

Evaluation of Denture Hygiene Habits among Elderly Patients Wearing Complete Dentures

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ABSTRACT

Background: The number of denture wearers (full or partial) are increasing in number in today's Era. Maintaining oral hygiene is very important among denture wearers. However due to lack of knowledge or due to aging people tend to ignore the importance of oral hygiene

Aim: Purpose of this study is to evaluate the denture hygiene habits of elderly patients wearing complete dentures.

Material and Method: A total of 200 patients were selected for the study. Out of 200 patients 110 were males and 90 were females. A self administered questionnaire was prepared to record the attitude and knowledge of patients regarding oral hygiene.

Result: Of the 200 patients 47% participants cleaned their dentures once a day. 14% cleaned their denture occasionally. 41% used water for cleaning where as only 15% were found using water, brush as well as soap.

Conclusion: Based on this study's result, the oral hygiene practice among the study population was found poor. Lack of awareness was noticed which can be minimized with proper demonstration of cleaning dentures and knowledge of its effect on soft tissue.

Keywords: Dental hygiene, complete denture, oral prophylaxis, denture cleansers.

INTRODUCTION

Dentures are prosthesis which are used to replace missing teeth; they are supported by the surrounding soft and hard tissues of the oral cavity. Dentures can be partial removable or complete dentures. The number of people requiring denture has increased over a period due to aging or periodontal diseases.¹ Maintaining good oral hygiene among denture wearers begins from the day patient starts wearing denture. Growing interest for oral hygiene has been noticed due to increase in awareness. Freitas JB et al reported an increased emphasis on maintaining oral health in

the old age, when alterations in oral tissues are associated with various conditions.²

Increased prevalence of periodontal disease and dental caries has been reported with increased age.³ Denture wearers face denture stomatitis as a problem which is caused due to poor oral hygiene which leads to accumulation of food particles between denture and soft tissues thus increased growth of bacteria and Candida species is noted.⁴ Authors have suggested that maintaining a good oral hygiene helps to minimize the oral lesions.⁵ Patients should be instructed about the oral hygiene practices to be followed after denture wearing during appointments as prevention is the

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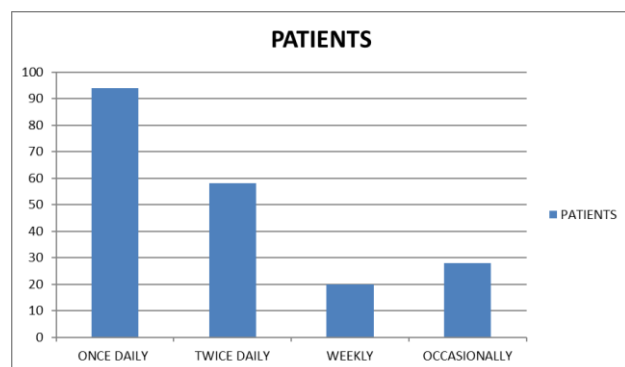
Table 1: patient's demographic value.

GENDER	SAMPLE	PERCENTAGE
MALE	110	55%
FEMALE	90	45%
TOTAL	200	100%

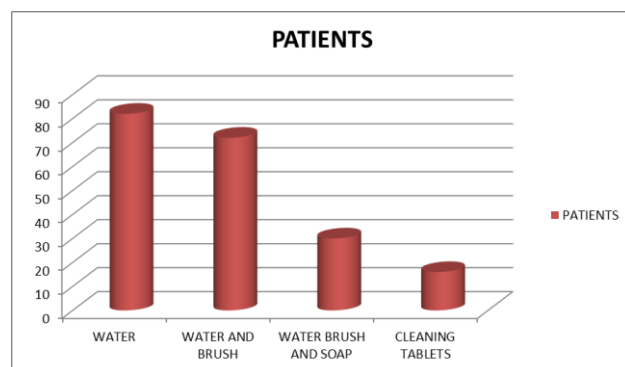
Table 2: Age distribution

GROUPS	AGE	SAMPLE	PERCENTAGE
Group 1	45-55	55	27.5%
Group 2	55-65	95	47.5%
Group 3	>65	50	25%

Graph 1: Graph representing frequency of cleaning



Graph 2: Method of denture cleaning



key to maintaining a good oral hygiene. So we aimed to evaluate the denture hygiene habits among elderly patients wearing complete dentures.

MATERIAL AND METHOD

Denture wearers were selected for the study and follow up was maintained. The sample size consisted of total 200 patients aged between 45

to 65 years. Of the 200 patients 110 were males and 90 were females. Based on the age distribution patients were divided in different groups.

Group 1- 45-55

Group 2- 55-65

Group 3- >65

Inclusion criteria and exclusion criteria:

1. Patients wearing denture,
2. Patients in need of denture
3. Medically compromised patients were excluded.
4. Histories of any psychiatric disorder were excluded.

Ethical clearance was obtained from the committee. A written informed consent was obtained from patients before treatment. A self administered questionnaire was prepared in both languages (Hindi and English). The questionnaire collected demographic details, age, sex of patients, knowledge and attitude of patient in regards to oral hygiene, frequency of cleaning and method used to clean the dentures

Statistical analysis: Data was obtained and each variable was analyzed and A p -value <0.05 was considered statistically significant. Data was analyzed by specific statistical software (IBMSPSS V10 STATISTICS, IBM, ARMONK, USA).

RESULT

Out of the total sample size of 200 subjects, who participated in the present study, 110 were males i.e. 55% and 90 were females i.e. 45% (Table 1). In our study based on the age distribution patients were divided into three groups. 55 belonged to the age group of 45 to 55 years, 95 subjects were of 55 to 65 years and 50 were ≥ 65 years of age. Maximum numbers of patients were aged between 55 to 65 years in our study (Table 2). When enquired about the cleaning habits practiced among the patients it was found that Overall 47% participants clean their dentures almost once a day. 29% reported that they at least clean their denture twice. 10% said they cleaned their denture weekly and 14 % said they prefer to clean occasionally (Graph 1). When enquired about the cleaning methods used it was found that 82 of the participants cleaned their denture with only water

i.e. 41%. 72/200 i.e. 36% said they used water and brush both for cleaning dentures. 30/200 said they used combination of water, brush and soap i.e. 15% and 16/200 i.e. 8% used cleaning tablets (Graph 2).

DISCUSSION

Denture wearers often face difficulty in cleaning denture probably due to increased age or lack of knowledge. Improper oral hygiene can cause serious issues like denture stomatitis. Self administered questionnaire was prepared and distributed the sample size. Of the 200 patients 55% were males and 45% were females. In present study maximum numbers of patients were aged between 55-65 years. This tells us that as the age increases the need of denture increases among people. Cleanliness and disinfecting denture is essential to maintain good health of oral soft tissues. Various authors have suggested that denture wearers find it difficult to adequately clean their dentures and many wear dirty dentures.^{6,7} Our results are in favour of those reported by other authors.

In the present study only 47% of the sample was found to be cleaning their denture once daily whereas 29% said they cleaned twice daily, which was found to be very less in number. Ozcan et al in their study reported that 45.7% clean their dentures once a day, which was similar to those reported by our study. However studies reported by Peracini et al reported 73.58% cleaned their dentures 3 times daily, which was higher than those found in our study.^{8,9}

In current study 41% patients cleaned their denture with water alone, which was higher than those reported by Abhishek Apratim et al.¹⁰ Polyzois et al in their study mentioned that 86% of Australian population was found maintain good oral hygiene and Indians were found to be maintain a poor oral hygiene.¹¹ Hoad-Reddick et al. found that a combination of methods i.e. brushing and soaking was used more frequently used among patients. However our results were different from those reported by the author as only 15% of our study population was found using combination of methods for cleaning dentures.¹² The overall cleaning habit among study population was found to be less in present study. Lack of knowledge was noticed among the study group for maintain oral hygiene.

CONCLUSION

Present study concluded that the number of denture wearers increases with increasing age. Cleaning of denture was not very common among the patients; very few reported to clean their denture daily. Lack of knowledge was evident in regards to the cleaning method used for the denture. Small population was found to be aware of availability and use of cleaning tablets used to clean denture.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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