

A Questionnaire Study on Oral Hygiene Among Dental Students in Chennai, India

Fahmida binti Abd Rahman

¹st year, BDS Saveetha Dental College and Hospitals, Saveetha University, Chennai-600 077.

I. Introduction

Oral hygiene is important for dental well being in which we keep our teeth clean by brushing and flossing in order to avoid from deposition of dental calculus, plaque and gum disease. Maintaining good oral hygiene is compulsory for each of the individual for overall health and for having better quality of life. Conversely, our quality of life will decrease if we have poor oral hygiene. For example, we will suffer pain and cause problems in term of social interaction [1].

One of the methods that can be used for maintaining good individual oral hygiene is by practising oral self care. Health beliefs and attitudes of dentists will not only affect their oral self care habits but may also give motivation to their patients to maintain their oral hygiene [2]. There are many factors that can influence attitude and behavior of an individual [3]. One of the factors that is responsible for someone attitude and behavior is knowledge [4].

Knowledge can be described as level of understanding of an individual towards facts, information, skills and many more [4]. Therefore, knowledge that is associated to dental health during training period is important especially for the future dentists. Apart from that, socioeconomic status and educational level will also affected people's oral health behavior [5].

II. Materials And Methods

Study design : A study based on questionnaire survey

Sampling : Convenient sampling

Sample size : 100 dental students

Study Group :

A survey questionnaire which consists of 10 multiple choice questions was circulated among 100 dental students of four different dental colleges in Chennai. The same questionnaire had been completed by all the dental students from those four colleges. The responses from dental students population have been collected within 21 days. The result is presented in bar charts and expressed in percentages for categorical variables.

III. Results

The results for this survey research is being presented in bar chart based on the data that is collected from 100 dental students from four different dental college in Chennai, India. To maintain confidentiality we have made the four dental colleges as Dental College 1, 2, 3, 4 respectively.

Table 1 : Questionnaire analysis

No of question	Dental College 1 n =40 (%)	Dental College 2 n= 20(%)	Dental College 3 n=20(%)	Dental college 4 n=20(%)
1. How many times do you brush your teeth? a) Once a day b) Twice a day c) More than twice a day	6 (24) 27(67.5) 7(17.5)	3(15) 11(55) 6(30)	11(55) 5(25) 4(20)	5(25) 10(50) 5(25)
2. What do you use to clean your teeth? a) Toothbrush and toothpaste b) Toothbrush, toothpaste and floss c) Floss only	36(90) 4(10) 0	14(70) 6(30) 0	15(75) 5(25) 0	16(80) 4(10) 0
3. How often do you change your toothbrush? a) Once in a month b) Once in a three months c) Once in 6 months	4(10) 34(85) 2(5)	6(30) 8(40) 6(30)	7(35) 9(45) 4(20)	11(55) 5(25) 4(20)
4. How often do you go to dental clinic for checking your teeth? a) Once a year b) Two times a year	7(17.5) 30(75) 3(7.5)	9(45) 5(25) 6(30)	12(60) 3(15) 5(25)	14(70) 4(20) 2(10)

c) More than two times a year				
5.What is your consideration when choosing toothbrush?				
a)Brand	16(40)	12(60)	12(60)	13(65)
b)Design	23(57.5)	6(30)	6(30)	5(25)
c)Price	1(2.5)	2(10)	2(10)	2(10)
6.How often do you get your teeth clean by dentist?				
a)Never	4(10)	5(25)	6(30)	8(40)
b)Once in a year	30(75)	10(50)	10(50)	7(35)
c)Twice in a year	6(15)	5(25)	4(20)	5(25)
7.What is the technique you used while brushing your teeth ?				
a)Vertical motion	4(10)	2(10)	1(5)	1(5)
b)Vertical and horizontal motion	29(72.5)	42(20)	14(70)	15(75)
c)Vertical,horizontal and round motion	9(22.5)	14(70)	5(25)	4(20)
8.How long do you take to brush your teeth?				
a>About half a minute	2(5)	1(5)	2(10)	4(20)
b>About one minute	18(45)	6(30)	8(40)	10(50)
c>About two minutes	17(42.5)	13(65)	5(25)	5(25)
d)More than 5 minutes	3(7.5)	0	5(25)	1(5)
9. Do you normally brush your teeth after your meal?				
a)Never	12(30)	4(20)	6(30)	10(50)
b>Sometimes	22(55)	12(60)	12(60)	5(25)
c)Always	6(15)	6(30)	2(10)	5(25)
10.How do you control your mouth odour?				
a)Regular rinse with plain water	23(57.5)	6(30)	10(50)	9(45)
b)Rinsing with salty water	7(17.5)	5(25)	3(15)	6(30)
c)Using mouthwashes	10(25)	9(45)	7(35)	5(25)

Result

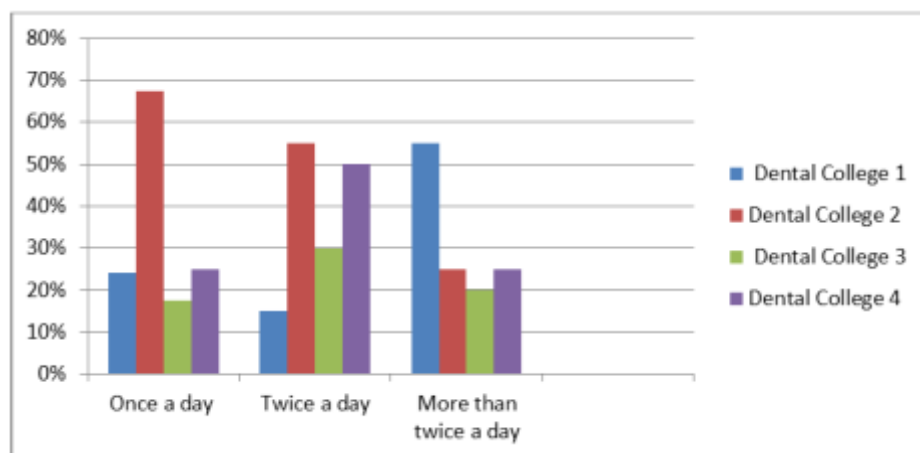


Figure 1: How many times do you brush your teeth?

In this study, approximately three-fourth of the total students from all four dental colleges stated that they brushed their teeth twice a day whereas the remaining students stated that they often brushed their teeth only once a day.

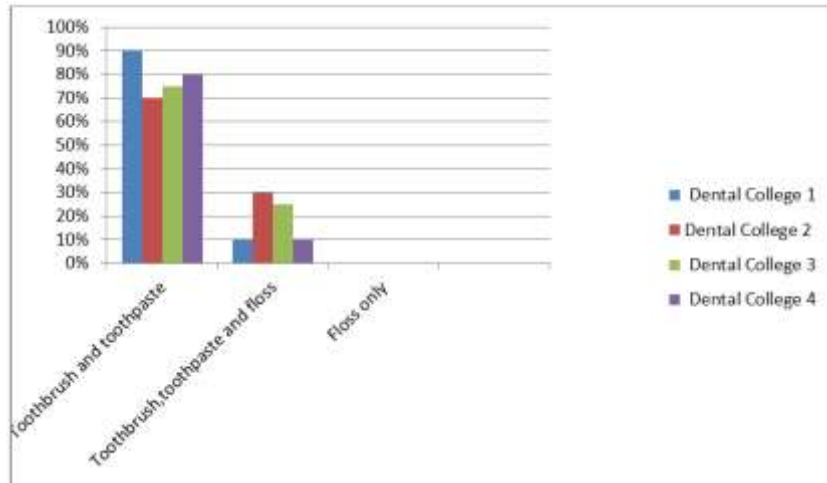


Figure 2: What do you use to clean your teeth?

The method of cleaning teeth are different among dental students in all four colleges. Some students use toothbrush and toothpaste, some use toothbrush, toothpaste and dental floss, while the others prefer to use only dental floss.

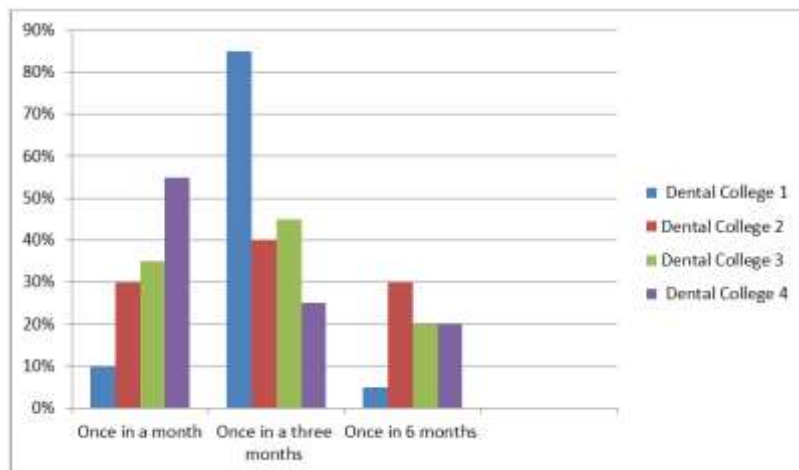


Figure 3: How often do you change your toothbrush?

Based on (Table 1 ,Figure 3) , we can see that dental students from Dental College 1 had the highest percentage (85%) for option B which is once in a month . The second highest percentage for this question belongs to students from Dental College 4 which has approximately (55%) for option A.

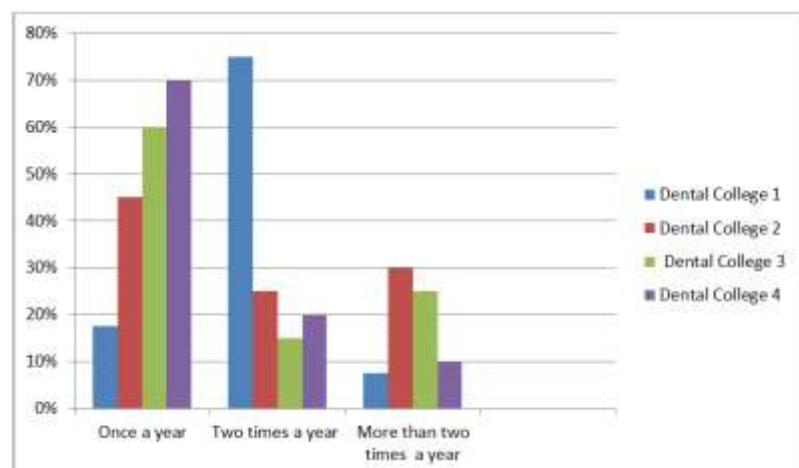


Figure 4: How often do you go to dental clinic for checking your teeth?

Based on the bar chart, the frequency of the dental students go to dental clinic for checking their teeth is highest for option A which is once a year.

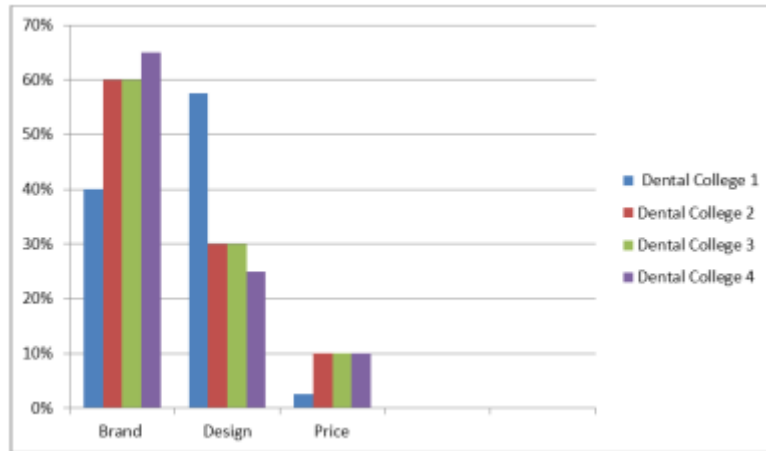


Figure 5 : What is your consideration when choosing your toothbrush ?

Based on the result and bar chart (Table 1, Figure 5 , the dental students from all four colleges most likely to choose toothbrush depend on their brand and design whereas cost having the least influence among the three given options in the question.

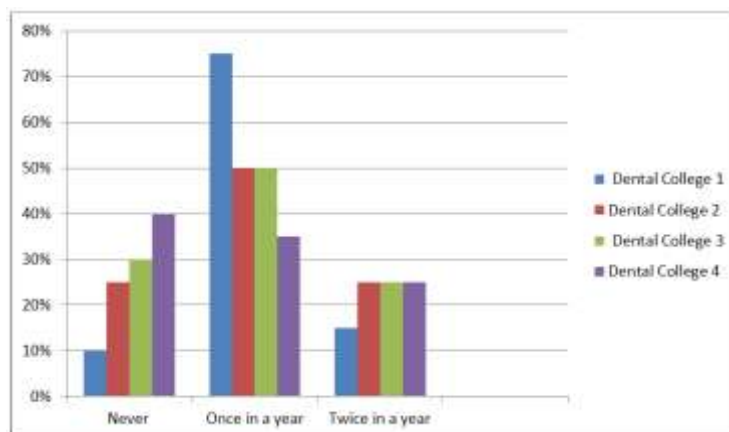


Figure 6: How often do you get your teeth clean by dentist?

As we can see from (Table 1, Figure 6) , about half of the students from all four colleges had their teeth cleaned by going to dental clinic for once in a year. The percentage for all of the students from four college except for Dental College 1 students is same for 'option C' which is at 24 % .

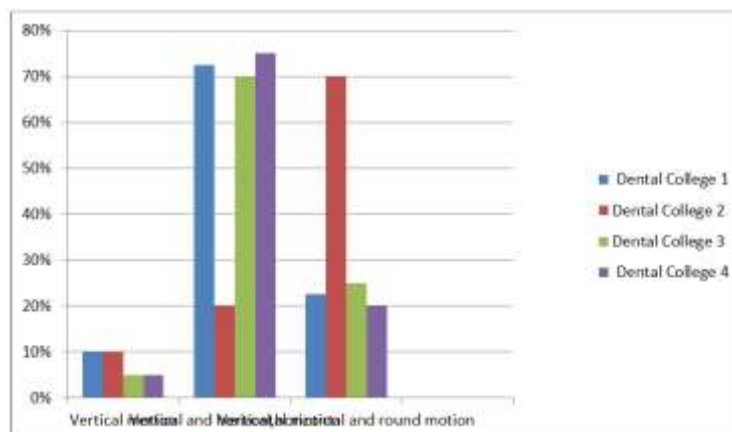


Figure 7 : What is the technique you used while brushing your teeth?

Basically, vertical and horizontal motion is the most preferable technique for brushing teeth among the students compared to the other two which are vertical motion and vertical, horizontal and round motion technique. The less frequent technique used by the dental students is option A which is vertical motion only.

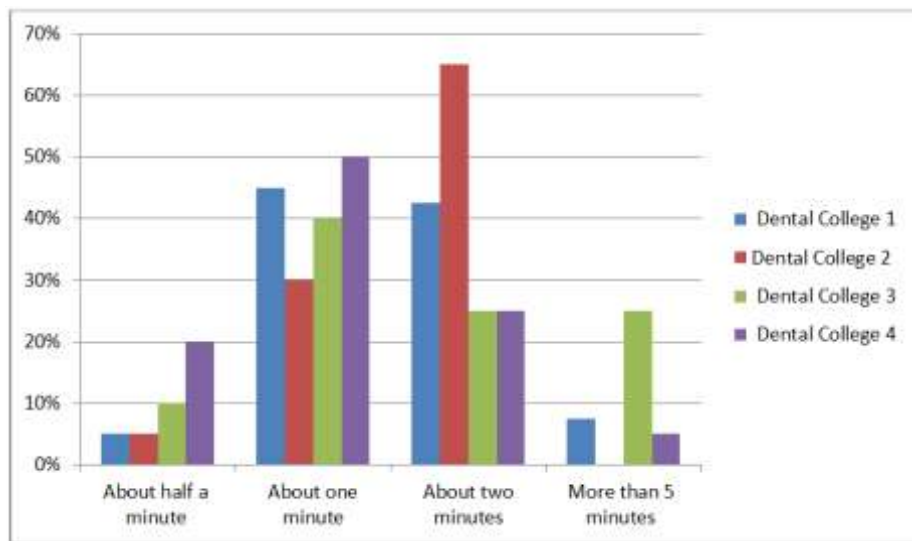


Figure 8: How long do you take to brush your teeth?

Based on my study, brushing time differs among respondents and not everyone has the same brushing time. Some will brush their teeth for about half a minute, about one minute or about two minutes and the rest take more than 5 minutes to brush their teeth. The ideal brushing time is estimated to be in the range of 30 seconds to 3 minutes whereas brushing time more than 3 minutes is not preferred because the retention of toothpaste in brush will be reduced as the time increase. [9]. Majority of the dental students prefer to brush their teeth about one minute whereas the least percentage for brushing teeth which is less than 20% for each dental college is about half a minute.

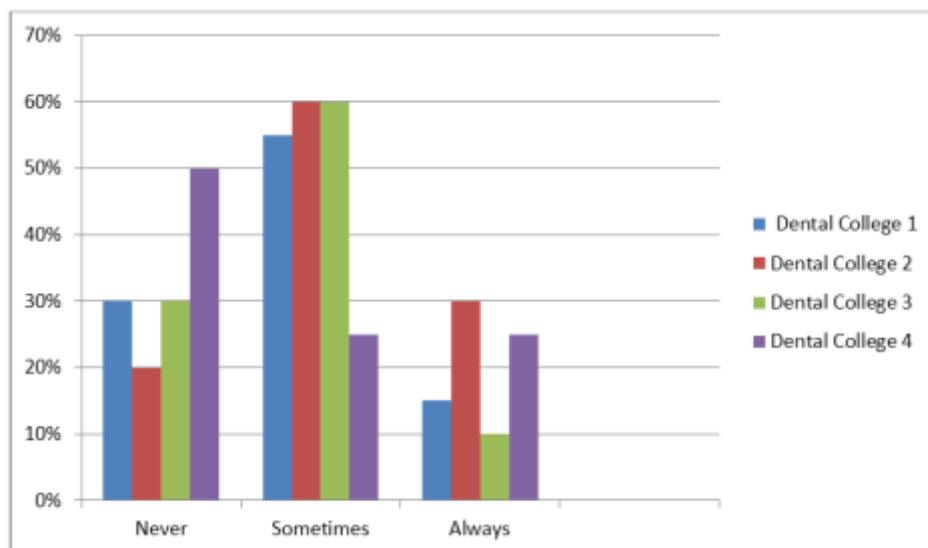


Figure 9: Do you normally brush your teeth after your meal?

For this question, it can be stated that majority of the students sometimes brush their teeth after taking meals. Approximately 60% students from Dental College 2 and 3 chose option B which is 'sometimes' and it is the highest percentage compared to other options. The respondents from Dental College 1 have the second highest percentage which is 50% and the students from Dental College 4 has the lowest percentage for option B in this study.

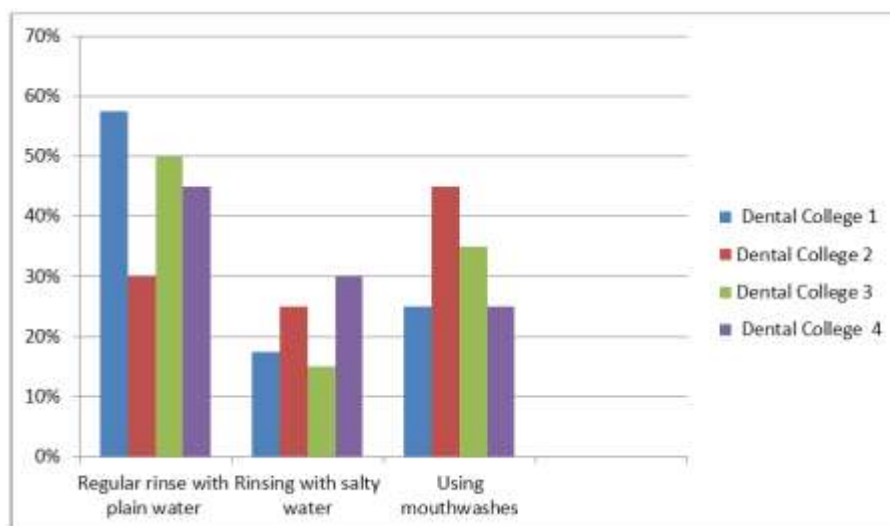


Figure 10: How do you control your mouth odour?

Based on the survey question that had been circulated to 100 dental students, we can see that majority students preferred to control their mouth odour by regular rinsing with plain water instead of controlling it by rinsing with salt water or using mouthwash.

IV. Discussion

In order to achieve oral health benefits, toothbrush and other oral hygiene aids should be used daily in a correct manner. Dental plaque will usually adhere on the surface of teeth and dental appliances. Plaque growth occurs within several hours and it should be removed at least every 48 hours to preserve our teeth from getting any carries or infection.

Considerable differences can be found in the level of oral hygiene among dental students from different colleges based on the impact of education on oral hygiene practices [6]. Based on this research, majority of the students only depend on the use of toothbrush and toothpaste in maintaining their oral hygiene. There are only a few students that use floss in maintaining their oral hygiene. Brushing teeth using toothbrush and toothpaste alone without the use of floss or any interdental cleaning are insufficient to prevent gingival disease as well as periodontal diseases since periodontal lesions are frequently found in interdental location [7].

Apart from that, dental student population most likely to change their toothbrush based on the brand and design whereas price having the less influence. This situation occurs probably because they are influenced by the advertisement that had been showed in television, radio or newspapers. After that, brushing time among the respondents are differs from one another. Some of them state that they brushed their teeth for about half a minute, some of them brushed for about one minute only or maybe for two minutes. There is only a few of them choose option D which is brushing teeth more than five minutes. In my opinion, the ideal time of brushing time is about one to three minutes. Based on the study by Saxer, longer brushing time is not good as it will reduce the retention of toothpaste in the brush [8]. Most of the dental students still not aware with the importance of the dental visit and the function of dentist as a crucial one for maintaining their oral health. Approximately half of the respondents demonstrated a negative attitude towards dental checking and cleaning their teeth [9].

To summarize, most of the dental stated from all four colleges stated that they brushed their teeth twice daily using toothpaste and toothbrush without use of dental floss. Then, majority of them reported that they frequently change their toothbrush once in a three month by considering either the brand or design of the toothbrush. After that, great majority of dental students stated that they frequently go to dental clinic once in a year either for checking teeth or cleaning purpose. About half of the respondents controlling their mouth odour by rinsing their mouth using plain water.

V. Conclusion

The significant elements of the practise of the dentistry is the control of plaque. Every person should be aware of this element and they should have at least basis knowledge on how to prevent plaque or otherwise their teeth will be easily got plaque. Good plaque control will help the individual to have a good health of oral cavity. Therefore, it can prevent from getting any related oral cavity disease like periodontal and gingival disease and tooth decay [10].

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