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## ORIGINAL ARTICLE

### A survey to assess patient satisfaction after receiving complete denture prostheses in Himachal Dental College, Sundernagar

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#### ABSTRACT:

An adequate dentition is of importance for well-being and life quality. Despite advances in preventive dentistry, edentulism is still a major public health problem worldwide. A better understanding of disease indicators is necessary for establishing a solid strategy through an organized oral health care system to prevent and treat this morbid chronic condition. Thus this survey will help in improving the patient satisfaction level.

**Key words:** Complete denture, edentulism, aesthetics.

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#### INTRODUCTION

Edentulism is a debilitating and irreversible condition and is described as the "final marker of disease burden for oral health". Although the prevalence of complete toothloss has declined over the last decade due to advancement in medicine technology, edentulism remains a major disease worldwide, especially among older adults. The implant supported denture is new treatment modality for the treatment of edentulism but this cannot be applied on every patient because of the medical conditions or socio economic status. Thus, conventional complete denture is fundamental treatment plan for edentulous patient providing esthetics, and other functions

Edentulism can lead directly to impairment, functional limitation, physical, psychological, and social disability, and handicap. Thus, the impact of edentulism on general health should be examined by analyzing the major dimensions of health: physical symptoms and functional capacity, social functioning and perception of well-being. According to house classification 4 different type of patients<sup>1</sup> can be seen with different expectation level with complete denture whether it is related to restoration of

function, aesthetics, and facial appearances. Various factors affect the satisfaction level of the patient. Patient satisfaction is as important as other clinical health measures and is a primary means of measuring the effectiveness of health care delivery. Psychological factors play a major role in the success of the complete denture. Several other factors which play important role in patient satisfaction are aesthetics, occlusion, mastication and speech.

This survey was conducted to evaluate that the effect of clinical quality of complete denture on patient satisfaction and to evaluate the possible effect of patient satisfaction with clinical factors and patient with the new denture.

#### MATERIAL AND METHODS

A randomised control trial was conducted and 30 patients with complete denture were randomly selected from outpatient from Department of Prosthodontics Crown and Bridge and Implantology from Himachal dental college, Sundernagar. Patients were recalled after three week of receiving prosthesis

**Inclusion criteria**

Patient who have received complete denture prostheses from the department recently (3 weeks)

**Exclusion criteria**

1. Patient with implant supported complete denture prostheses.
2. Patient with removable partial denture prostheses
3. Patient with complete denture prostheses made somewhere else
4. Patient with complete denture prostheses with duration more than 3 weeks

**METHODOLOGY**

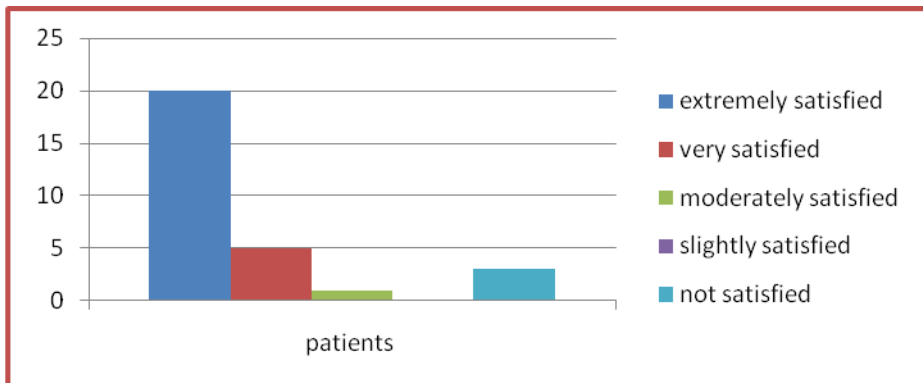
Written consent was taken from the patient which were selected randomly for the study .a questionnaire was prepared and was filled in consultation to patient. Patients were asked to fill the form in his / her language and were asked to give genuine opinion about the prostheses. The information given by the patient was kept confidential. Likert scale was used for the survey. Patients were grouped on the scale of extremely satisfied ,very satisfied, moderately satisfied, slightly satisfied ,not satisfied at all .following different parameters were assessed 1)aesthetics 2)mastication efficacy3)colour of the denture 4)speech 5) retention of maxillary denture 6)psychological boost 7)socioeconomic status (i)upper class (ii)lower class 8)stability of manibular denture 9)overall satisfaction of maxillary and mandibular denture.

**RESULTS**

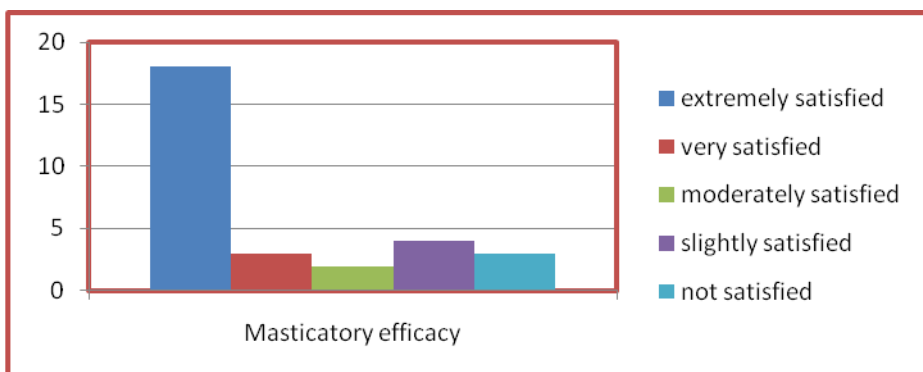
Among the 30 patient enrolled in the study 12(40%) were males and 18(60%) were females.

**1) Aesthetics**

Among the 30 patients 20(66.6%) were extremely satisfied with the appearance of the new prostheses. 5(16.6%)were very satisfied ,1(3.3%) was moderately satisfied and 3(10%) were not satisfied at all.

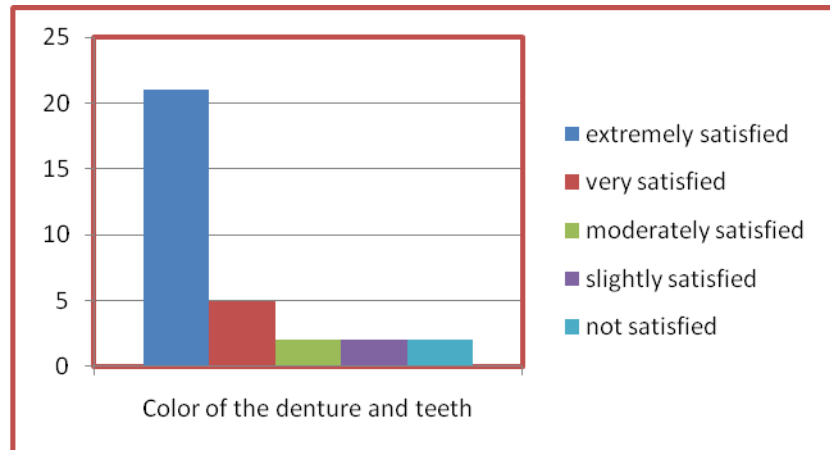


**2) Mastication efficacy(chewing efficacy )**



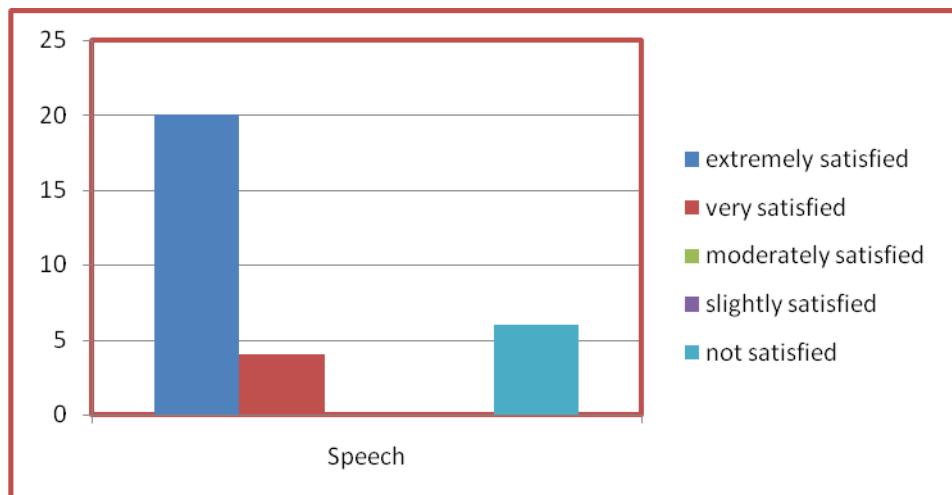
Among the 30 patients 18 (60%) were extremely satisfied by the chewing efficacy of the new prostheses .3(10%) were very satisfied and 2(6.7%) were moderately satisfied, remaining 4(13.4%) patients were slightly satisfied and3 (10%) were not satisfied at all.

**3) COLOR OF THE DENTURE AND TEETH**



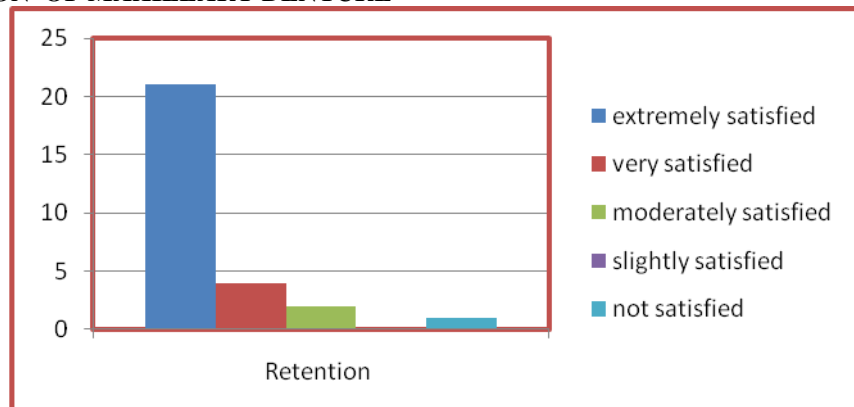
Out of 30 patients 21(70%) were extremely satisfied by the colour of denture and teeth and 5 (16.6%) were very satisfied. 2 (6.7%) were moderately satisfied, 2(6.7%) were not satisfied at all.

**4) SPEECH**



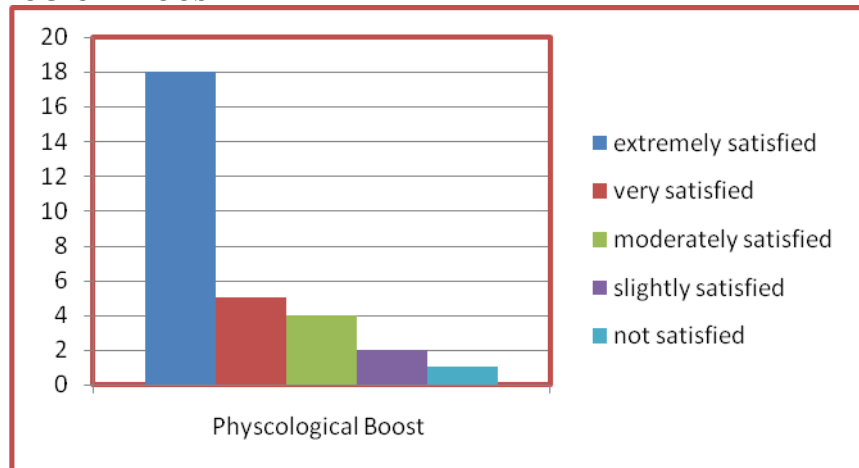
20 patients who account for 66% were extremely satisfied and 4 (13.4%) patients were very satisfied and 6(20%) patients were not satisfied as they were not able to speak clearly.

**5) RETENTION OF MAXILLARY DENTURE**



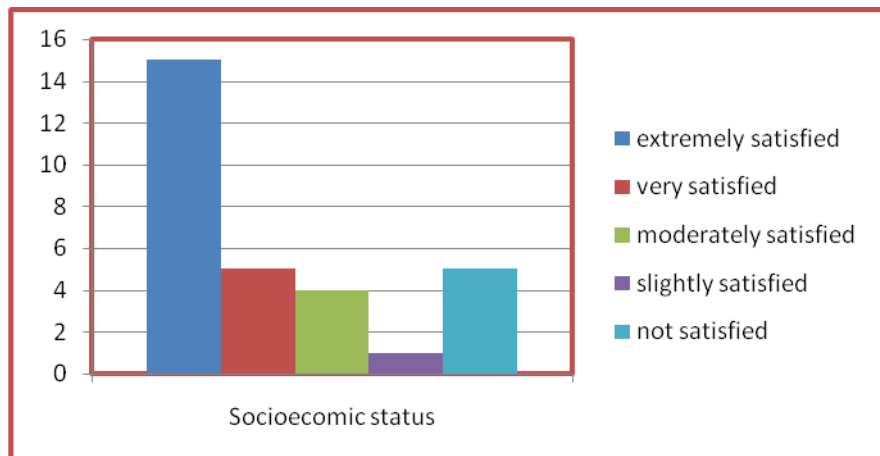
21(70%) of the patients were extremely satisfied by the retention of the denture. Whereas very satisfied were approximately 14%, moderately satisfied 9% and 7 % were not satisfied with the fit of the maxillary denture.

**6) PHSYCHOLOGICAL BOOST**



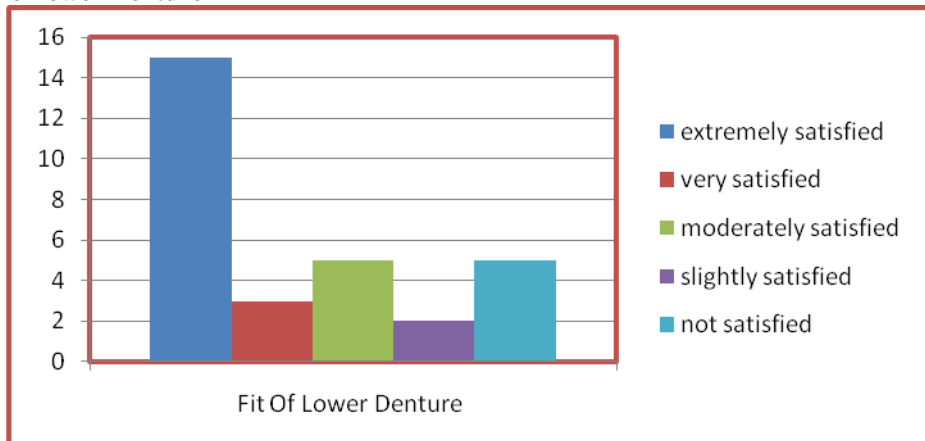
Among the 30 patients 18(60%) were extremely satisfied when they were given new prostheses , 5(16.6%) were very satisfied ,4(13.4%) were moderately satisfied , 2 (6.6%)were slightly satisfied and 1 were not satisfied.

**7) SOCIO-ECONOMIC STATUS**



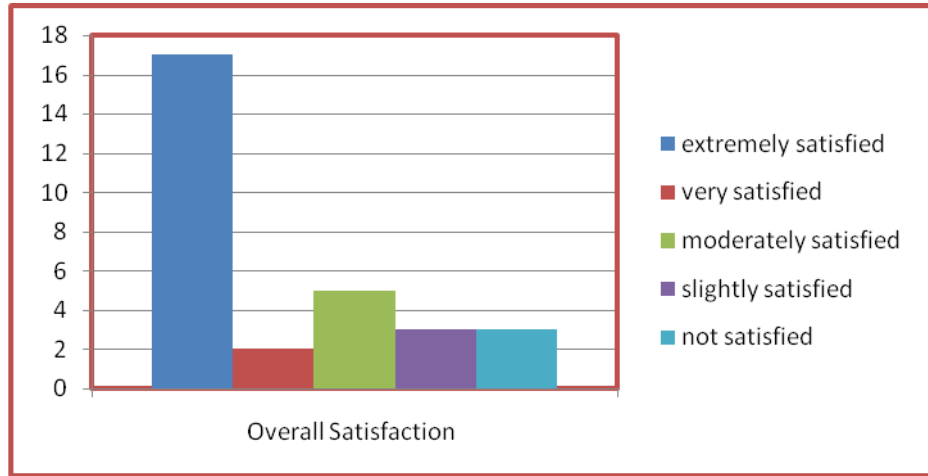
15(50%) patients were extremely satisfied by the cost of the denture out of which 35% were of lower socioeconomic status , 5(16.6%)were very satisfied ,4(13.4%)were moderately satisfied ,1(3.3%) were slightly satisfied and 5(16.6%) were not satisfied with the cost .

**8) Fit Of The Lower Denture**



15(50%) patients were satisfied with the fit of the lower, 3(10%) were very satisfied, 5(16.6%) were moderately satisfied, 2(6.7%) were slightly satisfied and 5(16.7%) were not satisfied with the fit of the lower denture .

**9) Overall Satisfaction of Maxillary and Mandibular Denture**



18(60%) patients were extremely satisfied with the overall experience of the new prostheses, 1(3.3%) were very satisfied, and 5(16.7%) were moderately satisfied, 3(10%) were slightly satisfied and 3(10%) were not satisfied

**DISCUSSION**

Edentulism is a state which impairs the function and aesthetic of a patient. Masticatory efficacy and other functions can be restored by providing artificial prostheses or complete denture. Use of complete dentures can adversely affect the health related quality of life (OHRQoL)<sup>2</sup>. There is no specific method or criteria which could assess the impact of conventional complete dentures on the (OHRQoL)<sup>3</sup>, hence present study was done to assess the effect of complete denture on patient satisfaction .

Education level, socioeconomic status and patient self perception and quality of life are interrelated to the patient satisfaction .while considering the esthetic aspect of complete denture .80% of the participants from the study were extremely satisfied with the new prostheses ,whereas females were more satisfied by the esthetic of the new denture .this can be correlated with the study done by balender<sup>4</sup> et al which concluded that females were more aware and concerned about the denture treatment to restore their lost esthetics ,social well being and function .

A descriptive cross sectional study from april 2010to October 2010 was conducted at the school of dental science of the university of Nairobi .100 participants were included in the study .the study concluded that more than 50% of the patients were satisfied with their denture<sup>5</sup> whereas in our study overall satisfaction level was more than 50% too.

The satisfaction level with respect to the masticatory efficacy was more than esthetic as chewing of food was main concern of the elderly patients which coincided with study conducted by M.A eswaran.et al<sup>6</sup>.

Cost and socioeconomic status plays a very important role in patient satisfaction. The satisfaction level varies with socio-economic status of the patients. In our study upper income group patients were less satisfied by the

mastication, speech and function of the complete denture because of higher expectations whereas, poor income group patients were more satisfied this can be due the fact the less income patients had less expectations than upper income patients .this can be correlated with various studies by Knezovi et al (2001)<sup>7</sup>, Stepti et al(2002)<sup>8</sup>, al quran(2001)<sup>9</sup> and Van der mass(1990)<sup>10</sup>.

The retention or stability of lower denture was less in elderly patients because of accelerated residual ridge resorption. It accounted for 50% in our study whereas , in a study conducted by Celebic et al<sup>11</sup> the satisfaction rate is as low as 15%. However, residual ridge resorption is a chronic, continuous process that is more rapid after tooth extraction. The residual alveolar ridge is highest immediately after extraction, and support for a mandibular CD should be optimal. Most likely due to the long period of neuromuscular adaptation (and to the possible undercutting of residual ridges immediately after extraction), mandibular dentures move and damage oral mucosa, thus causing discomfort, unfavourable retention, and low levels of chewing ability and general satisfaction.

A study was conducted by Neal et al<sup>12</sup> he included 21 participants in the study and conducted a study to assess the satisfaction level before and after the denture. Ten patients (48%) experienced difficulty pronouncing some or many words, but no one was dissatisfied with his speech. In our study 66.6% patients were extremely satisfied with the speech but 20% of the patient had problem in pronunciation of words or speak clearly.

Overall extreme satisfaction level in case of our study was approximately 60 % and 10% patients which were not satisfied with the fit, aesthetics, speech, chewing efficacy of upper and lower denture.

**CONCLUSION**

Overall satisfaction of the patients shows more on function than esthetic and comfort. 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. Great patient experience connects clinical excellence with outcomes. It connects efficiency, quality, behaviors and mission with caregiver experience and engagement. The patient experience relies on teamwork, communication, shared decision making, empathy, compassion and human connection. It is also influenced by dignity, respect and humanistic values, as well as the ability and willingness of clinicians to relate to their patients as people.

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