

Knowledge, Attitude and Practices on Various Brushing Techniques Among Clinical Dental Graduates: Institutional Study

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ABSTRACT

BACKGROUND: Oral health and hygiene is an important part of our lives to maintain the overall health of our body and it is necessary to spread awareness about it. This study was conducted to evaluate the knowledge, attitude and practices on various brushing techniques among clinical dental graduates.

MATERIALS AND METHODS: A total of 15 questions were prepared in the form of a survey questionnaire on google forms. Responses were collected from 100 clinical dental graduates. Statistical analysis was done using the software spss version 23. Chi-square test was used and statistical significance was set at 5%.

RESULTS: In this study, it was seen that (43%) said that increased sugar intake causes rapid dental decay. (87.9%) said that oral health is related to systemic health. (75%) clean their teeth twice a day. (70.7%) change their toothbrush every 3 months. (50.5%) noticed bleeding in their gums.

CONCLUSION: After conducting this study, it is seen that the majority of the students have a good idea about oral health and hygiene, but still do not understand the importance of it. The lack of motivation for oral health and hygiene causes poor behaviour, attitude and practicing of dental care.

KEYWORDS: KAP, brushing techniques, oral health and hygiene, clinical dental graduates, Innovative analysis.

INTRODUCTION

In recent years, it is seen that there is a considerable reduction in the occurrence and severity of oral diseases in developed countries (1). To improve the oral health of children and young adults, a systemic and organized health care has been introduced(2)(3). An increased number of adults being able to keep their original denture for later stages of life is another advantage of this type of health care(4).

Oral health is only improved in developed countries, but is yet to be improved in developing countries and it is one of the major health problems(5). Style modifications, improved self-care practices, changing living conditions, establishment of dental or oral care programs are the major reasons because of which there is improvement in overall dental or oral health in developed countries(6). On the contrary, incidence of dental caries has increased gradually in developing countries(7). There are not many studies which provide sufficient data regarding the knowledge, attitude and behaviour of the general population towards oral health care especially in developing countries. Therefore, there is a need to perform a study which can show the general trends of the human population in our community towards oral hygiene.

This research is needed to increase the awareness about oral health and hygiene among dental students. It will fulfil the deficiency in knowledge about brushing techniques, oral health and hygiene and the students will be more aware of these things. Effective knowledge about oral health practice will help students provide effective oral health education.(8–16),(17),(18),(19,20),(21),(22),(23–27)

The aim of the study is to evaluate KAP on oral health and hygiene based on brushing techniques among clinical dental graduates in Chennai city.

MATERIALS AND METHODS

A cross-sectional study with random sampling. A sample size of 100 was taken. A total of 15 questions were prepared in the form of a survey questionnaire on google forms and responses were collected from clinical dental graduates.

Study setting- the study was conducted in a Private dental institution in Chennai city, South India

Sample from- The sample was derived from a Private dental institution in Chennai city. The student performing clinical procedures were included as the sample in this study and convenience sampling was used.

Data Collection: Questionnaire survey was administered which collected details regarding demographics, and 12 questions on their oral health knowledge was assessed. Inclusion criteria were only those who provided informed consent and criteria for exclusion were dental students on extended leave (>1 month) due to health or personal reasons, as well as dental students whose enrollment had been cancelled and they are no longer part of the daily batch, and were not allowed to study.

Statistical analysis: All the responses were collected and exported in SPSS version 2.3 software. Descriptive status was used for data summarisation and presentation. Degree association was measured using T-test and anova to assess the significance level with $p < 0.05$

Ethical aspects: This study included those students who agreed to the terms of free and informed consent. Ethical approval was granted for the study by the institutional Research Ethics Committee.

RESULTS

From the survey conducted among clinical dental graduates, 100 responses were collected. (14.1%) were between the age group 24-28, (17.2%) above 28, (30.3%) between 18-20 and (38.4%) between 20-24. The study group consisted of (81%) females and (19%) males.

According to table 1, (43%) said that increased sugar intake causes rapid dental decay. (24%) said decreased brushing frequency causes it. (33%) said both. According to table 2, (87%) said that oral health is related to systemic health. (12%) said that oral health is not related to systemic health. According to table 3, (75%) clean their teeth twice a day. (25%) clean their teeth once a day. (70.7%) change their toothbrush every 3 months. (29.3%) change their toothbrush every 6 months. (50.5%) noticed bleeding in their gums. (49.5%) did not notice bleeding in their gums. (41%) said that media source is the source of oral health knowledge. (33%) said family members are the source. (18%) said teachers are the source. (37.4%) said that they would do nothing for bleeding gum. (23.2%) said that they would stop brushing. (19.2%) said that they would visit a dentist. (10.1%) said that they would increase brushing. (96%) clean their teeth with brush and paste. (4%) clean their teeth with brush and powder. (45%) clean their teeth with a soft brush. (41%) clean their teeth with a medium brush. (9%) never noticed. (30%) use horizontal brushing technique. (30%) use circular brushing technique. (26%) use vertical brushing technique. (14%) use bass brushing technique. (81%) clean their tongue. (19%) do not clean their tongue. (56.8%) use tongue cleaning aids. (43.2%) use a toothbrush to clean their tongue. (80%) rinse their mouth after eating. (20%) do not rinse their mouth after eating.

Table 1: This table is a comparison between age and the reason for rapid dental decay.

		What causes rapid dental decay?			P value
		Decreased brushing frequency	Sugar intake	Both	
age	18-20	6 19.4%	17 54.8%	8 25.8%	0.093
	20-24	7 18.9%	12 32.4%	18 48.6%	
	24-28	3	6	5	

		21.4%	42.9%	35.7%
	Above 28	7	8	2
		41.2%	47.1%	11.8%
Total		24	43	33
		24.0%	43.0%	33.0%

Table 2: This table is a comparison between age and student’s opinion on oral health being related to systemic health.

		Is oral health related to systemic health?		P
		Yes	No	
age	18-20	25 80.6%	6 19.4%	0.283
	20-24	34 91.9%	3 8.1%	
	24-28	14 100.0%	0 0.0%	
	Above 28	13 76.5%	3 17.6%	
Total		87 87.0%	12 12.0%	

Table 3: This table is a comparison between age and how many times they clean their teeth in a day.

age	How many times in a day do you clean your teeth?		P
	Once	Twice	
18-20	8 25.8%	23 74.2%	0.384
20-24	10 27.0%	27 73.0%	
24-28	2 14.3%	12 85.7%	
Above 28	5 29.4%	12 70.6%	
Total	25 25.0%	75 75.0%	

DISCUSSION

In this study, it was observed that (43%) said increased sugar intake causes rapid dental decay. In a previous study conducted in 2019, (19.8%) said that increased sugar intake causes rapid dental decay, but (60.1%) said that decreased brushing frequency causes rapid dental decay(28). In conclusion, it is seen that the majority of the people opted for decreased brushing frequency as the cause of rapid dental decay.

In this study, it was observed that (87.9%) said oral health is related to systemic health, whereas in a previous study conducted, (77.2%) said yes to oral health being related to systemic health. But, (22.8%) said oral health is not related to systemic health(29). In conclusion, it seen that the majority of the people said oral is related to systemic health.

In this study, it was seen that (75%) clean their teeth twice a day. In a previous study conducted, (12.2%) clean their teeth twice a day. But, (68.8%) clean their teeth once a day(30). In conclusion, when we compare these two studies, in this study it was observed that the majority clean their teeth twice a day, whereas in the previous study conducted, the majority clean their teeth once a day.

In this study, (70.7%) change their toothbrush every 3 months. In a previous study conducted, (30.4%) change their toothbrush every 3 months, but (36.5%) change their toothbrush every 6 months(31). In conclusion, in this study, the majority opted for 3 months, whereas in the previous study, the majority opted for 6 months.

In this study, it was seen that (50.5%) noticed bleeding in their gums. In a previous study conducted, the majority of the people noticed bleeding in their gums, whereas a few did not notice bleeding in their gums(32). In conclusion, the majority noticed bleeding in their gums.

The limitation faced in this study was lesser time availability. The future scope involved is more awareness about oral health and hygiene and more importance to oral health which is related to systemic health.

CONCLUSION:

From this study, it was concluded that the majority of dental students have a good idea about oral health and hygiene, but still do not understand the importance of it. The lack of motivation for oral health and hygiene causes poor behaviour, attitude and practicing of dental care.

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