



## Brushing Habits in Children below 6 Years-Urban Areas

Manya. Suresh<sup>1</sup>\*, Dr.M.Dhanraj<sup>2</sup>, Dr. Marian Anand Bennis<sup>3</sup>

<sup>1</sup>BDS Saveetha Dental College, 162, Ponamallee high road, Chennai, Tamil Nadu, India.

<sup>2</sup> Department of Prosthodontics, Saveetha Dental College, 162, Ponamallee high road, Chennai, Tamil Nadu, India.

<sup>3</sup>Department of Prosthodontics, Saveetha Dental College, 162, Ponamallee high road, Chennai, Tamil Nadu, India.

\*Corresponding author's E-mail: [manya232@gmail.com](mailto:manya232@gmail.com)

Received: 07-03-2017; Revised: 12-04-2017; Accepted: 08-05-2017.

### ABSTRACT

The aim of the study is to do a survey on the brushing habits of children below 6 years in urban areas. This study investigates the brushing habits of children below 6 years living in urban areas and its relation with cavities. Brushing teeth is an important part of dental care routine. Improper brushing habits results in the formation of plaque which eventually leads to the formation of cavities. Proper brushing habits should be taught to children for maintaining their oral hygiene and to prevent cavities. This study shows the amount of exposure about the benefits of proper brushing among parents and children belonging to urban areas. The relation between brushing habits and cavities is also highlighted. One of the major causes for the occurrence of cavities in children is poor brushing habits. This study is to create awareness among parents about the importance of proper brushing habits and its effect on cavities and to train their children to develop proper brushing habits.

**Keywords:** Brushing habits, children, parents, urban.

### INTRODUCTION

Oral health is a major public health issue affecting all population groups. Poor oral health during childhood is directly associated with poor oral health outcomes in adulthood as people remain more susceptible to developing dental caries throughout their lives. Oral health has an impact on all systems of the body. For example, Early Childhood Caries (ECC) can lead to more widespread health issues, such as diabetes and cardiovascular disease. The oral health status of children relies heavily on the caregivers; therefore, understanding what parents and caregivers know about oral health is crucial when working towards modifying behaviours and encouraging health promotion. Research has shown that parents' lack of knowledge and negative attitudes towards oral health are strongly associated with an increased caries experience in preschoolers. Examples of negative attitudes towards oral health include: downplaying the importance of oral health, not visiting the dentist and not brushing teeth regularly. This has been re-emphasised by the Surgeon General of America who stressed that if parents and caregivers are unfamiliar with the importance and care of their child's primary teeth, they are unlikely to promote a good oral health status and to provide the appropriate care that is required to prevent ECC. Previous studies revealed mixed results of parental knowledge about when to begin tooth brushing. Some studies found that the majority of parents knew that they needed to start brushing their preschoolers' teeth when the first tooth erupts. However, another study has found that only one-third of mothers (32%) knew when to commence tooth brushing in their child. The same study also explored the relationship

between parents' own oral health behaviours and knowledge of preschool oral health, and found a strong correlation between the frequency that parents brush and floss their teeth and their knowledge of preschool oral health. These findings highlight the importance of educating parents on when to start brushing their preschoolers' teeth, as well as promoting good oral health behaviours among parents.<sup>1</sup> Among oral diseases, dental caries is a prevalent dental problem among children<sup>2</sup>, as they consume lots of sweets and aerated drinks. Brushing and flossing are practices to maintain good dental health, along with regular dental visits<sup>3</sup>. Oral health knowledge is essential for proper oral hygiene and better oral health<sup>4</sup>. People living in developing countries, and concomitantly, of lower socio- economic status have a lacunae in oral health awareness mirrored in their practice of oral hygiene habits.

### MATERIALS AND METHODS

The present study was carried among 50 children who visited a clinic in an urban area. The children who participated were below the age of 6 years. The questionnaire was administered to the parents as the children were too young. The study comprised of 20 questions which involved personal oral hygiene questions like the age of the child when brushing was introduced, frequency of brushing, and behaviour of the child when brushing was introduced etc.

### RESULTS

In this study 100 children were given the questionnaire, the data was then analysed and has been tabulated along with charts for each question. The average age of the child



when he/she started brushing was 11-18 months for 51.1% , was 19-26 months for 29.8%,0-10 months for 10.6%,27-36 months for 4.3% and above 36 months for 4.3% (GRAPH 1).68.8% stated that their mother was responsible for introducing tooth brushing ,16.7% stated that their father was responsible ,10.4%stated that the grandparents were responsible, the rest 4.2 %was their siblings(GRAPH 2).Behaviour of the child when brushing was introduced 49%were less cooperative ,,22.4% was co operative,20.4% were un cooperative, the rest 8.2% do not remember.(GRAPH 3).53.1% of the children brushed only once a day,34.7% brushed twice a day,6.1% brushed more than twice and the rest (6.1%) never brushed.(GRAPH 4). To clean their child's teeth 68.8 % used tooth brushes,12.5% used neem sticks and 18.8% used their finger (GRAPH 5).Regarding the way they brushed 49% brushed in any direction,28.6% of them brushed horizontally and 22.4% brushed in a vertical direction(GRAPH 6).75% of them brushed for 1-3 minutes 16.7% brushed for 3-5 minutes and 8.3% brush for longer than 5 minutes (GRAPH 7).55.2% parents said that they use soft tufted brush while 40.8% use medium tufted brush and rest 4.1% of parents use hard tufted brush for brushing(GRAPH 8).Majority (71.4% ) brushed in the morning,12.2% in the evening, the rest(12.2%) brushed after meals and 4.1% of the, brushed after eating sweets/desserts(GRAPH 9).54.2% of them used fluoridated toothpaste for their kids and the rest (45.8%) used non fluoridated toothpaste(GRAPH 10).As for the interval of replacement of toothbrush44.9% of them changed their tooth brush once in 4-6 months,42.9% changed their tooth brush once in 1-3 months8.2 % of them changed their brush only once in 7-12 months and 4.1% of them didn't know the interval of replacement of their child's toothbrush(GRAPH 11).40.8% of the kids ate sweets/chocolates at least once a day,28.6% ate them twice a day,20.4% ate them three times a day,6.1% had sweets/chocolates four times a day and the rest(4.1%) never had any sweets/ chocolates(GRAPH 12).53.1% of the kids did not like to brush and 46.9% of them liked to brush their teeth(GRAPH 13).The frequency of visits to the dentist,50% of them visited the dentist one or two times a year,31.3% of them have never been to a dentist and18.8% of them visited the dentist three or more times a year(GRAPH 14).As for the reasons the parents brushed their child's teeth 34.7% wanted their children to have clean, bright teeth,32.7% to get rid of foul breath, 26.5% of them brushed to prevent caries 4.1% of them made their kids brush to set a good example for others and 2% of the kids brushed to prevent bleeding of gums (GRAPH 15).If there were any signs of tooth decay in their kids tooth majority (60.4%) visit a dentist immediately,33.3% of them make the kids brush more often, the rest (6.3%) neglect it (GRAPH 16).39.1% of them prefer mouth wash to clean their child's mouth other than tooth paste,34.8% prefer salt water, 21.7% use tongue cleaners and the rest

(4.3%) prefer to floss (GRAPH 17) Majority (33.3%) of them started using tooth paste with fluoride when the child was 2-3 years,24.4% of them started using it when the child was 3-4 years, 22.2% started using it only when the kid was 5-6 years and the rest(20%) used it when the child was 4-5 years old (GRAPH 18).64.4% of them did not know that toothpaste with fluoride was advised to be used only after their child is 3 years old ,only 39.6% of them knew this fact (GRAPH19). The factors inducing interest in brushing in their kids31.1% said that it was the flavour of the toothpaste, 18.8% said it was the attractiveness of the toothbrush, 16.7% said that it was the time spent by the parent during brushing, 6.3% of them said that it was the play activities during brushing while 27.1% said that it was all of the above (GRAPH 20).



Graph 1



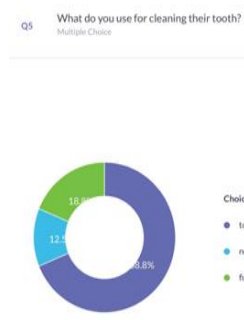
Graph 2



Graph 3



Graph 4

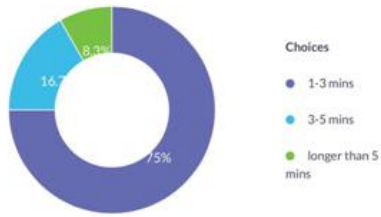


Graph 5



Graph 6

Q7 What is the duration of brushing?  
Multiple Choice



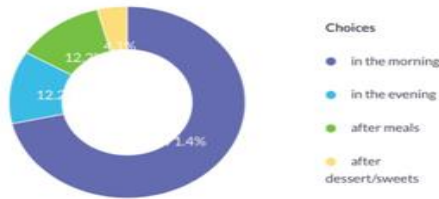
Graph 7

Q8 What type of brush do you use?  
Multiple Choice



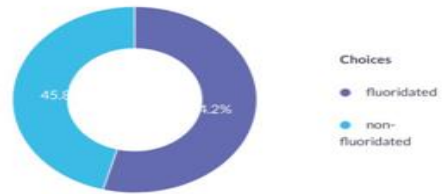
Graph 8

Q9 Occasion of tooth brushing  
Multiple Choice



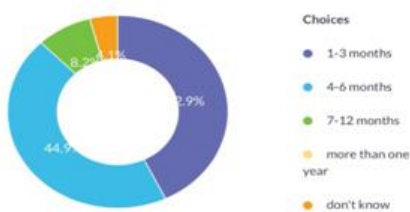
Graph 9

Q10 Use of tooth paste  
Multiple Choice



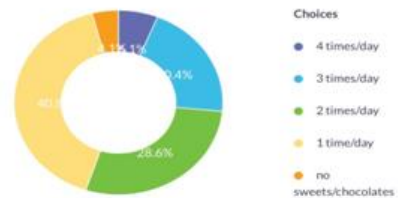
Graph 10

Q11 Intervals for replacement of tooth brush  
Multiple Choice



Graph 11

Q12 Frequency of eating sweets/chocolates  
Multiple Choice



Graph 12

Q13 Does your child like to brush?  
Multiple Choice



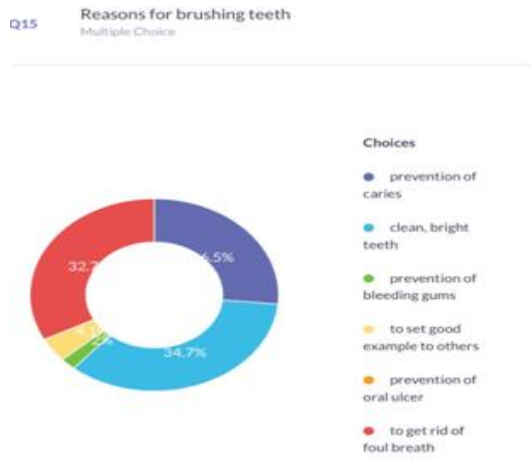
Graph 13

Q14 How often do you visit the dentist?  
Multiple Choice



Graph 14

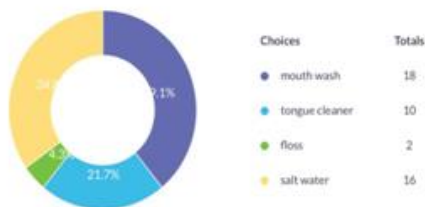
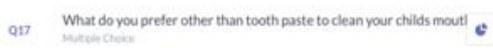




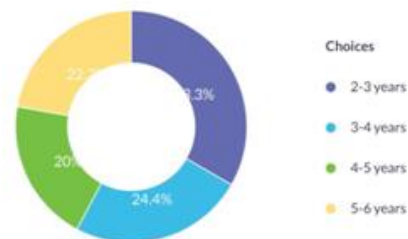
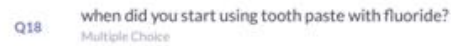
**Graph 15**



**Graph 16**



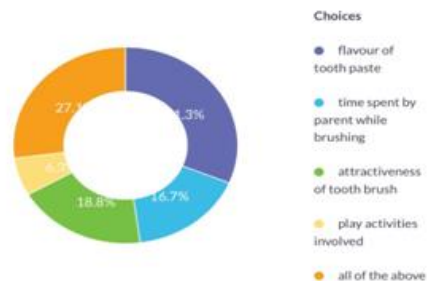
**Graph 17**



**Graph 18**



**Graph 19**



**Graph 20**

**DISCUSSION**

This study focused on the brushing habits in children below 6 years in urban areas. A perturbing result came out when parents were asked about various questions on dental knowledge.60.4% of parents didn't know that tooth pastes with fluoride were not advised to be used until the child is 3 years old these results coincided with the results obtained by Mobeen et al<sup>8</sup>.Only53.1% of the children brushed only once a day,34.7% brushed twice a

day,6.1% brushed more than twice and the rest(6.1%) never brush and d If there were any signs of tooth decay in their kids tooth majority (60.4%) visit a dentist immediately,33.3% of them make the kids brush more often, the rest(6.3%) neglect it.These results implicate a lack of awareness and knowledge of oral hygiene practices and the impact of it on oral health, thus, bringing to light the immediate need of vigorous awareness initiative concerning oral health. <sup>5</sup> Some of the



positive results that were brought out were that when the parents were asked what they used to clean their child's teeth 68.8 % used tooth brushes, 12.5% used neem sticks and 18.8% used their finger. This could be due to low socioeconomic status and lack of proper oral hygiene knowledge. It coincides with the results of another study done by Prashanth et al 2011.<sup>6</sup> A majority of the population were aware of the importance of oral hygiene practices exposing a contradiction in their knowledge component. Almost half of the children population brush for 1-2 minutes, change their tooth brush within the stipulated time, use medium tufted brush and use other aids like mouthwash. The questionnaire also highlighted the importance of parental awareness and participation in oral hygiene practices. Hence this study concludes that only few people are practicing brushing habits properly and so awareness should be created about brushing habits and the ill effects of oral hygiene.

### CONCLUSION

Cumulative analysis exposed a lacunae in the awareness in brushing habits in children below 6 years implying an urgent need for awareness initiative for oral health with the co-operation and participation of parents in the implementation of good oral health practices. The questionnaire also highlighted the importance of parental awareness and participation in oral hygiene practices. Our society in its attitude toward dental health has been giving it less importance as compared to general health. There has been a lack of public identification of oral health deterioration and wide acceptance of morbid mouths along with widespread prevalence of oral diseases and lack of reasonable oral health-care services in the past. Dental public health programmers have not been able to achieve the depth and penetration into society required to bring about the change in societal attitude.<sup>7</sup>

### REFERENCES

1. Saravanan S, Kalyani V, Vijayarani MP, Jayakodi P, Felix J, Arunmozhi P, et al. Caries prevalence and treatment needs of rural school children in Chidambaram Taluk, Tamil Nadu, South India. *Indian J Dent Res.* 19, 2008, 186–90. [PubMed: 18797092].
2. Cleaning your teeth and gum. Available [www.ADA.org/public/topic/cleaning.asp](http://www.ADA.org/public/topic/cleaning.asp). [Accessed June 23, 2009].
3. J.wood groove, G. CUMBER BATCH, AND S. Gylbier, "Understanding dental attendance behavior", *community dental health* 4, 1987, 215-21.
4. Jayakumary Muttappillymyalil, Binoo Divakaran, Jayadevan Sreedharan, Salini K, Santhosh Sreedhar. Oral health behaviour among adolescents in Kerala, India. *JPH - Year 7, Volume 6, Number 3, 2009.*
5. Mohammed Ahad et al ;Awareness of Tooth Brushing Techniques and Proper Oral Hygiene among School Children; *J. Pharm. Sci. & Res.* Vol. 7(6), 2015, 367-372.
6. Prashanth ST, Bhatnagar S, Das UM, Gopu H. Oral health knowledge, practice, oral hygiene status, and dental caries prevalence among visually impaired children in banglore. *Journal of the Indian society of pedodontics and preventive dentistry.* 29(2), 2011 Apr-jun, 102-5.
7. Grewal N, Kaur M. Status of oral health awareness in Indian children as compared to western children :A thought provoking situation( A pilot study).*J Indian soc pedod prev dent* 25, 2007, 15-9.
8. Nausheen Mobeen; To Access the Knowledge and Practice of Brushing Technique of Parents/Caretaker on Their Children; *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)* e-ISSN: 2279-0853, p-ISSN: 2279-0861. Volume 14, Issue 7 Ver. III (July. 2015), PP 20-22.

Source of Support: Nil, Conflict of Interest: None.

