

TOOTH BRUSHING HABITS AND KNOWLEDGE AMONG PATIENTS VISITING KHYBER COLLEGE OF DENTISTRY

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ABSTRACT

Objective: The aim of the study was to investigate the tooth brushing habits, frequency of tooth brushing and time of tooth brushing in patients visiting periodontology department of Khyber college of Dentistry for their periodontal problems, aged between 20-65 years of age.

Material and Methods: A total of 1000 patients were recruited between 20-65 years of age reporting for treatment of various periodontal problems. The purpose of study was explained to the patients and after their willingness, a printed questionnaire with different questions regarding their daily oral hygiene habits and brushing technique, were given and filled. The data collected was analyzed through SPSS version 16.

Results: Analyses of the data revealed that majority of the participants (95.3%) were using manual tooth brush for cleaning teeth. The data further suggested that 70% of the participants were using tooth brush once a day, 25.3% twice a day and 4.7% were not brushing their teeth either.

Conclusions: The data indicated that those brushing their teeth twice were having good oral hygiene compared with those with brushing once a day or no brushing.

Key words: Tooth brushing habit, Khyber College of Dentistry, Oral hygiene

INTRODUCTION

Around the world dentists and public/private sector hospitals recommends regular daily tooth brushing for an improved oral health, preventing periodontal disease and caries. Cleaning teeth with tooth brush is a common practice, however, chewing sticks, chewing sponges, etc. are also in use for the same purpose¹. Removal of supragingival plaque causes reduction in inflammation and gingival crevicular fluid (GCF) changing the subgingival environment and modifies the composition of subgingival plaque. Removal of dental plaque while brushing teeth is achieved via direct contact between filaments of tooth brush and the surfaces of the teeth and soft tissues¹.

People in the developed countries are more concerned regarding oral hygiene. Majority of boys in 32 European and North American countries practice tooth brushing more than once a day, whereas better compliance is seen among girls in these regions². In Japan a national survey in 1993 demonstrated that 95% of the population brushed their teeth every day³. In developing countries tooth brushing is practiced habitually, although a small proportion of elderly people do not brush their teeth at all⁴. Ninety seven percent Korea brushes their teeth once a day⁵. While in India, only 69% of the population brushes their teeth⁶. A national health survey in Pakistan showed that 36% of the Pakistani population cleaned their teeth once a day irrespective of whether chewing sticks or tooth brush was employed, while 54% did so either on alternative days, weekly or monthly basis⁷.

Taking self care is the best care, and motivation of the individual is the main factor for plaque control program. Recommended measures for oral health includes brushing teeth more twice a day, less sugar

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consumption and use of fluoride toothpaste⁸. One of the important task of the dentist is motivation of patients for taking care of their oral hygiene at home⁹. Keeping in view the importance of tooth brushing in oral hygiene, the present study was carried out to evaluate the effect of awareness among patients visiting Khyber College of Dentistry, Peshawar regarding the use of tooth-brush for oral hygiene.

METHODS AND MATERIALS

This descriptive cross sectional study was conducted in the Department of Periodontology Khyber College of Dentistry, Peshawar during June to December 2012. A total of 1000 patients were recruited between 20-65 years of age with a mean age of 35.65 years \pm 11.90 SD reporting for treatment of various periodontal problems. Mentally retarded and physically handicapped were excluded from study. The present study was commenced after approval from the institutional ethical committee. The purpose of study was explained to the patients and after their willingness, a printed questionnaire with different questions regarding their daily oral hygiene habits including their brushing technique, duration and strokes etc. were given and filled by the operator in case of illiterate participants or by themselves by educated patients. The data collected was analyzed through SPSS version 16.

RESULTS

The data indicated that mean age of the patients was 35.65 years and among total participants 56% were males whereas 44% were females with a male to female ratio of 1.27:1. Out of total, 60.7% participants were from urban population followed by those from rural areas (32.2%). The details are given in Table-1. Data concerning socio-economic status showed that 18.3% were poor while 50% were having satisfactory economic status and 31.7% belonged to good income group. Analysis of the data regarding teeth brushing habits revealed that 95.3% of the subjects were brushing their teeth while 4.7% were not using tooth brush. Out of those who were using tooth brush, the frequency was such that 73.46% used it once a day while 26.54% twice daily. Data concerning time of brushing indicated that 75.87% subjects were brushing their teeth before breakfast where as 24.13% after breakfast. Soft brush was used by 51.41% followed by medium brush. The detail is given in Table-2. The data suggested that 15.7% subjects were taught professionally by dentist how to brush their teeth whereas majority (84.3%) were un aware about brushing techniques.

Table-1: Demographic distribution of the participant

Valid	n	%
Urban	607	60.7
Rural	323	32.3
Semi urban	70	7
Total	1000	100

Table-2: Tooth brush type

	n	%
Soft	490	51.41
Medium	256	26.87
Hard	180	18.89
Not specified	27	2.83
Total	953	100

DISCUSSION

The use of manual tooth brush for cleaning teeth is the most common method employed by the majority of people. In Pakistan, research data regarding oral hygiene habits at national level is scarce, though different studies have been carried out in different hospitals. Daily use of tooth brush is recommended method for the mechanical removal of plaque and it must be removed within 48 hours to prevent inflammation¹⁰.

In the present study majority of patients were using tooth brush for cleaning their teeth regularly and these results are consistent with similar studies carried out elsewhere^{3,11,12}. Most of the subjects were brushing their teeth before breakfast where as one third of the participants were brushing their teeth after breakfast. This result is contrary to that reported by Attaullah¹³ who concluded that 88.5% of males clean their teeth after meals. The probable reason for this difference may be due to the fact that the present study was carried out on patients from the Periodontology department whereas Attaullah et al. investigated the same issue on patients from various Departments of Khyber College of Dentistry Peshawar. Data regarding brushing frequency suggested that two third of the patients were brushing their teeth once a day, one third twice a day and the remaining were not brushing their teeth either at all. Similar results were shown by Tsevenjav¹⁴ and Kripal¹⁵. Although by enhancing the frequency of brushing teeth in a day does not improve positive plaque removal¹⁶. The duration of brushing teeth for removal of plaque is an important factor¹⁷ as in the present study quite good number of patients brush their teeth for two minutes, however,

many individuals are not good in controlling plaque score when they brush their teeth¹⁸. It is also observed that in those motivated subjects who were willing to spare time for improving oral hygiene, manual tooth brushing is effective in controlling plaque biofilm and thus periodontal diseases¹⁹. The data suggested that financial position of the participants played a very important and effective role in oral hygiene. Brushing habits were improved due to better economic status. The data indicated that males took more care for better oral hygiene when compared with females. The conservative natures of our society where females are always dependent on their male counterpart result in poor dental hygiene.

CONCLUSIONS

It is concluded from the present study that majority of the participants were brushing their teeth regularly once a day. Males were more particular about their oral health compared with females. A mass media public campaign either by the government or non government organization is cry of the day to highlight the importance of oral hygiene and to educate people regarding oral hygiene measures for the prevention of periodontal disease.

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