Original article:

Evaluation of partially dentate patient’s knowledge about denture hygiene - A survey

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Abstract:
Regular and effective denture hygiene is an important component of good overall oral health and it is essential that individuals with RPDs are provided with excellent denture hygiene advice by the dental team responsible for their care. Contemporary society plays an essential role in promoting good health, especially among the elderly population, and a need for strengthening this action has been emphasised by the World Health Report. So the aim of this study was to investigate maintenance of denture in removable partial denture patients and to establish any deficiencies in patient knowledge regarding denture hygiene in removable denture patients, which were done under the objectives to investigate the information given to RPD wearers regarding denture hygiene, to assess the knowledge of RPD wearers on denture hygiene and to identify any possible changes that should be implemented. The study was conducted in the form of questionnaire in Datta Meghe Institute Medical Science, Sawangi (Meghe), Wardha Maharashtra. A total of 100 partially dentate patients were participated in this observational study. A structured questionnaire, which includes questions referring to knowledge about maintenance of removable partial denture, was provided in the local language and used to collect the data of all the partial denture wearers.

Key words – RPD, Denture hygiene

Introduction:
There are several options available for patients who have lost teeth which includes dentures, bridges and implants. Removable partial dentures (RPDs) have the advantage of being able to replace several missing teeth in a cost effective manner without any need for surgery and hence are popular options for many patients. However RPDs are far from perfect and numerous studies have linked RPD wear with increased plaque levels, periodontal disease, dental caries and denture stomatitis. In particular, those patients who wear their denture continuously, rather than only during the day, are much more likely to be affected.

Regular and effective denture hygiene is therefore a very important component of good overall oral health and it is essential that individuals with RPDs are provided with excellent denture hygiene advice by the dental team responsible for their care. Contemporary society plays an essential role in promoting good health, especially among the elderly population, and a need for strengthening this action has been emphasised by the World Health Report. Good oral health can improve general health and quality of life. From this aspect, some authors have reported that the dentist must act in the prevention of the general health problems of the elderly. Because of their advanced age and lack of information about the maintenance of oral health leading to loss of teeth, many of these elderly people are partial denture wearers. In addition, many elderly people are functionally impaired and have limiting conditions resulting in loss of independence making them incapable of caring for their own oral hygiene.
Aim of this study was to investigate maintenance of denture in removable partial denture patients and to establish any deficiencies in patient knowledge regarding denture hygiene in removable denture patients, which were done under the objectives to investigate the information given to RPD wearers regarding denture hygiene, to assess the knowledge of RPD wearers on denture hygiene and to identify any possible changes that should be implemented.

The study was conducted in the form of questionnaire to know the oral health related quality of life in removable partial denture patients.

**Material & Method**

The study was conducted in the form of questionnaire in Datta Meghe Institute Medical Science, Sawangi(Meghe), Wardha Maharashtra. A total of 100 partially dentate patients were participated in this observational study. A structured questionnaire, which includes questions referring to knowledge about maintenance of removable partial denture, was provided in the local language and used to collect the data of all the partial denture wearers. No patient exclusion criteria were applied.

**Statistical analysis**

All information given by patients was entered into a single computer database. Response analysis of data was performed.

**Results**

A total of 100 patients were interviewed, of whom 62 male and 38 female. Out of which 69 patients were above 40 years and 31 patients were below 40 years; out of total patients 55 were working and 45 were non-working. 62% were from rural area and 38% from urban area. Out of total interviewed patients 70% were received instructions regarding hygiene maintenance of denture from their respective dentist and 30% were not received any information regarding denture hygiene maintenance. Out of total patients 49% were cleaning their denture by using water, soap and toothbrush, 28% were by using water, dentrifice and toothbrush and 23% were by using just water and toothbrush for cleaning the denture. Out of total interviewed patients 53% patients were cleaning their denture after each meal, 38% were cleaning their denture twice a day and 9% were cleaning their denture just once a day. 76% patients were not using any oral rinse to clean the denture and 24% were using oral rinse; 96% were removing their denture while sleeping and 4% were not removing denture while sleeping.

**Discussion**

Removable partial dentures are a favoured option for the restoration of many situations involving partial tooth loss. However, some clinical studies have reported damage to oral tissues with the use of this type of denture, especially dental caries and periodontal disease.

Few studies about oral health knowledge of RPD wearers were found in the literature. Bengt Öwall et al (2002), Concluded that Greater attention should be paid to RPD design principles that minimize the risks of tissue injury and plaque accumulation in accordance with modern concepts of preventive dentistry.

Daniela Garcia Ribeiro et al (2010), concluded that the patients who wore RPDs presented deficient knowledge with regard to the prevention, aetiology and development of dental caries and periodontal disease.

Menaka A. Abuzar et al (2012), Concluded that, It is the role of the dental team to arrange follow-up appointments for these patients, highlight the need for dental professionals to advise RPD wearers how to clean their denture, how often (after every meal), and to leave their denture out at night.

Shigli et al concluded that a complete educational programme must begin during the patient’s first
visit and must continue throughout the entire period while the denture is being made. Therefore, denture-wearing patients must be informed about the need for proper denture hygiene procedures. Thus, it is necessary for professionals to know their patients and the deficiencies they suffer from, so that they can be explained by means of a suitable programme to prevent or reduce the severity of both conditions, it is necessary to establish appropriate methods of oral hygiene. Elderly patients need knowledge about mouth and denture hygiene procedures, and for oral hygiene control, these habits should be supervised by regular follow-up. Poor denture hygiene has a negative impact on the elderly and is an important public health issue.

Conclusion

It is important that both the dentist and patients who wear RPDs should be conscious of the need for regular supervision to maintain good oral health and denture cleanliness. This study demonstrated that by incorporating a preventive programme, it is possible to maintain a good standard of oral and denture hygiene in RPD wearers over a prolonged period of time.

References
