ORIGINAL ARTICLE

Awareness and Practices of Patients Regarding Oral Hygiene Visiting Dental OPD Sharif Medical and Dental College, Lahore

AQIB SOHAIL¹, ANEELA AMJAD², MARIA JABBAR³, MEHWISH MUNAWAR⁴, AMNA NAUMAN⁵, NIGHAT ZAHID⁶

¹Principal/Dean and HOD Oral and Maxillofacial Surgery Department, Lahore Medical and Dental College, Lahore.

²Associate Professor, of Oral Medicine and Diagnostics, Lahore Medical and Dental College, Lahore.

³Dental Surgeon

⁴Assistant Professor of Operative Dentistry, Azra Naheed Dental College, Lahore

⁵Professor of Community and Preventive Dentistry, Sharif Medical and Dental College, Lahore.

⁶Associate Professor of Oral and Maxillofacial Surgery, Lahore Medical and dental College, Lahore. Correspondence to Dr Aneela Amjad Email: aneelaamjad.aa@gmail.com, Phone: 03004234903

ABSTRACT

Background: Oral cavity related disorders are a serious public health issue because they have a direct influence on the person's quality of life and add load to healthcare setup. The current study was done to assess the oral hygiene knowledge and routine followed by the habitants of Lahore city.

Aim: To assess the oral health awareness, and practices in patients coming dental OPD Sharif Medical and Dental College, Lahore

Methodology: This study was conducted among participants coming dental OPD of Sharif Medical and Dental College, Lahore from March to August 2021. A questionnaire was given to all visited patients. The patients from both rural as well as urban background were selected.

Results: The outcomes of the study revealed 35% people brush their teeth and 15% use miswak for cleaning, 5% use charcoal while 40% are not bothered about oral hygiene and hence do not clean their teeth at all. Majority of the subjects (80%) go to the dentist in case any dental issue occurs.

Conclusion: There is absence of oral health awareness, inadequate knowledge of oral cleanliness practices and their outcome on general wellbeing. There is an imperative necessity for elaborated awareness plans to encourage healthy oral health among general population.

Keywords: Awareness, practice, oral hygiene.

INTRODUCTION

Oral health is now considered to be equally significant as systemic health. The oral cavity reflects the general health as being the "mirror" and gateway to the body. Knowledge related to oral health must begin with understanding the dynamics of oral cavity. Oral health is not only strong teeth influencing people physically and psychologically, but has influence on their development, function, communication, appearance, and socialization¹. According to the World Health Organization (WHO), "Promotion of oral health is a cost-effective strategy to minimize the burden of oral ailment and sustain oral wellbeing and standard of life".

Oral disorders are a serious community wellbeing issue because of the increased incidence and their impact on the person's quality of life. Gingival problems, tooth decay, maligned teeth, and cancerous conditions are included in the top predominant oral diseases that involve the population worldwide ⁽²⁾. A significant number of above mentioned problems can be controlled at personal and at population stage by explaining the significance of good oral health; that in turn will result a change in oral health approach and practices at community level. For instance, correct brushing technique is vital for maintaining the health of oral cavity and gums efficiently. It aids in keeping the esthetics and function of dentition.

For better understanding and treatment of diseases related to oral cavity, it is important to identify the causative factors involved in the etiology. To deliver better health services, it is mandatory to be aware of the traditions being followed and practices of the community you are dealing with³. As majority of the population belonging to low privileged countries cannot have direct approach to dental services and other elements as having low earnings and being uneducated, still the main associated causes remain absence of oral hygiene knowledge along with fabricated society opinions¹⁴. Oral health must be way beyond flawless dentition and absence of halitosis. Maintaining ideal oral hygiene is not only important for good overall health and relief from the pain and misery related with oral disease; it also improves self-worth,

Received on 05-11-2021 Accepted on 03-03-2022 quality of life, and efficiency at personal or professional level⁴. Even after the introduction of several oral wellbeing activities being initiated by official and personal level organizations, oral health situations of community remains at risk which is directly linked with knowledge, attitude and awareness of population towards oral health⁵.

Proper understanding of oral hygiene should be vital for behaviors linked with health, though mere relationship exist between knowledge and behavior in cross- sectional studies, nonetheless studies revealed there is an link between knowledge and better oral health⁶. While numerous studies have been conducted frequently to evaluate the knowledge and behavior of people about oral health, there is still a lack of education concerning the same especially for rural people¹³.

This study will help us to identify the absence of awareness and poor practices associated with oral hygiene being carried out at community level. So that we can implement suitable developments in term of oral health awareness programs to improve the overall oral hygiene at the community level.

METHODS AND MATERIALS

It is a cross sectional descriptive hospital setting study. Sample size was calculated using online calculator keeping confidence level 95%, precision value 0.05 and anticipated population was 0.75¹⁰. The study was conducted on 289 patients visiting dental OPD from March to October 2021. All subjects were selected by using non-probability convenient sampling technique and interviewed on a structured close ended questionnaire.

Inclusion Criteria: Patients above 15 years of age irrespective of gender

Exclusion Criteria: Patients suffering from maxillofacial trauma and patients having dental emergencies

Data Collection Procedure: After approval of proposal from the ethics committee of Sharif Medical and Dental College, a pre-validated questionnaire from reference study with reliability score of 0.719 was used¹³. The questionnaire had 12 questions. The question 1-6 were pertaining to awareness and question 7-12 were used to assess practices. The questionnaire was filled by qualified

house officers working in the department of oral medicine and diagnosis. Questionnaire had following variables:

Frequency of teeth cleaning using a brush, Kind of dentifrices selected, Length of dental visit for examination, Gender and age, frequency of pan gutka chewing, frequency of tongue cleaning.

Data Analysis Procedure: The collected data was statistically analyzed using SPSS software version 24. Categorical data like age (in groups) gender were expressed in frequency and percentage and results obtained. There were sections in questionnaire;

Section 1: Demographics: Section 1 Had questions regarding demographics of the participants including name, age, and gender. Section 2: Awareness Questions: Section 2 Comprised of six questions in which question 1 to 6 were used to assess awareness Scoring for Awareness Question: For awareness a score of 0 was marked as 'no', a score of 1 was marked as 'don't know', and a score of 2 was marked as 'yes'. Reverse scoring was used for negatively framed questions which means a score of 0 was given to 'yes', 1 as 'don't know' and 2 to 'no' (¹¹). This way a respondent scored a maximum of 12 and minimum of 0 in awareness section. On the basis of these scores, the awareness was classified as poor (0-4), bad (5-8), good (9-12)¹¹.

Section 3: Practice Questions: Section 3 Comprised of six questions in which question 7-12 were used to assess practices

Scoring for Practices Question: For practices a score of 0 was marked as 'no', a score of 1 was marked as 'don't know', and a score of 2 was marked as 'yes'. Reverse scoring was used for

negatively framed questions which means a score of 0 was given as 'yes', 1 as 'don't know' and 2 to 'no' $^{(11)}$. This way a respondent scored a maximum of 12 and minimum of 0 in practice section. On the basis of these scores, the practice was classified as poor (0-4), bad (5-8), good (9-12)¹¹.

RESULTS

Chi square test was used to check the statistical correlation among frequency of teeth cleaning using a brush, kind of dentifrices selected, Length of dental visit for examination, frequency of pan gutka chewing, frequency of tongue cleaning with Gender and age (in groups).

The study population included 150 (51.91%) male and 139 (48.09%) women patients, the mean age of the selected individuals was 45.8±16.2 (Range 15-70) years with man to women ratio of 1:1.4 (Table 1). Frequency of teeth cleaning is given in Table 2. Particulars regarding practicing various dentifrices are shown in Table 3, whereas regularity of mouth examination is given in Table 4.

Table 1: Gender of the participants:

Gender	Incidence	Percentage %
Man	150	51.91
Women	139	48.09
Aggregate	289	100

Table 2: Frequency of teeth cleaning using a brush:

Gender	One time a day	Two times a day	Three times a day	None	Aggregate
Man	110	8	2	30	150
Women	90	30	2	17	139
Aggregate	200	38	4	47	289

Table 3: Practice of using various teeth cleaning agents & dental floss in participants

Gender	Tooth paste	Mouth wash	Tooth powder	Dental floss	Others	Aggregate
Man	100	5	10	5	30	150
Women	120	10	5	2	2	139
Aggregate	220	15	15	7	32	289

Table 4: Frequency of dental examination

Gender	Quarterly	Bi annually	Others	Aggregate
Man	40	20	90	150
Women	60	50	29	139
Aggregate	100	70	119	289

DISCUSSION

Maintaining good oral health is of prime consideration in community. The appropriate tooth brushing routine is reflection of motivated oral health attitude as compared to consuming lots of carbohydrate containing foods and lack of tooth brushing reflects negative health behavior. Regular cleaning of the plaque is essential for the preservation of ideal oral and dental health⁷. A consensus statement on oral hygiene showed that bacterial plaque is a causative factor of dental caries, halitosis and gingival disorders; also regular cleaning of dental plaque results in the stoppage or elimination of them¹⁰. Manual cleaning of the teeth is reflected as a suitable mean of plaque prevention, subject to the fact that cleaning is done meticulously and done on a regular basis¹⁷.

The current study revealed that maintaining good oral hygiene by cleaning teeth with brush and paste was highly frequently followed technique of keeping the oral cavity clean (85.28%) and the participants agreed to the fact that maintaining good oral health is an essential step to keep good systemic health as well, that is significantly different than the research carried out at Maulana Azad Institute of Dental Sciences, New Delhi (60.4%). On the other hand, the result of current research is nearly the same to the research carried out by Ali et al (83%) in Karachi.⁽⁸⁾Cleaning of teeth using brush in women (90.8%) was more in comparison to the men (82%) in the present study which

was almost identical to the results of Almas et al¹¹. The cause for the higher percentage of tooth brushing, particularly found in females related to the fact females are more concerned about their appearance and are more aware about presentation particularly the smile. Another research at New Delhi, where females (89.7%) cleaned their teeth with brush as compared to men (81.6%) matches the results shown in our research reason being our country has similar socioeconomic and social norms as followed in neighboring country as well as other low privileged areas⁹. Local study conducted at Multan reflects dental floss practice (14.7%) very alike to our study (16%) in comparison to the dental floss usage percentage is greater in comparison to the study carried out by Al-Omiri et al in North Jordon where dental floss usage showed (5%), reflecting the absence of oral hygiene knowledge, and awareness about the use of other measures to keep teeth clean¹². Current research showed mouth wash usage (3.21%) very low as compared to the results of the study carried out in Multan (14.5%). Current study showed the number of those patients who went to dental OPD for regular dental examinations and prevention was (15.7%) (53 males and 2 females) that match the study done in Multan where (18.2%) (Man 45.5%, Women 51.4%) of study participants had gone to dentist in the past 6 months¹⁴.)Study conducted in Jodhpur, India concluded 58% of the people went to dental surgeon in case of pain while Nabil Al-Beiruti shared 67.5% of the respondent reporting dental surgeon in case of pain. While

this study was completed in a teaching hospital, where large number of the patients were residents of urban areas but ratio of women was significantly lower in comparison to men because of cultural as well as traditional restraints and poor socioeconomic status¹⁸.

CONCLUSION

Confining to the boundaries of our study, it is therefore established that there is a lack of awareness regarding keeping good oral hygiene amongst the patients visiting OPD and their oral hygiene practices and routine to visit dentist need to be modified and improved. Findings of current study reflected the fact that, awareness and practices related to oral wellbeing and hygiene in the respondents of the current study were not satisfactory in general, whereas belonging to the similar set up, women were more conscious and followed two times daily teeth cleaning with brush in comparison to men

The following recommendations and suggestions can be given for the development and better implementation of awareness:

- 1. Oral health educational programs must be conducted for the awareness of the people across the community
- Younger population group particularly school going children should be taught oral hygiene knowledge to improve and cultivate oral hygiene practices on regular basis.
- 3. Mentors and parents should play a key role in encouraging healthy oral habits among children.

Limitations: Further research is required to evaluate the outcomes of good oral health habits and to detect the causes of not visiting the dentists despite of having oral hygiene issues. Conflict of interest: None Funding sources: None

REFERENCES

- Bana KM, Ahmad F, Danish SH, Bana NF, Kazmi AR. Non communicable diseases and oral health: Introspection. Pak J Med Dent. 2016;5(2):38-44
- Pitts NB, Zero DT, Marsh PD, Ekstrand K, Weintraub JA, Ramos-Gomez F, Tagami J, Twetman S, Tsakos G, Ismail A.Dental caries. Nat Rev Dis Primers. 2017;3:17030
- Frencken JE, Sharma P, Stenhouse L, Green D, Laverty D,Dietrich T. Global epidemiology of dental caries and severeperiodontitis-a comprehensive review. J Clin Periodontol.2017; 44:S94
- Younus A, Qureshi A. Tooth brush changing frequency and associated socio-demographic and oral hygiene factors amongresidents of Karachi. J Dent Oral Hyg. 2016;8(2):4-11.

- Ahmed ZU, Shafiq K, Wali A, Siddiqui TM, Usman A.Knowledge, attitude and practices of oral health amongst low socioeconomic strata of Sindh. Pak Oral Dent J. 2016;36(4):628
- Verma S, Deepak U, Misra N, Saran G, Banerjee A, Jaiswal S. Cleaning Aids in Dentistry: A Cognizant Survey. J Adv Med Dent Sci Res. 2019;7(1):14-6.
- Umanah AU, Braimoh OB. Oral hygiene practices and factors influencing the choice of oral hygiene materials among undergraduate students at the University of Port Harcourt, Rivers State, Nigeria. J Dent Allied Sci 2017;6:3-7
- Kassebaum NJ, Bernabé E, Dahiya M, Bhandari B, Murray CJ, Marcenes W.Global burden of untreated caries: systematic review and metaregression. J Dent Res. 2015;94(5):650.
- Goryawala SN, Chavda P, Udhani S, Pathak NV, Pathak S, Ojha R. A survey on oral hygiene methods practiced by patients attending Dentistry Department at a Tertiary Care Hospital from Central Gujarat. J Int Soc Prev Community Dent. 2016;6(2):115.
- Jain N, Mitra D, Ashok KP, Dundappa J, Soni S, Ahmed S. Oral hygiene-awareness and practice among patients attending OPD at Vyas Dental College and Hospital, Jodhpur. J Indian Soc Periodontol 2012;16:524-8
- Mangla M, Sharma P, Srivastava N, Raza M, Nafees N, Negi A. Oral health awareness among different professionals. Int J Adv Res. 2017;5:1529-41. Nagarajappa R, Sahare P, Shukla N, Tuteja J, Bhalla A. Knowledge, attitude and practices regarding oral health among out patients at Rama Dental College, Kanpur. Rama Univ J Dent Sci. 2015;2(1):8-14.
- Prusty U. Oral Hygiene–Knowledge, Attitude and Practice among the Health Worker (ANM/ASHA) of Kamrup (Metro) District in North East Region of India. J Tradit Med Clin Natur. 2017;6(215):2.
- Wahengbam PP, Kshetrimayum N, Wahengbam BS, Nandkeoliar T, Lyngdoh D. Assessment of oral health knowledge, attitude and selfcare practice among adolescents-A state wide cross-sectional study in Manipur, North Eastern India. Journal of clinical and diagnostic research: JCDR. 2016 Jun;10(6):ZC65.
- Nagarajappa R, Sahare P, Shukla N, Tuteja JS, Bhalla A. Knowledge, attitude and practices regarding oral health among out patients at Rama dental college, Kanpur. Rama Univ J Dent Sci. 2015 Mar;2(1):8-14.
- 15. Jhon J, Oral hygine index; Textbook of Preventive and Community Dentistry. SS Hiremath Second Edition
- 16. Al-Omiri MK, Al-Wahadni AM and Saeed KN. Oral health attitudes, knowledge, and behavior among school children in North Jordan. J Dent Educ 2018; 70: 179-87.
- Oberoi SS, Mohanty V, Mahajan A, Oberoi A. Evaluating awareness regarding oral hygiene practices and exploring gender differences among patients attending for oral prophylaxis J Indian Soc Perio. 2017; 18(3): 369-74.
- 18 Tada A, Hanada N. Sexual differences in oral health behavior and factors associated with oral health behavior in Japanese young adults. Public Health. 2018; 118: 104-09.