

## Assessment of Oral Hygiene Practices Among Youth in Tamilnadu -An Online Survey

**Received:** 27 October 2022, **Revised:** 26 November 2022, **Accepted:** 29 December 2022

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### Key words

Oral Hygiene, Tooth brush, dental floss, mouth wash

### Abstract

Back Ground: Preventive dental care practises are important in maintaining good oral health in order to improve their general health. One of the factors contributing to poor oral hygiene practises is a lack of knowledge about the importance and proper methods to maintain it. The aim of the present study was to assess the prevailing oral hygiene practices among youth in Tamilnadu. MATERIAL AND METHODS A cross-sectional questionnaire study was conducted in Tamil Nadu in which subjects were included from the rural and urban areas of Tamil Nadu through online survey using Google forms by convenient sampling method. A self-administered 15 item closed ended questionnaire was used in the survey. RESULTS Habit of brushing only once a day was found in 309(67.9%) of the study subjects where 146 (32.1 %) were brushing twice a day. Almost 449 (98.7 %) people use tooth brush and tooth paste and 151 (33.2 %) of them use pea size of toothpaste to brush. 290(63.7 %) of the study population take 2-3minutes for brushing. 308 (67.7%) members from study group have the habit of cleaning their tongue. 210 (46.4 %)members of the study population have never visited dentist CONCLUSION In this study it was evident that most of them were using toothbrush and toothpaste as an oral hygiene aid but there is lack of awareness about proper brushing technique, duration of brushing, frequency of changing the tooth brush and use of other oral hygiene aids which requires emphasis through oral health education programs.

### 1. Introduction

Preventive dental care practises are important in maintaining good oral health in order to improve their general health. By improving oral health habits including correct teeth brushing, using dental floss, going to the dentist on a regular basis, and following a healthy diet, oral illness can be prevented. One of the factors contributing to poor oral hygiene practises is a lack of knowledge about the importance and proper methods to maintain it. Collaboration between the dentist and the patient is necessary to maintain a

healthy dental profile.<sup>[1,2,3]</sup> According to National Oral Health Survey to 2004-2005, just 50% of Indians use a toothbrush, while 95% of the population has gum disease.<sup>[4]</sup> It was discovered that greater knowledge is linked to better oral hygiene and a more optimistic attitude towards oral health.<sup>[5]</sup>

The aim of the present study was to assess the awareness about oral hygiene aids among 15 – 30 years old adult population all over Tamilnadu. The objective was framed to gather information on the knowledge about tooth brushing methods and frequency, gingival

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health, and their interest towards dental routine checkups.

## 2. Materials and Methods

A cross-sectional questionnaire study was conducted in Tamil Nadu among the youth aged 15 to 30 years. The subjects were included from the rural and urban areas of Tamil Nadu through online survey using Google forms through convenient sampling method. The oral health practices and the awareness about other oral hygiene aids were assessed.

Demographic details and self-administered closed ended questionnaire consisting of 15 questions related to respondents oral health practices like the brushing technique, amount of paste taken, usage of other oral hygiene aids, dental visit and its reason related questions were included. It took a maximum of 10-15 minutes to complete the questionnaire. Based on the dental floss (7.9%) usage among the population sample size was calculated as 453 and it has been rounded off to 455.

### Exclusion Criteria

Subjects who are health care professionals and also those who provided incomplete data or multiple answers for a single were exempted from the survey.

### Statistical Analysis

After transferring the data to Microsoft Excel, the findings were percentage-based statistically assessed using SPSS. By using the Chi-square test, associations between discrete variables were evaluated. A P value of 0.05 or above was regarded as significant in each case.

The collected data were checked regularly for clarity, accuracy, validity, and consistency. Invalid questionnaires were removed before the actual data collection.

## 3. Results

A total of 455 people participated in the study (male – 156 (34.3%) and female – 299 (65.7%) with mean age 20.9± 2.14 years. The Distribution of the study population according to the demographic profiles are represented in table 1.

**Table 1: Distribution of the study population according to the demographic profiles**

Profile	Number	Percentage
<b>Age (years)</b>		
<b>16-20</b>	<b>198</b>	<b>43.5</b>
<b>21-25</b>	<b>247</b>	<b>54.3</b>
<b>26-30</b>	<b>10</b>	<b>2.2</b>
<b>Gender</b>		
<b>Male</b>	<b>156</b>	<b>34.3</b>
<b>Female</b>	<b>299</b>	<b>65.7</b>
<b>Education</b>		
<b>Schooling</b>	<b>23</b>	<b>5</b>
<b>Diploma</b>	<b>4</b>	<b>0.8</b>
<b>Undergraduate</b>	<b>331</b>	<b>72.7</b>
<b>Post graduates/ Professionals</b>	<b>97</b>	<b>21.5%</b>

(n=455)

### Oral Hygiene Aid Used:

More than half of the study population were between the age of 21-25 years 247(54.3%). Habit of brushing only once a day was found in 309(67.9%) of the study subjects where 146 (32.1 %) were brushing twice a day. Almost 449 (98.7 %) people use tooth brush and tooth

paste for cleaning their teeth and 182 (40 %) of the study population use soft type of toothbrush to cleanse their teeth.

### Amount of tooth paste Usage:

For the amount of tooth paste used, 86 (18.9 %) of the participants use full length of toothbrush whereas 157

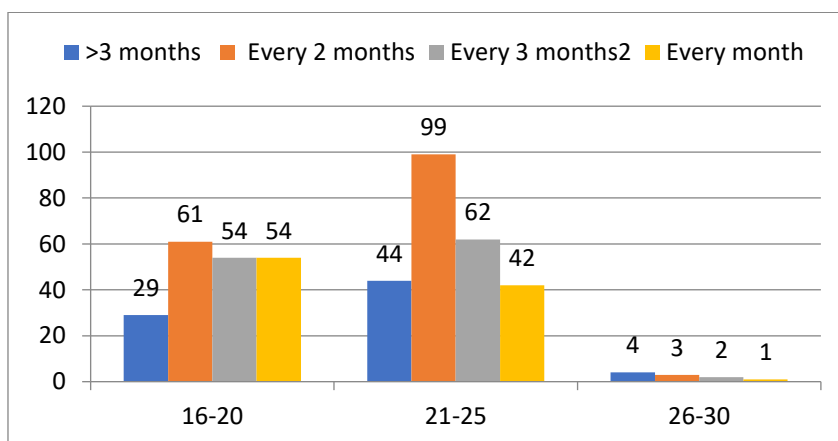
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(34.5%) and 61 (13.4 %) of them use half the length and it varies on daily basis respectively .Only 151 (33.2 %) use pea size of toothpaste to brush .

### Duration of Brushing:

290(63.7 %) of the study population take 2-3minutesfor brushing while 19 (4.2% ) take more than 5minutes, in which 44 (9.7%) of them brushes less than a minute.102 (22.4%) take 4- 5 minutes to brush their teeth. Graph 1 depicts the distribution based on change of tooth brush

**Graph 1** Distribution based on change of tooth brush

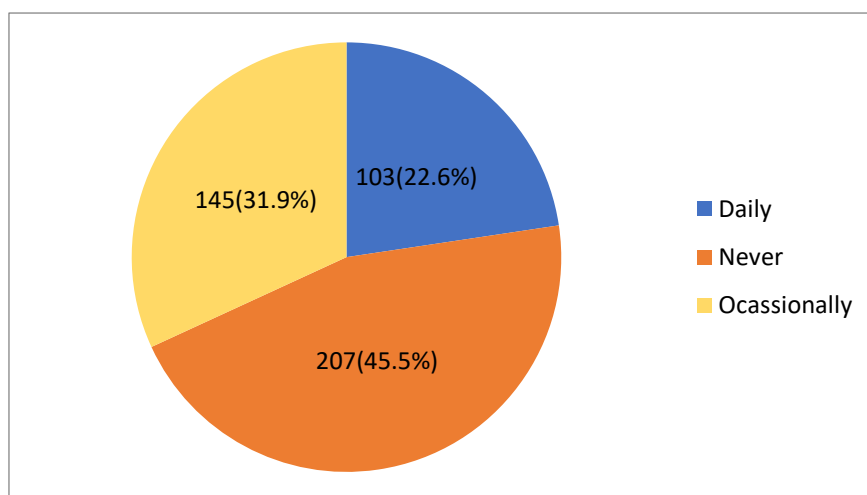


### Oral Hygiene aids other than Brushing:

About 286(62.9%) of the study group doesn't use interdental aid like dental floss while 133(29.2%) of the study population were not aware about the use of dental floss itself. About 137 (30.1%) of study population uses tooth pick to remove the food stuck between their teeth.

Graph 2 depicts the distribution based on mouthwash usage among the participants. 308 (67.7%) members from study group have the habit of cleaning their tongue. 191 (42%) of the participants use back side of the teeth to clean their tongue and 129(28.4%) of them use tongue scrapper for it.

**Graph 2:** Distribution of study population based on mouthwash use



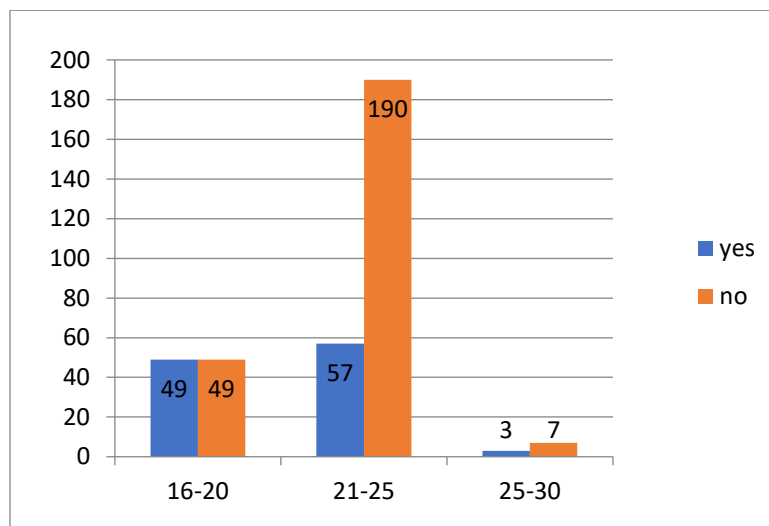
### Dental visits:

210 (46.4 %)members of the study population have never visited dentist. 74 (16.3 %)of the study

population visited dentist for cleaning their teeth, 46 (10.1 %) for tooth removal and 39 (8.6%) for filling

their teeth . . Dentist recommendation about the on oral hygiene aids was shown in Graph 3.

**Graph 3:** Dentist recommendation on Oral hygiene aids



#### 4. Discussion

Eventhough the morbidity due to poor oral hygiene was prevalent in most of the individuals it has never been acknowledged. Most people aren't aware about the systemic illnesses or problems related to poor oral hygiene. Due to a lack of awareness, many diseases go undetected or untreated when they initially manifest as oral signs and symptoms.

The awareness survey was conducted among 455 young adults all over Tamil Nadu .In terms of how people clean their teeth, tooth brushing and tooth paste (98.7%) were the most common options among the research population. This result was similar to that of the study conducted by S. N. Goryawala et al (90%).<sup>[6.]</sup>

According to the current study, more participants cleaned their teeth once per day (67.7%), which is similar to the findings of Neamatollahi H et al, Davies RM et al, and Khami MR et al.<sup>[7]</sup> Where as people in study done by Tadin A et al (85.7%) brushes with toothbrush and toothpaste several times in a day .<sup>[8]</sup>

Regarding the frequency of mouthwash usage, in the present study 31.9% participants have never used mouthwash, which was higher (22.8%) than that of the study conducted by Tadin A et al<sup>[8]</sup> and lower than the study conducted by Manju et all (43%)<sup>[9]</sup>

In the present study about 67.7 % have the habit of cleaning their tongue .which is higher than that of the study conducted by, Nitika J et al<sup>[10]</sup>

About 46.2%of participants in the current study have never visited dentist which higher than the study conducted by Sukhvinder et all (28.8%)<sup>[11]</sup> and (22.5% ) in a study conducted by Rafi et all <sup>[12]</sup>

54.5% of participants use tooth pick and 7.9 % use floss for interdental cleaning where as in the study conducted by Daljit Kapoor et all 20% of the patients used any interdental aids like floss, toothpick, interdental brush .<sup>[13]</sup>

#### 5. Conclusion

In this study it is evident that most of them were using toothbrush and toothpaste as an oral hygiene aid .but there is lack of awareness about proper brushing technique, duration of brushing, frequency of changing the tooth brush and use of other oral hygiene aids. Hence education through camps and social media should be implemented to improve adequate knowledge on oral hygiene aids. As dentists, it is our responsibility to continually emphasise the value of both routine checkups and the need to correct all issues connected to brushing and flossing



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