

Original Research

Patients Awareness Regarding Denture Maintenance /Hygiene –A Survey

Renu Gupta¹, Abhishek², RP Luthra³, Dapinder Kaur⁴, Bhuvaneshwari K²

¹Professor & Head, ²PG student, Department of Prosthodontics, HP Govt dental college, Shimla, ³Professor and Head, Department of Dentistry, Dr. YSP Government Medical College, Nahan, ⁴Private Practitioner

ABSTRACT:

The aim of this research is to evaluate the awareness of patients toward denture hygiene using a questionnaire survey. The awareness of prosthetic treatment among patients has increased and hence people awareness of the prosthetic treatment. Efficient and regular cleaning of removable denture is necessary to maintain good oral hygiene conditions and also to maintain the durability of the dentures.

Key words: Denture Maintenance, oral hygiene

Received: 12 November, 2019

Revised: 24 November, 2019

Accepted: 29 November, 2019

Corresponding author: Dr. Renu Gupta, Professor & Head, Department of Prosthodontics, HP Govt dental college, Shimla.

This article may be cited as: Gupta R, Abhishek, Luthra RP, Kaur D, Bhuvaneshwari K. Patients Awareness Regarding Denture Maintenance /Hygiene –A Survey. J Adv Med Dent Scie Res 2019;7(12): 105-107.

INTRODUCTION

With over 1 billion persons, India is the second most populous country in the world. Of these, 7.7% are over the age of 60 years which amounts to 77 million people. Health is one of the major concerns for the welfare of elderly. General health is compromised by poor oral health and loss of teeth which not only adversely affect the dietary intake but nutritional status also¹.

The number of elderly patients requiring dentures to replace missing teeth has also increased due to the increase in life expectancy over the past decade.² Replacement of lost teeth with the removable partial /complete dentures helps in restoring the functional and esthetic conditions of the patients².

The success of treatment outcome depends on the maintenance of proper denture and oral hygiene.² In older persons, care of dentures and the mucosal tissues of the edentulous mouth can be important for overall health. In addition, due to unclean prosthesis, there may be greater social consequences of mouth malodor for someone whose dietary intake is strongly linked to socialization, such as an older person who attends a senior activities center for meals. Unclean dentures have a more profound effect on a

frail elder than on a younger, healthier person causing impairment in eating.³

For the long-term success of removable prosthodontic treatment, Regular oral and denture hygiene procedures play a major role in the maintenance of oral health. When patients are highly motivated toward the correct method of use and hygiene maintenance procedures, only then rehabilitative treatment is successful⁴. As periodic recall programs are effective in promoting good oral health surveys have reported that complete denture wearers have difficulty in cleaning their dentures. It is often noted that patients do not report to the dentist for denture cleansing instructions in follow up visits and the maintenance of their dentures. It is the responsibility of dentist to educate their patients periodically and the maintenance of their dentures at appropriate intervals is the duty of dentist. The difference in oral hygiene habits and attitudes may be related to number of factors, such as education, gender, social status, or age. Geriatric oral health care will increase several fold in the coming years.⁴

Several studies have investigated patients denture-cleaning habits; however, vary In different communities, Patients oral and denture hygiene habits, frequency of use, and methods of choice for denture cleaning may vary.⁵ So,

this study is aimed to investigate the denture hygiene habits among removable partial and complete denture wearers

MATERIALS AND METHODS

This survey was conducted on 100 patients with removable complete or partial dentures attending the Outpatient Department of Prosthodontics, HP GDC .Data was collected using a verbal questionnaire .

QUESTIONNAIRE

1. Do you remove denture at night?
2. What was the prime purpose for the prosthesis fabrication?
3. How you Store prosthesis?
4. Whether you clean prosthesis daily ?
5. Frequency of cleaning prosthesis?
6. What material(if any specific) they use for cleaning prosthesis
7. Do you remember instruction given to you by dentist?

1. Do you remove denture at night?	Yes (80%)	No(20%)		
2. What was the prime purpose for the prosthesis fabrication?	Mastication (86%)	Apperance (13%)	Speaking (1%)	
3. How you store prosthesis?	Water(85%)	Open (15%)		
4. Whether you clean prosthesis daily?	Yes (90%)	No(10%)		
5. Frequency of cleaning prosthesis?	Twice or more(50%)	Once(40%)	Occasionally(10%)	
6. What material they use for cleaning prosthesis?	Water and brush(45%)	Water(35%)	Water,brush and soap(15%) Brush and paste (5%)	
7. Do you remember instruction given to you by dentist?	Yes(60%)	No(30%)	Never received instructions(10%)	
8. Do you smoke ?	Yes(15%)	No(85%)		

RESULTS

A total of 100 patients were reviewed with their age ranging from 40 to 80 . Among them, 59% were male and 41% were female .About 60% of elders have been denture wearers for less than 6 months, whereas about 30% have worn dentures for 1 year(>6 months) , about 5% for 1–2 years and 5% more than 2 yrs .

80% patients told that they remove denture while sleeping

The most common reason given by the patients for wearing denture was given as improving mastication(chewing) (86%), whereas about 13% wore dentures for appearance and only 1% wore dentures for speaking.

Regarding storage of dentures, the results obtained in this study are that most patients (85%) immersed their dentures in water, whereas only 15% stored them in the dry environment

When we asked regarding cleaning of denture,about 50% cleaned their denture twice or more than twice per day, whereas 40% were found to clean their denture once a day and only 10% cleaned their dentures occasionally.

When we asked regarding how they clean denture the most common method was found to be with water and brush (45%) followed closely by water (35%), water ,brush and soap (15%), brush and paste (5%)

When we asked regarding whether they remember instructions given to you by dentist,60% told yes they know but 30% told they don't remember and 10% told they did not receive such kind of instructions

When we asked about smoking habit 15%admitted that they smoke.

DISCUSSION

A total of 100 patients were reviewed with their age ranging from 40 to 80 . Among them, 59% were male and 41% were female. About 60% of elders have been denture wearers for less than 6 months, whereas about 30% have worn dentures for 1 year(>6 months) , about 5% for 1–2 years and 5% more than 2 yrs .

Most of the patients (80%) remove denture while sleeping. This situation is better than those reported in the previous studies in which 41.5% and 64% of patients, respectively, did not remove their dentures at bedtime^{7,8,9}. Baran and Nalçacı showed that 55.2% of patients slept with their dentures.⁹ The most common reason given by the patients for wearing denture was given as improving mastication(chewing) (86%), whereas about 13% wore dentures for appearance and only 1% wore dentures for speaking.² Results are similar to the previous study done by Chen .⁶

Regarding storage of dentures, the results obtained in this study are that most patients (85%)immersed their dentures in water, whereas only 15% stored them in the dry environment which is in agreement with other studies^{6,10,11}

When we asked regarding cleaning of denture,about 50% cleaned their denture twice or more than twice per day, whereas 40% were found to clean their denture once a day and only 10% cleaned their dentures occasionally. This frequency was higher than that of Dikbasal et al.⁷, where 25% of individuals, from a sample of 234, reported cleaning their dentures more than 2 times a day. However, according to Pietrovovski et al.¹² and Peracini et al.¹³ 96% and 73.58% of patients, respectively, reported cleaning their dentures 2 or more times per day

When we asked regarding how they clean denture, the most common method was found to be with water and brush (45%) followed closely by water (35%), water, brush and soap (15%), brush and paste (5%). In a study by Molouk et al.¹⁴, 31.7% of patients cleaned their dentures with water and 31.14% with brush and water. Khasawneh and alWahadni¹⁵ reported that most patients cleaned their denture with a toothbrush.

When we asked regarding whether they remember instructions given to you by dentist, 60% told yes they know but 30% told they don't remember and 10% told they did not receive such kind of instructions. The previous studies have reported that the majority of denture wearers do not know how to clean their dentures because they have never received instructions from

their dentist. Results were obtained by Dikbas et al.⁷, Hoad Reddick et al¹⁶, Marchini et al¹⁷, and Amanda et al¹⁸, who found that 82.9%, 86.3%, 77.5%, and 51.89%, respectively, of the respondents, did not receive proper denture cleaning instructions from their dentists.

CONCLUSION

Within the limitations of this study, it was concluded that though most of patients remove denture at night but still they don't know exactly about removable prosthesis/denture maintenance part so the patients should be instructed by the dentists about denture maintenance and other oral hygiene practices, the harmful effects of overnight wearing and accumulation of micro organisms and debris on the denture surfaces. Benefits of the follow up visits must be told and reinforcement instructions help in maximum benefit.

REFERENCES

1. Shah N, Prakash H, Sunderam KR. Edentulousness, denture wear and denture needs of Indian elderly – a community-based study. *Journal of Oral Rehabilitation* 31; 467–476
2. Namrata M, Dhanraj Ganapathy. Awareness about Denture Hygiene: A Survey among Patients Wearing Complete Dentures and Removable Partial Dentures. *Int J Orofac Biol* 2017;1:59-65.
3. Saha A, Dutta S, Varghese RN, Kharsan V, and Agrawal A. A survey assessing modes of maintaining denture hygiene among elderly patients. *J Int Soc Prev Community Dent*. 2014 Sep-Dec; 4(3): 145–148
4. Shankar T, Gowd S, Suresan V, Mantri S, Saxena S. Denture Hygiene Knowledge and Practices among Complete Denture Wearers attending a Postgraduate Dental Institute
5. Naz F, Bali SK, Shah SA. Assessment of denture cleanliness and hygiene habits among complete denture wearing patients in Kashmiri population- an original research. *Intern J of Recent Scie Research*. 2019 Vol. 10, Issue, 06(H), pp. 33214-33218.
6. Chen Qipeng. Denture Care Behaviours and Denture Related Quality of Life of Elderly Denture Wearers in Hong Kong. *The HKU Scholars Club*; September, 2013
7. Dikbas I, Koksall T, Calikkocaoglu S. Investigation of the cleanliness of dentures in a university hospital. *Int J Prosthodont*. 2006; 19:294-298.
8. De Castellucci Barbosa L, Ferreira MR, De Carvalho Calabrich CF, Viana AC, De Lemos MC, Lauria RA. Edentulous patients' knowledge of dental hygiene and care of prostheses. *Gerodontology*. 2008; 25:99-106.
9. Baran I, Nalçaci R. Self-reported denture hygiene habits and oral tissue conditions of complete denture wearers. *Arch Gerontol Geriatr*. 2009; 49:237-241
10. Gendreau L, Loewy ZG. Epidemiology and etiology of denture stomatitis. *J Prosthodont* 2011;20:251-60.
11. Celić R, Knezović Zlatarić D, Baucić I. Evaluation of denture stomatitis in Croatian adult population. *Coll Antropol* 2001;25:317-26.
12. Pietrovski J, Azuelos J, Tau S, Mostavoy R. Oral findings in elderly nursing home residents in selected countries: Oral hygiene conditions and plaque accumulation on denture surfaces. *J Prosthet Dent* 1995;73:136-41
13. Peracini A, Andrade IM, Paranhos Hde F, Silva CHde Souza RF. Behaviors and hygiene habits of complete denture wearers. *Braz Dent J* 2010;21:247-52.
14. Torabi Parizi M, Taheri S, Amini P, Karimi Afshar M, Karimi Afshar M. Evaluation of denture hygiene among removable denture wearers referred to clinics of Kerman, Iran. *J Oral Health Oral Epidemiol* 2013;2:44.
15. Khasawneh S, alWahadni A. Control of denture plaque and mucosal inflammation in denture wearers. *J Ir Dent Assoc* 2002;48:13-28.
16. Hoad Reddick G, Grant AA, Griffiths CS. Investigation into the cleanliness of dentures in an elderly population. *J Prosthet Dent* 1990;64:48-52.
17. Marchini L, Tamashiro E, Nascimento DF, Cunha VP. Self reported denture hygiene of a sample of edentulous attendees at a University dental clinic and the relationship to the condition of the oral tissues. *Gerodontology* 2004;21:226-8
18. Peracini A, Andrade IM, Paranhos Hde F, Silva CH, de Souza RF. Behaviors and hygiene habits of complete denture wearers. *Braz Dent J* 2010;21:247-52.