

# Evaluation on Frequency of Edentulous Patient Wearing Dentures

Anitha

Saveetha Dental College, Chennai

## Abstract:

The treatment options for the completely edentulous patients are implant supported prosthesis and the complete dentures. Complete dentures are more preferred for it's less cost and no surgeries. Repeating the complete denture fabrication is common. The main cause for repeating the dentures are loss of retention and poor aesthetics. Poor denture maintenance can be one of the reasons for denture reconstruction. The aim of this study is to evaluate the frequency of wearing complete denture in edentulous patient. A questionnaire based survey was conducted and the results were analysed. 90% of the denture wearers wear their denture for more than 12 hrs per day. 20% of the denture wearers not clean their dentures regularly. Instructions to the patients should be proper and the patients are insisted not to wear the denture for more than 16 hrs per day.

**Keywords:** denture maintenance, complete denture, denture wearers,

## INTRODUCTION:

The ratio of edentulism increases when age increases. According to World health organisation the life expectancy is increased over 5 years in last 15 years. The percentage of middle age group are more in number than other groups<sup>1</sup>. Edentulism can be partial or complete. To have a better quality of life the edentulism should be restored. The physical and mental health of the patients is improved by restoration in the edentulous area<sup>2-4</sup>. Partial edentulism are mostly restored by fixed prosthesis than removable prosthesis as there are more changes for periodontal problem, decay to the existing teeth, or poor patient acceptance<sup>5</sup>. In completely edentulous condition the treatment options are implant supported prosthesis or removable prosthesis. Removable prosthesis is the treatment option for many decades. Fixed prosthesis cannot be given to all due to poor bone support for implant placement, patient may not willing for the surgical treatment or due to medical conditions<sup>6</sup>. A complete denture should restore the aesthetic, speech and function of the edentulous patient. The efficacy of complete denture in edentulous patients depends not only on a good prosthesis but also depends on denture care maintenance. The aim of the study is to analyse the frequency of wearing complete dentures and the denture care maintenance by the denture wearers

## MATERIALS AND METHODS:

Selection criteria:

A total of 50 patients of age group 40 to 60 who visited Department of Prosthodontics, Saveetha Dental College, Chennai were included in the study. There were 29 females and 21 males. The selection criteria exclude severe residual ridge resorbed patients.

Pre-structured questionnaire was circulated among them to assess their knowledge about the denture care and frequency of edentulous patient wearing complete denture.

## RESULT AND DISCUSSION:

### The structured questionnaire:

- 1) When did you loose your teeth?  
A) less than a year      B) between 1-2 year      C) more than 2 year
- 2) What was the reason for replacement?  
A) aesthetic B) difficulty in chewing C) both aesthetic and difficulty in chewing
- 3) When was the replacement done?  
A) more than 1 year B) 1 year C) less than 1 year
- 4) Is this is your first replacement?  
A) yes.    b) no
- 5) If no, Specify the number of times you have replaced?  
A) 1 B) 2 C) 3
- 6) What was the problem with your previous replacement?  
A) loss of retention b) irritation c) broken denture
- 7) Are you satisfied with your new denture?  
A) yes.    B) no
- 8) Did you clean your denture daily?  
A) yes b) no
- 9) Do you wear your denture regularly?  
A) yes.    B) no
- 10) If yes, How many hours do you wear your denture per day?  
A) more than 12 hrs b) 10 hrs c) 8 hrs
- 11) If no, what was the reason for not wearing the denture?  
A) Irritation. B) loss of retention c) difficulty in speaking

12)When did you remove your denture?  
*A)During night B) during meal c) after meal*

13)Why did you remove your denture?  
*a)discomfort b) doctor's advice c) loss of retention*

14)After removing the denture what you will do?  
*A)place in to water b) place it anywhere*

15)Do you know that,denture should be removed atleast 6 hours per day  
*A)yes b)no*

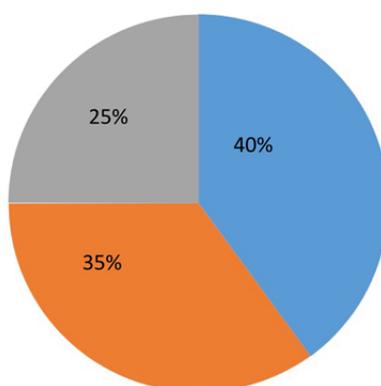
16)Do you know the reason for removing the denture for 6 hours  
*A)yes b)no*

17)Do you know the complication of wearing denture for 24 hours.  
*A)yes b)no*

The data collected from questionnaires were analysed and the following results were obtained.

**PIE-CHART1:**

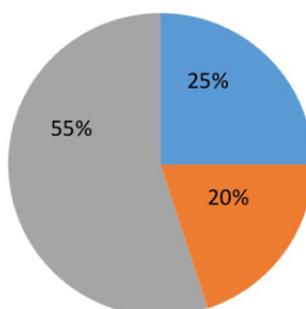
### Time of edentulous condition



■ less than a year ■ between 1-2 year ■ more than 2 year

**PIE-CHART:2**

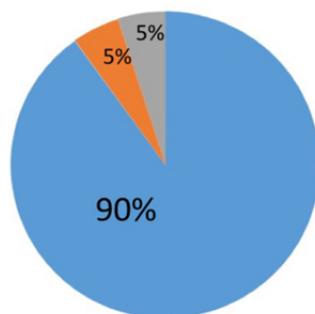
### Reason for replacing the denture



■ aesthetic ■ function ■ both aesthetic and function

**PIE-CHART:3**

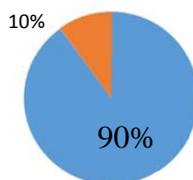
### Frequency of wearing complete denture



■ more than 12 hours ■ during eating ■ aesthetic concern

**PIE-CHART:4**

### awareness of denture care maintenance



■ maintain properly ■ maintain improperly

Pie-chart:1 shows the time of edentulous condition. 40% of the subjects lost their teeth in less than a year. 35% of the patients lost their teeth between 1-2 years. 25 % of the patients lost their teeth for more than 2 years.

Pie-chart:II shows the reason for replacing the existing complete denture. 25% subjects replaced their denture for poor aesthetics. 20% of the subjects replaced for difficulty in chewing. 55% of the subjects replaced their dentures for both poor aesthetic and function.

Pie-chart:III frequency of wearing complete denture. 90% patients wear dentures for more than 12 hours, 5% wear dentures only during eating and 5% wear only for aesthetic concern.

Pie-chart:IV shows the awareness of denture care maintenance. 90% of the denture wearers maintain their denture properly and 10% of them were not maintain their denture properly

Complete dentures are more preferred than fixed prosthesis for edentulous patients due to economic reasons. The complete denture has to be maintained properly to serve its function. The underlying tissue change occurs periodically. The residual ridge resorption is more in the first year after extraction. Based on the tissue changes the denture has to be modified or remade. The commonest cause for remaking the dentures within one year are poor aesthetics and ill-fitting. The awareness for the edentulous patients wearing dentures is not very clear. Significant patients wear their dentures continuously overnight without knowing the sequelae. Continuous wearing of complete denture reduces the blood supply to the underlying tissue that aids in resorption of the residual ridge. The residual ridge resorption results in poor denture retention. Care has to be taken in instructing the patients to follow the post insertion instructions to reduce the number of denture reconstruction.

**CONCLUSION:**

The survey shows completely edentulous patients wearing complete dentures have moderate knowledge about the denture care maintenance. The poor denture maintenance may lead to residual ridge resorption, ulcerations and fungal infection. The Dentist should insist upon regular denture care maintenance and inform the sequelae of poor denture care maintenance with more emphasis on tissue health.

**REFERENCE:**

1. Christensen K, Doblhammer G, Rúa DR, Vaupel JW. Aging populations: The challenges ahead. *The Lancet* 2009; 374/9696:1196-1208.
2. Adam RZ: Do complete dentures improve the quality of life of patients? Department of Restorative Dentistry, Faculty of Dentistry and World Health Organisation (WHO) Oral Health Collaborating Centre, University of the Western Cape, 2006
3. Jennings DE. Treatment of the mandibular compromised ridge: a literature review. *J Prosthet Dent* 1989;61:575-9.
4. Garrett NR, Kapur KK, Perez P. Effects of improvements of poorly fitting dentures and new dentures on patient satisfaction. *J Prosthet Dent* 1996;76:403-13
5. Wöstmann B1, Budtz-Jørgensen E, Jepson N, Mushimoto E, Palmqvist S, Sofou A, Owall B. Indications for removable partial dentures: a literature review. *Int J Prosthodont*. 2005 Mar-Apr;18(2):139-45.
6. Rafael Gómez-de Diego,1 María del Rocío Mang-de la Rosa,2 María J. Romero-Pérez,3 Antonio Cutando-Soriano,4 andAntonio López-Valverde-Centeno5. Indications and contraindications of dental implants in medically compromised patients: Update *Med Oral Patol Oral Cir Bucal*. 2014 Sep; 19(5): e483–e489.