

THE CONNECTION OF THE SATISFACTION OF PATIENTS FOR THE OLD AND NEW DENTURES

Neada Hysenaj, MA
Herta Beck, Dr

University Dental Clinic, University Hospital Center "Mother Theresa", Tirana, Albania
Suela Tabaku, Prosthetist, Tabaku Dental Clinic

Abstract

Introduction. One of the ultimate goals of prosthetic treatment is the achievement of the patient's satisfaction; defined as "patient's" cognitively based evaluation of, and affectively based response to the important aspects of the structure, process and result of their service. The purpose of this study was to investigate the relation between patient's satisfaction with their old and new removable total dentures. This study aims to help the doctor to determine a diagnose of the new dentures based on the old denture's satisfaction of the patient. **Methods and Results** 78 patients, 36 men and 42 women, aged 40-80 years old, who were voluntarily chosen, were examined and treated with new dentures for a period of two years in the University Dental Clinic, Tirana and in the „Tabaku“ Dental Private Clinic. They answered a subjective questionnaire about their satisfaction from the old dentures and the new dentures 3 months after delivery. **Results.** Analyzing the results using the t-Test, it was found that the relation between patient's satisfaction from old and new denture for the following factors was statistically significant: The comfort of the denture, The factor related to the fit of the upper and lower denture, Their appearance, The ability of the patients to speak ($p < 0.05$).

According to the results some factors had a stronger relation of the patient's satisfaction with the old and new dentures according to the statistical results. The test performance shows that some factors can be used as indicators to diagnose the prognosis of the new dentures.

Keywords: Complete dentures, satisfaction, relation

Introduction

Improvement of oral health and quality of life is the main goal of contemporary dentistry, since it has been considered as an important part of patient's well-being. Eliminating oral pain and the problems connected to chewing and speech, as well as the improvement of aesthetic contributes the improvement of oral health.

The quality of complete dentures assessed by clinicians does not always come to accordance with the subjective judgment of the patients. Although a number of studies failed to show statistically significant relations between the two variables, other studies could show weak or moderately significant associations.

Allen and McMillan (2003) found that patients who choose to replace complete dentures and partial dentures with implant-retained dentures have a poor OHRQOL and some of these issues remain post-treatment. However, patients who seek to replace their existing complete dentures with new complete dentures have a better OHRQOL than those seeking implant-retained dentures. They suggest that these patients are best left with conventional dentures even though implant-retained dentures may provide more stability and retention.

The aesthetics of the upper denture and the lack of stability of the lower one are the main complaints of the patients. One of the factors for the dissatisfaction related to the dentures may be attributed to the level of oral perception of each patient, a phenomenon known as oral stereognosis.

The satisfaction level of the patient is influenced by several factors, including the dentures quality and the plated 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.

Main Text

This study was conducted at department of Prosthodontics, University Dental Clinic, Tirana, Albania and in the private Dental Clinic “Tabaku”.

The duration of study was two years. Patients included were complete denture user's who had worn dentures successfully for a significant period of time and now wanted to replace the dentures. After a preliminary examination, patients were excluded if they exhibited symptoms of temporomandibular disorders, xerostomia, orofacial motor disorders, severe oral manifestations of systematic disease or psychologic or psychiatric conditions that could influence their response to treatment. Dentures were produced by an acrylic base with full balanced occlusion with hard resin artificial teeth. A conventional protocol was used:

preliminary impressions for fabrication of custom trays, the final impressions was made with a custom tray with border-molded impression compound, followed by a polyvinyl siloxane impression. Horizontal and vertical jaw relation was recorded with wax occlusion rims.

Dentures were tried in the mouth at the wax setup stage and patients were allowed to return for adjustment after insertion. On insertion, dentures were checked in the mouth for adaptation of the borders and denture bearing surfaces using pressure indicating paste and were relieved as needed. Oral hygiene instructions were provided.

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 seven questions of the Questionnaire I, in a scale ranging from 0 (zero) to 3 (three), where 0 represents the total satisfaction and 3 represents the total dissatisfaction.

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

Factors related to patient's satisfaction	Very satisfied	Fairly satisfied	Dissatisfied
Comfort	45 (57%)	13(16 %)	20 (25%)
Fit(Upper)	50 (64%)	13(16%)	15 (19%)
Fit (Lower)	35 (44%)	20(25%)	23(29%)
Ability to eat food	42(53%)	16(20%)	20(25%)
Ability to taste food	40(51%)	24(30%)	14(17%)
Appearance	44(56%)	19(24%)	15(19%)
Speech	50(64%)	9(11%)	19(24%)

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

Factors related to patient's satisfaction	Very satisfied	Fairly satisfied	Dissatisfied
Comfort	65(83%)	7(8%)	6(7%)
Fit(Upper)	70 (89%)	1(1%)	7 (8%)
Fit (Lower)	49 (62%)	13(16%)	16(20%)
Ability to eat food	42(53%)	16(20%)	20(25%)
Ability to taste food	56(71%)	14(17%)	8(10%)
Appearance	64(82%)	10(12%)	4(5%)
Speech	59(75%)	12(15%)	7(8%)

The results

After the patients answered to the questionnaire for the old and the new dentures we pointed out the following results:

73% of the patients were satisfied with the comfort of their old dentures;91% of the patients were satisfied with the comfort of their new dentures.

80% of the patients were satisfied with the fit of their upper old dentures,90% of the patients were satisfied with the fit of their upper new dentures.

69% of the patients were satisfied with the fit of their lower old dentures,78% of the patients were satisfied with the fit of their lower new dentures.

73% of the patients were satisfied with the ability to eat food with their old dentures,73% of the patients were satisfied with the ability to eat food with their new dentures.

88% of the patients were satisfied with the ability to taste food with their old dentures,88% of the patients were satisfied with the ability to taste food with their new dentures .

80% of the patients were satisfied with their appearance with their old dentures,94% of the patients were satisfied with their appearance with their new dentures..

75% of the patients were satisfied with their speech with their old dentures,90% of the patients were satisfied with their speech with their new dentures .

Analyzing the results using the t-Test, it was found that the relation between patient's satisfaction from old and new denture for the following factors was statistically significant:

- The comfort of the old and new dentures
- The fit of the upper and lower denture
- The patient's appearance
- The ability of the patients to speak

Conclusion

According to the results the factors related to the fit of upper and lower dentures, their comfort, their appearance,the ability of the patients to speak had a stronger relation of the patient's satisfaction with the old and new dentures according to the statistical results.

Discussion

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. . Tissue changes that occur on denture bearing area due

to alveolar ridge resorption lead to poorer denture retention and stability which consequently affects patients' satisfaction . Often dentists and patients judge the concept of success differently. Dentists consider dentures to be successful when they meet certain technical standards, whereas patients evaluate them from the viewpoint of personal satisfaction. However, to evaluate success in terms of patients satisfaction is critical to the outcome of complete denture treatment. The ability to adapt to new 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. The success of conventional complete denture is variable and depends on the patient showing sufficient adaptive capacity to overcome the many limitations of complete dentures by the process of habituation. This study aims to help doctors to diagnose the prognosis of the new dentures based on the satisfaction of the patients with their old dentures.

References:

- Clinical morbidity and sequelae of treatment with complete dentures, 1998
- An investigation of factors influencing patients' use of new complete dentures using structural equation modelling techniques, 2000
- Relationship between prosthodontic evaluation and patient ratings of mandibular conventional and implant prostheses, 2003
- Satisfaction level and masticatory capacity in edentulous patients with conventional dentures and implant-retained overdentures, 2006
- The effect of past denture experience on patients satisfaction with their complete dentures
- Simplified versus comprehensive fabrication of complete dentures :patient ratings of denture satisfaction from a randomized crossover trial