

Quality of Dentures and Patient Satisfaction

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ABSTRACT

This study is aimed at evaluating a co-relationship between the quality of the complete dentures and their serviceability. Dentist consider dentures successful when evaluate dentures from the point of view of their own satisfaction. The ability of patients to use dentures for mastication or speech and consideration of aesthetics has been evaluated with standard complete dentures. The analysis of data on 60 patients showed direct relationship of quality of dentures and acceptance of dentures by patients.

Key words: Complete dentures, quality

INTRODUCTION

Mankind is known to have concerned itself with replacement of lost teeth even before the Christian era. A number of studies have reported the relationship between quality of dentures and patient's satisfaction. The results of these investigations are contradictory. Studies published by authors such as Young, (1949, 1957), Carlson et al, (1967) and Bergman, (1972), show that some edentulous patients are quite satisfied in spite of technical imperfections in their dentures.

On the other hand, there are patients who are dissatisfied although the technical quality of their dentures is excellent, as shown in studies by Langer, (1961) and Yoshizumi, (1964). An inverse relationship was found by Manne and Mehra (1983). The more dissatisfied patients are with the better quality of dentures.

Vanaken, (1989), and Marinus A.J. van, (1990) showed a moderately positive correlation between satisfaction of the patient and the quality of the dentures. Only a weak correlation or no correlation has been found (Carlson, (1967); Langer, (1962); Kalk, (1979); Vanwass, (1990).

According to Wass's (1990) study, even specific problems such as pain, looseness of the dentures and the difficulty in chewing were not related to the quality of ridges. Thus patients with optimal anatomic conditions may have the same problems with their dentures as do patients with atrophic ridges. These results are in agreement with those of most other investigations. (Carlson, 1967), (Kalk, 1979).

MATERIALS AND METHODS

Sixty subjects included in this study and selected on random basis, with an age range from 38-81 years. Complete dentures were made from 1st May, 2006 to

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15th Feb 2007 at Punjab Dental Hospital, Lahore. In this study the standards of dentures were judged by the principles approved by the Academy of Denture Prosthetics, published in 1989. For the purpose of this study two questionnaires were designed, the first questionnaire aimed to find out, what the patient thought about his denture. The patients were requested to rate their dentures Good, Fair or Poor in the following six categories:

- I. retention (Fit),
- II. ability to chew food,
- III. appearance,
- IV. speech,
- V. ability to taste food,
- VI. comfort.

Criteria for rating as good, fair or poor were provided for each category. Each item was scored on the basis of good = 3, fair = 2, and poor = 1. As a result, the score could range from 18, with all categories circled 'good', to 6, with all categories circled 'poor'. This total score was termed the 'Patient Satisfaction Score'.

Questionnaire No.2 was used to know the patient's presenting complaints and the denture history from that provisional diagnosis was made. Examination of dentures includes:

1. The examination of denture bases.
2. Jaw relations; (a) vertical (b) Horizontal,
3. Tooth positioning
4. Occlusion

Then internal examination of any pathology in the mouth etc. was done. The quality of the new denture was compared with the old denture which was in the patient's use.

Relevant medical history was noted and final diagnosis established. For this purpose the same questionnaire was used which is in the common use for diagnosis and treatment planning in Prosthetics Department de' Montmorency college of Dentistry, Lahore.

The scoring of the quality of dentures was done on the same basis as questionnaire 1. Retention of U/L bases give good = 3, Fair =2, Poor =1. If Vertical dimension is correct =2 and in case of incorrect =1. In case of Centric relation, correct decision =3, split decision =2, wrong = 1. Stability of U/L dentures categorized in Good =3, Fair = 2, Poor =1. Aesthetics determined by harmony of dentures with face and positioning of teeth in relationship to biometric guides. Good harmony and correct positioning of teeth scored 2 and inappropriate give 1.

The data collected was arranged so that a relationship could be established between the following factors:

1. The quality of denture and patient satisfaction.
2. Patient satisfaction with age changes in complete denture patients.
3. Relationship between individual faults in denture and patient complaints.

RESULTS

For the whole sample the spearman coefficient test was used. The mean age of the complete denture bearers was 69 years.

The success rate of complete denture adaptation was more in male than females. There was no correlation of age of patient to satisfaction of patient with complete dentures. With new dentures 90% of patients were generally satisfied, 10% patients had vague history of problems not related with faults in dentures. Generally patient's complaints and satisfaction is in correlation with quality of old and new dentures as shown in Table 1 & 2. Table 3 shows the distribution of the results of the old dentures examination.

Table 1: Distribution of the answers to questionnaire on patient satisfaction with old dentures (Questions/answers)

	Very satisfied (Good)		Fairly satisfied (Fair)		Dissatisfied (Poor)	
	No.	%	No	%	No	%
Comfort.	13	22	23	38	24	40
Fit (Upper)	17	28	29	48	14	23
Fit (Lower)	4	7	18	30	38	63
Ability to eat food	12	20	25	42	23	38
Ability to taste food	32	53	27	45	1	2
Appearance	18	30	31	52	11	18
Speech	25	42	35	58	0	0

Table 2: Distribution of the answers to questionnaire on patient satisfaction with new dentures (Questions/answers)

	Very Satisfied (Good)		Fairly satisfied (Fair)		Dissatisfied (Poor)	
	No.	%	No	%	No	%
Comfort.	50	83	6	10	4	7
Fit. (Upper)	50	83	10	17	0	0
Fit (Lower)	30	50	29	49	1	1
Ability to eat food	29	49	30	50	1	1
Ability to taste food	58	97	2	3	0	0
Appearance	51	85	7	12	2	0
Speech	57	95	3	5	0	0

Table 3: Evaluation of technical quality of old dentures.

Evaluation/Retention	=n	%age
Upper		
Good	9	15
Fair	29	49
Poor	22	35
Lower		
Good	1	2
Fair	15	25
Poor	44	72
Centric relation in harmony with centric occlusion		
Yes	29	49
No	19	30
Occlusal vertical dimension.		
Correct	40	66
Incorrect	20	33
Stability Upper		
Good	14	23
Fair	25	42
Poor	21	35
Stability Lower		
Good	3	5
Fair	15	25
Poor	42	70
Appearance		
Yes	29	48
No	31	52
Anteroposterior position of teeth		
Yes	15	25
No	45	75

DISCUSSION

The results of this study show that there was no correlation between the age of the patients and their satisfaction with complete dentures. The results found a significant correlation between the quality of dentures and patient satisfaction. The dentures that have faults like under extended bases or incorrect jaw relations, generally in these cases patients also complained about retention and inability to eat food. But the patient's opinion about the appearance is different from operator's evaluation of aesthetics

according to the biometric guides. In some patients dissatisfaction with appearance can result in lack of confidence in complete dentures and presentation of vague complaints.

CONCLUSION

1. This study did not find any correlation between age of patients and denture satisfaction:
2. There was significant correlation between denture quality and patient satisfaction.

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