

A QUESTION TO DENTURE WEARERS- DOES IT IMPROVE THE QUALITY OF LIFE?

Davinderjit Kaur Shergill

Resident, Department of Prosthodontics, Maharaja Ganga Singh Dental College and Rresearch Centre, Sriganganagar, Rajasthan, India.

Abstract

Background: The purpose of this study was to investigate denture satisfaction and oral health-related quality of life. **Material and Method:** A descriptive study was conducted with a sample of 40 patients. In which 20 were from male population and 20 were from female population. These patients were selected from the population of denture wearers in the institution. All patients completed an informed consent form. **Result:** In group A 50% of the males were completely satisfied, 40% were fairly satisfied and 10% were not satisfied with their dentures. In group B 50% of the subjects were fairly satisfied, 30% were completely satisfied and 20% of the subject population were unsatisfied with their prosthesis. **Conclusion:** It was seen that a vast majority of the dentures had a wrong vertical dimension and especially the high vertical dimension caused a significant decrease in patient satisfaction concerning chewing and speech ability.

KEY WORDS- Complete denture, satisfaction, quality of life, mastication, esthetics.

Corresponding author: Davinderjit Kaur Shergill, Resident, Department of Prosthodontics, Maharaja Ganga Singh Dental College and Rresearch Centre, Sriganganagar, Rajasthan, India

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INTRODUCTION

Many countries are facing an aging population, which will cause a ratio of individuals over 65 years of age up to 50% in the coming decades. The number of edentulous patients even in countries with a high standard of dental health care is significant.^{1,2} According to the World Health Organization (WHO) Global Oral Data Bank the prevalence of edentulism older than 65 years was shown as 58% in Canada, 41% in Finland and 46% in the United Kingdom.¹ The quality of complete dentures assessed by clinicians does not always come to accordance with the subjective judgment of the patients. The satisfaction level of the patient is influenced by several factors, including the dentures quality and the palatal area, the quality of interaction in the patient-dentist relationship, past

experiences with full dentures, and the psychological personality. In harmony, such factors may promote the improvement of the mastication, the speech, and the aesthetics of the teeth, besides producing less discomfort and pain sensitivity, favoring the comminution of harder food. Wearers of conventional full dentures have their masticatory functions reduced between 1/4 (one fourth) and 1/7 (one seventh) when compared to adults with natural teeth, depending on the age and the type of food.³ Patient perceptions are fundamental to improving health care quality, so methods for assessing patient feedback on satisfaction, care experience, and treatment outcomes are very important.⁴ This study aims to access whether complete dentures improve the quality of life (QOL) of an edentulous patient.

MATERIAL AND METHODS-

A descriptive study was conducted with a sample of 40 patients. These patients were selected from the category of complete denture wearers patients in the institution. All patients completed an informed consent form and were interviewed using the questionnaire in which questions were on the basis of various factors associated with prosthesis. Ethical clearance taken from ethical committee of institution. The study population was divided into two group-Group A (Male population) and Group B (Female population). Group A and group B were interviewed separately in which response of the patients was based on their personal satisfaction level with the prosthesis and they were rated their experiences on VAS scale. In questionnaire subjects response was divided into 3 categories(satisfied, fairly satisfied, not satisfied). The questionnaires were provide by one evaluator only, being this in charge only for the elucidation of possible doubts that could arise along the answers, therefore not interfering with their contents. The application of the questions started when the patient was comfortably sat in the chair. Individuals were invited to express their opinions about the conditions of their dentures through a set of 10 questions of the Questionnaire using VAS scale in which the scale ranging from 1 (one) to 3 (three), where 1 represents the total satisfaction and 3 represents the total dissatisfaction.

Statistical analysis- All the collected data were analyzed using SPSS software version 17.0.

RESULTS -

After the patients answered to the questionnaire on VAS scale ,Asking regarding the pain related with denture 10% males and females were fairly satisfied For proper speech 15% female were not satisfied and 20% male were fairly satisfied 20% female were fairly satisfied with chewing efficacy and 10% males were fairly satisfied. When the subjects were asked that is the food particles are getting interapped into denture 5% female were fairly satisfied while 10% of males were very satisfied . On asking for the appearance of red sores after started using denture 20% males were very satisfied but 10% of female were fairly satisfied . In terms of irritability 10% females were very satisfied and 5% males were very satisfied. In group A which belongs to male population of denture wearers 50% of the males were completely satisfied, 40% were fairly satisfied and 10% were not satisfied with their dentures. In group B which

belongs to female population of denture wearers 50% of the subjects were fairly satisfied, 30% were completely satisfied and 20% of the subject population were unsatisfied with their prosthesis.

DISCUSSION-

In this study, we attempted to assess the overall level of QOL(quality of life) in complete denture wearers. The results of this study highlight the need for more effective health promotion and prevention programmes. Although a major part of the population in many countries has an incomplete dentition, a substantial number of patients remain either not prosthetically restored⁵ or functioning with a shortened dental arch without any need for treatment⁶ Dentists consider dentures to be successful when they meet certain technical standards, whereas patients evaluate them from the viewpoint of personal satisfaction³ The number of studies evaluating the success, complication rate and patient satisfaction related to removable prosthesis is relatively scarce. The replacement of missing teeth can be achieved by fixed or removable appliances, but generally it is accepted that removable dentures deteriorate in a shorter time period.⁷ Many factors may influence patient's satisfaction with their dentures: quality of bone tissue and oral mucosa of denture bearing area, the adaptability of the neuromuscular mechanism, individual feeling of security by denture wearing, influence of the surrounding muscles on denture flanges, viscosity of saliva, patient's age, position of occlusal plane, occlusion, hygiene, type of food, etc. Focused on overall level of QOL and is regarded as useful for evaluations of oral disease impairment and for outcome assessments in prosthetic rehabilitation. Prosthetic treatment for edentulous patients often improves their chewing, appearance, and social functioning.^{8,9} Generally, all the patients were satisfied with their prosthesis but A higher rate of dissatisfaction was recorded for the speech problem which was 20% in females and 15% in males that is suggestive of ill fitted dentures. Despite this, a high rate of overall satisfaction was noted. This may be explained by the two reasons: Firstly, most dental patients in a dental college environment develop a degree of friendship towards their student. Therefore, many patients may have been protective of students when answering the questions and found it difficult to express their dissatisfaction^{10,11}. Secondly, the present study evaluated denture satisfaction within a short time (2-3 months) following clinical procedure completion. This may also contribute to the high rate of satisfaction as almost all the

Table 1- FORMAT OF THE QUESTIONNAIRE

S.No.	Questions on patients satisfaction	Response of the patients using VAS scale					
		Male patients			Female patients		
		Very satisfied	Fairly satisfied	Not satisfied	Very satisfied	Fairly satisfied	Not satisfied
1.	Have u ever faced any kind of pain in mouth because of using denture?	-	10%	-	-	10%	-
2.	Do you ever faced any kind of speech problem because of your denture.	-	20%	-	-	-	15%
3.	Do you have faced any difficulty in chewing any foods because of problems with your dentures?	10%	-	-	-	20%	-
4.	Have you ever noticed that the food particles are getting intrapped in ur denture?	-	-	10%	-	5%	-
5.	Do you avoid eating any kind of a food substances because of your denture?	-	5%	-	-	-	5%
6.	Have you ever felt that you are unable to eat with the denture you have been placed?	5%	-	-	10%	-	-
7.	Did you faced sore spots in your mouth?	20%	-	-	-	10%	-
8.	Have you been irritable with other people because of the problem with your denture?	-	5%	-	10%	-	-
9.	Do you feel a bit embarrassed because of problems with your denture?	10%	-	-	-	5%	-
10.	Do you avoid going out wearing denture?	5%	-	-	10%	-	-

in this sample had previous denture experience. A denture sore spot which is the second frequent encountered complication might also be related to the misfitting of the dentures. Sheppard et al.¹² revealed denture looseness as the main cause of complaints of denture wearers, followed by pain which corroborates the results of our study. The another reason for the aforesaid problem can be related with the vertical dimation that can be defined as "the distance measured between two points when the occluding members are in contact"¹³. Actually vertical dimension can be accurately determined in the clinic with various methods and its value has diagnostic validity¹⁴. In

all circumstances, an adequate interocclusal rest space must be developed in the range of 2 to 4 mm. Faults in the development of the appropriate individualized dimension can result either an increased or decreased vertical dimension of occlusion¹⁵. The ability to adapt with dentures and the prognosis will generally diminish in proportion to the health status. Some of the diseases that adversely affect patients satisfaction with their dentures include hyposalivation, Parkinson's disease, myasthenia gravis, bulbar palsy and diseases with either a strong connection to emotional stress or impairing mental health. Further in our study, patients showed an

improvement in their quality of life after using complete denture. Patients were fairly satisfied with their function, appearance, physical pain, social disability, psychological disability and discomfort, and physical disability. Comparing the results in our study, patients treated with complete dentures were satisfied with their quality of life.

CONCLUSION-

Denture quality, patient's level of acceptability and quality of life are all related to patient satisfaction. However the quality of denture shows the strongest correlation with patient satisfaction. Short term edentulous patients wearing complete dentures for the first time and with better quality of denture-bearing areas were more satisfied. Within the limitations of the present study concluded that the most frequently encountered complication in association with dentures is the loss of retention, followed by ulcerations, Complications do not affect the esthetic patient satisfaction scores, whereas loss of retention causes dissatisfaction of patients related to chewing ability, ulcerations affect patients' speech and chewing ability satisfaction scores negatively and It was seen that a vast majority of the dentures had a wrong vertical dimension and especially the high vertical dimension caused a significant decrease in patient satisfaction concerning chewing ability.

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