ORAL HYGIENE PRACTICES- A SURVEY

¹MUNESH PAL KHAMUANI, ²RIDA AMNA, ³SABEEN MASOOD, ⁴YOUSUF ALI LAKDAWALA ABSTRACT

The purpose of the study was to evaluate and analyze the oral hygiene condition and practices among the patients seen at Dental Outpatient Department of Altamash Institute of Dental Medicine, Karachi. It was carried out from mid-January, 2018 to mid-February, 2018. A description based cross-sectional survey was carried out on 100 patients. Patients were asked their name, age, gender, occupation, employment, education and residential area and were recorded in the questionnaires. It was further categorized to evaluate the knowledge, awareness, practices, and behavior pattern associated with oral hygiene. Among all participants (60) were female and (40) were male. Study showed that toothbrush and toothpaste (94%) were the main products used for the maintenance of oral hygiene. Only 6% of the people used other oral hygiene aids.

Key Words: Oral Hygiene, Practices, Role of education, methods

INTRODUCTION

The knowledge of oral hygiene is considered essential for wellness-related behavior.¹ The oral health is now recognized as equally important in association to general health.² Obeying the directive of proper oral hygiene is of primary importance in the prevention of dental caries and periodontal diseases.³ Various aspects like nutritional standing, tobacco smoking, alcohol, stress etc are linked to a wide range of oral diseases.^{4,5} The best way of maintaining good oral hygiene is by "Plaque Control" since plaque is the major factor responsible for dental and gingival diseases. Toothbrushes and toothpastes are the most widely used oral hygiene aids.⁷ Although using a toothbrush significantly improves the level of oral hygiene, there are many other contributing factors such as dental flossing and mouth rinsing etc.⁸

METHODOLOGY

A descriptive cross-sectional hospital-based survey was carried out during mid-Jan to mid-Feb 2018 on the patients visiting Altamash Dental Hospital's outpatient department (OPD). The Ethics Committee of the Institute supervised the study protocols. Participants gave consent and were also informed that their participation in the study will be anonymous, voluntary, and non-compulsory. There was no intervention involved as it was a descriptive study. As a result, there was less than minimal risk to all the participants.

All new patients attending dental OPD in the age group of 18-50 years and giving consent to participate in the study were included.

For accessing oral hygiene knowledge and awareness among patients (n = 100) seeking dental care, a cross sectional study was carried out. Only those patients were included in the study who agreed to participate and visited the dental hospital during the study period, till the estimated sample size was reached. In all a total of 100 patients were involved in the current study with the response of 100%.

A closed ended questionnaire consisting of 16 questions in English language was made and distributed among the patients. Patients from both rural and urban population were included in the research which sums up to that both educated and illiterate groups were taken in account in the age group of 18 to 50 years. A dental hygienist guided the illiterate patients in filling up the forms.

The questionnaire was in two parts:

Part 1: Demographic details of the study participants. Part 2: Information about practice of oral hygiene methods and awareness.

As the patients waited in the waiting area of the Department of Periodontology they were given the questionnaires. A dental hygienist was present with

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the patients as they filled the questionnaires to make sure that the responses have not been discussed and they understood it clearly. In order to complete the questionnaire 10 minutes were given after distribution. Results were subjected for statistical analysis.

Variables recorded in the study were oral hygiene maintenance material, duration of use, frequency of use, changing of brush, method of brushing, secondary method of cleaning, use of floss, halitosis, tongue cleaning material used to clean tongue, use of mouthwash, selection criteria of toothpaste, frequency of dental visits, personal opinion on visiting dentists, knowledge about relation to systemic health.

The data were first transferred to Microsoft Excel and the results were analyzed by using SPSS statistical software in terms of percentages.

RESULTS

The present study was carried out on 100 patients. Among them, 40% were males and 60% were females. Patients were further divided on the basis of age groups; group 1 (G1) being 18-25 years and group 2 (G2) 26-50 years old. Highest proportion was from group 2 females. Distribution of patients according to age and gender is in fig 1.

The detailed educational, work and social status distribution is shown in the table 1. Showing the maximum number of undergraduate/graduates in group 1 females, highest unemployment rates in group 1 females and the most underprivileged being the group 2 females.

On evaluation, it was revealed that the oral hygiene aids show notable difference among different patient groups. Most of the patients which included both males and females were in favour of toothbrush and toothpaste while only 6% females opted for other cleaning aids like finger and miswak. It was further observed that most of the patients brushed their teeth twice daily (50%), 38% brushed once daily and 12% patients brushed more than twice a day. Moreover, most of the patients (48%) brushed for 2-5 minutes, while 40% for 1 minute and 12% brushed less than a minute. Besides, 68% of patients changed their toothbrush once in every three months, 16% changed it within a month, 10% changed it once in six months, 4% changed it every year and 2% changed it when the bristles were frayed.

In addition to this, combined brushing technique was used by 68% participants. Nonetheless, 18% used horizontal, 12% used vertical and 8% used circular brushing method.

It was evaluated that 44% participants used toothpicks as secondary mode of plaque control and 16% used dental floss. However, only 10% used interdental brush and 30% used no aid. Also, 54% participants did not use a dental floss, 32% used it occasionally, 10% used it once daily and 4% flossed twice daily. Evaluation of halitosis showed 68% of clients had no halitosis while the rest 32% did feel bad breath from their oral cavity.

Tongue cleaning is also considered one the remarkable aspects of cleaning oral cavity. 70% of the participants cleaned their tongue whilst the rest 30% did not. Furthermore, 58% of the participants performed tongue cleaning by using a toothbrush, 6% used a tongue cleaner, 6% used finger and 30% were those who did not clean their tongue. It was also noticed that 48% patients never used a mouthwash, 28% used it once a week whereas 24% used it only when prescribed by the dentist.

Selection of toothpaste, according to 32% of the participants was based on fluoride content. On the other hand, 26% selected on the basis of pleasant taste, 14% dentist recommendation, 12% advertisement, 10% packaging and 6% on cost.

It is surprising that around 62% of the total population visit the dentist only when in problem whilst only 16% of the patients visit the dentist once in 6 months and 4% patients visited a dentist once in a year. Moreover, 18% patients did not even feel the need to visit a dentist. Nevertheless, 72% participants think it is essential to visit dentist every six months whereas, 28% think it is not mandatory. Regarding the association between oral health and systemic health, 6% of the patients did not have any idea while 94% of the participants did have some knowledge.

Lastly, the results of the study pointed out that educational level was one of the most important factors that governed the knowledge, perspective and behaviour of the people.

DISCUSSION

Around the world, a variety of methods are used by people to maintain their oral hygiene. Contemporary



TABLE 1					
	MALES		FEMALES		
	G1	G2	G1	G2	
Secondary Education	8	8	8	14	
Undergraduate/Graduate	12	12	20	18	
Employed	4	20	0	6	
Unemployed	16	0	28	26	
Privileged	10	8	16	14	
Underprivileged	10	12	12	18	

oral hygiene materials include toothpastes, toothbrushes, dental floss, tongue cleaners and mouthwashes. Basic prodigy is to clean all surfaces of teeth so the bacterial growth is decreased and oral diseases are arrested.⁹

In the present study, efforts were made to assess different measures taken by studied population to maintain their oral hygiene and to test their knowledge of relation between oral and systemic health. Although, all the participants cleaned their teeth on regular basis but still our study has shown little awareness on prevention and preventive dental behavior.¹⁰

The relationship between dental service utilization and main demographic variables e.g., age, sex, address, education and occupation are discussed in this study.¹¹

This study included 60 females participants and 40 male participants. All of these subjects cleaned their teeth regularly, with brushing being the most common mode of cleaning. Along with this, 94% of the patients cleaned their teeth using toothbrush and toothpaste. Out of these, 50% cleaned their teeth twice daily, 38% once daily and 12% cleaned more than twice a day.

In a study conducted in Saudi Arabia in 2001, it was noted that dental floss was not used by a single subject for interdental cleaning, which is somewhat close to the results of the research of the current study. In the present study, about 70% of the total participants used interdental aids, out of which only 10% subjects used dental floss, 44% used toothpick and 16% of them used interdental brush.

Moreover, in the present study bad breath was experienced by 32% of the patients. However, in the study findings of Kumar *et al.* 21% of the subjects experienced bad breath.¹³ Besides, tongue cleaning was done by 70% of the patients in the present study which is in contrast to the study done by Jain *et al.* where only 20% of the studied group cleaned their tongue.¹⁰

Furthermore, visiting a dentist is still not considered a preventive dental behavior. The present study shows that around 62% of the patients visited the dentist only when required. About 16% of the subjects visited the dentist every 6 months. Moreover, 4% visited once a year and 18% were those who never visited a dentist. These results are almost identical to the study done by Jain *et al*. in which 54% of the people went to the dentists only when they were in pain.

CONCLUSION

It was concluded that education was one of the most significant factor affecting the knowledge, attitude, practice and behavior of the society and 94% of the people were aware of the association between oral hygiene and systemic diseases.

REFERENCE

- 1 Nitika Jain et al. Ora l hygiene-awareness and practice among patients attending OPD at Vyas Dental College and Hospital, Jodhpur. J Indian Soc Periodontal. 2012; 16(4): 524–28.
- 2 Archana Sharda, Jagat Sharda. Factors influencing choice of oral hygiene products used among the population of Udaipur, India. Int J Dent Clinics 2010:2 (2):7-12
- 3 Gopikrishna V, Bhaskar NN, Kulkarni SB, Jacob J, Sourabha K G. Knowledge, attitude, and practices of oral hygiene among college students in Bengaluru city. J Indian Assoc Public Health Dent 2016; 14:75-79
- 4 Sheiham A, Watt R. The common risk factor approach; a rational basis for promoting oral health. Community Dentistry and Oral Epidemiology, 2000, 28: 399-406.
- 5 Anjum Younus, Ambrina Qureshi. Tooth brush changing frequency and associated sociodemographic and oral hygiene factors among residents of Karachi. Journal of Dentistry and Oral Hygiene. 2016 8(2); 4-11.
- 6 Paik DI, Monn HS, Horowitz AM, Gitt HC, Jeong KL, Suh SS. Knowledge of oral practices related to caries prevention among Koreans. Journal of Public Health Dentistry, 1994; 54: 205-210
- 7 Mohammad Abdul Baseer, Mohammed Suliman Alenazy, Mohammad AlAsqah, Mansoor AlGabbani, Aleemullah Mehkari. Oral health knowledge, attitude and practices among health professionals in King Fahad Medical City, Riyadh. Dent Res J (Isfahan) 2012; 9(4): 386–92.
- 8 Cronin MJ, et al. Three-month assessment of safety and efficacy of two electric toothbrushes. J Dent. 2005; 33:23-8.
- 9 S. N. Goryawala, Paragkumar Chavda, Sneha Udhani, Naiya V. Pathak, Shivang Pathak, Ritu Ojha. 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): 115–19.

- 10 Kapoor D, Gil I S, Sing h A, Kau r I, Kapoor P. Oral hygiene awareness and practice amongst patients visiting the Department of Periodontology at a Dental College and Hospital in North India. Indian J Dent . 2014;5(2):64-8.
- 11 Madhrjya Chakraborty, Rohit R Thakkar, Dinesh Swamy, Amit Kumar, Shruti Mehta Bhumika K Badiyani, C Dithi, D Rajesh. Knowledge, Attitude, and Practices about Oral Hygiene Maintenance among Patients attending a Dental College in India. Int J Oral Care and Research, 2017;5(3):1-3.
- 12 M. JAMJOOM, HANAA. Preventive Oral Health Knowledge and Practice in Jeddah, Saudi Arabia. Journal of King Abdulaziz University-Medical Sciences. (2001). 9. 10.4197/Med.9-1.3.
- 13 Seenivasan MadhanKumar MDS, Venkatesan Singarampillay, Shanmuganathan Natrajan Mds. Oral Hygiene Awareness Among Two Non-Professional College Students In Chennai, India- A Pilot Study. Int J Scientific and R Publications, 2012; 2:5.

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