

AWARENESS AND PRACTICES OF ORAL HEALTH AMONG PATIENTS SEEN AT KHYBER COLLEGE OF DENTISTRY HOSPITAL

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ABSTRACT

The aim of this study was to assess the awareness and practices of oral hygiene maintenance among both genders of the groups who were seen in the hospital of Khyber College of Dentistry. Three hundred and fifty subjects were randomly selected and interviewed on a semi-structured questionnaire for age, gender, education, frequency of tooth brushing, use of dentifrices and dental floss. SPSS version 17.0 was used to analyze the data. Out of the total 350 subjects, 160 (45.7%) were male and 190 (54.3%) were female, with mean age of 43.9±17.2. The age range was 12-80 years. 45.14% brushed their teeth twice, 35.71% reported once and 8.57% thrice daily. Awareness about the use of dental floss was 18%, while 82% did not use. Regarding the use of dentifrices, 90% were using tooth paste followed by 7.4% tooth powder. Male dominated females in frequent dental check up. In conclusion females were more aware and in practice of maintenance of oral hygiene compared to males.

Key Words: Awareness, practice, oral hygiene.

INTRODUCTION

Dental hygiene is generally the forgotten element of the daily life of most of the population of the under-developed countries. Significance of oral hygiene is frequently underestimated because it not only keeps the oral cavity clean but also prevents it from the risk factors, timely diagnosis and prompt treatment by seeking professional advice.¹ Health education to general masses and regular dental checkups is the utmost need of 21st century. Poor oral health awareness is the cause of increasing the prevalence of periodontal diseases, financial consequences, and harmful effect on the quality of life of the affected individuals. Facial appearance, eating, the pattern of everyday life and social relations are often negatively affected.² Oral health knowledge is considered to be an essential prerequisite for health-related behavior.^{1,2}

National Oral Health Survey of Pakistan states that, basic curative dental health facilities in the public and the private sectors are not accessible to the

general public, children and young adults are at risk of losing 2-3 teeth due to bad oral hygiene practices and dental caries.^{3,4} Cross-sectional studies showed a weak association between knowledge and behavior while some other studies found a well developed relationship between knowledge and better oral health.⁵

Appropriate identification and assessment of the causative factors is the cornerstone for the proper management of oral health related conditions. The knowledge of the local community's traditional oral hygiene practices is very important for providing oral health education and services. Because most of the people of underdeveloped countries do not have access to dental hospitals and apart from factors like low income and illiteracy, the most important risk factors are lack of oral health understanding and false cultural perceptions. Oral wellbeing is much more than spotless white teeth and absence of bad breath.⁶

METHODOLOGY

This was a cross sectional descriptive hospital based survey, conducted on patients visiting outpatient department of Khyber College of Dentistry, Pakistan from January 2014 to March 2014. Required sample size was calculated according to sample size formula for cross sectional studies i.e.

$$\frac{(1.96)^2 \times P \times (1 - P)}{(5)^2}$$

using prevalence 50%, confidence level 95% and significance level 5%. A total of 350 subjects were randomly

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selected and interviewed on a semi structured questionnaire using Non Probability convenient sampling technique. The questionnaire reflecting four variables, frequency of tooth brushing, dental floss usage, type of dentifrices used and duration of dental checkup in order to assess the awareness and practice of oral hygiene among the general population and compare both genders. SPSS version 17.0 was used to analyze the collected data.

Patients more than 12 years of age, who were willing to participate and were able to understand and answer the questions were included in the study, while patients suffering from debilitating diseases, trauma, congenital and acquired dental deformities were excluded.

RESULTS

The study population included 160 (45.7%) male and 190 (54.3%) female patients, the mean age of the patients was 43.9 ± 17.2 (Range 12-80) years with male, female ratio of 1:1.2 (Table 1). Frequency of tooth brushing can be seen in Table 2. Details of the use of different dentifrices are available in Table 3, while frequency of the dental checkup can be seen in Table 4.

DISCUSSION

The present study found that brushing with toothbrush and toothpaste was the most commonly used

method of teeth cleaning (82.28%) and the respondents believed that oral hygiene is considered to have an important role on general health as well, which is considerably higher than the study conducted at Maulana Azad Institute of Dental Sciences, New Delhi (60.4%).⁷ While the findings of present study are almost similar to the study conducted by Ali et al (81%) in Karachi.⁸ Tooth brushing among females (96.7%) was more as compared to the males (85%) in the present study which was nearly similar to the findings of Al-mas et al.⁹ The reason for the high frequency of tooth brushing, predominantly among females is that they have a better aesthetic sense and are more conscious about their looks and smile in particular.^{10,11,12} A study at New Delhi, where females (88.8%) used toothbrush in comparison to males (80.6%) is very similar to the findings of present study and the reason is that Pakistan shares same socioeconomic and cultural background with India as well as other third world countries.¹³

A study at Multan showed the use of dental floss was (15.4%)⁴ which is nearly similar to present study (18%) and the frequency of use of dental floss is higher than the study conducted by Al-Omiri et al in North Jordan where the use of dental floss was (2%),¹³ it is because lack of oral health education, and awareness about the use of inter-dental aides.

In the present study the use of mouth wash was (1.71%) which is far less than the findings of the study done in Multan (14.5%).¹² In the current study, the number of those patients who visited dentist for routine dental checkups and prophylaxis was (15.7%) (53 males and 2 females) which is comparable to the study done in Multan where (19.5%) (Male 46.8%, Female 53.2%)

TABLE 1: GENDER OF THE SUBJECTS

Gender	Frequency	Percentage
Male	160	45.7%
Female	190	54.3%
Total	350	100%

TABLE 2: FREQUENCY OF TOOTH BRUSHING AMONG GENDERS

Gender	Once Daily	Twice Daily	Thrice Daily	None	Total
Male	125(35.71%)	6(1.71%)	5(1.42%)	24(6.85%)	160
Female	5(1.42%)	152(43.42%)	25(7.14%)	8(2.28%)	190
Total	130(37.14%)	158(45.14%)	30(8.6%)	32(9.14%)	350

TABLE 3: USE OF DIFFERENT DENTIFRICES & DENTAL FLOSS AMONG PATIENTS

Gender	Tooth Paste %	Mouth Wash %	Tooth Powder %	Dental floss %	Others %	Total
Male	125(35.71%)	6(1.71%)	26(7.42%)	61(17.42%)	3	160
Female	182(52%)	Nil	Nil	2(0.57%)	8	190
Total	307(87.71%)	6(1.71%)	26 (7.42%)	63(18%)	11(3.1%)	350

TABLE 4: FREQUENCY OF DENTAL CHECK UP

Gender	3 Months %	6 Months %	Others %	Total
Male	52(14.85%)	53(15.14%)	55(15.71%)	160
Female	16(4.57%)	2(0.57%)	172(49.14%)	190
Total	68(19.42%)	55(15.71%)	227(64.85%)	350

of study participants had visited the dentist during the last 6 months.¹⁴

Study done in Jodhpur, India showed 54% of the participants visited a dentist when they were in pain¹⁴ while Nabil Al-Beirut found that 69.5% of the participants reported visiting a dentist only when they had dental pain.¹⁵ Although this study was done in a teaching hospital and most of the patients were from urban areas but still the number of females was far less than males and the reasons were cultural and traditional constraints and low socioeconomic status.^{16,17}

The results of this study showed that, awareness and practices regarding oral health and hygiene among the study participants were not good in general, while living in the same community, females were more aware and practiced twice daily tooth brushing as compared to males.

Oral health awareness programs at schools, colleges, universities, and community levels should be undertaken, in collaboration with the health department and NGOs in urban as well as in rural areas using electronic and print media.

REFERENCES

- 1 Axelsson P, Albandar JM, Rams TE. Prevention and control of periodontal diseases in developing and industrialized nations. *Periodontol* 2000; 29: 235-46.
- 2 Petersen PE, Kwan S. Evaluation of community-based oral health promotion and oral disease prevention – WHO recommendations for improved evidence in public health practice. *Community Dent Health*. 2004; 21: 319-29.
- 3 Azodo CC, Unamatokpa B. Gender difference in oral health perception and practices among Medical House Officers. *Russian Open Med J*. 2012; 1: 1-4.
- 4 Khan AA. National Oral Health Pathfinder Survey. 2002.
- 5 Hamilton ME, Coulby WM. Oral health knowledge and habits of senior elementary school students. *J Pub Health Dent*. 1991; 51: 212-18.
- 6 Ashutosh, Nagesh KS. Oral Health related KAP among 11 to 12-year-old school children in a government-aided missionary school of Bangalore city. *Indian J Dent Res*. 2008; 19: 236-42.
- 7 Chanchal Gangwar, Manish Kumar, L Nagesh KAP toward Oral Health, Oral Hygiene and Dental Caries Status among Anganwadi Workers in Bareilly City, Uttar Pradesh: A Cross-Sectional Survey. *J Dent Scie Oral Rehabilitation*. 2014; 5(2): 53-57.
- 8 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: 20-23.
- 9 Almas K, Al-Hawish A, Al-Khamis W. Oral hygiene practices, smoking habit, and self-perceived oral malodor among dental students. *J Contemp Dent Pract*. 2003; 4: 77-90.
- 10 Nagina Parveen, Bilal Ahmed, Amjad Bari, Aamir Mahmood Butt Oro-Dental Health: Awareness and Practices, *JUMDC* 2, (2), Jul-Dec 2011: 5-10.
- 11 Azodo CC, Unamatokpa B. Gender difference in oral health perception and practices among Medical House Officers. *Russian Open Med J*. 2012; 1: 1-4.
- 12 Paul B, Basu M, Dutta S, Chattopadhyay S, Debasis Sinha, Misra R. Awareness and Practices of Oral Hygiene and its Relation to Sociodemographic Factors among Patients attending the General Outpatient Department in a Tertiary Care Hospital of Kolkata. *Indian J Family Med Prim Care*. 2014; 3(2): 107-111.
- 13 Al-Omri MK, Al-Wahadni AM and Saeed KN. Oral health attitudes, knowledge, and behavior among school children in North Jordan. *J Dent Educ* 2006; 70: 179-87.
- 14 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*. 2014; 18(3): 369-74.
- 15 Tada A, Hanada N. Sexual differences in oral health behavior and factors associated with oral health behavior in Japanese young adults. *Public Health*. 2004; 118: 104-09.
- 16 Al-Omari QD, Hamasha AA. Gender-specific oral health attitudes and behavior among dental students in Jordan. *J Contemp Dent Pract*. 2005; 6: 107-09.
- 17 Eldarrat A, Alkhabuli J, Malik A. The Prevalence of Self-Reported Halitosis and Oral Hygiene Practices among Libyan Students and Office Workers. *Libyan J Med*. 2008; 3: 170-76.

CONTRIBUTION BY AUTHORS

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|-----------------------------|---|
| 1 Manzar Anwar Khan: | Title selection, helped in correcting the article. |
| 2 Ghazala Yasmin: | Data collection/discussion. |
| 3 Shazia Makhdoom: | Final proof reading helped methodology & references collection. |