



ORIGINAL RESEARCH PAPER

Periodontology

AWARENESS OF ORAL HYGIENE AMONG PATIENTS ATTENDING DENTAL OUT PATIENT DEPARTMENT IN A TERTIARY HOSPITAL IN COIMBATORE –A CROSS SECTIONAL STUDY

KEY WORDS:

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ABSTRACT

Periodontitis is one of the leading oral infections in India. Prevalence of periodontitis was 86% as per world oral health report in 2003 and has been ever increasing. Factors like neglected or under awareness of oral hygiene and oral hygiene, practices play a critical role in the pathogenesis of periodontitis .Moreover it is related to many systemic diseases. Present cross sectional study is done to evaluate the oral hygiene awareness and practices among patients attending dental OPD in PSG hospital, Coimbatore. The study is done to add on to the scientific base and to improve the awareness of oral hygiene and practices among Coimbatore population .The results show that though there is improvement in oral hygiene practices, awareness about oral prophylaxis and follow up is lacking among the study population.

Introduction

Health is wealth and oral health is window to overall health[1].In our country it is reported that awareness in oral hygiene for general wellbeing is under rated even in areas with adequate access to oral health care. Epidemiological studies suggest high prevalence of periodontitis from poor oral hygiene practices and calculus deposition[2]. Albandar in an overview concluded that subjects of Asian ethnicity had the third highest prevalence of periodontitis[3].

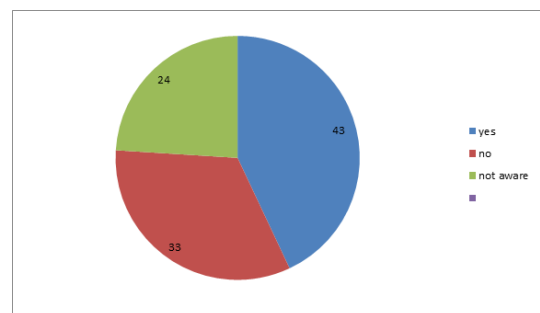
Periodontitis is one of the main inflammatory dental disease which is related to many systemic diseases bi-directionally like diabetes[4],cardiovascular disease[5],rheumatoid arthritis[6], alzimers disease[7,8],osteoporosis etc.[9][10].periodontal disease also leads to early tooth loss at an early age which leads to compromise in mastication and psychological problems in addition to affecting systemic health. Oral hygiene awareness is crucial as it aids towards effective plaque control, which is the corner stone to maintain periodontal health [11].Therefore, more efforts are needed to encourage greater use of preventive and therapeutic services. To achieve this goal, it is important to gain information regarding the awareness levels and values related to periodontal and gingival health. Literature on awareness of oral hygiene practices and aids among patients visiting dental clinics for treatment is negligible. This study is carried out with an aim to determine the oral hygiene status, knowledge about the practices and aids used in maintaining the oral hygiene among patients visiting dental outpatient department.

Methodology

Ethical clearance was obtained from the Institutional Board. Patients were selected randomly, Data was collected from 200 patients visiting dental out patient department after getting consent to participate in the survey. The inclusion criteria was patients above 18years and the exclusion criteria was medically compromised patients and those who did not consent to the survey. Questionnaire comprising 14 questions was used to collect the data. Questions relating to knowledge and attitude towards oral hygiene practices and aids were asked in face in face interview. Brushing techniques were explained to the patients as an attempt to improve the awareness about the oral hygiene habits. Completed questionnaire were then analyzed statistically to obtain the results in terms of percentage.

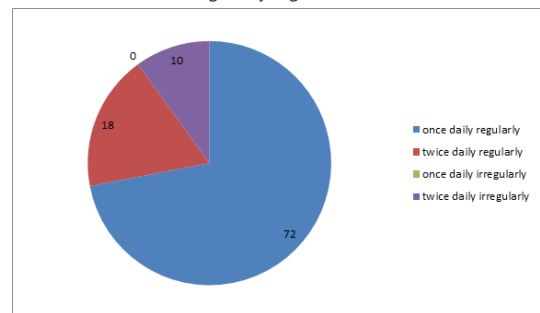
Results

Of the participants, 62% were male and 38% were female. About 43%feel oral health maintenance is important for general health, 33% do not agree and 24% were not aware of it[Figure1]



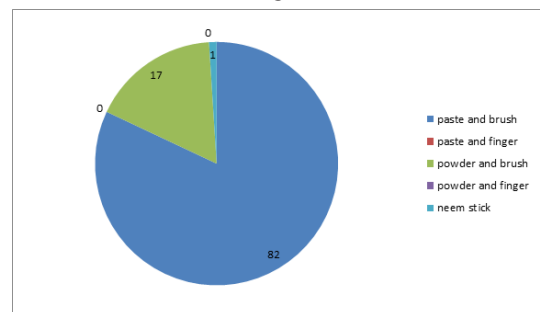
Figure[1] Oral health and general wellbeing

72% of people brush once regularly,18%brush twice regularly and 10% brush twice irregularly[Figure2]



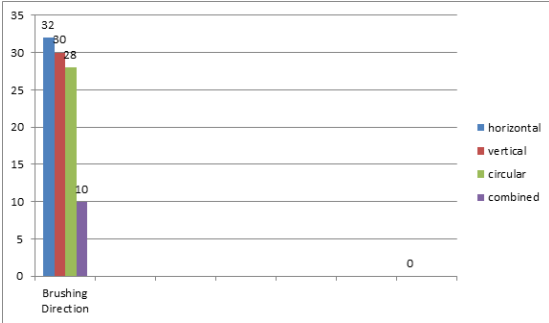
Figure[2]Brushing frequency

Paste and brush is used by 82% of people,17% use powder and brush and 1% used neem stick,figure[3].



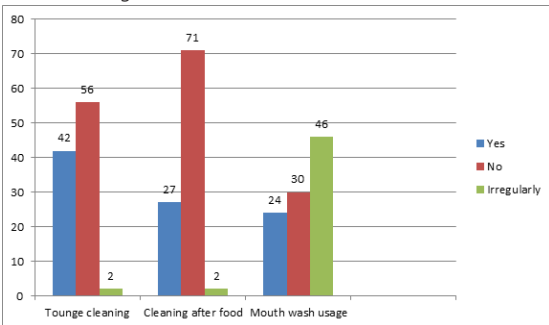
Figure[3] Frequency of population using brush and paste

About 32% of people use horizontal tooth brushing technique,30% use vertical brushing technique,28% use circular brushing technique and 10% use combined brushing techniques, figure[4].



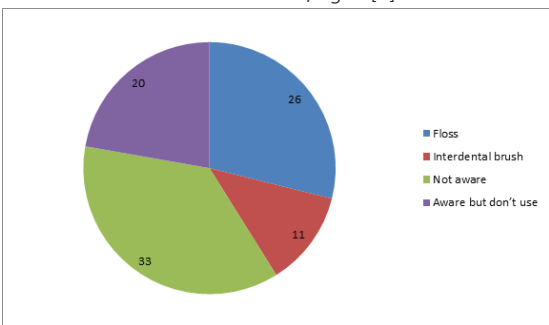
Figure[4] Brushing technique

Forty two percent of people clean their tongue daily and 56% of people don't and 2% clean irregularly ,figure[5]. Twenty seven percent of people clean their mouth after eating and 71% don't and 2% clean irregularly, Figure[5]. Twenty four percent of people use mouth wash regularly,46% use irregularly and 30% don't use mouth wash, Figure[5].



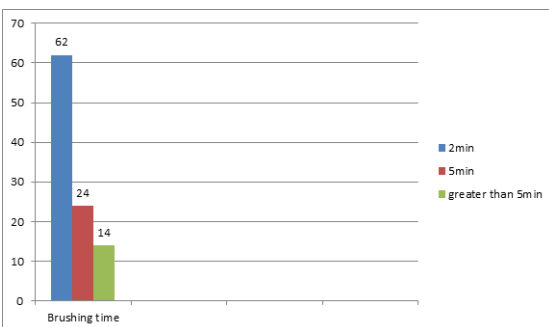
Figure[5] Frequency of tongue cleaning, cleaning after food intake and mouth wash usage

Regarding usage of interdental aids 26%use floss, 11%use interdental brush,43% are not aware if such aids and 20% are aware but don't use inter dental aids, Figure[6].



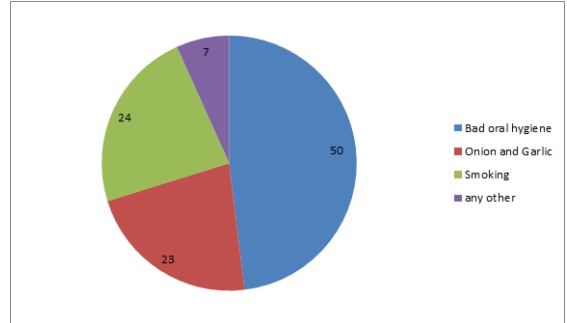
Figure[6] Percentage of people using interdental aids

Brushing time followed is 2min by 62%,5 minutes by 24 % and more than 5min by 14%,figure[7].



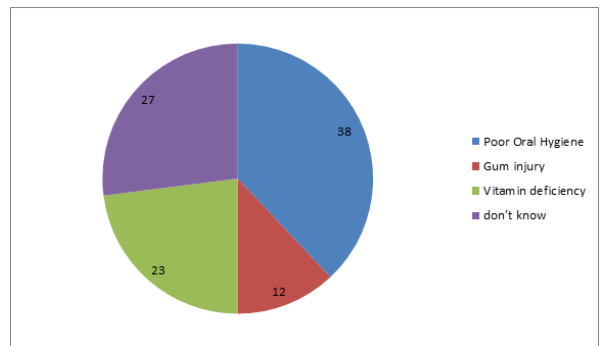
Figure[7] Brushing time percentage

Around 50%think bad oral hygiene is the cause for bad breath, 23% feel onion and garlic is the prime cause,20% feel it is because of smoking and 7% feel there is no specific reason, Figure[8].



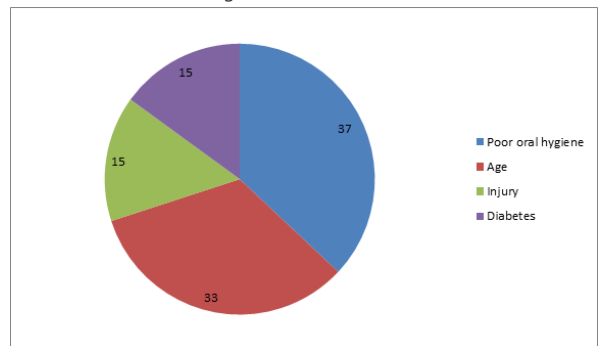
Figure[8] Frequency of people with bad breath

About 38% of people agree that poor oral hygiene is responsible for bleeding gums,12% say it is due to gum injury,23% say it is due to vitamin deficiency and 27% don't know the reason, Figure[9]



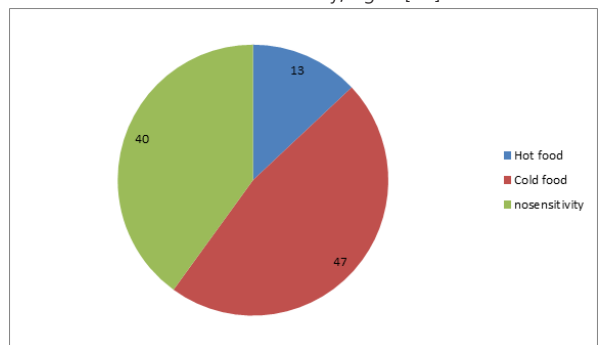
Figure[9] Percentage of people noticed gum bleeding

Loosening of teeth is due to poor oral hygiene say 37% of people, 33% say it is due to age,15% say it is due to injury and 15% agree the reason is diabetes, Figure[10].



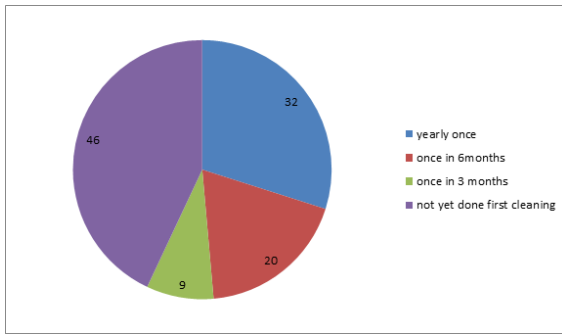
Figure[10] Percentage of people with loosening of teeth

Hot food causes sensitivity in 13%,cold food causes sensitivity in 47% and 40% do not have sensitivity, Figure[11]



Figure[11] Percentage of people with tooth sensitivity

Oral prophylaxis is done by 32% of people once in a year ,13% of people do it once in 6months , 09% do it once in 3 months and 46% are yet to clean their teeth ,figure[12]



Figure[12] Percentage of people undergone oral prophylaxis

Discussion

Oral health is necessary for general wellbeing. Due to lack of awareness, oral hygiene is ignored in India where the population is estimated to be more than 1.35 billion. 27% of this population live in urban area. The present study is conducted in tertiary care hospital dental department where a combined population from village and urban area come under one roof for various treatments. Among the study subjects, 62% were literate and 38% were illiterate. For the illiterate subjects, the questions were explained in their mother tongue and their answers were collected.

Forty three percent of subjects agreed that oral health is needed for overall health, 33% did not agree and 24% were not aware about the fact, Figure[1]. Our results shows that the level of awareness is much low compared to 60.4% in the study conducted by Sukhvinder et al in 2014[12].

Only 18% of subjects brushed twice daily, 72% brushes once daily and 10% brushes twice irregularly, Figure[2], which is also low compared to 58% of police recruits in a study by Dilip et al [13] but coincides with the study done by Kuppusamy VL et al where twice brushing was 17%[14].

Paste and brush was used by 82% of population which coincides with study done by Subha et al [15]. Using tooth brush decreases the frequency of tooth wear Bhardwaj et al [16]. Seventeen percent use powder for brushing which coincided with study by Sukhvinder[12] which again contribute to tooth wear, Figure[3].

Thirty-two percent used horizontal technique, 30% used vertical method, 28% used circular technique and 10% used combined technique. It is less when compared to study done by Zhu et al and Jain et al [17, 18]. Basically subjects were not very clear with the techniques existing for brushing. Awareness about the techniques if improved can reduce the tooth and periodontal diseases related to abrasion, Figure[4].

Only 32% clean their tongue regularly and 27% wash their mouth after food which is due to lack of awareness, Figure[6]. Thirty-seven percent of population use either dental floss or inter dental aid which is a huge transformation from 0% in study conducted by Hanaa M. Jamjoom in 2001[19]. This may related to the factors like oral health care media advertisements, Figure[6].

Around 62% brushes for 2 minutes, 24% for 5 minutes and 14% for more than 5 minutes similar to study by Sukhvinder[16]. Beneficial role of long brushing time for more than 2 minutes in plaque removal is yet to be studied, figure[7].

More than 30% of study population agreed that poor oral hygiene is the reason for bad breath, bleeding gums and loosening of teeth which is similar to study by Ali et al [20] and MM Dayakar [21], Figure[8, 9, 10].

Mouth wash regular usage was 24% and irregular usage was 46% mainly as alternative for malodor, figure[11]. Almost 50% agreed with cold food as the cause for sensitivity. The reason for sensitivity

can be gum recession, caries, hypersensitivity which was not examined in the present study. About 46% of population are yet to do their first ever oral prophylaxis which is an alarming situation, Figure[12]. This study is similar to one by Peterson et al and Al Hussaini et al [22 and 23]. This mindset of not reaching dentist for regular checkup and oral prophylaxis may be due to a generalized view that oral hygiene is separate entity from overall health in general population.

Limitation

Since the study is hospital based and only 200 subjects were involved, further studies involving general public and more involving population has to be carried out to further improve our knowledge about oral hygiene practices. This will help to organize awareness programs at various levels to inbuilt the mindset that good oral hygiene is needed for overall wellbeing.

Conclusion

The results show that though usage of tooth brush and paste has increased, our general population are still reluctant about oral care, nearly 50% are yet to do their first ever oral prophylaxis. Awareness has to be created regarding regular dental visit and oral prophylaxis which can improve the life time of natural teeth and also help to reduce overall inflammatory reactions as periodontitis is related to many systemic diseases [1, 4, 5, 6, 7, 8, 9, 10]. Studies at various level and with different sample groups have to be conducted in India and compared in order to improve our oral hygiene awareness and practice programs which will definitely improve oral health.

Conflict of interest – Nil

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