	100 (57.1)	75 (42.9)
Consuming sweet food and beverages can affect your teeth	143 (81.7)	32 (18.3)
Fluoride can prevent tooth decay	84 (48)	91 (52)
Oral health affects general health	135 (77.1)	40 (22.9)
Internet to search about information on oral health or disease	94 (53.7)	81 (46.3)

**Table 2: Oral health Practices among study participants**

Oral health Practices	Yes (%)
Brush teeth twice a day	87 (49.7)
Brush teeth 2-5 minutes	48 (27.4)
Brush teeth with Tooth Paste	168 (96)
Once in 3- 4 months	78 (44.6)
Vertical, horizontal and circular motion of toothbrushing	104(59.4)
Change tooth brush once in 3-4 months	78(44.6)
Rinse mouth after each meal	(92.6)
Use of dental floss	(34.3)
Used mouthwash at least once	(44)

**Table 3: Oral Health attitude among study participants**

Oral Health attitude	Yes (%)	No (%)
Are you worried about teeth colour	133 (76)	42 (24)
Are you worried about bad breath	101 (57.7)	74 (42.3)
Do you fear visiting a dentist	70 (40)	105 (60)
Routine dental check-up important	162 (92.6)	13 (7.4)

## DISCUSSION

In the present study, students showed high awareness regarding oral disease. This may be attributed to incorporating and teaching lesson about oral health in school curriculum. The positive impact and usefulness of introducing these topics to individuals at an early age helps in prevention of disease. In addition, students reported searching internet regarding information on oral health and disease. This reflects the constructive contribution that media and internet can have on individuals regarding health, if properly used. Collectively, all this enhances oral health care and self-sufficiency in health care practices among the students.

Majority of the study participants were aware about the ill effects of sweet food and beverages on tooth. This is similar to study done on PU students in Mysore where 89% students were aware that sticky and sweet food causes dental caries.[1] Most of the students knew that sweet food and beverages could affect teeth and these results is similar to study among female public health and nutrition students in Qatar.[2] This knowledge acts as the corner stone in primordial prevention of dental caries which is the most common oral disease worldwide and thereby maintenance of oral health. However, knowledge regarding ill effects of fluoride and sweet on oral health was low among students in Mysuru, Tanzania, Kuwait and Jordan. [1, 3,4,5,6]

Students demonstrated high awareness regarding relationship between oral health and general health which is similar to study done on PU students in Mysuru.[1] A similar awareness was demonstrated among students in Bengaluru. [7] This awareness acts as a foundation promoting oral health for general health as well as encouraging students for better oral hygiene practices that will enhance their oral health and wellbeing. It also acts as a motivating factor to make individuals understand the ramifications of not preserving oral health and treating already existing oral disease.

Toothbrush and toothpaste were the most commonly used aids for regular oral hygiene measure. This is similar to studies done among students in Bengaluru and elsewhere, where 92% reported using toothbrush and toothpaste. [6-9]

Only 34.3% revealed using dental floss in the present study. This is similar to studies done in Bengaluru at response rate of 11.5%.[7] However this was in contrast with the finding in San Francisco where 75% students used dental floss at least once per day and in Iraq where over half of the students used dental floss once or more a week.[6,12]

Although few participants were fearful to visit a dentist for screening, positive attitude towards dental care is reflected, as most of the participants knew the importance of routine dental check-up. This highlights the importance of provision for screening camps to remove the fear of dental care and intercept early disease progression and promote oral health.

## CONCLUSION

In conclusion, this study highlights the awareness, attitude and practices regarding oral health among students of Government ITI college, Begur, Chamarajanagar. Although the participants demonstrated good awareness regarding oral health, particular gaps especially with regards to usefulness of fluoride in preventing decay was evident. The usage of dental floss and mouthwash was meagre although most of them used tooth brush and tooth paste as oral hygiene measures. However students communicated a positive attitude towards oral health although fear of dental visit is conspicuous. To alleviate this fear and bridge the gap between knowledge and practice oral health care, education and awareness regarding cause of dental caries and the use of personal oral hygiene measures has to be reinforced time and

again for better maintenance of oral health. Fear of dental visit can be removed by conducting oral health screening camps and oral health education by means of health talks, audio visual aids and demonstrations. A healthy and well-informed adolescent is the backbone of an efficient and healthy society.

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