

Awareness Among School Going Children's In Chennai About Dental Health Care

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ABSTRACT

Background: Oral health is integral part of general health and well-being. Tooth decay and gum disease are most widespread conditions affecting school children's and documentation of children's dental health is limited.

Aim: The aim of the following study is to create awareness on dental health care and knowledge among school children's in Chennai using a questionnaire.

Materials and Methods: The subjects for this study were randomly selected in the age group of 8-16 years. A total of 200 children were selected, of which 92 were males and 108 were females.

Results: The results showed that 55.50% of children brush their teeth twice daily, 100% of the participants use tooth brush and paste to clean their teeth, 66.50% of the participants change their tooth brush once in a month, 20.25% of participant change their brush once in 2 month, 9.25% of participant change their brush once in 3 month. 39.50% of participant cleans their tongue regularly by using tooth brush and tongue cleaner. 26.50% of children's wash their mouth after eating sticky foods and chocolate. 10.5% of children visit dentist regularly for dental checkup. 99.5% of participant knew that tobacco cause ill effects on oral and general health.

Keywords: Awareness, Tobacco, Dental health care, Child dental health.

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INTRODUCTION

Like many areas of the body, our mouth is teeming with bacteria — most of them harmless. Normally the body's natural defenses and good oral health care, such as daily brushing and flossing, can keep these bacteria under control. However, without proper oral hygiene, bacteria can reach levels that might lead to oral infections, such as tooth decay and gum disease.

Tooth decay and gum disease are among the most widespread conditions in human population, affecting over 80% of school children in some countries(1-3). Early childhood caries is a disease characterized by severe decay

in the teeth of infants or young children. Early childhood caries is a very common bacterial infection affecting 70% children worldwide. While education should be promoted, especially in high-risk communities and population groups (low-income families and native population), it should not be the only preventive strategy of early childhood caries. Early screening for signs of caries development, starting from the first year of life, could identify infants and toddlers who are at risk of developing ECC and assist in providing information to parents about how to promote oral health and prevent the development of tooth decay (4). More than 50 million school hours are lost annually due to oral health problems,

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which affect children's performance at school and success in later life (5).

Prevention is better than cure, prevention can be defined as 'action taken prior to onset of disease which removes the possibility that a disease will occur' (Soben Peter). Modes of intervention in prevention are as follows:

- Health promotion through health education, environmental modification, nutritional interventions and lifestyle changes.
- Specific prevention, e.g. fluorides and pit and fissure for caries prevention (6).

AIM OF THE RESEARCH

- The aim of the research was to assess the:
- Awareness of oral hygiene habits
- Awareness of the role of the dentist
- Awareness of frequency of dental visit
- Awareness of tobacco and its ill effects.

METHODOLOGY

The research work was performed across school going children's in Chennai, India. The inclusion criteria for this study were children aged 8-16 as they were a little older to understand and complete the questionnaire by themselves. A total of 200 students were invited to participate in this study, of which the data were collected using a self-structured questionnaire. The questionnaire included 12 items without any names and identification numbers of the subject designed to evaluate the demographic background, oral health knowledge, care and practice of young school children regarding their oral health and dental treatment. Because the children were at different grade levels, it was necessary to design the questionnaire to be readable and understandable for the youngest children. The questionnaire was typed in English [table 1].The children's were briefed about how to mark their responses and were informed that more

than one response format is possible for some items. Thus the subjects were free to choose more than one response for the same item. Investigator was available to clarify their doubts about any point during the course of completing the questionnaire. All questionnaires were completed and data collected.

RESULTS

In the study conducted, there were a total of 200 students. Out of this 200, 92 of the participants were males

while the other 108 were females. The children were aged from 8 to 16 years of age. The results are depicted in the form of Tables and Graphs.

ORAL HEALTH CARE PRACTICES

The aim of the survey was to investigate the oral hygiene practices and awareness levels in the school children.

Out of the 200 participants asked about 'how often they brush their teeth', 111

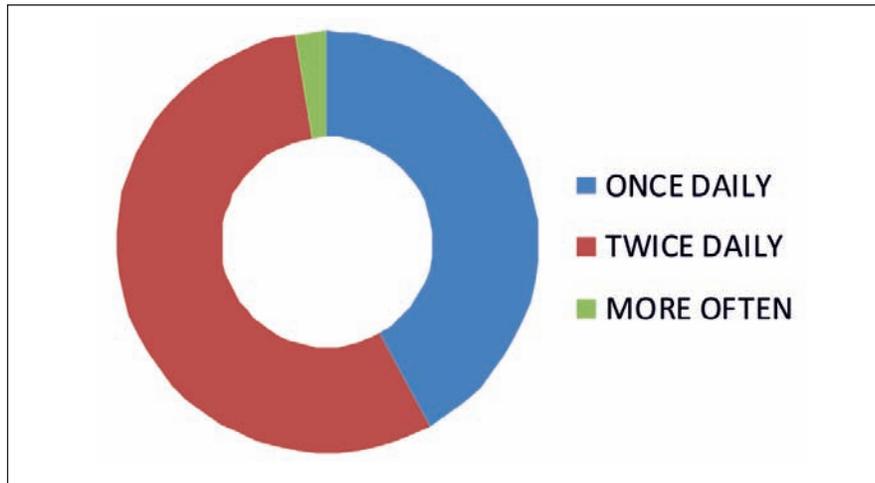


Figure 1:

Frequency of Brushing	In Percentage
Once Daily	42.00%
Twice Daily	55.50%
More Often	2.50%

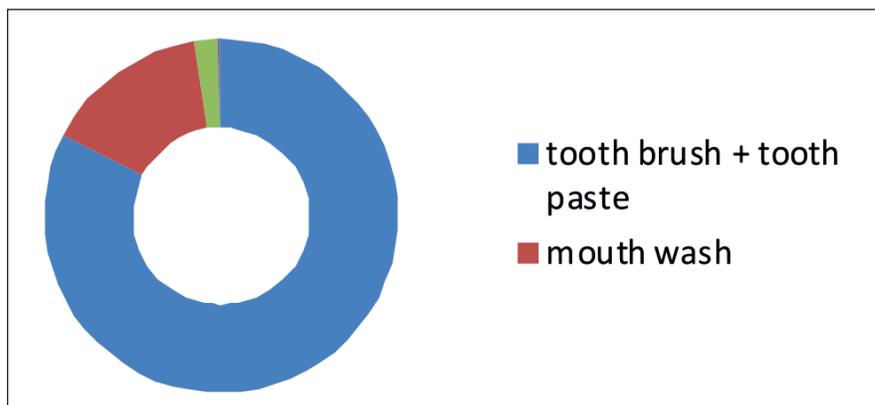
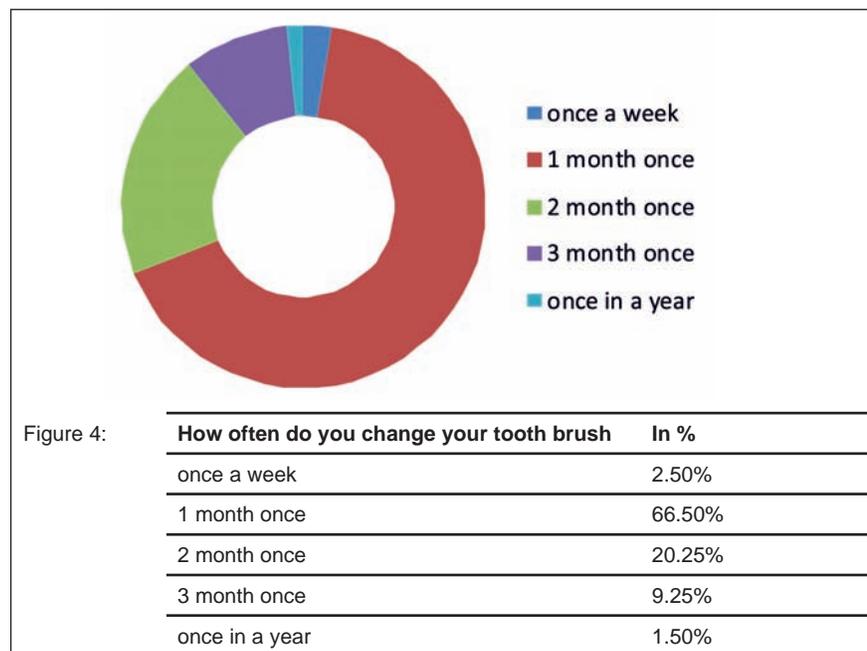
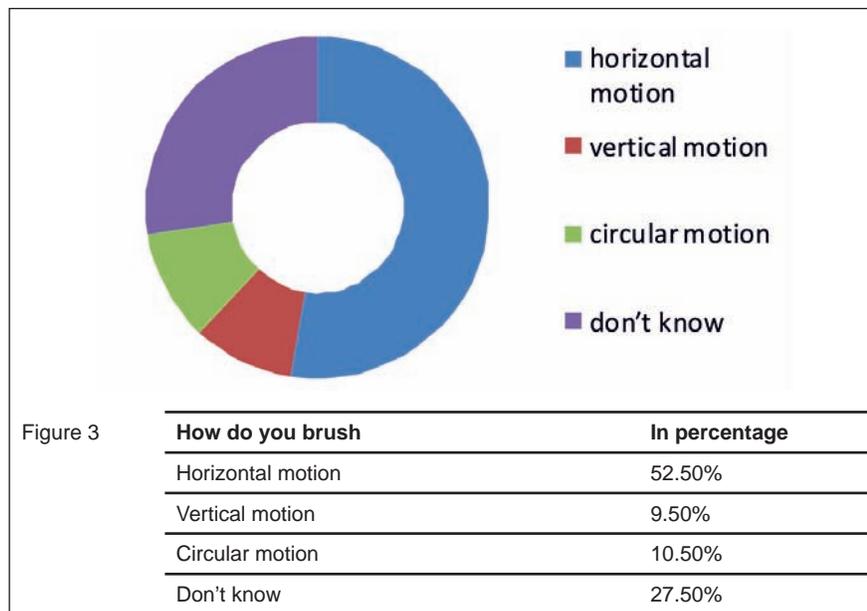


Figure 2:

What do you use for cleaning your teeth?	In percentage
Tooth brush + Tooth paste	100%
Mouth wash	18%
Tooth pic	2.50%
Dental floss	0.50%



of them brush twice daily, 84 of them brush once daily and 5 of them brush more often. 'What they used to clean teeth', 200 of them used a toothbrush and toothpaste, 36 of them used mouth wash also, 5 of them used tooth pick also and only one said that she used dental floss also to clean her teeth. The results are published in Graph 1 and 2.

The results for the brushing technique used by the participants are given in Graph 3. Out of the 200 participants

asked about what technique they use to clean their teeth, 105 Of them said they use horizontal motion, 19 of them said they use vertical motion, 21 of them said they used circular motion and 55 of them dono what technique they use to brush their tooth. And 7 of them said they use all the motions to brush their teeth.

The results for the question 'how often do you change your toothbrush?' are given in graph 4. Out of 200, 5 of them

change their tooth brush yearly once, 133 said they change their tooth brush once in 3 months, 40 Of them change their tooth brush once in 2 months, 20 of them said they change their tooth brush once in 1 month, 3 of them said they change their tooth brush more often may once in a week.

The next question was 'do you clean your tongue?' the results are given in Graph 5. 79 Of them clean their tongue regularly, 121 of them not aware of cleaning their tongue regularly. The following question was to evaluate how many of the participants cleaned their tongue (Graphs 5 and 6). We also assessed how they cleaned their tongue.

The next question was 'do you clean your mouth after eating sticky foods or chocolates?', 53 of them said yes they wash mouth after taking sticky food, 147 of them not aware of washing mouth after taking sticky foods. (Graph 7)

Have you visited dentist? 21 of them said yes regularly, 70 of them said yes occasionally, 102 of them said no never. Results represented in Graph 8.

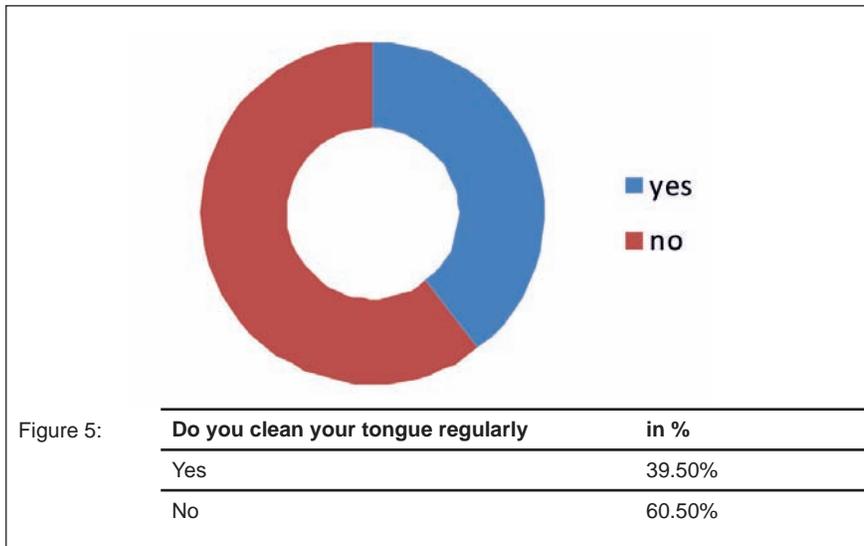
TREATMENT UNDERWENT

Out of 91 who had visited the dentist at least once, 19 of them had underwent scaling and filling, 6 of them filling alone, 2 of them underwent scaling, filling and extraction, 10 of them had underwent an extraction ,20 of them underwent orthodontic treatment (braces) and 20 of them dono what treatment they received. Results represented in graph-9.

AWARENESS ABOUT ILL-EFFECTS OF SMOKING

The next question 'do any one smokes in your home?' out of 200,42 of them said yes and 158 of them said no. Results represented in graph 10.

'Do you know ill effects of tobacco?' when this question asked to children's,

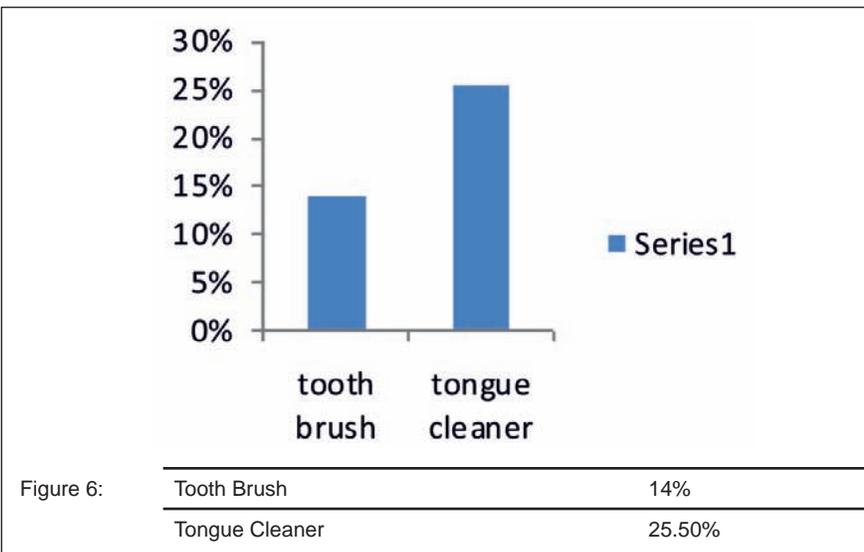


199 of them responded yes, only 1 child of age 8 said no.

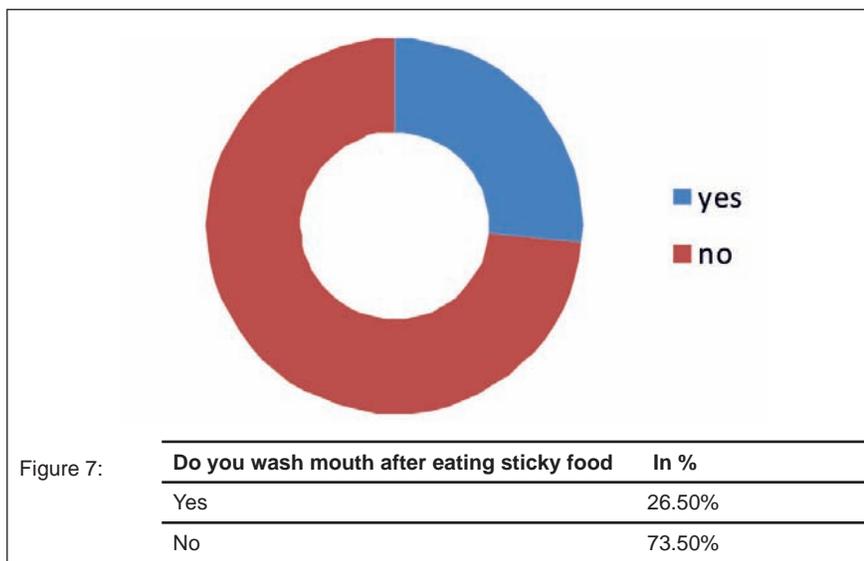
Next question of discussion is 'Do any one advised your family member to not smoke?' 16.5% said yes and 83.5% said no.

DISCUSSION

'Over the past two decades, a marked decline in dental caries experience of children has been observed in many industrialized countries (7,8). Against this, increasing levels of dental caries have been found in some developing countries, especially for countries where preventive programs have not been established (9-11).



India is one such country wherein preventive programs have not been completely established and this reflected in the results, which have been discussed below. In the study conducted in the rural areas of Kanchipuram District, only 62.69% of the participants brushed while the rest used their fingers (12). However, the results obtained from the study show that 94.7% of all the participants brushed their teeth. This is a large difference and it can be attributed to the urban setting of this study. The urban population is exposed to a large amount of advertising and awareness campaigns, which has led to the 94.7% of the participants using toothbrushes. Moreover, 75% of the participants used either a toothbrush or a tongue cleaner as a tool to clean their tongue. This can be attributed to tongue cleaning being a deeply rooted cultural practice in India. Interestingly, none of them were confident of the brushing technique. This could be because the brushing knowledge came from the mother, sibling or relative, most of which in this case were uneducated.



A study conducted on Oral health attitudes, knowledge and practice among school children in Chennai, India by Priya M and et al. showed that Overall the level of knowledge score was statis-

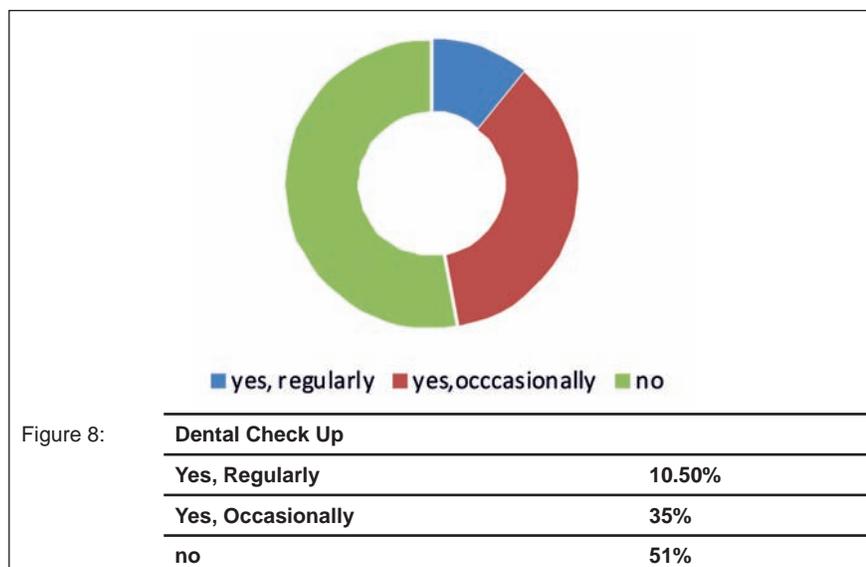


Figure 8:

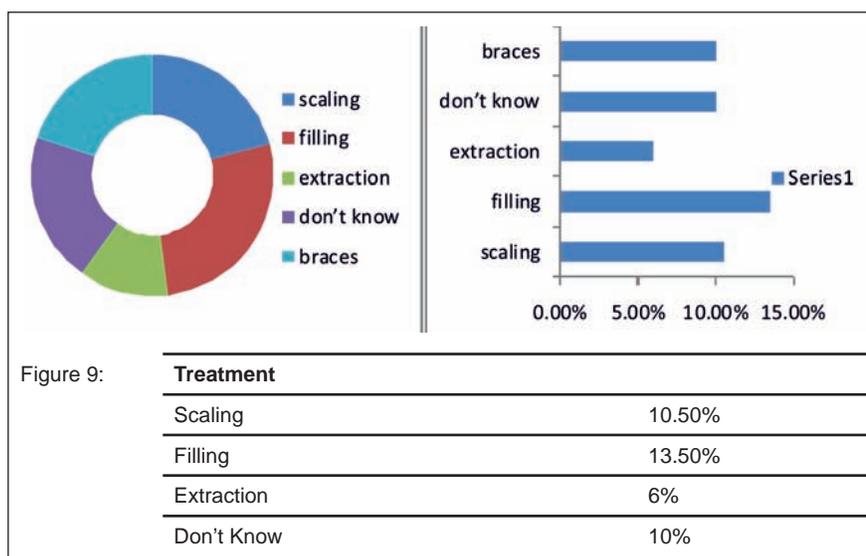


Figure 9:

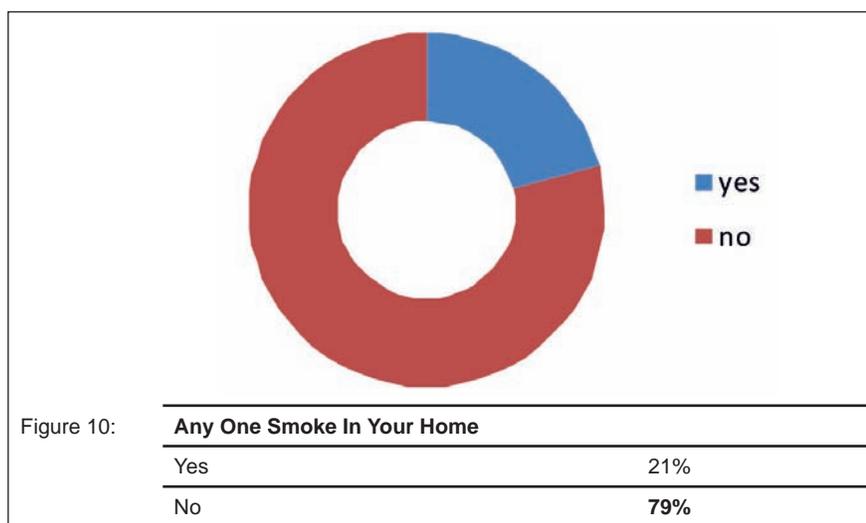


Figure 10:

tically significant with $P = 0.004$. There was statistically significant difference with $P = 0.008$ when comparing the frequency of brushing the teeth twice per day among the two different age groups. Comparing the various other factors such as gender, type of school and age groups to the visit to the dentist, it was observed that statistically significant difference with $P < 0.001$ was found when comparing the female children (75.3%) and male children (60.3%) and $P = 0.002$ observed when comparing the younger and older age group who visited the dentist (13).

It is very important to instill good oral health practices from a young age to ensure long-term dental health and hygiene. And the present study conducted in order to create awareness on dental health care and ill effects of tobacco on oral health by using a questionnaire among school going children's. The results showed that 55.50% of children brush their teeth twice daily, 100% of the participants use tooth brush and paste to clean their teeth, 66.50% of the participants change their tooth brush once in a month, 20.25% of participant change their brush once in 2 month, 9.25% of participant change their brush once in 3 month. 39.50% of participant cleans their tongue regularly by using tooth brush and tongue cleaner. 26.50% of children's wash their mouth after eating sticky foods and chocolate. 10.5% of children visit dentist regularly for dental checkup. 99.5% of participant knew that tobacco cause ill effects on oral and general health.

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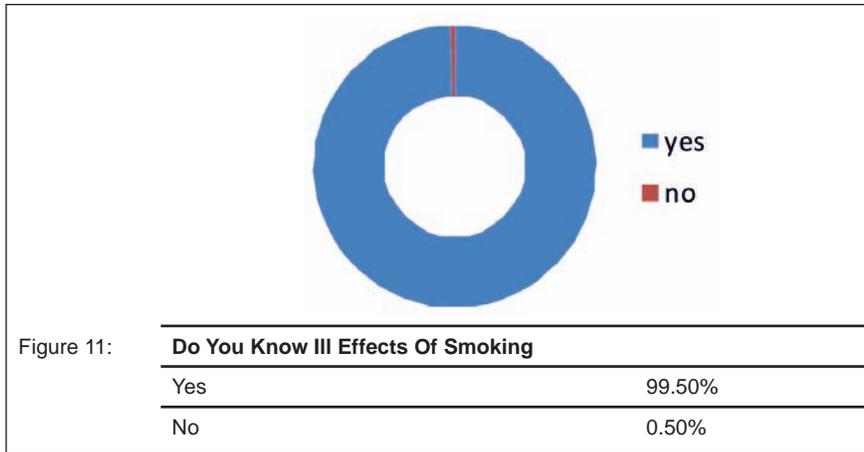


Figure 11:

Do You Know Ill Effects Of Smoking

Yes	99.50%
No	0.50%

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QUESTIONNAIRE

- How often do you brush your teeth?
 - Once daily
 - Twice daily
 - More often
- What do you use for cleaning your teeth?
 - Tooth brush + tooth paste
 - Mouth wash
 - Tooth pic
 - Dental floss
 - Any other.....
- How often do you change your tooth brush?

.....
- How do you brush?
 - Horizontal motion
 - Vertical motion
 - Circular motion
 - Don't know
- Do you clean your tongue regularly? Yes/No
- How do you clean your tongue?
 - Tooth brush
 - Tongue cleaner
- Do you wash your mouth after eating sticky food, chocolate or dairy products? Yes/No
- Have you visited dentist? Yes/No

If yes,

 - Regularly
 - Occasionally
- Do you receive any dental treatment from dentist? Yes/no

If yes,

 - what type of treatment.....
 - Don't know
- Do anyone in your home smokes? Yes/No
- Do you know smoking is harm to health? Yes/No
- Have you advised them not to smoke? Yes/No