

Oral Hygiene Awareness and Practice among Patients Visiting the Department of Periodontics at the Thai Moogambigai Dental College and Hospital in Chennai

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Abstract:-

➤ Aim:

The aim of this study is to estimate about the oral hygiene awareness and practice among patients visiting the Department of Periodontics. It is the cross-sectional study around 100 subjects from the Department of Periodontics are selected for the study. The subjects are asked to answer thirty multiple choice questions. Comparative graphs are made and discussed.

➤ Objective:

This study was carried out to determine the oral hygiene awareness and practice among patients visiting the Department of Periodontics at Thai Moogambigai Dental College and Hospital, Chennai.

➤ Methods:

A comparative study was carried out among patients visiting the Department of Periodontics of Thai Moogambigai Dental College and Hospital, Chennai. A total of 100 subjects were randomly selected and questionnaire was presented to them response from the patients were evaluated in terms of percentage.

➤ Results:

The result of the study shows acute lack of oral hygiene awareness and limited knowledge of oral hygiene practices.

➤ Conclusion:

There is a healthy need for education programs and to educate them about the oral hygiene practice.

Keywords:- Awareness, Knowledge, Practice, Oral Hygiene.

I. INTRODUCTION

Oral health imbalance may occur due to changes in biological, social behavioral, psychosocial, societal and political factors. Oral diseases mostly affect the people with economically backward classes[1,2].

The prevention of oral disease can be achieved by maintaining proper oral hygiene. Equal importance should be given for both oral health and systemic health. It is believed there is link between oral health and systemic disease like diabetes mellitus, cardio vascular disease, hypertension etc.,[8].

People living in cities are more prone to dental disease due to their dietary habits and unhealthy lifestyle. Therefore, the present study was conducted to determine the oral hygiene awareness and practices amongst patients visiting the Thai Moogambigai Dental College and Hospital, Chennai.

II. MATERIALS AND METHODS

This is a comparative study. This study was carried out among patients visiting the Department of Periodontology of Thai Moogambigai Dental College and Hospital, Chennai. A total of 100 subjects were selected using a convenient sampling technique and questionnaire was presented to them. Ethical committee approval was obtained from university.

The subjects were conveyed about the study and consent was obtained from them. Patients were divided into two groups (depending on the gender) 50 patients in each group. The awareness was compared among the gender. The questionnaire consists of 30 questions. Only the patient who were visiting the dental hospital during the study period were selected. The questions are based on oral health

practice, their knowledge regarding the oral hygiene and awareness of treatment doing in the Department of Periodontics.

III. RESULTS

➤ **QUESTION 1:-** Do you clean your teeth?

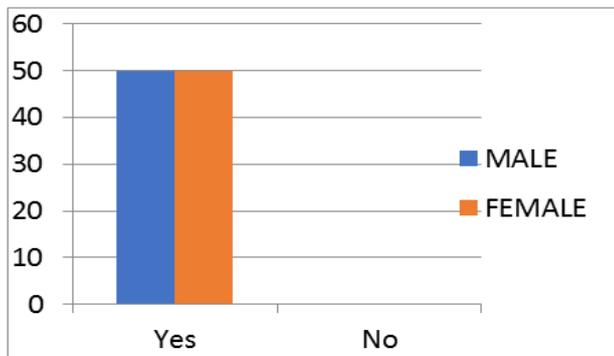


Fig 1

Almost hundred percentage of the participants brushes their teeth 50% of male 50%of female .both male and females are equal in their distribution of cleaning their teeth.

➤ **QUESTION 2:-** If yes ,how do you clean your teeth?

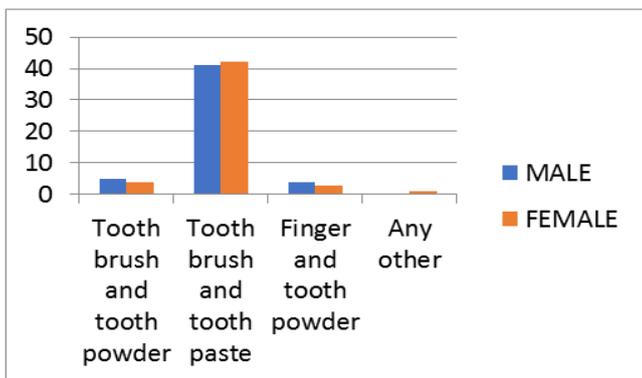


Fig 2

Almost 41%of male and 42% of female participants using tooth brush and tooth paste as a method to clean their teeth. 5%of male and 4%of female participants using tooth brush and tooth powder to clean their teeth .4%of male and 3%of female participants using finger and tooth powder to clean their teeth .1%of female participants using tooth powder and finger to clean the teeth .In this total population female are more conscious in cleaning their teeth.

➤ **QUESTION 3:-** How often do you clean your teeth?

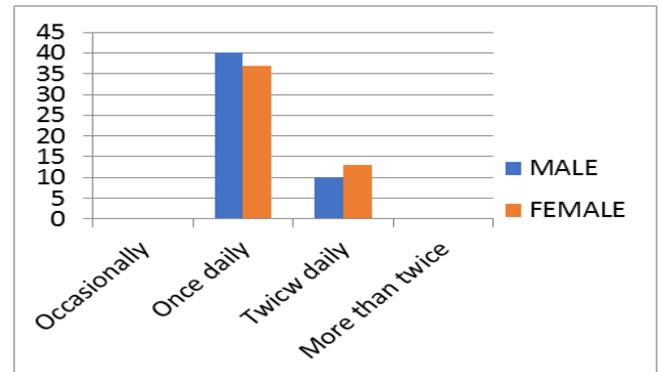


Fig 3

While enquiring about cleaning a teeth among the population of 100 people 40%of male 36%of female cleaning their teeth one time (once daily) in a daily basis and 10% of male 13%femalecleaning their teeth two times a day (twice daily) .In these males are more prone to clean their teeth one time in daily basis than female.

➤ **QUESTION 4:-** What type of brush do you use?

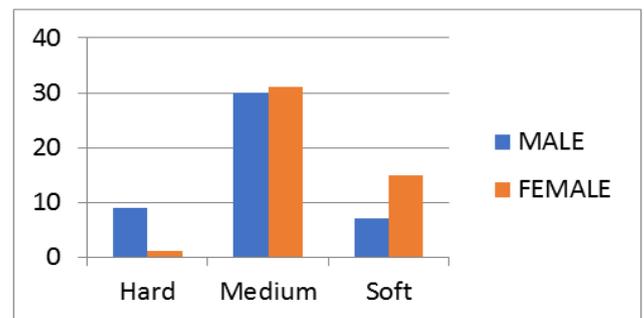


Fig 4

Based upon this population 9%of male 1%female are using hard type of brush and further 30% of male 31% of female using medium type of brush and 12% of male 15% female using soft type of brush in this population. In this female using soft brush more than the male so, female are more clear in using the correct brush.

➤ **QUESTION 5:-**Which technique do you brushing ?

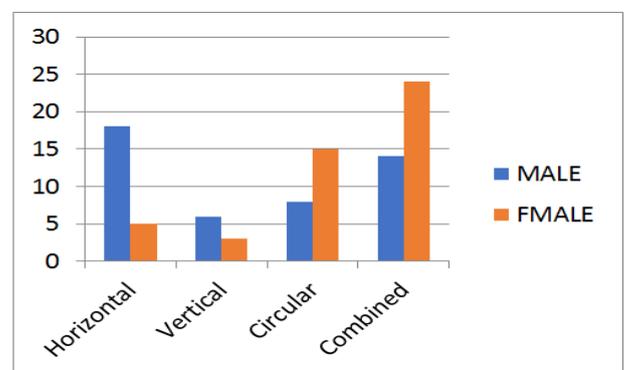


Fig 5

Among the population of 100 peoples 17%of male 5%of female brushing their teeth in Horizontal motion and 6%of male 3%of female brushing their teeth in vertical motion and 8%of male and 15%of female are brushing in circular motion and 14%of male and 24%of female brushing in all the three motion (horizontal ,vertical ,circular).In these females are using correct brushing method than male that is circular method.

➤ **QUESTION 6:- Do you change your brush?**

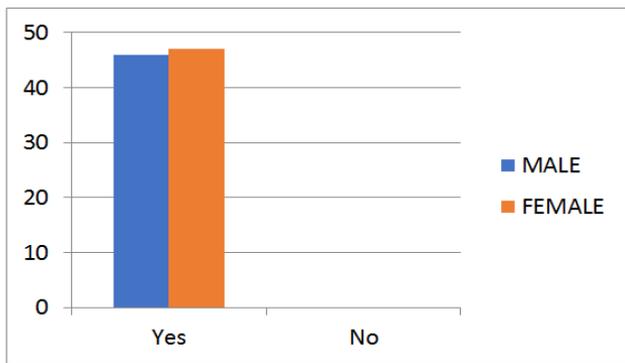


Fig 6

Among this population 46%of male 47%of female changing their brush In this chart both male and female are both were more conscious in changing their brush.

➤ **QUESTION 7:- If yes how often do you change ?**

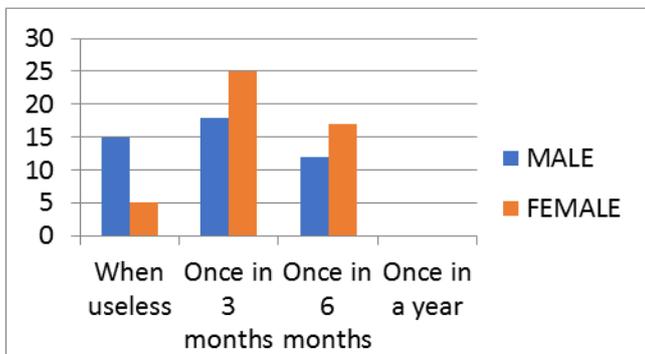


Fig 7

Among this population 15%of male and 5%of female change their brush when its useless and 18%of male 25%of female change their brush in once in 3 month 12%of male 17%of female change their brush once in 6 months .In this females are more clear about when to change their brush when compared to males.

➤ **QUESTION 8:- Do you know what interdental aids are?**

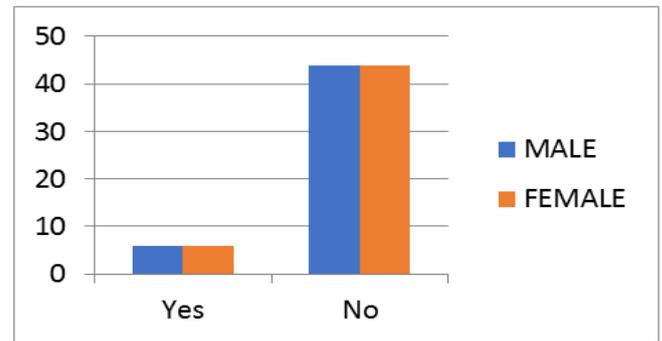


Fig 8

In the total population around only 5%of male 5%of female of population know that what is interdental aids and the rest of 44%of male and 44%of female are not aware of any interdental aid .Both males and females were not aware of the interdental aids .

➤ **QUESTION 9:- If yes , do you use any of these interdental aids?**

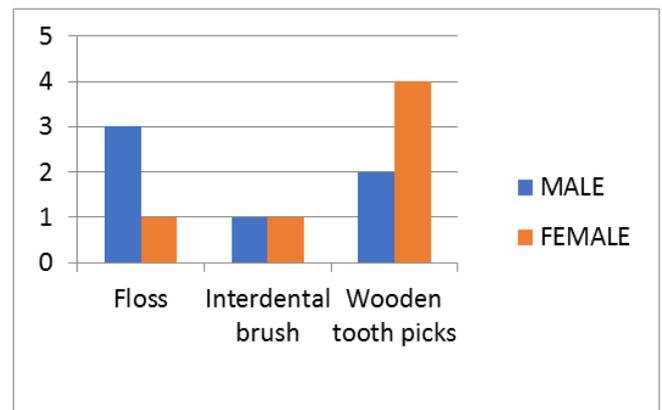


Fig 9

In this 5%of total population people 3%of male and 1%of female are using floss as a interdental aid and 1%of male and 1%of female are using interdental brush and 2%of male and 4%of female are using wooden tooth picks as a interdental aid. Most of the females are using wooden picks as a interdental aids than male.

➤ **QUESTION 10:- Do you clean your tongue ?**

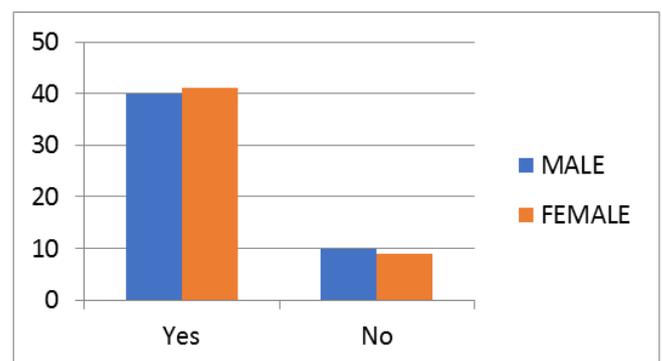


Fig 10

Almost 40% of male 41% of female are cleaning their tongue and 10% of male 9% of female are not cleaning the tongue in the total population. Mostly all the males and females are cleaning the tongue in equal basis.

➤ **QUESTION 11:-** *If yes, do you use.....*

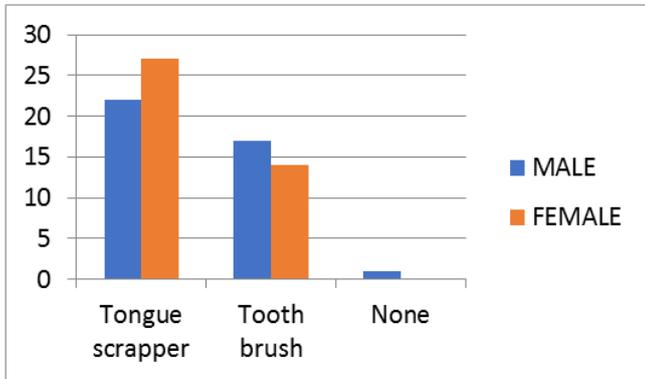


Fig 11

In this 40% of population are cleaning the teeth in that 22% of male 27% of female are using tongue scrapper to clean their tongue and 17% of male and 14% of female are using tooth brush to clean their tongue and rest of the people that is 1% of male is not using anything to clean their tongue. Females are mostly cleaning their tongue using tongue scrapper than males.

➤ **QUESTION 12:-** *Do you think pricking gums with pins will cause gingival inflammation?*

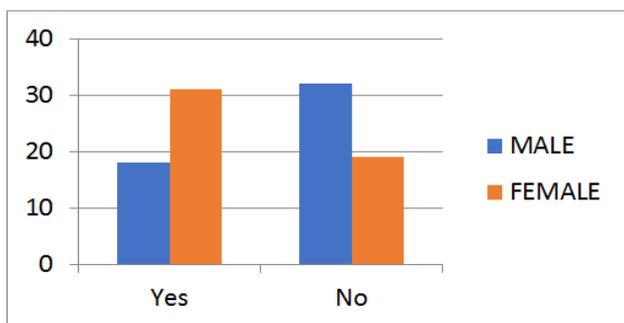


Fig 12

In these total population of 100 people only 15% of male and 31% of female are aware of that pricking gums with pins will definitely cause gingival inflammation and the rest of 31% of male and 19% of female are not aware of that pricking gums with pins will cause gingival inflammation.

➤ **QUESTION 13:-** *Do you think coffee or tea cause staining of teeth?*

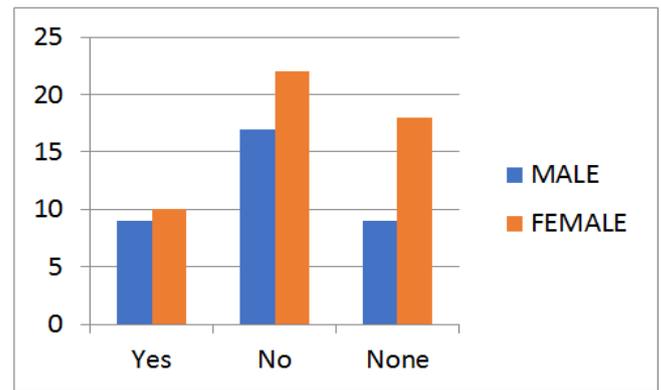


Fig 13

In this total population 9% of male and 10% of female are assuming that drinking coffee will stain the teeth and rest of the people 17% of male and 23% of female are saying that drinking coffee will not stain teeth and 9% of male and 18% of female people say that it may be stain the teeth.

➤ **QUESTION 14:-** *Do you think sensitivity to hot or cold food can be treated?*

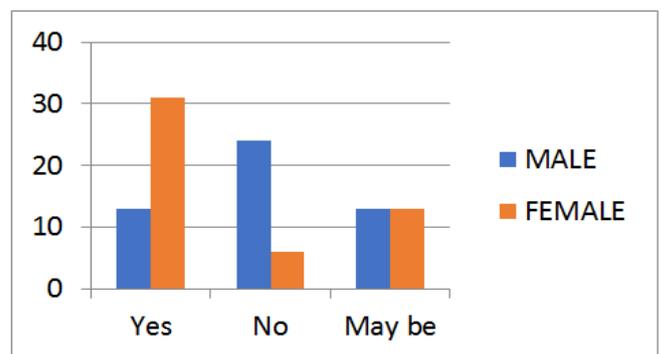


Fig 14

In the total population only 13% of male and 31% of female thought that sensitivity of teeth while drinking hot or cold will be treated and the rest of the people 24% of male and 6% of female says that sensitivity of teeth while drinking hot or cold not be treated and 13% of male and 13% of female says that it may be treated. Most of the females are clear that sensitivity of hot or cold can be treated than males.

➤ **QUESTION 15:-** *Do you rinse your mouth after eating?*

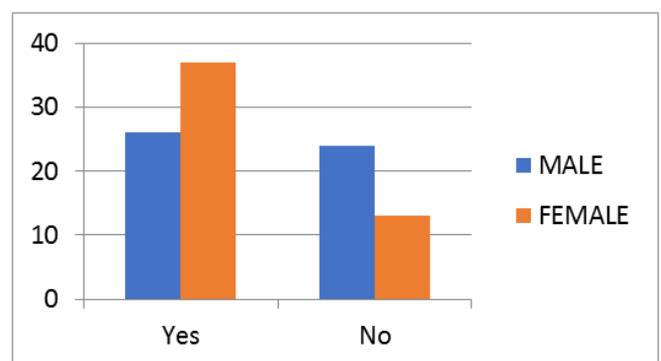


Fig 15

In the total population 26% of male and 37% of female rinsing their mouth after eating and the rest of the people 24% of male and 13% of female not rinsing their mouth after eating. Mostly females are rinsing their mouth after eating than males.

➤ **QUESTION 16:-** Do you think bad oral hygiene affects dental health?

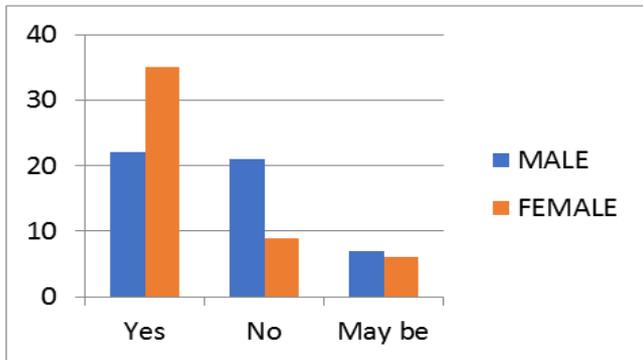


Fig 16

In these population 22% of male and 35% of female think that bad oral hygiene will affect the dental health and 21% of male and 9% of female are said that bad oral hygiene will not affect the dental health and the rest of people in whole population 7% of male and 6% of female assumed that it may affect the dental health.

➤ **QUESTION 17:-** What do you think the reason for bleeding gums ?

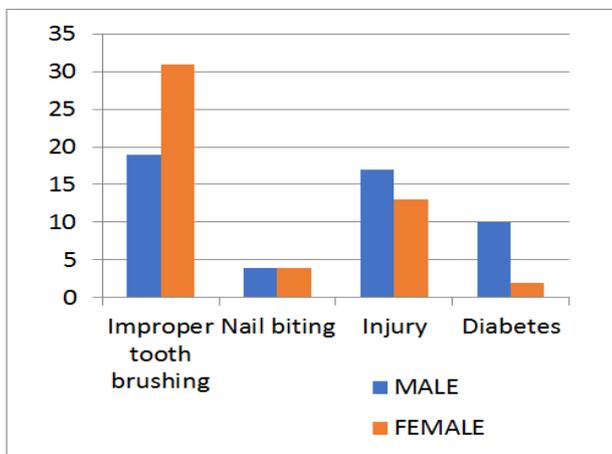


Fig 17

In these population 19% of male and 31% of female are said that improper tooth brushing is reason for the bleeding gums and 4% of male and 4% of female are assumed that nail biting is the only reason for bleeding gums and 18% of male and 13% of female are said that injury is the reason for the bleeding gums and rest of the population 10% of male and 2% of female are assumed that diabetes is only reason for bleeding gums.

➤ **QUESTION 18:-** What is the commonest cause for bleeding gums ?

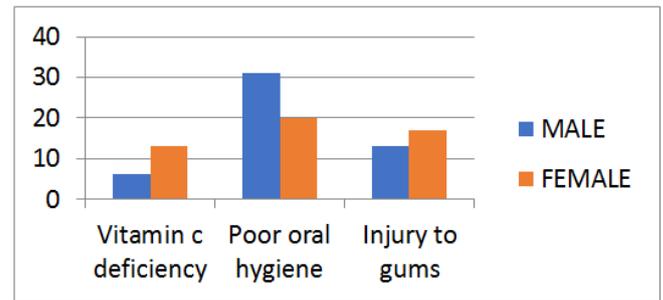


Fig 18

In these population 6% of male and 13% of female says that vitamin C deficiency is the only reason the bleeding gums and 31% of male and 20% of female are said that poor oral hygiene is the major cause for that bleeding gums and rest of the 13% of male and 17% of female said that injury to gums is the major cause for bleeding gums.

➤ **QUESTION 19:-** Do you think cleaning your teeth using ultrasonic device will lead to mobility?

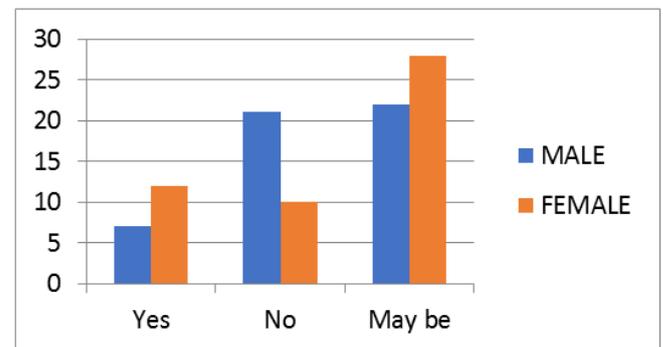


Fig 19

In these total population 7% of male and 12% of female says that cleaning teeth with ultrasonic device will lead to mobility of teeth and other 21% of male and 10% of female says that cleaning teeth with ultrasonic device will not lead to mobility of teeth and the rest of the people in these population 22% of male and 28% of female says that cleaning teeth will ultrasonic device may be the reason for the mobility of the teeth.

➤ **QUESTION 20:-** Do you think diabetes is the risk factor for periodontal disease?

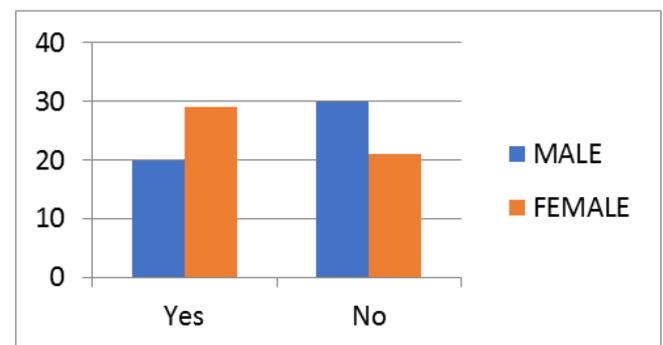


Fig 20

In these population 20% of male and 29% of female assumed that diabetes is the risk factor for periodontal disease and 30% of male and 21% of female said that diabetes is not the risk factor for the periodontal disease.

➤ **QUESTION 21:-** Do you know oral health is related to systemic health?

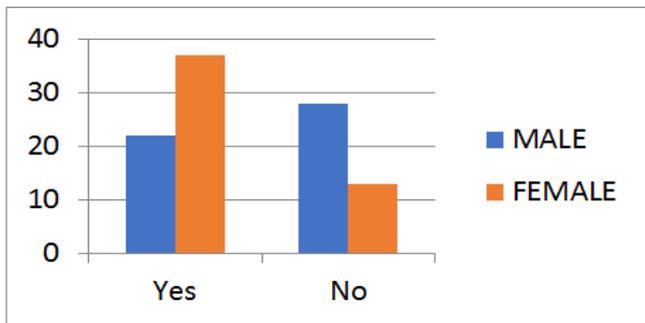


Fig 21

In the total population 22% of male and 37% of female are assumed that oral health is related to systemic health and the rest of the population and 28% of male and 13% of female said that oral health is not related to the systemic health.

➤ **QUESTION 22:-** Do you know the correct method of cleaning the teeth?

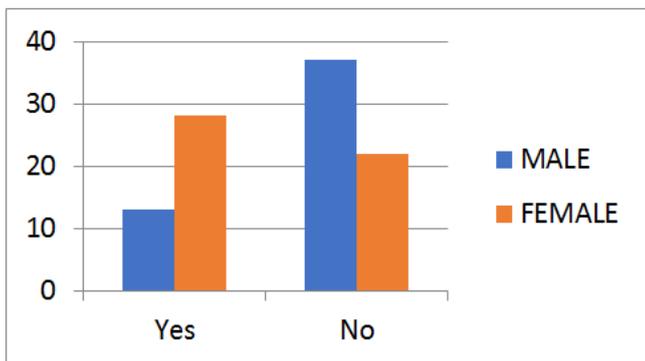


Fig 22

In the total population only 13% of male and 27% of female know the correct method of brushing technique and the rest of 37% of male and 22% of female do not know the correct method of brushing technique.

➤ **QUESTION 23 A:-** Do you visit a dentist ?

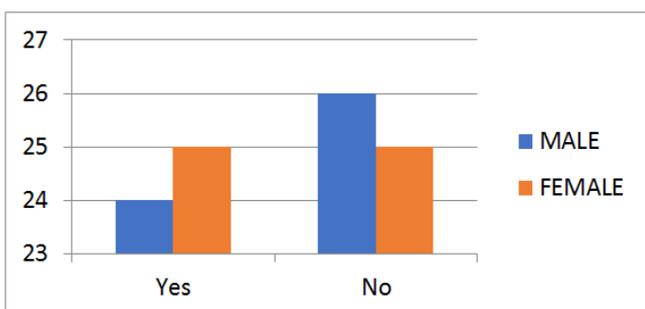


Fig 23 A

In this population 24% of male and 25% of female said visiting dentist in regular basis is female are more prone to visiting dentist than male and 26% of male and 25% of female said that visiting dentist in regular basis is not necessary.

➤ **QUESTION 23 B:-** If yes how often

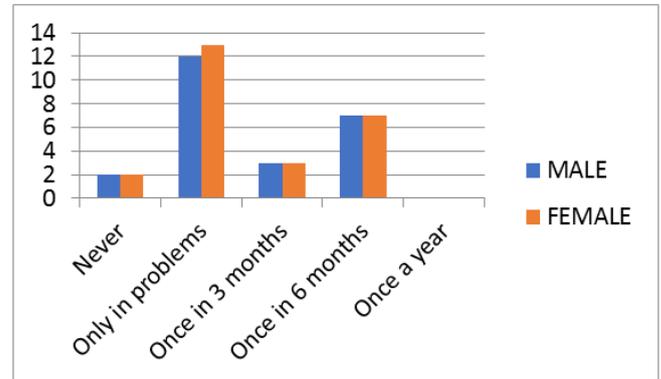


Fig 23 B

In the total population 2% of male and 2% of female said that they never visited the dentist and 12% of male and 13% of female are saying that only if had any problems they can visit dentist and 3% of male and 3% of female are said that visiting once in 3 months is necessary to visit dentist and the rest of the people and 7% of male and 7% of female said that visiting dentist once in 6 months is necessary .mostly both male and female saying that only if had any problems in oral cavity we can visit the dentist.

➤ **QUESTION 24:-** For what reason you are brushing your teeth?

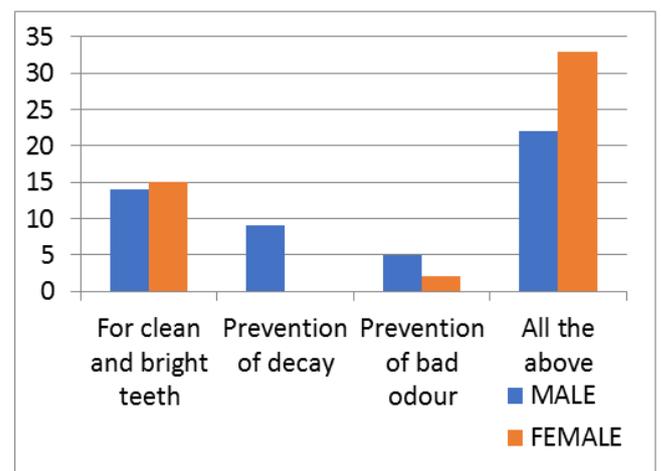


Fig 24

In the total population 14% of male and 15% of female saying that for clean and bright teeth they are cleaning the teeth and 9% of male are saying that for prevention of decay they are cleaning the teeth and 5% male and 2% of female are saying to prevent bad odour they are brushing their teeth ,and the rest of the people 22% of male and 33% of female are saying that all the three(for clean and bright teeth ,prevention of decay ,prevention of bad odour) mostly females are most prone to brushing their teeth than males.

➤ *QUESTION 25:- Do you use fluoridated paste ?*

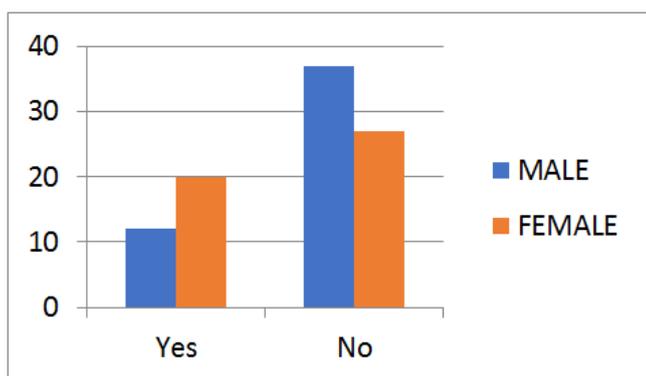


Fig 25

In the total population 12% of male and 20% of female are using fluoridated paste and 37% of male and 27% of female are not using fluoridated paste. Most of males are not using the fluoridated paste.

➤ *QUESTION 26:- Do you think mouth is the only source for bad breath?*

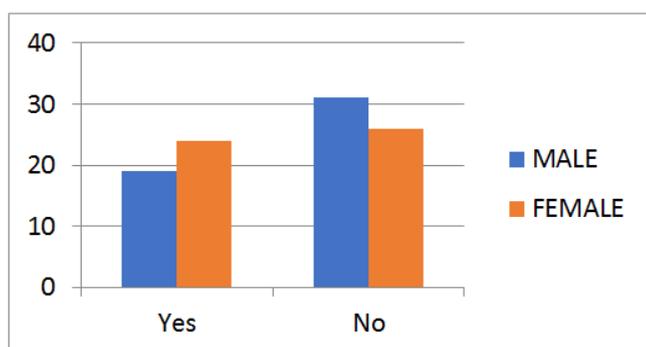


Fig 26

In the total population 19% of male and 24% of females are saying that mouth is the only source for bad breath and 31% of male and 26% of female are saying that mouth is not the only source for the bad breath and most of the males are saying that mouth is not the only source for bad breath than females.

➤ *QUESTION 27:- Have you experienced bleeding of gums while brushing ?*

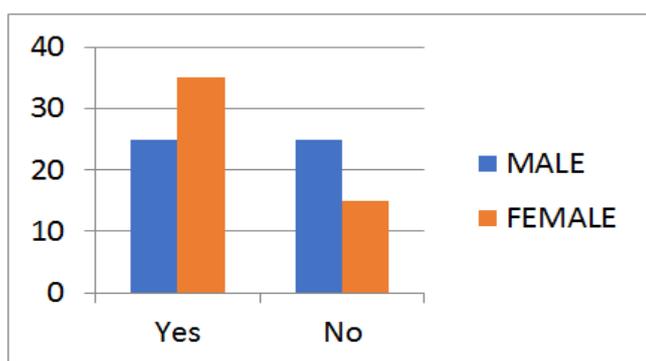


Fig 27

In the total population 25% of male and 35% of female are experienced bleeding of gums while brushing and 25% of males and 15% of female not experienced bleeding of gums while brushing. Most of the females have experienced bleeding gums while brushing than males.

➤ *QUESTION 28:- Do you think it is essential to meet dentist once in 6 months?*

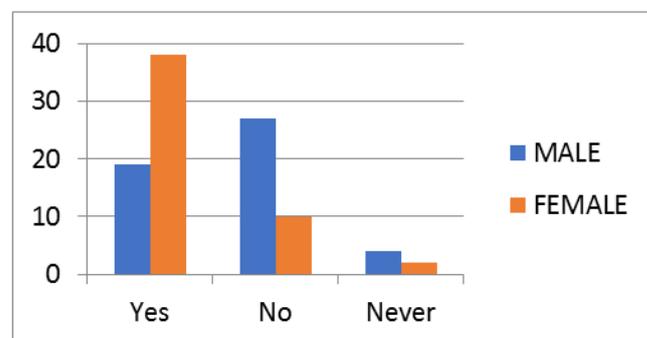


Fig 28

In the total population 19% of male 37% of female saying that is essential to meet dentist once in 6 month and 27% of male and 10% of female are saying that is not essential to visit dentist once in 6 month and the 4% of male and 2% of female saying that never visit dentist in once in 6 month. Mostly females are most prone to visiting dentist than males.

➤ *QUESTION 29:- Do you think shaking teeth can be treated?*

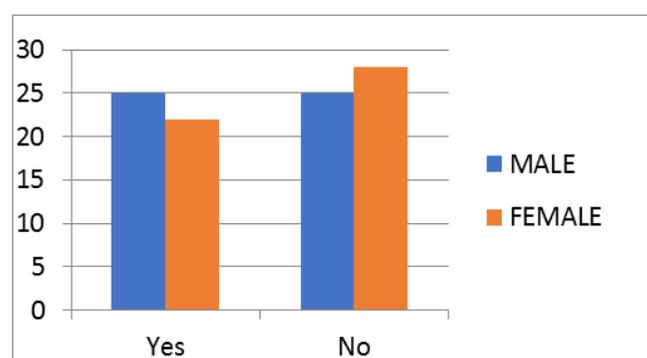


Fig 29

In the total population 25% of male and 22% of female are saying that shaking teeth can be treated and the rest of the 25% of male and 27% of female are saying that shaking teeth can not be treated.

➤ *QUESTION 30:- If yes which procedure do you think?*

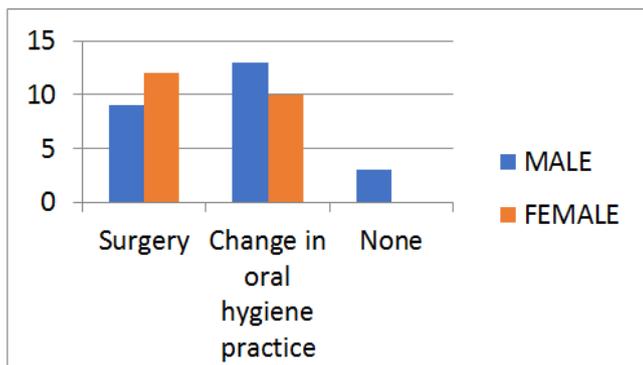


Fig 30

In the population 9% of male and 12% of female said that surgery is the only way to treat the shaking tooth and 13% of male and 10% of female saying that change in oral hygiene practice will be the treating method for shaking tooth and 3% of male assumed that there is no treatment for shaking tooth.

IV. DISCUSSION

This study confirmed the general opinion that oral hygiene practise is still ignored and unfulfilled as the major social problem. There is no awareness among the people, even with the literate their knowledge has to be improved. Hence, in this study attempts were made to describe the oral hygiene awareness, practise and knowledge and behaviour of the studied population. Our study has shown that very limited knowledge on prevention and preventive dental behaviour.

A. Brushing:

Brushing is the most commonly used method for teeth cleaning. This present study reports that all 100 patients were aware of cleaning their teeth on regular basis. 83% of the total patients clean their teeth with tooth brush and tooth paste. Out of that 42% of female and 41% male cleaning with tooth brush and tooth paste. 23% of the total patient brushes their teeth twice daily, in rest 77% were brushing once daily. In which females were brushing twice daily when compared to males. 27% of the total patients were using soft bristle brush, in which females are more aware of using soft bristle brush. 22% of the total patient using circular motion. Out of that 15% of female and 7% of male using circular motion. Females are more clear in the brushing technique. Both males and females are changing their brush 43% of people changing their brush once in three month in that 25% female 18% male, in which female are more aware than male. Only 50% of the total patient know the correct method of brushing technique. 55% of patients were believing that for brushing their teeth is mainly for clean and bright teeth, prevention of decay, prevention of bad odour (Figure: 2,3,4,5,7,22,24). Incorrect brushing technique and hard bristle tooth brushes give rise to tooth abrasion and gingival recession.

B. Interdental Aids:

There is generally a failure in use of interdental aids as a preventive tool. out of 100 patients only 10% of patients using interdental aids in that 6% were using wooden tooth picks (4% female 2% male). As flossing is the main interdental aid only 4% of total patients were using floss. From this it's obvious that both male and female are unaware of interdental aids (Figure : 8, 9). As long as they follow a proper oral hygiene they need not use it. (wooden tooth picks, dental floss etc.) [10]

C. Tongue:

81% of the total patients were cleaning their tongue, in that 49% of people cleaning their tongue with tongue scrapper. In which 27% of female were more aware of cleaning their tongue using tongue cleaner (Figure: 10,11) The coating that normally forms on the tongue can be a host for smelly bacteria this, leads to halitosis. To get rid of halitosis patient should gently brush their tongue using soft bristles of tooth brush or tongue scrapper [10]. The awareness about tongue cleaning should be increased among the patients.

D. Gingival Inflammation:

48% of total patients were aware of pricking gums with pins will cause gingival inflammation, out of which 18% are male and 31% are female. 50% of the total patients were believing that improper tooth brushing is the main reason for bleeding of gums in that 19% of male 31% of female. 51% of total patients were aware of poor oral hygiene is the commonest cause for bleeding gums. 51% of total patients were not aware of diabetes is the main risk factor for periodontal disease (30% of male 21% of female). 60% of the patients were experienced bleeding of gums while brushing, in that females experienced bleeding on gums while brushing when compared to males. Above all these results females are more aware of gingival health when compared to males (Figure: 12,17,18,27,20.). Initial sign of any inflammation is bleeding. The patients should be aware that there is still a chance that they can reverse the germ infection, even if the gums are bleeding and inflamed. It can be cured by improving their oral hygiene.

E. Dental Health:

57% of total patients were aware of the fact that bad oral hygiene will affect the dental health, in that female had more awareness than male. (Figure :16). 59% OF PATIENTS ARE aware that oral health will affect the systemic health, in that female are more aware than male (Figure: 21). This basic and simple method of maintaining oral hygiene is not very much popular among the population which shows lack of oral health awareness. Knowledge about systemic health and oral health and its link should be increased. [4]

F. Visiting Dentist:

Visiting a dentist is still not consider a preventive dental behaviour, at present it only depends on treatment needs [7]. The present study shows that around 49% of patients visited the dentist, in that 25% were visiting dentist only if they have problem in the oral cavity and 7% of

patients visiting dentists once in 6 months[10].(Figure: 23,28).Regular dental visit once in 3 month may avoid oral disease and patients should be briefed about this regular maintenance visits.

G. Treatment:

About 69% of total patient were assumed that cleaning the teeth using ultrasonic device will lead to mobility.(Figure:19,29,30).52% patients were unaware that shaking teeth can be treated. Patients should be made and understand that it the bone loss because of calculus accumulation which caused the mobility and not because of calculus removal. Mobility is the only sign of disease. The increased awareness about the underlying etiology and it also need to be treated to avoid further complication.

V. CONCLUSION

This study shows that there is some awareness in the oral health among both male and female. However most of the patients were not aware of the fact that oral health has an effect on systemic health. They should be aware about the oral disease and its systemic impact (pregnancy, COPD, cancer, etc.,) . Educating people about oral health, proper dental care and prevention of dental disease is important. Appropriate public health awareness could make a healthy individual and healthy society. Educating people should start at early stage of life. The people should be educated about oral health and its link with general health. Above all the present study, showed a positive impact and the awareness for females when compared to males .Further longitudinal studies on long term basis can help us identifying how we can improve and treat.

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