Knowledge, Attitude, and Practices among patients visiting a dental college hospital towards oral hygiene maintenance

[1]H.Firdus Fareen, [2]Dr.Dinesh Prabhu

[1]Undergraduate Student, [2]Senior Lecturer
Department of Oral and Maxillofacial surgery
Saveetha Dental College, Saveetha University, Chennai, India.

***Abstract*: Oral health is significantly related to oral hygiene behaviors and their knowledge. Poor oral hygiene can have a profound effect on the quality of life. Oral hygiene practices are those measures taken to ensure that the mouth is clean. Oral hygiene practices are essential for the prevention of dental and other associated systemic diseases. The purpose of the study was to evaluate and analyze the oral hygiene condition and practices among the patients who visited dental college hospital. A description based cross-sectional survey was carried out on 100 patients. A closed ended questionnaire consisting of 16 questions was made and distributed among the patients to evaluate their knowledge, awareness, practices associated with oral hygiene. The results of the present study showed that tooth brush and toothpaste (94%) were the main products used for the maintenance of oral hygiene. Only 6% of the people used other oral hygiene aids. The study showed that more than half of the respondents had good knowledge and positive attitude towards oral hygiene to maintain proper oral health, but their practices toward oral hygiene remain poor so education of people for the importance of oral hygiene maintenance, proper selection and method of use of oral hygiene products is needed.**

***Keywords*: oral hygiene maintenance, oral hygiene aids and systemic diseases.**

INTRODUCTION:

Oral hygiene knowledge is considered to be an essential prerequisite for any community members. Good oral hygiene maintenance has been shown to contribute greatly to the prevention of oral related diseases.(1,2) The oral health is now recognized as equally important in association to general health. Oral hygiene practices are essential for the prevention of dental and other associated systemic diseases.(3) Obeying the directive of proper oral hygiene is of primary importance in the prevention of dental caries and periodontal diseases.(4) Various aspects like nutritional standing, tobacco smoking, alcohol, stress etc are linked to a wide range of oral diseases.(5,6) 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. 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.(7,8)

Oral hygiene maintenance may be a totally ignored practice in people of the low socioeconomic class of developing countries like india.(9) Oral diseases constitute public health problem in developing countries due to their high prevalence, economic consequences, and negative impact on the quality of life of affected individuals.(10) Oral diseases adversely affect concentration, interpersonal relationship, and productivity due to the intricate relationship between oral health and general health. Prevention of oral disease can be achieved by optimizing the oral health practices in the form of proper tooth brushing, use of dental floss, dental visits at regular intervals, and proper dietary practices.(11)

Poor oral hygiene can lead to dental caries, periodontal disease, and tooth loss. In India, where majority of population resides in rural areas, oral hygiene awareness is very important. Therefore, this study was aimed to assess the knowledge, attitude, and practices of oral hygiene maintenance among both genders of the groups who visited dental college hospital.

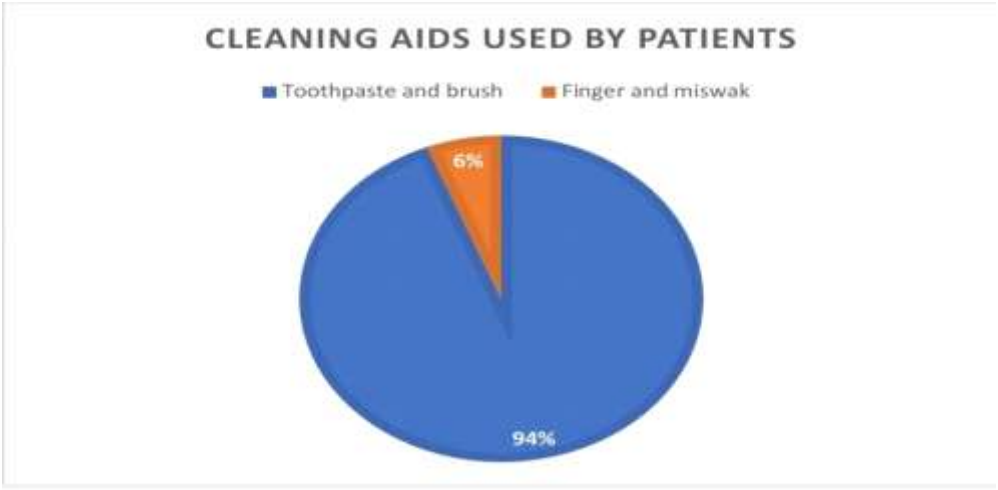
MATERIALS AND METHODS:

The study included description based cross-sectional survey was carried out on 100 patients in the age group of 18-50 years who gave consent to participate in the study were included. A closed ended questionnaire consisting of 16 questions 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 included both demographic details of the study participants and information about practice of oral hygiene methods and awareness. 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 from the participants were collected, statistically analyzed, and results were obtained.

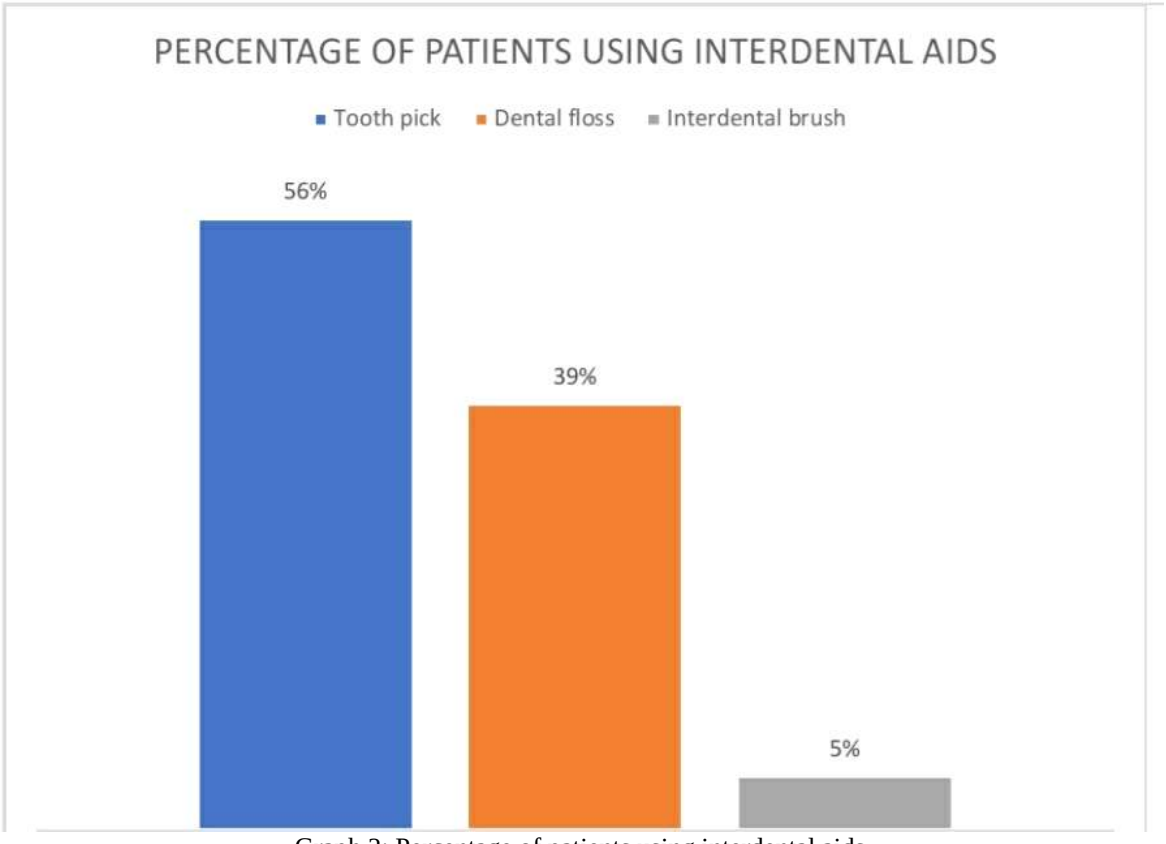
RESULTS:

The present study was carried out on 100 patients. Most of the patients, 94% of them which included both males and females were in favour of using tooth brush and tooth paste while only 6% of the patients opted for other cleaning aids like finger and miswak.[Graph1] It was further observed that most of the patients brushed their teeth twice daily (51%), 44% brushed once daily

and 5% patients brushed more than twice a day. Moreover, most of the patients (52%) brushed for 2-5 minutes, while 47% for 1 minute and 1% brushed less than a minute. Besides, 47% of patients changed their toothbrush once in every three months, 37% changed it within a month, 12% changed it once in six months, 4% changed it every year. It was evaluated that 56% of the participants used tooth picks as secondary mode of plaque control and 39% used dental floss. However, only 5% used interdental brush and 5% used no aid. [Graph2]



Graph1: Percentage of cleaning aids used by patients



Graph 2: Percentage of patients using interdental aids

Tongue cleaning is also considered one the remarkable aspects of cleaning oral cavity. 75% of the participants cleaned their tongue whilst the rest 25% did not. Furthermore, 22% of the participants performed tongue cleaning by using a toothbrush, 42% used a tongue cleaner, 2% used other aids and 34% were those who did not clean their tongue. It was also noticed that 45% of the participants used mouthwash 43% of patients never used a mouthwash and 12% of them used it occasionally.

It is surprising that around 42% of the total population visited the dentist once in a year and 33% of them visited dentist only when in problem whilst only 19% of the patients visit the dentist once in 6 months. Moreover, 6% 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, 32% of the patients did not have any idea while 68% 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:

Oral hygiene practices in India are deeply based in tradition and culture with use of indigenous substances being widely prevalent.(12) In the present study, Though toothbrush and toothpaste (94%) were used as the main products used for the maintenance of oral hygiene which was found to be less compared to other educated groups of people like, 97% of the police recruits in a study by Dilip (2005) and 98% of Anganwadi workers in Karnataka in a study by Pankaj et al (2005). To maximize the oral health, the ADA and US Surgeon General recommend that individuals brush twice and floss at least once a day and have regular prophylactic dental visits.(15) In the present study, the percentage of people brushing at least twice daily (51%) was lower compared to 67% of the Chinese urban adolescents in a study by Jiang et al (2005), 62% of the Kuwaiti adults in a study by Al-Shammari et al (2007) and was higher compared to the 44.4% of the Chinese adolescents in a study by Zhu et al (2003).

The use of other oral hygiene aids like dental floss, toothpicks and mouthwashes helps in keeping the good oral hygiene and maintaining the health of the oral cavity. In the present study, 56% of the participants used tooth picks as secondary mode of plaque control and 39% used dental floss. However, only 5% used interdental brush and 52% used no aid which was found to be higher compared to a study conducted in Saudi Arabia in 2001, in which it was noted that dental floss was not used by a single subject for interdental cleaning. Besides, tongue cleaning was done by 75% 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.

The present study shows that around 33% of the patients visited the dentist only when required. About 19% of the subjects visited the dentist every 6 months. Moreover, 42% visited once a year and 6% of them were those who never visited a dentist. These results are contradicting 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 68% of the people were aware of the association between oral hygiene and systemic diseases. The percentage of people using oral hygiene aids other than tooth brush and tooth paste was very less. So the dental professionals should take more time out of their busy schedule to educate and motivate people about the oral hygiene maintenance, proper selection and use of the oral hygiene aids as well as work in alliance with the manufacturers to disseminate helpful information and facts about the oral hygiene products through the media. The knowledge of oral hygiene is considered essential for wellness-related behavior.

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