

Assessment of Oral Hygiene Practices , Oral Habits and Dental health seeking behaviour among Housewives at SAF Games village residential colony in Chennai : a cross sectional study

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ABSTRACT

Background:

Housewives group of people who take care of the household and under some amount of stress without time for a regular dental check-up or proper oral hygiene practices and with the possibilities of having oral habits such as teeth grinding, nail biting, tooth pick usage, etc as a form of stress release.

Objectives:

To assess the oral hygiene practices, oral habits and dental health seeking behaviour among housewives at SAF Games village residential colony in Chennai city.

Materials and methods:

A cross sectional study using a self-developed questionnaire was conducted to assess the oral hygiene practices, oral habits and dental health seeking behaviour among housewives at SAF Games village residential colony in Chennai city.

Results:

Moderate level of awareness on effective oral hygiene practices was observed in most of the participants. 4 to 25 % of the participants were having oral habits such teeth grinding, nail biting and tooth pick usage. The dental health seeking behaviour was problem driven rather than preventive driven.

Conclusion:

It was concluded that housewives need to be educated on oral hygiene measures including flossing and mouthwash usage and need to undergo comprehensive oral and general examination to assess the full extent of oral health status and treatment needs. They need to be educated on the importance of preventive health care.

Keywords: Housewives, Oral health status, oral hygiene, oral habits, dental health seeking behaviour

Background

House wives are unique group of people found in every socioeconomic strata of the population and are found in all the geographic localities. They take care of the household and do the common chores such as cooking, washing clothes and dishes, taking care of children and elderly and other members of the household. Even though most of the tedious jobs such as washing clothes and dishes are done by maids nowadays, the housewives still carry the burden and responsibility of micro managing everything. They are the unpaid section of the society functioning as pillars of the family. Most of them may not get time for a regular dental check-up or proper oral hygiene practices and they may have oral habits such as teeth grinding, nail biting or tooth pick habits etc as a form of stress release.[1-8].A descriptive cross sectional study was done on 100 random housewives at SAF Games village residential colony in Chennai city to get a background data on their oral hygiene practices, oral habits and dental health seeking behaviour and to formulate suggestions based on that.

Objectives

To assess the oral hygiene practices, oral habits and dental health seeking behaviour among housewives at SAF Games village residential colony in Chennai city.

Materials and Methods

This descriptive cross sectional study using a validated self-developed questionnaire was conducted to assess the oral hygiene practices, oral habits and dental health seeking behaviour among housewives between 1st December 2022 and 31st December 2022. 100 housewives who are 18 years and above in age were selected at random based on convenience sampling method. The purpose of the study was explained to them and informed consent (Annexure 1) was obtained to participate in the survey. Those who did not give informed consent were excluded from the survey.

A survey questionnaire comprising of 16 closed ended questions and the 3 basic demographic data (Annexure 2) were administered to the housewives. Those who can read and write marked the responses themselves in the questionnaire and signed it. For those who cannot read or write the investigator read out the questions orally translated in local language and marked the responses given by the participants and obtained thumb impression.

The responses were tabulated and analysed. (Table 1 & Table 2)

Results

A total of 100 randomly selected housewives who consented to the survey answered the 12 point questionnaire. The results are as follows.

Table 1: Demographic characteristics (n=100)

Demographic Characteristics	n	%
Age distribution		
< 20 years	2	2
20 to 30 years	25	25

30 to 40 years	56	56
40 to 60 years	10	10
60 to 80 years	5	5
> 80 years	2	2
Educational level		
Less than 8 th standard	1	1
10 th Standard	8	8
12 th Standard	19	19
Diploma / Certificate course	10	10
Undergraduate Degree	39	39
Postgraduate Degree	21	21
PhD or other higher degrees	2	2

Age distribution

Among the sample of 100 housewives , 2 were less than 20 years of age, 25 were between 20 to 30 years of age, 56 were between 30 to 40 years of age, 10 were between 40 to 60 years of age, 5 were between 60 to 80 years of age and 2 was above 80 years of age.

Educational level

Among the sample of 100 participants , 39 has an undergraduate degree, 21 has a postgraduate degree, 19 have studied till 12th standard, 8 have studied till the 10th standard, 2 have PhD or other higher qualifications and 1 has studied less than 8th standard.

Table 2: Assessment of Oral Hygiene Practices among Housewives at SAF Games village residential colony in Chennai

Questions and responses	n	%
1. How many times do you brush in a day?		
Once a day	43	43
Twice a day	56	56
Three or more times a day	1	1
2. What do you use for brushing your teeth?		
Manual tooth brush	96	96
Electric tooth brush	4	4
Fingers	0	0
3. What do use for brushing your teeth?		
Toothpaste	100	100
Toothpowder	0	0

Others	0	0
4. What type of bristles do you have in your brush?		
Soft	21	21
Medium	70	70
Hard	9	9
5. When do you change your tooth brush?		
Once in a month	12	12
Once in 2 months	47	47
Once in 3 months or more	41	41
6. Do you use dental floss?		
Yes	12	12
No	88	88
7. Do you use mouthwash?		
Yes	23	23
No	77	77
8. Do you have chewing habits?		
Yes	15	15
No	85	85
9. If Yes to the above question, what do you use?		
Betel nut	7	46.6
Betel leaf	8	53.3
Tobacco	0	0
Pan	0	0
10. Do you have teeth grinding habit?		
Yes	4	4
No	96	96
11. Do you have nail biting habit?		
Yes	15	15
No	85	85

12. Do you have habit of tooth pick usage?		
Yes	25	21
No	75	79
13. When was your previous visit to the Dentist?		
Within the last 6 months	15	15
Between 6 months to 1 year ago	67	67
More than 1 year ago	16	16
Never	2	2
14. If your answer to the above question was anyone of the 1st 3 options, what was purpose of the dental visit?		
Routine Dental check up	5	5.1
Pain in the teeth, gums or mouth	80	81.6
Other reasons such as for teeth cleaning, teeth alignment, teeth replacement,etc	13	13.2
15. Are you interested in Dental check-up?		
Yes	82	82
No	18	18
16. Are you interested in Dental treatment if necessary ?		
Yes	98	98
No	2	2

Brushing frequency

43 housewives brushed once a day, 56 brushed 2 times a day and 1 brushed 3 times a day.

Brushing device

100 % of housewives used tooth brush none used their fingers for brushing the teeth. Among them, 96 used manual tooth brush and 4 used electric tooth brush.

Dentifrice used

100% of housewives used tooth paste for brushing.

Type of tooth brush

Among the housewives who used the tooth brush (100%), 21 used soft bristled tooth brush, 70 used medium bristled tooth brush and 9 used hard bristled tooth brush.

Frequency of change of brush

Among the housewives who used the tooth brush (100%), 12 changed their brush once in a month, 47 changed their tooth brush once in 2 months and 41 changed their tooth brush once in 3 months or more.

Floss usage

12 housewives answered Yes to Dental floss usage.

Mouthwash usage

23 housewives answered Yes to mouthwash usage.

Chewing habits

15 housewives answered Yes to chewing habits and 85 answered no to chewing habits. Among the 15 who answered Yes , 7 had the habit of betel nut, 8 had the habit of betel leaves. None of them chewed tobacco or pan.

Teeth grinding habit

4 % of housewives answered Yes to having teeth grinding habit.

Nail biting habit

15 % of housewives answered Yes to having nail biting habit.

Tooth pick habit

25 % of housewives answered Yes to having tooth pick usage habit.

Previous visit to the Dentist

Among the 100 housewives, 67 visited a dentist between 6 months to 1 year ago, 16 visited a dentist more than a year ago, 15 visited a dentist in the last 6 months and 2 have never visited a dentist in their lifetime.

Purpose of dental visit

Among the 98 housewives who have visited a dentist previously, 80 visited the dentist for oral problems such as pain in the teeth, gums, mouth,etc, 13 visited the dentist for other reasons such as teeth cleaning, teeth alignment, teeth replacement , etc and only 5 visited a dentist for a routine dental check-up.

Interest in Dental check-up

82 % of housewives answered Yes to having their dental check-up done.

Interest in Dental treatment

98 % of housewives answered Yes to having their dental treatment done if necessary.

Discussion:

This descriptive cross sectional study was done on 100 random housewives at SAF Games village residential colony in Chennai city to get a background data on their oral hygiene practices, oral habits and dental health seeking behaviour and to formulate suggestions based on that.

As seen in this survey most (56%) of the housewives are in the age group of 40 to 50 years of age suggesting they are among the risk group [9-10] for a variety of non-communicable diseases such as hypertension and diabetes and thus the need to take out time to get health check-up done.

In this study, majority of the participants have an Undergraduate degree (39 %) or a post graduate degree (21 %). This correlates with the good oral hygiene practices found in majority of the participants as education has an influence on people's cognitive function and make them more receptive to messages about health education.[11-12]

43 % of housewives brush only once a day, whereas 56 % of housewives brush 2 times a day, which is a healthy trend. One housewife brushed 3 times a day. However there is a need educating them on proper oral hygiene measures such a correct brushing techniques and the use of dental floss and mouthwash.

100 % of the participants use tooth brush and among them, 4 % use electric tooth brush, suggesting that they are well abreast with the latest developments. Although manual tooth brushing is adequate provided proper brushing technique is followed, increasing usage of electric tooth brushes may prove to be beneficial in the long run.

100 % of the participants use toothpaste as the dentifrice.

Only 9 % of participants use hard bristles toothbrush when compared to those using soft bristles (21% %) and medium bristles (70 %) which is an indication that most of them are aware of the effects of using hard bristle brushes on the long run. Hard bristle tooth brushes are known to cause enamel abrasion defects on the teeth when combined with improper brushing techniques.

41 % of participants change their tooth brush once in 3 months or more, whereas 47 % change once in every 2 months and 12 % once in a month. The bristles of the tooth brush get frayed with prolonged usage and damage the gums and also when the bristles are excessively frayed, the efficiency of toothbrush also reduces. Thus they need to be educated to change the tooth brush once in at least 2 months or when the bristles start to show visible fraying so that damage to the gums can be prevented.

Only 12 % of the participants use dental floss and 23 % of the participants use mouthwash as aids to oral hygiene practices. This indicates a reduced awareness of the importance of these dental aids for optimal oral health care for prevention of dental caries and periodontal diseases.[13]

15 % of the participants answered Yes to the presence of chewing habits. Among them 46.6 % had the habit of chewing betel nut and 53.3 % had the habit of chewing betel leaves. None of the participants chewed tobacco or pan, which is a silver lining in this study and indicative of increased awareness of the hazards of using them.

4 % of the participants had teeth grinding habit, 15 % had nail biting habit both indicative of the presence of stress. They need to get a comprehensive oral examination done to rule out the effects of those habits on the teeth and treat them if necessary.

25 % of the participants had a tooth pick usage habit indicative of food lodgement between the teeth which can happen in the cases of dental caries, gingival recession or open contacts due to pathological teeth migration. Prolonged usage of tooth pick in between the teeth can lead to gingivitis, continuing gingival recession and resorption of the underlying alveolar bone. They need to undergo comprehensive oral examination and the underlying causes must be treated.

In this study 15 % of the participants had visited a dentist once in the previous 6 months, 67 % had visited a dentist in the within the past 1 year, 16 % had visited the dentist more than a

year ago and 2 % have never visited a dentist in their lifetime. Even among those who have visited the dentist, the majority (81.6%) of them had visited the dentist for some oral and dental problems and only 5 % of the participants visited the dentist for a routine check-up. Thus dental health seeking behaviour was problem driven rather than preventive driven [14]. This is similar to the results from the study conducted by Jahangiry et al. [9]

82 % of the participants were interested in getting their dental check-up done, which is a good indication of their levels of awareness of importance of oral health and 98 % of the participants were interested in getting the necessary dental treatment done. The remaining participants need to be counselled on the importance of early diagnosis and timely dental treatment for the oral and general health.

Conclusion

Within the limitations of the study, it can be concluded that the housewives need to be educated on oral hygiene measures and need to undergo comprehensive oral and general examination to assess the full extent of oral health status and treatment needs. A multi-centre study with a larger sample size needs to be done to assess the oral health practices, oral health status and treatment needs of this unique population.

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Annexure 1:

Participant Information Document and Informed Consent form

1. This survey is conducted for research purposes.
2. The purpose of the study is to assess the oral hygiene practices, oral habits and dental health seeking behaviour.
3. You will be given a questionnaire comprising of 16 questions to answer.
4. Benefits from the study are the oral hygiene practices and oral health assessment needs can be formulated that can help in formulating recommendations.
5. There will be no risks, discomfort or inconvenience from participating in the survey.
6. Your responses will be kept confidential and your name or other details will not be revealed to anyone.
7. The results from the survey will be published in scientific journals without revealing your name.
8. No payment / reimbursement is provided for participating in the study.
9. You are free to decline to participate in this study.

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I,.....have been explained about the survey in a language which I can understand and hereby give my consent to participate in this study.

Signature of the Participant

Name :

Date :

Witness 1:

Name :

Date :

Witness 2:

Name ;

Date:

Annexure 2:

Assessment of Oral Hygiene Practices , Oral Habits and Dental health seeking behaviour among Housewives at SAF Games village residential colony in Chennai

Survey Questionnaire

Name :

Age : years

Educational level

- Less than 8th standard
- 10th Standard
- 12th Standard
- Diploma / Certificate course
- Undergraduate Degree
- Postgraduate Degree
- PhD or other higher degrees

1. How many times do you brush in a day?

- Once a day
- Twice a day
- Three or more times a day

2. What do you use for brushing your teeth?

- Manual tooth brush
- Electric tooth brush
- Fingers

3. What do use for brushing your teeth?

- Toothpaste
- Toothpowder
- Others

4. What type of bristles do you have in your brush?

- Soft
- Medium
- Hard

5. When do you change your tooth brush?

- Once in a month
- Once in 2 months
- Once in 3 months or more

6. Do you use dental floss?

- Yes
- No

7. Do you use mouthwash?

- Yes
- No

8. Do you have chewing habits?

- Yes
- No

9. If Yes to the above question, what do you use?

- Betel nut
- Betel leaf
- Tobacco
- Pan

10. Do you have teeth grinding habit?

- Yes
- No

11. Do you have nail biting habit?

- Yes
- No

12. Do you have habit of tooth pick usage?

- Yes
- No

13. When was your previous visit to the Dentist?

- Within the last 6 months
- Between 6 months to 1 year ago
- More than 1 year ago
- Never

14. If your answer to the above question was anyone of the 1st 3 options, what was purpose of the dental visit?

- Routine Dental check up
- Pain in the teeth, gums or mouth
- Other reasons such as for teeth cleaning, teeth alignment, teeth replacement etc

15. Are you interested in Dental check-up?

- Yes
- No

16. Are you interested in Dental treatment if necessary?

- Yes
- No

Signature / Thumb impression of the Participant:

Name :

Date :

Signature of the Investigator:

Name:

Date :