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Research Article

**EFFECT ON PATIENTS SATISFACTION WITH COMPLETE  
DENTURES REPLACEMENT BY THE PAST DENTURES****\*Dr. Maleeha Naseer, \*Dr. Rida Awan, \*Dr. Sana Arif, \*\*Dr. Mohsin Majeed****\*Faisalabad Medical University (FMU), Faisalabad Pakistan****\*\*Nishtar Institute of Dentistry, Multan Pakistan****Abstract:**

**Objective:** The aim of this study was to evaluate the prosthetic effect of past experience on patient satisfaction with a new full denture using a self-assessment questionnaire.

**Study design:** A Cross- Sectional Study.

**Location and duration:** In the Dental Section of Faisalabad Medical University, Faisalabad for one year duration from July 2017 to July 2018.

**Methods:** Eighty patients with no prosthesis history were included in the study. A numerically equal group of patients with previous experience in prostheses and new prosthesis were selected as controls. The same clinical and laboratory procedures were followed for both groups. Patients were asked to return one week later to complete the self-assessment questionnaire evaluating satisfaction in terms of functionality, comfort and appearance. Patients in the study group were divided into three subgroups according to their age to examine the effects of age and gender differences.

**Results:** Mean scores were significantly higher in patients with previous experience in prosthesis. Satisfaction was significantly better in patients under 60 years of age and older than 69 years. Differences in mean scores between genders were not statistically significant.

**Conclusion:** previous experience with prosthesis has been an important factor in predicting the success of complete treatment, so it should be considered during evaluation. The 60-69 age group was the most difficult group to satisfy. However, gender change had little effect on patient satisfaction.

**Key words:** Previous experiences in dentures, satisfaction, complete dentition.

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**INTRODUCTION:**

One of the ultimate goals of prosthetic treatment is to ensure patient satisfaction; It is defined as a safe evaluation based on effectiveness and response based on the effectiveness of important aspects of the structure, process and service. "Most of the time, it is a very complex phenomenon that does not affect many factors. It is closely related to the stomatologic system. This includes not only the quality of the patient and interpersonal relationship, and the oral health of the prostheses, but also the behavior of the prosthesis, the patient related personality and factors, most of these factors, There were many factors associated with patient satisfaction, including the previous prosthetic experience and age. Experienced patients are usually treated with a new or prosthesis. In addition, various diseases such as xerostomia, fragile tissue, muscle weakness, osteoporosis, bone resorption, arthritis, anxiety and depression are the possible causes of prosthesis treatment-related aging failure. These aging problems concluded that prosthetic failure significantly increased with age. This prospective study examines the effect of a previous evaluation process on patient satisfaction with new complete dentures in terms of function, comfort and appearance using a patient satisfaction survey. It also analyzes the effect of changes in the age and sex of new prostheses on patient admission.

**MATERIALS AND METHODS:**

This Cross- Sectional Study was held in the Dental Section of Faisalabad Medical University, Faisalabad for one year duration from July 2017 to July 2018. Eighty subjects (53 males, 27 females aged 36-83 years) and new maxillary and mandibular prostheses were applied for this study. Selective criteria included the lack of experience previously experienced with the prosthesis and the presence of adequate anatomy of the ridge assessed by the physician. Criteria include mental health or emotional stress strongly related to the neuromuscular system of diseases, uncontrolled diseases affecting the scarcity and disruption of diseases, diseases and countable criteria.

Following the standard clinical and laboratory techniques, full upper and lower prostheses were created by the same clinician. All prostheses were processed in the same dental laboratory by the same technician. Upon loosening, mouth-fitting teeth, with the putty that determines the pressure, and the surface adapted to the prosthesis and the surface are reapplied, if necessary, loosened. All subjects were instructed to wear a prosthesis during the waking hours and to retire before retiring. Oral hygiene instructions were given. All patients were asked to return one week later and to make the necessary adjustments to complete a Weinstein self-assessment questionnaire. The questionnaire evaluated the overall satisfaction of patients, including three function categories, 12 comfort factors and appearance. Function category contained questions about drinking, chewing, bite and talk. Comfort was evaluated with questions about tension of upper and lower teeth, absence of bone and defeat of upper and lower teeth. Appearance was evaluated by shape and color of teeth and general appearance. A five-point rating system was used (weak = 1 to excellent = 5). The total satisfaction score was calculated from a total of 60 points for each patient (Function = 20, Comfort = 25 and Size = 15). Patients in the study group were divided into three subgroups according to their age (A: <59 years, B: 60-69 years, C:> 70 years). Statistical significance analysis for total satisfaction, function, comfort and appearance was evaluated by using statistical package for social sciences (SPSS 17.0). The effect of prosthetic pretreatment on t-test was used to evaluate the importance of gender change in patient satisfaction at  $p < 0.05$  and a one-way ANOVA test was used to analyze the significance of variance.

**RESULTS:**

The mean age of the control group was  $64.1 \pm 7.4$  (range 45 to 77), with a mean age of  $66.2 \pm 8.4$  years (range 36 to 83 years). . An equal number of females and males (53 males, 27 females in each group) were 106 males and 54 females. Table 1 shows the mean scores, standard deviation and p-value for total satisfaction in 3 categories, including function, comfort and appearance categories.

TABLE 1: SATISFACTION SCORES ACCORDING TO PREVIOUS DENTURE HISTORY

	Total score	Past denture history				Sig P <sub>≤</sub> .05
		Control Gpn=80		Study Gpn=80		
		Mean	SD	Mean	SD	
<b>Total Satisfaction</b>	60	58.54	2.111	54.24	5.328	.000
<b>Function</b>	20	19.30	1.436	17.23	2.546	.000
<b>Drink liquids</b>	5	4.94	.460	4.63	.769	.002
<b>Chew food</b>	5	4.65	.638	3.86	1.088	.000
<b>Bite into food</b>	5	4.80	.513	4.18	1.003	.000
<b>Speak clearly</b>	5	4.91	.363	4.56	.840	.001
<b>Comfort</b>	25	24.40	.836	22.56	2.396	.000
<b>U denture tightness</b>	5	4.88	.369	4.43	.925	.000
<b>L denture tightness</b>	5	4.58	.689	3.85	1.069	.000
<b>Lack of gagging</b>	5	5.00	.000	4.95	.219	.043
<b>U denture comfort when not eating</b>	5	4.99	.112	4.76	.534	.000
<b>L denture comfort when not eating</b>	5	4.98	.157	4.60	.773	.000
<b>Appearance</b>	15	14.84	.561	14.59	.959	.049
<b>Shape of teeth</b>	5	4.93	.265	4.79	.469	.024
<b>Shade of teeth</b>	5	4.98	.157	4.84	.434	.009
<b>General appearance</b>	5	4.94	.291	4.83	.471	.071

In Table 2, the mean score of patient satisfaction and the level of significance according to age distribution were shown as  $p < 0.05$ .

TABLE 2: SATISFACTION SCORES ACCORDING TO AGE VARIATION IN STUDY GROUP

	Total score	Age Groups						Sig P <sub>≤</sub> .05
		≤59 years n=19 mean 53.95 SD 4.49		60-69 years n=36 mean 63.9 SD 2.82		≥70 years n=25 mean 71.96 SD 2.19		
		Mean	SD	Mean	SD	Mean	SD	
Total Satisfaction	60	56.16	3.55	52.33	5.84	56.0	3.92	.006
Function	20	18.0	2.02	16.28	2.86	18.0	1.87	.009
Drink liquids	5	4.78	.54	4.47	.93	4.72	.61	.266
Chew food	5	4.21	.97	3.5	1.09	4.12	1.01	.023
Bite into food	5	4.26	1.04	4.06	1.08	4.28	.84	.634
Speak clearly	5	4.73	0.45	4.25	1.09	4.88	.33	.008
Comfort	25	23.15	1.80	21.67	2.68	23.4	1.87	.008
U denture tightness	5	4.37	1.01	4.31	0.94	4.64	.81	.368
L denture tightness	5	4.16	.83	3.5	1.19	4.12	.88	.028
Lack of gagging	5	4.95	.23	4.92	.28	5	0	.348
U denture comfort when not eating	5	4.78	.53	4.72	.56	4.8	.5	.832
L denture comfort when not eating	5	4.89	.46	4.22	.97	4.84	.37	.000
Appearance	15	14.68	.82	14.22	1.55	14.6	1.12	.855
Shape of teeth	5	4.84	.37	4.69	.57	4.88	.33	.269
Shade of teeth	5	4.89	.32	4.78	.53	4.88	.33	.541
General appearance	5	4.95	.23	4.75	.55	4.84	.47	.334

Table 3 shows a comparison between satisfaction scores of men and women in the study group. As we have seen, the average scores for most of the factors examined are higher than women.

TABLE 3: SATISFACTION SCORES ACCORDING TO GENDER VARIATION IN STUDY GROUP

	Total score	Gender Variation				Sig P <sub>≤.05</sub>
		Male n=53		Female n=27		
		Mean	SD	Mean	SD	
<b>Total Satisfaction</b>	60	54.58	5.329	53.56	5.359	.417
<b>Function</b>	20	17.43	2.515	16.81	2.602	.307
<b>Drink liquids</b>	5	4.58	.819	4.70	.669	.517
<b>Chew food</b>	5	3.94	1.082	3.70	1.103	.355
<b>Bite into food</b>	5	4.28	.984	3.96	1.091	.179
<b>Speak clearly</b>	5	4.62	.765	4.44	.974	.373
<b>Comfort</b>	25	22.83	2.146	22.04	2.794	.163
<b>U denture tightness</b>	5	4.49	.800	4.30	1.137	.378
<b>L denture tightness</b>	5	3.96	1.018	3.63	1.149	.190
<b>Lack of gagging</b>	5	4.96	.192	4.93	.267	.487
<b>U denture comfort when not eating</b>	5	4.85	.411	4.59	.694	.041
<b>L denture comfort when not eating</b>	5	4.60	.817	4.59	.694	.952
<b>Appearance</b>	15	14.53	.966	14.70	.953	.449
<b>Shape of teeth</b>	5	4.74	.524	4.89	.320	.169
<b>Shade of teeth</b>	5	4.79	.495	4.93	.267	.195
<b>General appearance</b>	5	4.79	.495	4.89	.424	.390

**DISCUSSION:**

Often, dentists and patients judge the concept of success in different ways. While dentists believe that dental prostheses are successful when they meet specific technical standards, patients evaluate them for personal satisfaction. However, the assessment of success in terms of patient satisfaction is essential for the outcome of the complete treatment of the prosthesis. A patient self-assessment questionnaire provides an opportunity for clear and descriptive assessment for patients and is therefore used in this study. Some factors may affect satisfaction. They are related to each other and usually have an associated effect. Dental prosthesis covers not only factors such as comfort, chewing ability, aesthetics and persistence, but also patient-related factors. The ability to adapt to new prostheses and prognosis will generally decrease in proportion to health. Some of the diseases that affect patient satisfaction with myasthenia, dentures with emotional stress or deterioration, bulbar palsy and saliva disease, lack of Parkinson's mental illness gravis, are a strong link. None of these patients participated in this study. In addition, some researchers have reported that although some patients expect to find a positive relationship between their oral condition and the value of prosthetic patients, some researchers do not have. However, all patients who participated in this study had an adequate form. According to Sato, overall satisfaction is highly associated with chewing, speech, pain, aesthetics, harmony, care and comfort. Therefore, these variables were evaluated in this study. Past experiences in prosthetics are closely related to the satisfaction of the prosthesis. Other sets

of patients prostheses obtained in this way have been adopted for more advanced muscle control of the prosthesis in improving balance and functionality. The ability to heal and these patients have more realistic expectations about aesthetics. Studies on the importance of age in patient satisfaction have conflicting results. Some have found a satisfactory level of age with complete dental prostheses. Others, like Frank, have reported their double discontent in patients younger than 60 years of age, especially in older patients with their dentures, aesthetic defects. However, as patients get older, it becomes more difficult for them to adapt successfully. The elderly patients are more likely to rely on previous experiences in prosthetics, so their neuromuscular control can highly improve the prosthesis and better functioning and stabilize them with them. An additional point is that elderly patients may have more realistic expectations about the prognosis of replacement prostheses. The effect of social change on patient satisfaction with prostheses was also examined. In addition to the higher aesthetic tradition of women, it has been found that men are generally more satisfied with prostheses than women. Although not statistically significant, this observation does not agree with previous studies suggesting that male tend to be more critical than females.

**CONCLUSION:**

The previous experience with dental prostheses is considered to be a predictable factor for the success of the complete treatment of the prosthesis, since the overall satisfaction level in terms of function, comfort and appearance increases significantly in

patients with complete prosthesis. This should be considered during evaluation and treatment planning.

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