

International Journal of Dental Science and Innovative Research (IJDSIR)

IJDSIR : Dental Publication Service Available Online at: www.ijdsir.com

Volume – 4, Issue – 3, May - 2021, Page No. : 278 - 292

Studies on Dental Health Status to Correlate Between Detrimental Food Habits and Oral Hygiene: A Questionnaire Based Survey

¹Sonali N. Gawande, Department of Microbiology, Shri. R.L.T. College of Science, Akola, Maharashtra, India

²Vijay D. Nanoty, Department of Microbiology, Shri. R.L.T. College of Science, Akola, Maharashtra, India

Corresponding Author: Sonali N. Gawande, Department of Microbiology, Shri. R.L.T. College of Science, Akola, Maharashtra, India

Citation of this Article: Sonali N. Gawande, Vijay D. Nanoty, "Studies on Dental Health Status to Correlate Between Detrimental Food Habits and Oral Hygiene: A Questionnaire Based Survey", IJDSIR- May - 2021, Vol. – 4, Issue - 3, P. No. 278 – 292.

Copyright: © 2021, Sonali N. Gawande, et al. This is an open access journal and article distributed under the terms of the creative commons attribution noncommercial License. Which allows others to remix, tweak, and build upon the work non commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Type of Publication: Original Research Article

Conflicts of Interest: Nil

Abstract

Oral health and hygiene have a synergistic complementary relationship .Oral infectious disease as well as acute, chronic and systemic oral manifestation impact the functional ability as well as diet and nutrition too.

Effective plaque control, Regular oral checkups and good hygiene practices is the foundation of any attempt to prevent and control tooth decay and many periodontal diseases. Common oral problem in all the age group is dental Carries due to bacterial accumulation or Biofilm formation with cause of 43% tooth loss in children and adolescence between age of 6- 19 years. The study was designed to evaluate the oral health status along with oral hygiene level in individuals with or without various detrimental food habits.

A questionnaire based survey was carried out among healthy as well as dental patients visiting to dental care clinic in Akola region. Questionnaire included questions

regarding oral hygiene practices and perception about relationship of oral health with detrimental habits. In present study of total participants n=288, participation of female participants was 61.55% (n=177) and remaining 38.5 % (n=111) was of male participants. In this study the opinion survey was made regarding the probable reasons for tooth decay. Improper brushing as the major cause of tooth decay was reported by 25.7% (n=74) while 23.6% (n=68) attributed it to the consumption of high sugar content, 14.9 % (n=43) opined improper diet as the reason for tooth decay, likewise 12.2% (n=35)reported dental treatment apathy or anxiety responsible for it, likewise 6.9%(n=20) held addiction of tobacco as the reason for tooth decay, whereas 16.7% (n=48) reported other factors like age were responsible for tooth decay.

Awareness particularly regarding the frequent use of brushing, gargling, use of mouth wash etc. along with the avoidance of detrimental food habits may increase the quality of oral care.

Keywords: Oral health, hygiene, habits, tooth decay **Introduction**

In many developing countries oral diseases establish public health problem because of their high commonness, economic values with adverse impression on the quality of daily routine of individuals [8]. In some cases oral disease can badly effect concentration of mind, solitary relationship, and performing efficiency of an individual just because of sophisticated relationship between oral health and habits. One can prevents oral disease by boosting the oral health practices in the form of proper tooth brushing, use of dental floss, dental visits at regular intervals, and proper dietary practices [13].

Oral health and hygiene have a synergistic complementary relationship .Oral infectious disease as well as acute, chronic and systemic oral manifestation impact the functional ability as well as diet and nutrition too.

Effective plaque control, Regular oral checkups and good hygiene practices is the foundation of any attempt to prevent and control tooth decay and many periodontal diseases [13]. The appreciative of actual rehearses in keeping the standard oral health is based on patient's opinions of oral health care, which is very important. Oral health is about over and above sparkling white teeth and fragrant breath. The detrimental food practices and superficial contact obstructions have been related to oral health. Individual's awareness of the quality of dental care facility and their intent on initial a dental service may be associated with a practitioner's skill, sympathy, and conveyance of oral hygiene advice etc. [25]. Dental experts are faced with a number of apparent impossibilities when it comes to advising patients on the most appropriate strategy for plaque control [2]. Maintenance of good Oral condition is a part of general health self-care, encompasses wide scale of deeds ranging from care, prevention, and diagnosis to seeking specialized care. Self-Care practices have been proved to be an effective preventive measure at individual level for maintaining good oral health and avoidance to oral disease [6].

Common oral problem in all the age group is dental Carries due to bacterial accumulation or Biofilm formation with cause of 43% tooth loss in children and adolescence between age of 6- 19 years. And near about 90% of adults have experience tooth decay. Elder's carries cause unnecessary pain and expenses as compared to children and youngsters. Infection control is an imperative issue in a dental practice. It is reported that 1 ml of saliva sample from mouth of an average healthy individual contains about 750 million microorganisms [13].

A preventive oral regimen design to maintain equilibrium in continuously changing demineralization and remineralization of tooth surface is major part which includes diet counselling, fluoride therapy, proper tooth cleaning habits and control of cariogenic bacteria [19 &26].

Sticky food, Slowly dissolving food, high sugar content food, other fermentable food, time of consumption of tea , nutritive values, potential to stimulate saliva , sequence of food intake and combination of food are primary factors to consider in explaining the various cariogenic and cariostatic, nature of dietary items [19 &26].

Inflammation and loss of bone supporting tissue is carried out in periodontal disease which is caused by

© 2021 IJDSIR, All Rights Reserved

bacterial infection. With the bacteria and host response, systemic and behavioral factors influenced the severity of disease progression in many cases. Systemic disease includes Type 1 and Type 2 diabetes, hypertension, osteoporosis, cardiovascular disease, immune status of individual and pathogen associated with periodontal disease in oral flora. There are some behavioral risk factor associated with periodontal diseases these include poor oral hygiene, like consumption of smoky and smokeless tobacco as well as selective nutrient deficiencies like Vitamin C and Magnesium, may compromise the systemic response to inflammation and infection [5 &12].

Oral hygiene habits have importance because of lack of awareness about utilization of dental care service or apathy along with the choice of dietary product consumption [17]. The concept of oral healthiness associated value of life expectancy from the definition of health that the WHO gave in 1946. Health is understood to be a state of complete physical, mental and social well-being and not merely the absence of disease of infirmity [27].

The program for self-consciousness of oral disease concern training about oral hygiene and healthy diet, fluoride prophylaxis, periodic checkups, session of professional oral hygienist and secondary prevention program. There exist a biunique relationship between diet and oral health i.e. a balance diet correlates to a state of oral health; constituents of periodontal tissue, dental elements, quality and quantity of saliva and incorrect nutrition intake correlates to a state of oral disease [21]. The study was designed to evaluate the oral health status along with oral hygiene level in individuals with or without various detrimental food habits.

Material and Methods

A questionnaire based survey was carried out among healthy as well as dental patients visiting to dental care clinic in Akola region. Questionnaire included questions regarding oral hygiene practices and perception about relationship of oral health with detrimental habits.

The survey had been pilot studied through questionnaire. Questionnaires were sent to 30 participants. Responses from pilot study were analyzed to assess the clarity and relevance to question. Necessary modification was carried out on the feedback of pilot test participants.

The Questionnaire was randomly distributed to Dental patients as well as healthy individuals which includes 17 close and 18 open ended questions with two parts

- Demographic information
- Detrimental food habits and hygiene

Selection Criteria

- Systemically healthy as well as dental patients aged more than 10 years.
- The Patients who gave consent for willing to give information as per questionnaire were included in study.

Rejection criteria

- Patients with history of systemic disease(chronic disease or any condition having a sustainable effect on oral health)
- Pregnancy and lactation.

Data Collection

The Study participants were registered by various dental clinics in Akola. A total 288 respondents were considered for study during the month of February – March 2021.

Statistical analysis

Data was entered into Microsoft excel and analyzed using SPSS. Descriptive Statistics (Number and percentage of responses for the questions related to the oral hygiene practice including the demographic information) were calculated for response item.

Results

Demographic distribution of data is one of the important aspects of study. In present study of total participants n=288, participation of female participants was 61.55% (n=177) and remaining 38.5 % (n=111) was of male participants as shown in table 1. The majority in participation of the females indicated their more awareness about oral health and hygiene.. As, locality may affect availability or approach to dental practitioner, availability of medicine, daily habits and many factors that influenced oral health; while collecting the responses the residential area of the respondents was divided into regions such as Urban, Periurban and Rural regions. Locality wise distribution of participants in Akola region is given in Table 2 in which 49 % (n=141) participants were from the urban region while 14.9% (n= 43) and 36.9% (n=104) were from periurban and rural region respectively.

Table 1. Showing gender wise distribution of participants						
	Frequency	Percent	Valid Percent	Cumulative Percent		
Female	177	61.5	61.5	61.5		
Male	111	38.5	38.5	100.0		
Total	288	100.0	100.0			

Table 2. Showing	distribution of particip	pants on the ba	sis Locality	
	Frequency	Percent	Valid Percent	Cumulative
				Percent
Peri urban	43	14.9	14.9	14.9
Rural	104	36.1	36.1	51.0
Urban	141	49.0	49.0	100.0
Total	288	100.0	100.0	

Occupation and education imparts important role in maintaining individuals overall health. In present study are Employed , 49.7 % (n=143) were student , 9% (n= 26)were House wife, 6.3 (n=18) % Retired and only 4.5 % (n=13) of total participants were found to be unemployed. Whereas as regards education 38.5% (n=103) were Matriculate, 36.5% (n=105) were graduates, and 27.4 % (n=78) were post graduate . Among total number of samples 12.8 % people were suffering from diabetes (Type 1 n =30 and Type 2 n=7) 16 % (n = 46) of them reported having specific allergy whereas 18.9% (n=83) and 34.4% (n=99) were suffering from Hypertension and Hyperacidity respectively such information was found to be useful in treating carries and oral diseases.

as per occupation near about 30.6% (n=88) participants

As regards the oral care by the participants in present survey, it was found that, regular visits to the dental clinics are mostly associated with the pain. It was observed that maximum 52.4% (n=151) participants visits to dental clinic regularly only when there is pain, cumulatively as good as 25.4% (n=74) visit once every few year and once in year or more often, whereas 22.2% (n= 64) are not visiting for checkup regularly. As many as 69.1% (n=199) preferred to visit the private practitioners whereas as 16.6% (n= 26) went for Government Practitioner and about 14.9 % (n= 43) have preferred to home remedies, as shown in graph 1 and 2. Majority of participants near about 59.7% (n = 172) preferred allopathy for dental pain while cumulatively 34.4% (n= 99) preferred for Ayurveda and Homeopathy, only 5.9% (n= 17) used Unani medicines and other medicine types as shown in graph 3. Majority of participants visited to dental clinics for the reason of tooth pain 40.6% (n=117), whereas 8.3% (n=24) visited for regular checkups, 9% (n=26)for cosmetic reason, 7.3

% (n=21) for any other reason . as many as 34,7% (n=100) have no reason to visit the dental clinics as shown in graph 4. Scaling of teeth once a year or more often and once every few year was cumulatively reported by only 34% (n= 98)of the total participants, while 66% of them never go for scaling of teeth as shown in graph 5. About 23.3 % (n=67) of the participants took Root canal treatment, followed by about 13.2% (n=38) have taken antibiotic treatment, adhesive fillings were done by 11.5% (n=33) and prosthesis (RPD/CD/FDP) was done by 5.9%(n=17), while 10.4% (n=30) have got tooth extraction treatment. Surprisingly, as much as 35.8 % (n=103) have not taken any treatment, as shown in graph 6.

A substantial number of population 24.3% (n=70) possessed swollen gums while 31.6% (n=91) were with exposed bases . Near about 6.9% (n=20) were having bleeding gum problem at every brushing and 38.9% (n=112) having bleeding rarely while brushing tooth as shown in graph7 ,8 and 9. Most of the participants 63.9% (n=184) does not have any problem of movable teeth while 18% (n= 54) have indicated the positive responses and 17.4% (n=50) have no knowledge about their movable teeth as shown in graph 10.

As good as 37.5% (n= 108) have 1-2 cavities in their teeth, whereas 7.3 %(n= 21) have 3-4 cavities in teeth, while 9.4 %(n=27) don't know about cavities and 45.8% (n=132) did not have any cavities in mouth and near about 29.5% (n= 85) have tooth aches among total population as shown in graph 11 and 12.

Majority of the participants 41.3% (n= 119) reported suffering from tooth sensitivity while they were eating some acidic, sweet and chilled food whereas 17.4% (n= 50) opted for may be and 41.3% (n= 119) reported never suffering from sensitivity problem as shown in graph 13. Some participants have deformities in mouth area like Fissure of lips and Mouth ulceration 32% (n= 92)(graph 14). It was found that collectively 34.8% (n= 131) having bad smell of mouth while 51% (n=147) never have unpleasant breath (graph 15). Feeling of Dryness in mouth with sometimes was reported by 35.1% (n= 101), more often by 18.8% (n=54) and 46.2% (n= 133) have never experienced it as shown in graph 16.

Most of the people used tooth brush regularly as was reported by 83% (n= 239) few of them 6.9 % (n= 20) have irregular use of toothbrush whereas quite few and 10.1% (n=29) reported no use of tooth brush. As for the type of tooth brush used majority of participants 42% (n=121) have used medium type of tooth brush while 36.5% (n= 105), 16% (n= 46) respectively used soft and extra soft type whereas only few 5.6 % (n=16) were used hard type of tooth brush (graph17, 18). The large portion of participants 51% (n=147) brushed their tooth only once while 39.6% (n= 114) twice, 4.2% (n= 12) thrice and 5.2% (n=15) were having irregular brushing in a day. As regards the time taken for brushing the teeth 16.7% (n=48) have irregular time, 14.9% (n=43) brush for less than one minute, 22.9% (n=66) do brush for one minute and 45.1% (n=130) up to two minutes (Graph 19, 20).

The use cleaning aids was such as dental floss was adopted by 10.1% (n= 29) likewise 11.8%(n=34) used interdental brush, 21.5% (n=62) used tooth picks, 17% (n=49) used water picks whereas 39.6% (n= 114) not used any type of cleaning aid . As regard the number of times made use of cleaning aids 31.9%(n=92) irregular , 35.4% (n=102) made its use once, 10.8% (n=31) used it more than twice, 4.6% (n=13) used frequently over

© 2021 IJDSIR, All Rights Reserved

and over as many as 31.9 % (n=92) made its irregular use whereas 17.4% (n=50) have not used any of the above aids while cleaning mouth as shown in graph 21a, b, c).

As regards the frequency of mouthwash, use of mouth wash once in a day was reported by 15.3% (n=41), twice by 14.9% (n=43), thrice by 4.9% (n=14), irregularly by 14.2% (n=41) of the respondents whereas 50.7% (n=146) made no use of mouth wash. AS far as the specificity of the mouth wash is concerned 3.8% (n=11) used Chlorohexidine 98.8(n=57), 6.3% (n=18) used Colgate Plax, Listerine was used by 7.6% (n=22), and use of Rexidine was made by 6.7% (n=25) whereas 53.8% (n=155) have not made use any type of mouth wash as shown in graph 22 (a) and (b).

As far as the bad food habits such as consuming chewing gum, high sugar content foods, sticky foods are concerned it was revealed that majority of participants 87.2% (n=251)are not in regular habits of consuming chewing gum while 12.8 % (n=37) consumed d it regularly, as regards the regular high sugar consumption 8.3% (n=24) have it, likewise consumption of high sugar content sometimes was with 55.6% (n=160) whereas no regular consumption of high sugar content was with as many as and 36.1% (n=104) of them as shown in graph 23 (a) and (b). However consumption of sticky foods regularly was with most of them, 61.1% (n= 178) use of sticky foods sometimes regularly was made by 11.8% (n= 34) whereas 27.1% (n=78) were not having habit of eating sticky foods regularly(Graph 23(c)).

Maximum people 39.6% (n=114) made use of Herbal tooth paste and was the most common aid used for cleaning of teeth, it was followed by chemical tooth

paste(Colgate / Pepsodent/Close-up etc.)and was used by 34% (n=98) , use of herbal powder (Vicco Vajradanti / Dabur Lal Dant manjan / Vithoba dant manjan) was made by 6.3% (n=18), use of herbal sticks (Neem / Babool/ Hiwar / Kapur) was made by 4.5% (n=13),whereas other aids(Wood ash/ cow dung ash/ tobacco ash nus /Bytco black tooth powder) were used by the remaining 15.6% (n=45) respectively as shown in Graph 24.

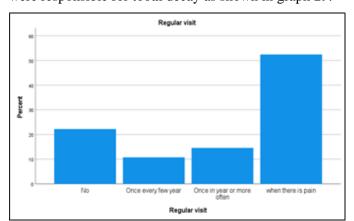
Most of the participants 74.7% (n=251) opted for not any addiction of tobacco, 18.1% (n=52) are in habit of taking it sometimes, whereas 7.3% (n=21) have addiction to tobacco. As regards the frequency of smoking 2.4% (n=7) were smoking occasionally, 7.6% (n=22) needed one to four cigarettes per day, about 3.5% (n=10) needed more than four cigarettes per day and hopefully 86.5% (n=249) were found to be nonsmoker as shown in graph 25 (a) and (b).

As regards the diet is concerned, about 35.19 % (n=101) of the respondents were taking mixed type of diet having both the vegetarian and non -vegetarian components in their diet. As good as 32.6% (n=94) happened to be vegetarians taking vegetarian diet including Fibrous /Raw fruits and vegetables, About 25% (n=72) were taking vegetarian diet including Fermented food , Milk and Milk product, oily food etc. Only 7.3% (n=21) were takin Non-vegetarian type of die t as shown in graph 26. To clean the mouth after meals by making gargling with plain water regularly was reported by 30.9% (n=89), whereas it followed sometimes by 44.4% (n=128) and as much as 24.7% (n=71) participants have responded negatively(graph 27).

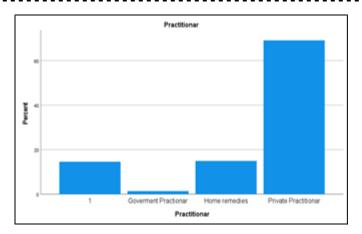
The regular consumption of soft drink every day was found to be common with 3.1% (n=9), about 9.7%

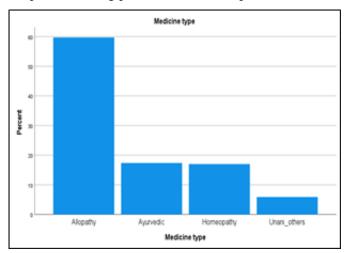
(n=28) used to consume three per week, likewise 19.1% (n=55) were drinking soft drinks two per week and 68.1% (n=196) never consumed soft drink. A large proportion of the participants 45.1% (n= 130) consumed black tea and coffee regularly while 21.5% (n=62) consumed it occasionally and about 33.3% (n=96) were not consumer of black coffee or tea. Consumption of black coffee or tea for more than five times a day was common with 12.5% (n=36), whereas four times a day with 11.5% (n=33), likely twice a day was with 55.2% (n=159) and whereas 20.8% (n=60) of them never consumed black coffee or tea as shown in graph 28(a) and (b).

In this study the opinion survey was made regarding the probable reasons for tooth decay. Improper brushing as the major cause of tooth decay was reported by 25.7% (n=74) while 23.6% (n=68) attributed it to the consumption of high sugar content, 14.9 % (n=43) opined improper diet as the reason for tooth decay, likewise 12.2% (n=35)reported dental treatment apathy or anxiety responsible for it, likewise 6.9%(n=20) held addiction of tobacco as the reason for tooth decay , whereas 16.7% (n=48) reported other factors like age were responsible for tooth decay as shown in graph 29.



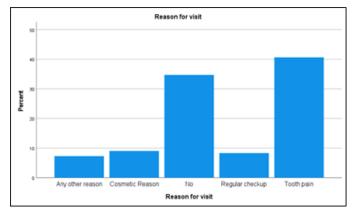
Graph 1: Showing regular visit of participants



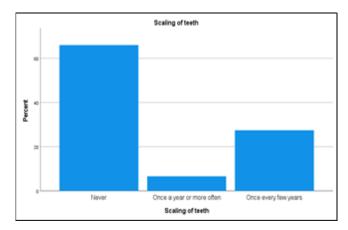


Graph 2: Showing preference to dental practitioner

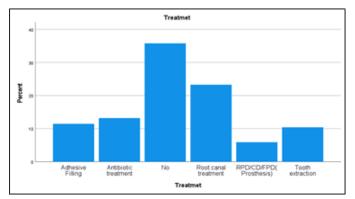
Graph 3: Showing type of medicine prefer by participants



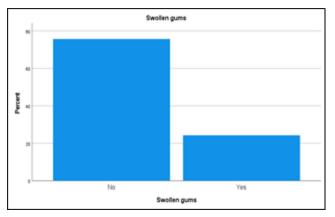
Graph 4: Showing reason for present dental visit



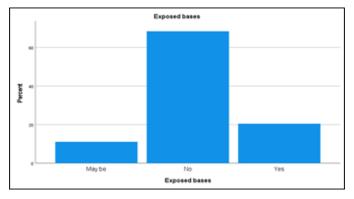
Graph 5: Showing participants frequency of scaling



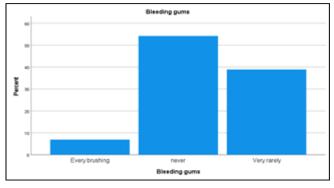
Graph 6: Showing treatment carried out



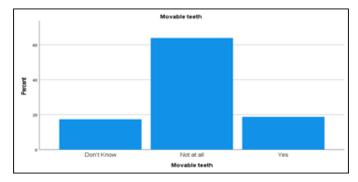
Graph 7: Showing Percent of swollen gums



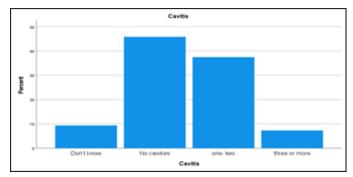
Graph 8: Showing percent of exposed tooth bases



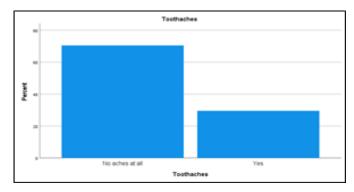
Graph 9: Showing Bleeding gums percent



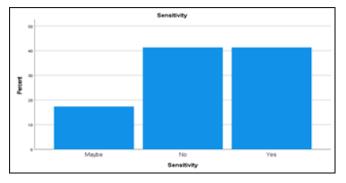
Graph 10: Showing Movable teeth percent



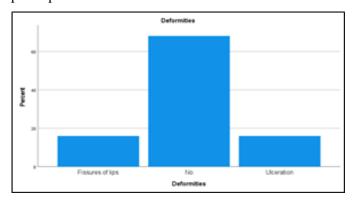
Graph 11: Showing percentage of cavities



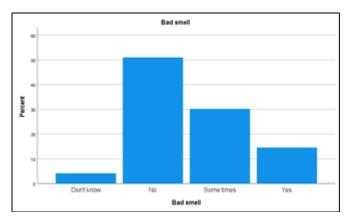
Graph 12: Showing percentage Toothaches



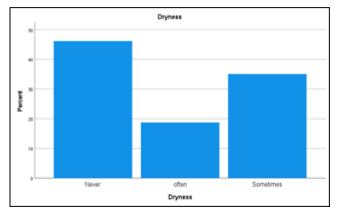
Graph 13: Showing Sensitivity among percent participants



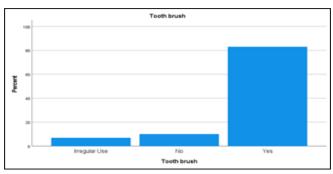
Graph 14: Showing Deformities percentage among participants



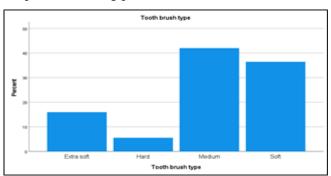
Graph 15: Showing Bad smell percent



Graph 16: Showing Percentage of Dryness



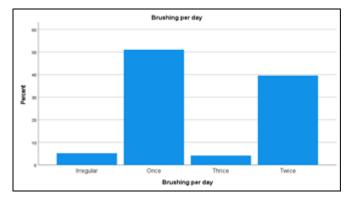
Graph 17: Showing percent of Tooth brush use



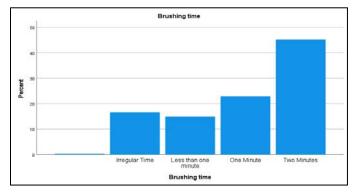
Graph 18: Tooth brush type percentage

© 2021 IJDSIR, All Rights Reserved

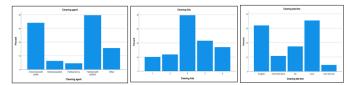
 $_{Page}286$



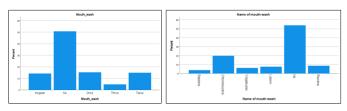
Graph 19: Showing Percentage of Brushing per day



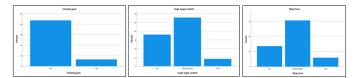
Graph 20: Showing percentage of Brushing time



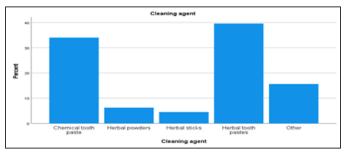
Graph 21: a). Showing percentage of cleaning agent usedb) Showing Cleaning aids used c) Cleaning aid using frequency



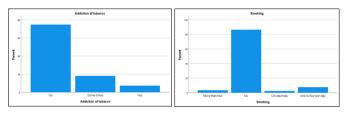
Graph 22: (a) Showing Percent of Mouth wash used (b) Name of Mouth wash



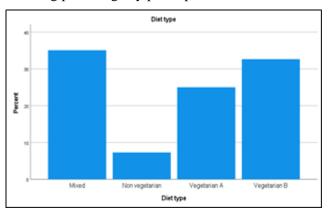
Graph 23: Showing Percentage of (a) Consumption ofChewing gum (b) Consumption of High sugar content(c) Consumption of sticky food.



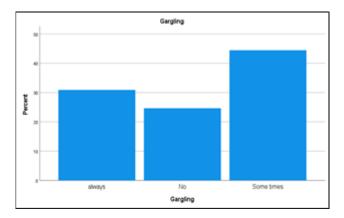
Graph 24: Showing percent use of Cleaning agent used by participantss



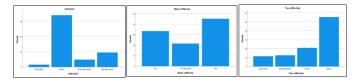
Graph 25: Showing (a) Addiction of tobacco (b) Smoking percentage by participantss



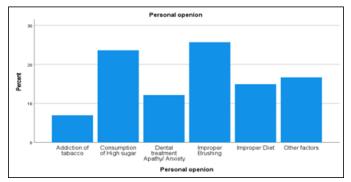
Graph 26: Showing Percent of diet prefer by participants



Graph 27: Showing percent of gargling after meal



Graph 28: Showing percent of consumption (a) soft drink (b) Black coffee and tea (c) Frequency of tea and coffee



Graph 29: Showing personal opinions of participants about tooth decay

Discussion

The elements such as age, gender, race, diet, oral hygiene habits, socioeconomic level and education are important contributing factor for oral and dental health. An upsurge in level of information of oral health leads to an increased cognizance of oral health and better oral hygiene practice[17]. Shah et al from Delhi India reported that dental caries was more among the rural population as compared to urban communities. However in the present study the presence of dental caries was

more or less equal in rural ,urban and periurban area. Conspicuously the Oral hygiene seemed to be associated with gender. The observance of "Good" oral overall hygiene was higher in females than males likewise observance of general oral health was also lower in males than female [7]. The present finding are in conformity with these reported studies. As participation of females was found to be 61.5% of the total participants in present study.

Many studies conducted towards the awareness, practices and attitudes on oral health in general are available without focusing on nutritional related knowledge among the school students, house wives, mothers and adults[20]. In Saudi Arabia study regarding awareness of oral health in adolescents was carried out and they have reported sufficient level of awareness without significant differences in males and females [3]. Likewise Badrasawi et al, (2020) conducted studies on oral health awareness amongst the school teachers in India and reported fair level of oral health awareness amongst them.

During present study it was reported that12.8% of the individuals were with diabetes (type 2), these were at greater risk for compromised wound healing and increased risk and severity of local infectious diseases including fungal infections, gingivitis , periodontal and oral mucosal disease and caries ; as well as Xerostomia, burning mouth and tongue sensation . Xerostomia results in loss of protective mechanism of saliva and causes dryness of mouth [15]. Accordingly feeling of dryness of mouth often and sometimes was reported cumulatively by 53.9% of the participants in present study.

During the present studies No regular visit to a dentist was reported by 22.2% of the participants which was

much lower than reported by Oberoi et al.(2014) and Steele et al, (1996) who reported only 10.8% of the participants among various age groups made Dental visit within a year or more. Likewise the percentage of the participants who reported no regular Dental visits in present study was lower than in the studies reported by Behbehani et al (49%), Peterson et al (37%) and Al – Hussaani et al (44%). Majority (52.44%) of the participants in the present study have visited a dentist for oral hygiene only when there is pain.

Zeki et al, (2016) found that poor oral hygiene is known an important predisposing factor for periodontal disease. To overcome this problem and to maintain oral health, tooth brushing is found to be most effective hygiene practice. in their studies 54 (98.2%) participants mentioned that they were brushing the teeth on a regular basis; which is more than the finding of present study i.e. 239(83%). In several studies the most common oral hygiene was reported to be brushing 1-2 times a day. Brushing twice a day is reported by 39.6% of the participants in the present study which was in accordance with the study conducted by Oberoi et al (43.6%), Al Johani et al, 2008 (38.5%). Brushing teeth once daily was reported by majority (51%) of the participants in the present study which was similar to study carried by Khami et al,2007 (54%) and higher than the study conducted by Oberoi et al.(2014).

With the use of interdental cleaning aids, periodontal patients are able to improve clinical outcomes and reduce clinical signs of disease and inflammation (Christou et al,1998). Atassi (2010) reported that 6% of patient used Dental floss, 24% used tooth picks, 16% used interdental brush while 10.1% used dental floss, 11.8% interdental brush, 21.5% tooth picks. Whereas in

present studies use of cleaning aids such as dental floss was adopted by 10.1% (n= 29), 11.8%(n=34) used interdental brush, 21.5% (n=62) used tooth picks, 17% (n=49) used water picks whereas 39.6% (n= 114) not used any type of cleaning aid.

Frequent use of mouth wash reduced accumulation of microorganism in oral cavity. Atassi (2010) reported that 34 % used mouthwash. A fluoride residues happened to be milestone in the prevention and the control of dental carries. Fluorides reduce carries by (n=20) 40 %[27].In present study 35.1% respondent regularly used fluoride containing mouth washes.

The development of caries requires the presence of sugar and bacteria but it is influenced by the susceptibility of the teeth with the type of bacteria and secretion of saliva. Saliva is supersaturated with calcium and phosphate with pH equal to neutral which triggers remineralization. When acid stimulation is too strong demineralization prevails until the formation of the carious lesions. Very low level of dental caries was found in isolated traditional communities with traditional life styles and low consumption of sugar [27].

The principal features to cogitate in influential the cariogenic ,cariostatic and anti-cariogenic properties of the diet are food form i.e. liquid, solid or sticky, slow dissolving , frequency of consumption of sugar, and other fermentable carbohydrates ,their nutrient composition , potential to stimulate saliva , sequence and frequency of food intake and combination of food [19 & 26]

Diet can be good traitor in hindrance of caries. Increase in consumption of fibers, amides / low sugar , cheesy food have cariostatic properties . Calcium, phosphorus and casein contained in milk inhibit caries. Whole meal

© 2021 IJDSIR, All Rights Reserved

food foods have protective properties as they required more mastication, thus stimulating salivary secretions. Peanuts, hard cheese and chewing gum are good gustative or mechanical stimulators of saliva. Black tea extract increase the concentration of fluorine in plaque and reduces the cariogenecity of diet rich in sugars [27]. Tobacco is major contributor of oral risk which slows down healing of wound after any dental surgery and fevers periodontal disease ,halitosis and oral infections. Alcohol and tobacco account for 75% of the disease burden of oral and oropharyngeal malignancies in Europe, Americans and Japan. Oral smokeless tobacco is major cause of oral and oropharyngeal squamous cell carcinoma in Indian sub-continent parts of South -East Asia, China and Taiwan especially when consumed in betel quid containing areca nuts and lime reported by International Agency for Research on cancer in 2003[22]. In present study 25.4% of the participants were addicted with tobacco and the smoking frequency was found to be 13.5%.

In the present study 74 respondents thought that Improper brushing was the main cause for tooth decay, while 68 respondents have attributed it towards the consumption of high sugar which is quite conspicuous. Dental treatment apathy / Anxiety is also the one of the reason for periodontal diseases, in the present studies the dental treatment apathy / anxiety was reported by 12.2 % of the participants. This finding is supported by the earlier studies wherein it was found that 25.5% subjects have dental fear with the reason negative stories heard by others cause hypertension in patients [17]. Various other factors have been reported by the researchers, Italian researcher have recently identified genetic defect responsible for cleft lip and palate. The gene variation in MTHFR that determines the lowering of folate levels in blood which result in birth to child with defected cleft lip and palate increase future risk related to orthodontics and related carries [27].Malocclusion is misalignment or incorrect relation between teeth of the upper and lower dental arches, which makes oral hygiene preservation a difficult task , thereby upsurge the risk of carries[22]. Likewise , Older people with dementia have considerable plaque and many oral problems related to carries , soft tissue degradation, gingival bleeding , fissure of lips, mucosal lesions and dryness of mouth[11]. In present studies also about 16.7% of the participants have reported other factors like age as responsible for tooth decay.

Conclusion

Based on the finding of this studies, it was concluded that in order to improve oral health oral hygiene must be maintained . Good practice comes from adequate knowledge. Based on the present study the oral hygiene practices are ignored partially among the studied population which may lead to oral problems. Professional calculus removal and regular visits are in combination with participants' oral hygiene. Instructions can minimize the level of disease. Moreover positive attitude towards dentist supported by proper guidance and strengthening could significantly minimize oral diseases and decaying of the tooth. Awareness particularly regarding the frequent use of brushing, gargling, use of mouth wash etc. along with the avoidance of detrimental food habits may increase the quality of oral care.

Declaration

This is General Survey of People for mentioned research topic .The Information obtained will not be shared for **References**

- Al-Hussaini R, Al-Kandari M, Hamadi T, Al-Mutawa A, Honkala S, Memon A. Dental health knowledge, attitudes and behaviour among students at the Kuwait University Health Sciences Centre. Medical Principles and Practice. 2003;12(4):260-5.
- Ali NS, Khan M, Butt M, Riaz S. Implications of practices and perception on oral hygiene in patients attending a tertiary care hospital. J Pak Dent Assoc. 2012;1:20-3.
- Al Subait AA, Alousaimi M, Geeverghese A, Ali A, El Metwally A. Oral health knowledge, attitude and behavior among students of age 10–18 years old attending Jenadriyah festival Riyadh; a crosssectional study. The Saudi Journal for Dental Research. 2016 Jan 1;7(1):45-50.
- Atassi F, Awartani F. Oral hygiene status among orthodontic patients. J Contemp Dent Pract. 2010 Jul 1;11(4):25-32.
- Al-Zahrani MS, Borawski EA, Bissada NF. Periodontitis and three health-enhancing behaviors: Maintaining normal weight, engaging in recommended level of exercise, and consuming a high-quality diet. Journal of periodontology. 2005 Aug;76(8):1362-6.
- Axelsson P, Albandar JM, Rams TE. Prevention and control of periodontal diseases in developing and industrialized nations. Periodontology 2000. 2002 Apr;29(1):235-46.
- Badrasawi MM, Hijjeh NH, Amer RS, Allan RM, Altamimi M. Nutrition Awareness and Oral Health

any commercial purposes, nor the identity of the respondent will be made public in any way.

among Dental Patients in Palestine: A Cross Sectional Study. International journal of dentistry. 2020 Feb 26;2020.

- Barnabas U. Gender difference in oral health perception and practices among Medical House Officers. Russian open medical journal. 2012;1(2).
- Behbehani JM, Shah NM. Oral health in Kuwait before the Gulf War. Medical Principles and Practice. 2002;11(Suppl. 1):36-43.
- Christou V, Timmerman MF, Van der Velden U, Van der Weijden FA. Comparison of different approaches of interdental oral hygiene: interdental brushes versus dental floss. Journal of periodontology. 1998 Jul;69(7):759-64.
- Delwel S, Binnekade TT, Perez RS, Hertogh CM, Scherder EJ, Lobbezoo F. Oral hygiene and oral health in older people with dementia: a comprehensive review with focus on oral soft tissues. Clinical oral investigations. 2018 Jan 1;22(1):93-108.
- Genco RJ, Grossi SG, Ho A, Nishimura F, Murayama Y. A proposed model linking inflammation to obesity, diabetes, and periodontal infections. Journal of periodontology. 2005 Nov;76:2075-84.
- Gupta S, Rani S, Garg S. Infection control knowledge and practice: A cross-sectional survey on dental laboratories in dental institutes of North India. The Journal of the Indian Prosthodontic Society. 2017 Oct;17(4):348.

- 14. Johani HA. Oral hygiene practice among Saudi patients in Jeddah. Cairo Dent J. 2008;24:395-401.
- 15. Kawamura M, Tsurumoto A, Fukuda S, Sasahara H. Health behaviors and their relation to metabolic control and periodontal status in type 2 diabetic patients: a model tested using a linear structural relations program. Journal of periodontology. 2001 Sep;72(9):1246-53.
- Khami MR, Virtanen JI, Jafarian M, Murtomaa H. Oral health behaviour and its determinants amongst Iranian dental students 1. European journal of dental education. 2007 Feb;11(1):42-7.
- Koyuncuoğlu CZ, Kazak M, Pamuk F, ÇİFCİBAŞI E. Oral hygiene habits and oral health status of female adolescents under state protection: A pilot study. Journal of Istanbul University Faculty of Dentistry. 2017 Jan 2;51(1):1.
- Marsh PD. Contemporary perspective on plaque control. British dental journal. 2012 Jun;212(12):601-6.
- Mobley CC. Nutrition and dental caries. Dental Clinics of North America. 2003 Apr 1;47(2):319-36
- 20. Murthy GA, Mohandas U. The knowledge, attitude and practice in prevention of dental caries amongst pediatricians in Bangalore: A cross-sectional study. Journal of Indian Society of Pedodontics and Preventive Dentistry. 2010 Apr 1;28(2):100.
- 21. Oberoi SS, Mohanty V, Mahajan A, Oberoi A. Evaluating awareness regarding oral hygiene practices and exploring gender differences among patients attending for oral prophylaxis. Journal of Indian Society of Periodontology. 2014 May;18(3):369.

- 22. Peter S. Textbook of Public Health Dentistry. Chapter. 2011;14:237.
- Petersen PE, Yamamoto T. Improving the oral health of older people: the approach of the WHO Global Oral Health Programme. Community dentistry and oral epidemiology. 2005 Apr;33(2):81-92.
- 24. Petersen PE, Aleksejuniene J, Christensen LB, Eriksen HM, Kalo I. Oral health behavior and attitudes of adults in Lithuania. Acta Odontologica Scandinavica. 2000 Jan 1;58(6):243-8.
- 25. Saleh F, Dyer PV. A questionnaire-based survey of patient satisfaction with dental care at two general dental practice locations. Primary Dental Care. 2011 Apr(2):53-8.
- 26. Sanders TA. Diet and general health: dietary counselling. Caries research. 2004;38(Suppl. 1):3-8.
- Scardina GA, Messina P. Good oral health and diet. Journal of Biomedicine and Biotechnology. 2012 Jan 1;2012.
- 28. Schillinger T, Kluger W, Exner M, Mlekusch W, Sabeti S, Amighi J, Wagner O, Minar E, Schillinger M. Dental and periodontal status and risk for of carotid progression atherosclerosis: the inflammation and carotid artery for risk atherosclerosis study dental substudy. Stroke. 2006 Sep 1;37(9):2271-6.
- Steele JG, Walls AW, Ayatollahi SM, Murray JJ. Dental attitudes and behaviour among a sample of dentate older adults from three English communities. British dental journal. 1996 Feb;180(4):131-6.