

Knowledge, Awareness and Regular Usage of Interdental Cleansing Aids among Non-Dental Graduates

Type of manuscript: Questionnaire Survey

Running Title: Knowledge, Awareness and Regular usage of interdental cleansing aids among non-dental graduates

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ABSTRACT:

INTRODUCTION:

The maintenance of a good oral health is essential for overall well-being and an improved health-related quality of life. In populations that use toothbrushes, the interproximal surfaces of the molars and premolars are the predominant sites of residual plaque. The methodologies of oral hygiene ranges from brushing, Interdental cleaning, and use of mouth wash and tongue hygiene. Inter Dental cleaning is just as essential as brushing to prevent dental disease by eliminating the Interdental plaque.

AIM AND OBJECTIVE:

The aim of this study is to evaluate the knowledge, Awareness and Regular usage of interdental cleansing aids among non-dental graduates.

MATERIALS AND METHODS:

A questionnaire based survey was conducted among 105 college students in Chennai, Tamilnadu. It was distributed through an online survey link and results were collected. Data analysis was done using spss software.

CONCLUSION:

The knowledge and the Regular usage of interdental cleansing aids among non-dental graduates are not sufficient and should be improved. Therefore, Health education and other Awareness programs should be conducted to improvise their knowledge.

KEYWORDS: Interdental cleansing aids, Oral hygiene, plaque control, Dental caries, interproximal areas

INTRODUCTION:

The maintenance of a good oral health is thus very crucial for overall well-being and an improved health-related quality of life, since poor oral health affects appearance, resulting in stained or missing teeth; contributes to bad breath and negatively influences self-confidence, self-esteem and communication(1). Poor oral health can also present with pain which may lead to discomfort when eating, drinking and speaking, thus affecting quality of life(2). The Bacterial plaque that forms on all hard and soft oral tissues is considered to be the principal etiological agent in periodontal diseases. The accumulation of plaque facilitated by poor oral health maintenance predisposes to gingivitis, leading to the onset of periodontal inflammation(3). There is evidence that improvement in oral hygiene will lead to reduction in gingival inflammation. It has also been convincingly demonstrated that periodontal disease is most frequent and severe in the interproximal areas, and it is recognised to progress faster interdentally(4). In populations that use toothbrushes, the interproximal surfaces of the molars and premolars are the predominant sites of residual plaque. The removal of plaque from these surfaces remains a valid objective because in patients susceptible to periodontal disease, gingivitis and periodontitis are usually more pronounced in this interdental area than on other aspects(5). Dental caries also occurs more frequently in the interdental region than on lingual and buccal smooth surfaces. The methodologies of oral hygiene ranges from brushing, Interdental cleaning, and use of mouth wash and tongue hygiene(6). Inter Dental cleaning is just as essential as brushing to prevent dental disease by eliminating the Interdental plaque. Burden of oral health diseases remains high all over the world(7). This could be mainly because of the lack of acceptance of healthy oral habits that are vital in controlling the most common oral diseases. If appropriate instructions on brushing and flossing are given, patients would be more likely to adhere to these practices(8,9). Various types of inter-dental cleaning aids have been developed in recent years. Dental floss is one of the common type of inter-dental aids for tight contacts, others being unitufted and proxa brush and other interdental cleansing aids(10).

Interdental cleaners or interdental cleaning aids such as Dental Floss and Interdental Brushes, are highly recommended for the removal of dental plaque from interproximal areas of the teeth and they are widely available(11). Although Dental floss requires dexterity and might be difficult in areas with previous periodontal breakdown. Interdental brushes were designed in order to better access difficult-to reach interproximal areas, facilitating supragingival plaque control. They offer the advantage of being available in wider and new thinner versions to accommodate the various dimensions of the interdental spaces and patients with poor dexterity often find interdental brushes easier to use. Thus, the choice and selection of interdental cleaning aid depends on preference, availability, interdental anatomy and dexterity of the user(12,13). This study evaluates the knowledge, Awareness and regular usage of interdental cleansing aids among non-dental graduates.

MATERIALS AND METHODS:

A questionnaire based survey was conducted among 105 college students in Chennai, Tamilnadu. The questionnaire was prepared to assess the awareness, knowledge and regular usage on interdental cleansing aids among Non-Dental graduates. It was distributed through an online survey link and results were collected. Data analysis was done using spss software (Figure: 1).

- 1)What is your frequency of toothbrushing?
(A)Once daily. (B) Twice daily
- 2)What is your frequency of changing toothbrush?
(A)Once a month. (B)Every three months. (C)As and When convenient
- 3)Are you able to clean all the tooth surfaces with the toothbrush?
(A)Yes. (B)No
- 4)Do you know that tooth brushing alone is not sufficient to maintain good oral hygiene?
(A)Yes. (B)No
- 5)Have you heard about any recommended interdental cleansing aids?
(A)Yes (B)No
- 6)What are the interdental cleansing aids you know of?
- 6)What are the devices used to remove plaque interdentally?
(A)Interdental brushes. (B)Tufted Floss. (C)Wooden dental cleaners. (D) All of the above
- 7)Do you know that dental floss is essential to remove plaque and debris from interdental area?
(A)Yes. (B)No
- 8)Have you used interdental cleansing aids?
(A)Yes. (B)No
- 9)If Yes, what is the frequency of using interdental cleansing aids?
(A)Once (B)Twice. (C)Irregular. (D)Only in case of food impaction
- 10)Which of the following plays a role in the selection of an Interdental device?
(A)Preference. (B)Availability. (C)Dexterity. (D)All of the above
- 11)Do you know that dental floss should be used customarily along with tooth brushing everyday?
(A)Yes. (B)No
- 12)Do you know about technique of flossing?
(A)Yes. (B)No
- 13)Are you aware of electrical dental flossing?
(A)Yes. (B)No
- 14)Do you think multifilament floss is more beneficial than monofilament floss?
(A)Yes. (B)No
- 15)What type of device offers the advantage of being available in wider and new thinner versions
(A)Floss. (B)Interdental brushes. (C)Toothpicks. (D)Tips

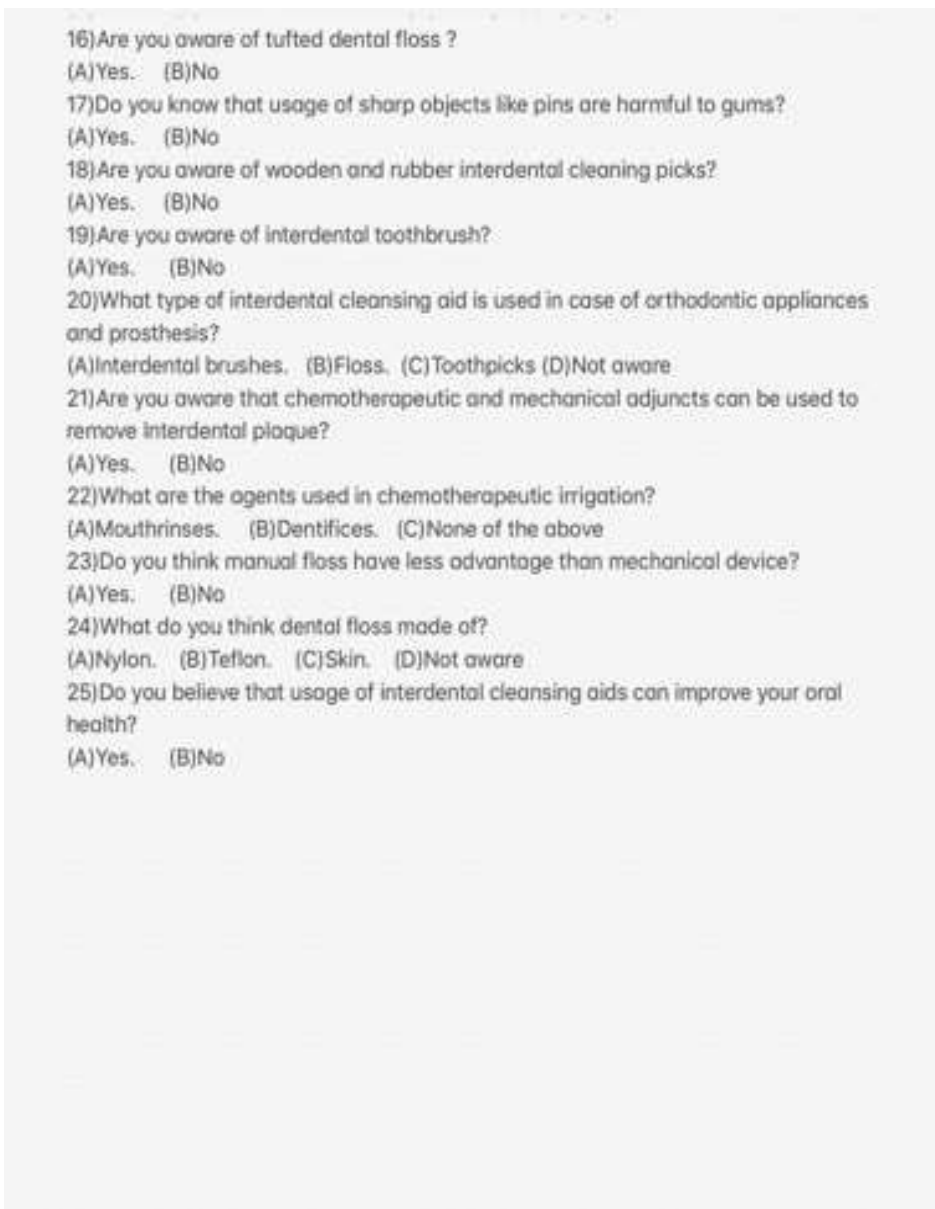


Figure: 1-QUESTIONNAIRE

RESULTS:

The survey questionnaire containing 25 questions regarding knowledge, Awareness and their attitude towards Regular usage of interdental cleansing aids were answered by 105 people. The results varied from individual to individual. This study states that majority of 53% people inspite of being non-dental graduates are aware of various interdental cleansing aids available such as Dental floss, Interdental brushes and wooden Dental cleaners etc., And about 55% people use interdental cleansing aids. But among those people 27% people use only during food impaction, 23% people use irregularly, 18% use twice in a week and the remaining 18% people use Once a week. 49% people stated that the selection of interdental cleansing aids is based on preference, availability and Dexterity and 32% people stated that availability is important than preference and dexterity. Although 53% of participants are aware of various interdental cleansing aids, 70% stated that Dental floss plays a crucial role in removing plaque from interdental spaces but only 34% people are aware of the availability of tufted dental floss and flossing techniques. Only 47% people are aware of the availability of other interdental cleansing aids such as wooden and rubber interdental cleansing picks. 41% people are aware of the importance of interdental brushes in cases of orthodontic and prosthetic treatments. Only 36% people know about the usage of chemotherapeutic and mechanical adjuncts in plaque control. However, 77% people stated that Regular usage of interdental cleansing aids can improve oral health but they lack to use the Interdental cleansing aids regularly. Therefore, it is essential to improve their knowledge and to create awareness regarding the importance of the usage of interdental cleansing aids (Figure:2-12).

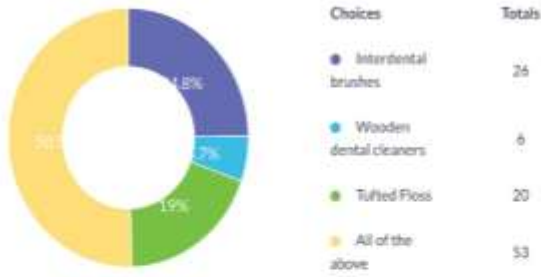


Figure:2- DEVICES USED TO REMOVE PLAQUE INTERDENTALLY

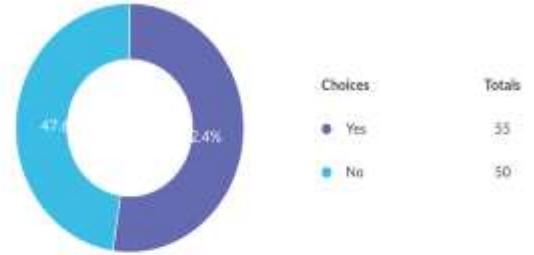


Figure:3- USAGE OF INTERDENTAL CLEANSING AIDS

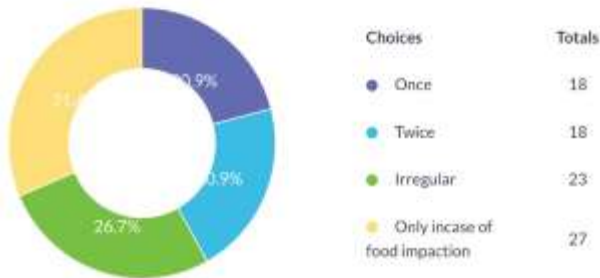


Figure:4- FREQUENCY OF USING INTERDENTAL CLEANSING AIDS



Figure:5- FACTORS IN THE SELECTION OF INTERDENTAL AIDS

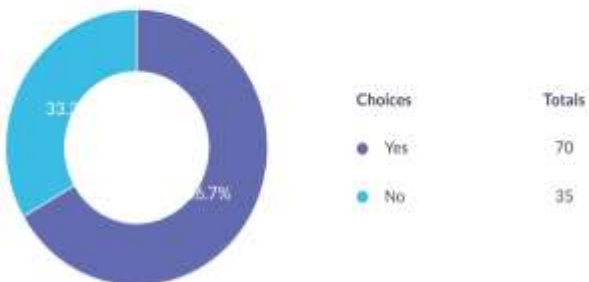


Figure:6- KNOWLEDGE ON DENTAL FLOSS



Figure:7- AWARENESS ABOUT TUFTED DENTAL FLOSS

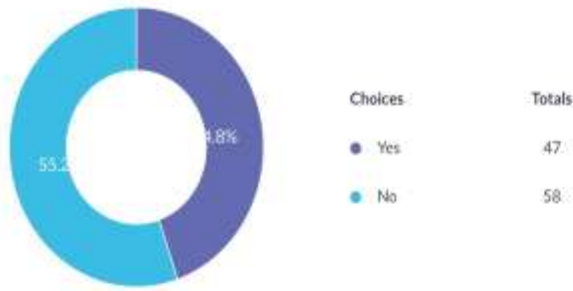


Figure:8-AWARENESS ABOUT WOODEN AND RUBBER TOOTH PICKS

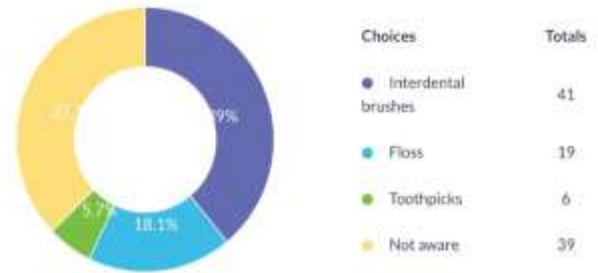


Figure:9-INTERDENTAL CLEANSING AIDS IN ORTHODONTICS AND PROSTHESIS



Figure:10-CHEMOTHERAPEUTIC AND MECHANICAL ADJUNCTS

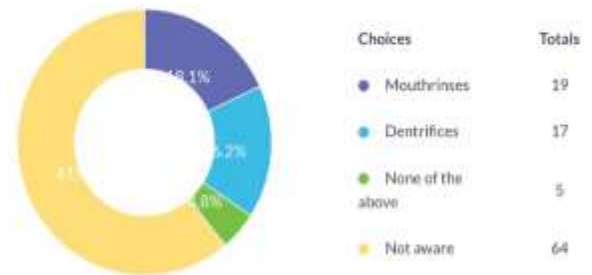


Figure:11-AGENTS USED IN CHEMOTHERAPEUTIC IRRIGATION

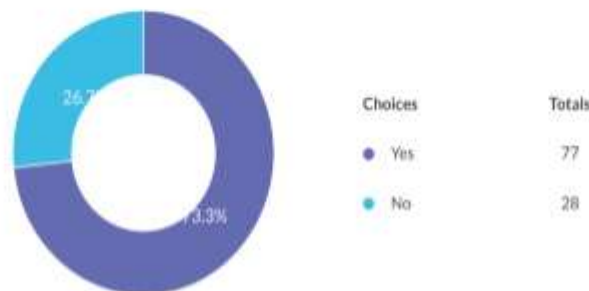


Figure:12-USAGE OF INTERDENTAL CLEANSING AIDS TO IMPROVE ORAL HEALTH

DISCUSSION:

Oral hygiene is important for the preservation of oral health, whereby microbial plaque is removed and prevented from accumulating on teeth and gingival tissues (14). Interdental aids are important as they can remove food trapped between the teeth which can turn into plaque and then calculus (15,16). Interdental spaces are spaces between teeth and they are usually inaccessible during brushing, hence the recommendation that interdental cleaning aids like dental floss and interdental brushes be used to clean them(17,18). This study assessed the knowledge, Awareness and Regular usage of interdental cleansing aids among non-dental graduates. A Questionnaire containing 25 questions was distributed to 105 non-Dental graduates and oral screening was done .The results were collected and analysed. Although Regular usage of interdental cleansing aids was essential, majority of the people that

is 53% stated that their usage of interdental cleansing aids is only in case of food impaction. Of the participants who clean interdentally, 73% of them use dental floss. This is not surprising as it is advertised more frequently compared to other interdental cleansing aids. Even though Non-Dental students have knowledge regarding the importance of interdental cleansing aids, they lack to use them regularly. Considering the calibre of the participants it is also surprising that 77% believed that the regular usage of interdental cleansing aids can improve oral health in spite of their known knowledge and their usage of interdental cleansing aids. Dental students, Dental Therapists and Dentists are taught the importance of removing dental plaque, the causative agent for periodontal diseases not only from the accessible parts of the teeth but also and especially from the inaccessible ones since studies have shown that periodontitis is more prevalent and severe in inter proximal surfaces as compared to free surfaces (19,20).

CONCLUSION:

The knowledge, Awareness and Regular usage of interdental cleansing aids among non-dental graduates are not adequate and should be improvised. Therefore, Health education programs regarding interdental cleansing aids are necessary to create awareness and adequate training at beginners level is also essential to improve their knowledge about maintaining good oral hygiene. Dentists should practice themselves and should act as role-models in the society.

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