



ISSN Print: 2394-7489  
ISSN Online: 2394-7497  
IJADS 2018; 4(1): 228-230  
© 2018 IJADS  
www.oraljournal.com  
Received: 24-11-2017  
Accepted: 27-12-2017

**Aditi Sharma**  
Lecturer, Department Of  
Prosthodontics, Indira Gandhi  
Govt. Dental Hospital, Jammu  
and Kashmir, India

**Vishal Partap Singh**  
MDS, Prosthodontics 2<sup>nd</sup> Year,  
Institute Of Dental Sciences And  
Technology, Modinagar, Uttar  
Pradesh, India

**Beneetu Atri**  
House Surgeon, Department Of  
Prosthodontics, Indira Gandhi  
Govt. Dental Hospital, Jammu  
and Kashmir, India

## Knowledge and attitudes toward patient education regarding denture care in dentists: A questionnaire survey

**Aditi Sharma, Vishal Partap Singh and Beneetu Atri**

### Abstract

**Introduction:** Denture cleanliness is essential to prevent malodor, poor aesthetics and the accumulation of plaque/calculus with its deleterious effects on the mucosa. The present study was conducted to assess the denture hygiene knowledge and attitudes toward patient education in denture care among dentists.

**Materials & Methods:** The present questionnaire survey was conducted in the department of Prosthodontics on 204 dentists. A questionnaire was designed to gather the socio-demographic characteristics, assess the denture hygiene knowledge and attitudes.

**Results:** Out of 204 subjects, 169 were BDS (males- 88, females- 81) and 35 MDS (males- 20, females- 15). The difference was significant ( $P < 0.01$ ). 152 BDS and 35 MDS knew that dentures accumulate plaque/biofilms. 120 BDS and 35 MDS knew that toothpaste is advisable for denture cleansing. 142 BDS and 32 MDS knew that dentures are prone to develop denture stomatitis. The difference was significant ( $P < 0.05$ ). 117 BDS and 35 MDS were strongly disagree with the fact that explaining denture hygiene instructions to old patients can be very time consuming. 112 BDS and 32 MDS were disagree with the fact that patient education regarding the impact of denture hygiene on systemic health is not important. 127 BDS and 33 MDS were strongly disagree with the fact that denture adhesives (if used) need not be cleaned completely and reapplied again daily. The difference was significant ( $P < 0.05$ ).

**Conclusion:** Author concluded that BDS had limited knowledge and attitudes toward patient education in denture care whereas MDS had sufficient denture hygiene knowledge, attitudes toward patient education in denture care among dentists.

**Keywords:** Denture hygiene, denture stomatitis, knowledge

### Introduction

Oral health is the mirror to the general health. If periodontal health is to be maintained, daily effective oral hygiene measures should be pursued, failing to do so will unleash the inevitable consequences of plaque accumulation. Dental plaque accumulates on all surfaces; both hard and soft in the oral cavity. Removable dentures are also vulnerable to plaque accumulation hence; oral hygiene maintenance is a life-long exercise<sup>[1]</sup>.

Denture cleanliness is essential to prevent malodor, poor aesthetics and the accumulation of plaque/calculus with its deleterious effects on the mucosa. The micro-porous surfaces of an acrylic denture provide a wide range of environments to support microorganisms that can threaten the health of physically vulnerable denture patients. There are innumerable solutions, pastes and powders available for cleaning dentures with a variety of claims about their relative efficacies<sup>[2]</sup>.

Ideally, denture care products should be easy to handle, effective for removal of inorganic/organic deposits and stains, bactericidal and fungicidal, nontoxic to the patient, nondeleterious to the denture materials and inexpensive. Given that brushing is the most common cleansing method for complete dentures, the use of specific brushes and cleansers is of paramount importance for good outcomes<sup>[3]</sup>.

Dentists' and denture patients should realize that microbial plaque on dentures may be harmful to both the oral mucosa and the general health. Hence, it is the responsibility of the patient to maintain oral hygiene through daily home care routine. However, denture wearers in comparison to the dentate, pay less attention toward the importance of plaque control.

**Correspondence**  
**Aditi Sharma**  
Lecturer, Department Of  
Prosthodontics, Indira Gandhi  
Govt. Dental Hospital, Jammu  
and Kashmir, India

It is the obligation of the dentist to motivate and instruct the denture wearers and provide the means and methods for plaque control. Dental professionals must have a current knowledge of denture cleansing strategies to maximize the services offered to their denture patients [4]. The present study was conducted to assess the denture hygiene knowledge, attitudes toward patient education in denture care among dentists.

**Materials & Methods**

The present questionnaire survey was conducted in the department of Prosthodontics. It comprised of 204 dentists of both gender. All were informed regarding the study and written consent was obtained. Ethical clearance was obtained prior to the study.

General information such as name, age, gender etc. was recorded. A questionnaire was designed to gather the sociodemographic characteristics, assess the denture hygiene knowledge, attitudes. This 23- item questionnaire included five knowledge related questions each of these questions had three options to choose from: Yes, no and do not know. Five attitude statements were included (use, perceived necessity, patient education). The options for attitude were based on 5- point Likert scale, it requires the dentists' to make a decision on their level of agreement on this scale (strongly agree, agree, do not know, disagree, strongly disagree). Results were tabulated and subjected to statistical analysis using chi- square test. P value less than 0.05 was considered significant.

**Results**

**Table I:** Distribution of subjects

BDS		MDS		P value
Males	Females	Males	Females	
88	81	20	15	0.01

Table I shows that out of 204 subjects, 169 were BDS (males- 88, females- 81) and 35 MDS (males- 20, females- 15). The difference was significant (P- 0.01).

**Table II:** Dentists knowledge about denture hygiene

Question	BDS	MDS	P value
Do dentures accumulate plaque/biofilms?			0.05
Yes	152	35	
No	12	0	
Don't know	5	0	
Is regular toothpaste advisable for denture cleansing?			0.01
Yes	120	35	
No	10	0	
Don't know	39	0	
Dentures are associated with denture stomatitis?			0.02
Yes	142	32	
No	12	2	
Don't know	15	1	

Table II shows that 152 BDS and 35 MDS knew that dentures accumulate plaque/biofilms. 120 BDS and 35 MDS knew that toothpaste is advisable for denture cleansing. 142 BDS and 32 MDS knew that dentures are prone to develop denture stomatitis. The difference was significant (P< 0.05).

**Table III:** Dentist attitude towards denture hygiene instructions

Question	Strongly agree	Do not know	Strongly disagree
Explaining denture hygiene instructions to old patients can be very time consuming			
BDS	40	12	117
MDS	0	0	35
It is of no use to provide older people with denture hygiene instructions, as they decline to follow			
BDS	35	22	112
MDS	1	2	32
Patient education regarding the impact of denture hygiene on systemic health is not important			
BDS	10	14	145
MDS	1	1	33
Denture adhesives (if used) need not be cleaned completely and reapplied again daily			
BDS	30	12	127
MDS	0	2	33

Table II shows that 117 BDS and 35 MDS were strongly disagree with the fact that explaining denture hygiene instructions to old patients can be very time consuming. 112 BDS and 32 MDS were disagree with the fact that patient education regarding the impact of denture hygiene on systemic health is not important. 127 BDS and 33 MDS were strongly disagree with the fact that denture adhesives (if used) need not be cleaned completely and reapplied again daily. The difference was significant (P< 0.05).

**Discussion**

Cleansing and disinfecting of dentures are essential for the maintenance of oral soft tissue health and successful use of removable dentures. Therefore, it is very important for dentists' to educate their patients regarding daily denture cleansing regimen to prevent undesirable circumstances. Poor denture hygiene is a seemingly common problem encountered by prosthetic dentists' with their numerous complete denture patients [5]

Elderly patients, particularly those who are in a compromised state, are not able to maintain good denture hygiene due to some physical and/or mental handicap. However, the maintenance of denture hygiene is neglected in not just compromised geriatric patients but also with normal healthy denture wearers. This can be attributed to a definite lack of motivation, basic knowledge or simply carelessness and neglect [6]

A study by Vinay *et al.* [7] on 168 dental practitioners completed a comprehensive questionnaire. Most of the subjects were qualified with a bachelor degree 142 (85%). 25 (18%) subjects did not associate oral biofilms on complete denture with conditions like denture stomatitis and other serious systemic diseases. Approximately half of the DPs 69 (48%) and specialists 8 (31%) agreed that explaining denture hygiene instructions to old patients can be very time consuming. A recall program for their patients is of importance according to 39 (27%) of DPs and 3 (12%)

specialists.

A study by Ling Zhu *et al.* [8] on 4,398 subjects showed that 32% of the 35–44-year-olds and 23% of the 65–74-year-olds brushed at least twice a day but only 5% used fluoridated toothpaste; 30% and 17% respectively performed ‘Love-Teeth-Day’ recommended methods of tooth brushing. A dental visit within the previous 12 months was reported by 25% of all participants and 6% had a dental check-up during the past two years.

Nearly 15% of the subjects would visit a dentist if they experienced bleeding from gums; about 60% of the subjects paid no attention to signs of caries if there was no pain. Two thirds of the urban residents and one fifth of the rural participants had economic support for their dental treatment from a third party, either totally or partially. Significant variations in oral health practices were found according to urbanization and province. At age 35–44 years 43% of participants had daily consumption of sweets against 28% at age 65–74 years. Dental caries experience was affected by urbanisation, gender, frequency, time spent on and method of tooth brushing. Knowledge of causes and prevention of dental diseases was low with somewhat negative attitudes to prevention observed.

### Conclusion

Author concluded that BDS had limited knowledge and attitudes toward patient education in denture care whereas MDS had sufficient denture hygiene knowledge, attitudes toward patient education in denture care among dentists.

### References

1. Polyzois GL. Denture cleansing habits. A survey. Aust Dent J. 1983; 28:171-3.
2. Schou L, Wight C, Cumming C. Oral hygiene habits, denture plaque, presence of yeasts and stomatitis in institutionalised elderly in Lothian, Scotland. Community Dent Oral Epidemiol. 1987; 15:85-9.
3. Likert R. A technique for the measurement of attitudes. Arch Psychol. 1932; 140:55.
4. Srinivasan M, Gulabani M. A microbiological evaluation of the use of denture cleansers in combination with an oral rinse in complete denture patients. Indian J Dent Res. 2010; 21:353-6.
5. Gornitsky M, Paradisi I, Landaverde G, Malo AM, Velly AM. A clinical and microbiological evaluation of denture cleansers for geriatric patients in long-term care institutions. J Can Dent Assoc. 2002; 68:39-45.
6. Manderson RD, Ettinger RL. Dental status of the institutionalized elderly population of Edinburgh. Community Dent Oral Epidemiol. 1975; 3:100-7.
7. Vinay, de Almeida OP, Bozzo L, Scully C, Graner E. Oral mucosal health and disease in institutionalized elderly in Brazil. Community Dent Oral Epidemiol. 1991; 19:173-5.
8. Ling Zhu, Harrison A. Assessment of plaque prevention on dentures using an experimental cleanser. J Prosthet Dent. 2000; 84:594- 601.