



ORAL HYGIENE

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Article received on:

23/04/2013

Accepted for Publication:

20/09/2013

Received after proof reading:

06/02/2014

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ABSTRACT... Objective: To observe the status of oral hygiene and its association with other factors in patients visiting Hamdard University Dental Hospital. **Study Design:** It was a descriptive type of study. **Place and Duration of study:** The study was carried out at Hamdard University Dental Hospital, Karachi. Total duration of this study was one year. **Methodology:** Non probability purposive sampling technique was used. Total 581 patients were included in this study, after taking consent structured questionnaire was administered to evaluate information from all patients. Then patients were divided into three groups on the basis of their oral hygiene status. **Results:** In this study 228 were males while 353 were females. In males only 6.1% patients had good oral hygiene while 28.5% & 62.2% had fair and poor oral hygiene respectively. In females 8.2% had good oral hygiene while 39.6% & 18.13% had fair and poor oral hygiene respectively. Among males 88.1% use tooth brush while 3.5% use finger for teeth cleaning while in females this ratio was 91.7% & 3.3%. **Conclusions:** In males frequency of poor oral hygiene was comparatively high which may be linked to smoking and dietary habits.

Key words: Tooth brush, oral hygiene, smoking, brushing habits.

Article Citation: Hussain M, Hasan SI, Khan M, Arsalan A, Tabassum S. Oral hygiene status in patients visited Hamdard University Dental Hospital. Professional Med J 2014;21(1): 066-069.

INTRODUCTION

Good oral hygiene is an indicator for good body health, poor oral hygiene not only affect the oral cavity but also a risk factor for initiation of many systemic diseases. Presence of dental plaque is an indicator of poor oral hygiene and if not treated properly can change into dental calculus which will further deteriorate the situation. Environmental factors such as culture, socioeconomic status, life style and diet pattern have a great influence on maintaining good oral hygiene¹.

There are numerous techniques used to determine the oral hygiene status now a days, proper oral examination along with use of standard questionnaire is a very useful method to determine oral hygiene. Certain indices like Oral Hygiene Index (OHI), Gingival Index (GI), Community Periodontal Index (CPI), and the Gingivitis-Periodontitis-Missing/Teeth Index (GPM/T), Decayed, Filled and Missing tooth

surfaces (DMFS) are the some commonly employed indices to determine oral hygiene².

Tooth brushing is one of the effective tool in removal of dental plaque, numerous factors like frequency of brushing, technique, type of tooth brush, selection of dentifrices all are very important in this regard. Addition of specific elements like essential oils will further enhance the action of dentifrices³.

Addition of fluoride in dentifrices will further enhance their action and various studies shows marked improvement in oral hygiene status as compare to conventional dentifrices without fluoride⁴.

Selection of tooth brush and brushing technique are also important factors for maintaining good oral hygiene, special designed tooth brush at young or old age can be more effective then

conventional fabricated tooth brush, use of special designed software for tooth brushing is also recommended for achieving better oral hygiene^{5,6}.

Apart from health care providers, professionals from other fields like teachers after proper training can also be involved in various dental education programs at regional and national level⁷.

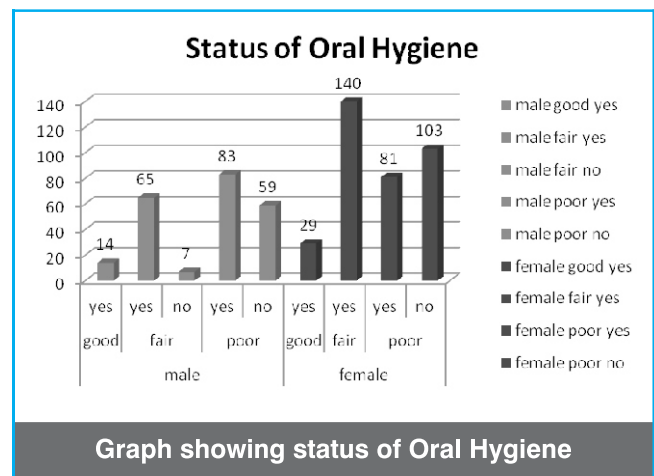
In this study randomly selected patients visited Hamdard University Dental Hospital (HUDH), Karachi were examined and divided into various groups on the basis of their oral hygiene status by using criteria designed by Wilkins 8 and pattern of oral hygiene along with its relation with tooth brushing was evaluated.

MATERIALS AND METHOD

It was a descriptive study, total 581 patients with age range from 24-74 years reported to HUDH were included in this study by using non probability purposive sampling technique. The duration of this study was one year. After taking consent, history and examination was carried out for every patient and structured questionnaire was used to observe status of oral hygiene along with its relation with tooth brushing and then categorizing patients into three groups on the basis of good, fair and poor oral hygiene respectively. The data was collected and statistical analysis was performed using SPSS software.

RESULTS

Total 581 patients were included in this study, out of these patients 228 were males while 353 were females. In males only 6.1% patients had good oral hygiene while 28.5% & 62.2% had fair and poor oral hygiene respectively. In females 8.2% had good oral hygiene while 39.6% & 46.4% had fair and poor oral hygiene respectively. Among males 88.1% use tooth brush while 3.5% use finger for teeth cleaning while in females this ratio was 91.7% & 3.3%. In males 13.5% patients had smoking habits and in female this was only 0.56%.



DISCUSSION

Oral hygiene is not only influenced by type of tooth brush but brushing technique, tooth paste, dietary habits and various environmental factors also play an important role in maintaining oral hygiene as well. Use of various indices and questionnaire are documented in various studies on oral hygiene.

Total patients 581	Gender	Good	%	Fair	%	Poor	%
	Male	14	6.1	65	28.5	142	62.2
	Female	29	8.2	140	39.6	64	18.13

Table-I. Status of oral hygiene in patients visited HUDH.

Total patients 581	Gender	Tooth Brush	%	Finger	%
	Male	201	88	8	3.5
	Female	324	91.7	12	3.3

Table-II. Status of oral hygiene in relation with tools of cleaning mouth

Total patients 581	Gender	%	Smoking	%
Male	228	39.2	31	13.5
Female	353	60.7	02	0.56

Table-III. Status of oral hygiene in relation with habits

Tanvir et al⁹ used questionnaire to evaluate oral hygiene status in adult population of Karachi and found that majority of the patients had poor oral hygiene like in our study.

Kalem et al in his study conducted at CMH, Rawalpindi found that majority of the patients used tooth brush like in our study, he also observed that as smoking is more common in males, there are more cases of poor oral hygiene in males as compare to females which is also similar to our study as well¹⁰.

Hommata et al¹¹ evaluated oral hygiene status in Greek population and found that 52.1% had good oral hygiene status, 39.8% fair and 8.1% poor, while in our study this was 7.4%, 35.25 & 52.6% respectively which is in contrast to their study. In our study 90.3% patients used tooth brush while in their study this was 79%.

Jain et al observed in their study conducted at Jodhpur, India that there was an acute lack of awareness regarding oral hygiene in selected adult patients which reflected in their study by a fact that very few patients used tooth brush¹².

Gupta et al¹³ did their study in younger population of Southern India and found that they have better awareness of oral hygiene and majority of them were used tooth brush like in our study. In our study only 3.4% patients used finger in spite of tooth brush while contrast to our study Tanvir et al in their study conducted in adult population of Karachi found that 27% used fingers for oral hygiene. This may be due to fact that they conducted their study in that population which did not visit dental hospital regularly¹⁴.

In our study despite of the fact that majority of the patients used tooth brush for oral hygiene but still

had poor oral hygiene may be due to the fact that their tooth brushing technique, frequency, diet selection and habits were not appropriate. Smoking is a detrimental factor for good oral hygiene, as smoking habits are more common in males in our region, so higher percentage of males have poor oral hygiene as compare to female gender, which is also observed in our study as well.

This study is conducted only at one centre, no significant data is available regarding oral hygiene of rural population of Pakistan. There is an immense need to conduct such study not only in rural areas of Pakistan but also in other cities of Pakistan, so that significant data is available at national level to formulate dental health policies. In this regard media can also play an important role regarding creating awareness about importance of oral hygiene, brushing technique, selection of tooth brush and dietary habits¹⁵.

CONCLUSIONS

Despite of high frequency of tooth brushing, awareness of oral hygiene is still not adequate. This may be due to faulty tooth brushing technique, improper selection of tooth brush and tooth paste, frequency of brushing and dietary factors. However if these are adequate environmental factors like culture, socioeconomic status, life style and dietary pattern can also have an influence on oral hygiene. It is concluded that good oral hygiene is the collective effect of all above mentioned factors.

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REFERENCES

1. ur Rehman MM, Mahmood N, ur Rehman B. **The relationship of caries with oral hygiene status and extra-oral risk factors.** J Ayub Med Coll Abbottabad 2008; 20(1):103-8.
2. Mariño R, Morgan M, Kiyak A, Schwarz E, Naqvi S. **Oral health in a convenience sample of Chinese older adults living in Melbourne, Australia.** Int J Public Health 2012; 57: 383-90.
3. Kraivaphan P, Amornchat C. **Effect of an essential oil-containing dentifrice on established plaque and gingivitis.** Southeast Asian J Trop Med Public Health 2012; 43(1): 243-8.

4. Zohoori FV, Duckworth RM, Omid N, O'Hare WT, Maguire A. **Fluoridated toothpaste: usage and ingestion of fluoride by 4- to 6-yr-old children in England.** Eur J Oral Sci. 2012;120: 415-21.
5. Ghassemi A, Vorwerk L, Hooper W, Patel V, Sharma N, Qaqish J. **Comparative plaque removal efficacy of a new children's powered toothbrush and a manual toothbrush.** J Clin Dent 2013; 24: 1-4
6. Graetz C, Bielfeldt J, Wolff L, Springer C, El-Sayed KM, Sälzer S, Badri-Höher S, Dörfer CE. **Tooth brushing education via a smart software visualization system.** J Periodontal 2013; 84: 186-95.
7. Haleem A, Siddiqui MI, Khan AA. **Oral hygiene assessment by school teachers and peer leaders using simplified method.** Int J Health Sci (Qassim). 2012; 6(2): 174-84.
8. Wilkins EM. **Planning for Dental Hygiene. Clinical Practice of the Dental Hygienist.** 10th ed. China: Lippincott Williams & Wilkins 2009; 353-67.
9. Tanwir F, Altamash M, Gustafsson A. **Perception of oral health among adults in Karachi.** Oral Health Prev Dent. 2006;4(2):83-9.
10. Kaleem M, Nazir R, Rafi S, Manzoor MA. **Association Between Cigarette Smoking and Periodontitis in Pakistani Population.** Pak Oral Dent J 2009; 29(2): 345-52.
11. Mamai-Homata E, Polychronopoulou A, Topitsoglou V, Oulis C, Athanassouli T. **Periodontal diseases in Greek adults between 1985 and 2005--risk indicators.** 2010 Int Dent J 2010; 60: 293-9.
12. 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(4): 524-8.
13. Gupta T, Sequeira P, Acharya S. **Oral Health Knowledge, Attitude and Practices of a 15-year-old Adolescent Population in Southern India and Their Social Determinants.** Oral Health Prev Dent 2012; 10: 345-54.
14. Tanwir F, Altamash M, Gustafsson A. **Influence of betel nut chewing, dental care habits and attitudes on perceived oral health among adult Pakistanis.** Oral Health Prev Dent. 2008;6(2):89-94.
15. Zini A, Sgan-Cohen HD, Vered Y. **Media exposure and oral health outcomes among adults.** Quintessence Int 2013; 44: 147-56.

“There is always room at the top.”

Daniel Webster