



**ORIGINAL RESEARCH PAPER**

**Dental Science**

**SATISFACTION LEVEL OF MASTICATION ESTHETIC SPEECH COMFORT & COST IN FIXED DENTAL PROSTHESIS PATIENTS**

**KEY WORDS:** aesthetics, dental prosthesis, oral complaints, patient satisfaction, fixed partial denture

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**ABSTRACT**

Satisfaction is an imperative component in assessing the achievement rate of a treatment. Fixed partial denture (FPD) is characterized as a partial denture that is cemented to natural teeth or roots which furnish primary support to the prosthesis. These are done in patients who are not ready to keep up removable dentures. The points of this review contemplate were to assess tolerant fulfillment with fixed partial dentures (FPDs) 5 years following position.

**MATERIALS AND METHODS:** Seventy patients with FPDs who have been treated 5 years beforehand and those took an interest in the examination. The poll comprised of explanations on patients' subjective impression of treatment with FPDs. Patients' impression of clinical result aesthetics, masticatory productivity, speech, and comfort of the FPD.

**RESULT:** There were 82% of FPDs that were 3-4 units in outline and 47% included anterior teeth. The 5-year survival of the FPDs was 93.7%. Tolerant fulfillment with the useful parts of the FPDs was by and large high; 93% were certainly or to some degree happy with the aesthetic appearance, 91% with biting solace (chewing comfort), and 99% with the capacity to talk regularly. 87% observed the expenses to be unquestionably or to some degree sensible.

**CONCLUSION:** More than 90% of patients were happy with having missing teeth supplanted with FPDs from functional and aesthetic perspective. Expenses were thought to be sensible by the larger part of patients and most would experience a similar treatment again and furthermore prescribe the treatment to others. Just about portion of patients utilized some type of interdental cleaning and most were uninformed of the centrality of bleeding around the gingiva of natural teeth and FPDs.

**INTRODUCTION**

Tooth loss can have negative impacts on facial appearance, speech, and mastication. The replacement of missing teeth by appropriately designed prostheses is in demand, and is required to maintain a good health status and normal life<sup>[1]</sup>. There are several modalities of treatment for rehabilitation of partially edentulous patients. These include implants supported prostheses, teeth-supported bridges, and removable partial dentures (RPDs). However, some options such as dental implants, can be difficult to implement due to general and/or oral limitations, financial issues, and patient preferences<sup>[2]</sup>. Resin-bonded fixed partial denture (FPD) is a legitimate treatment choice for the substitution of missing teeth in conditions when the protection of the tooth structure is required or the prosthesis assumes a transitional part in the oral cavity<sup>[3]</sup>. In spite of their inconveniences, for example, more regular rates of debonding than traditionally luted bridges, resin bonded FPDs have favorable circumstances, for example, an minimally invasive preparation, diminished cost and great patient acknowledgment<sup>[4]</sup>. Fixed prosthodontics is the area of prosthodontics concentrated on for all fixed dental prostheses. Such dental restorations efforts, likewise alluded to as indirect restorations, incorporate crowns, bridges(fixed dentures), inlays, onlays, and veneers<sup>[5, 6]</sup>. Prosthodontists are authority dental practitioners who have attempted preparing perceived by scholarly establishments in this field. Fixed prosthodontics can be utilized to reestablish single or different teeth, crossing zones where teeth have been lost. By and large, the primary favorable circumstances of fixed prosthodontics when contrasted with direct restorations are the predominant quality when utilized as a part of large restorations, and the capacity to make an aesthetic looking tooth. Likewise with any dental rebuilding, standards used to decide the proper reclamation include thought of the materials to be utilized, degree of tooth demolition, orientation and area of tooth, and state of neighboring teeth<sup>[7]</sup>. The fulfillment of patients with prosthesis devices is affected by factors relying upon the patient and advisor. Fixed partial denture (FPD) is characterized as a partial denture that is established to regular teeth or roots which outfit essential help to the prosthesis. FPD is indicated in short span

edentulous arches, presence of sound teeth that can offer adequate help nearby the edentulous space<sup>[8]</sup>. It is likewise demonstrated for rationally bargained and physically challenged patients who can't keep up removable prosthesis. FPD are contraindicated in conditions with huge measure of blood loss as in injury, young teeth with vast pulp chambers, in periodontally traded off patients, in long span edentulous and bilateral edentulous spaces. Medically and mentally compromised patients who can't coordinate to delicate medicines and furthermore in extremely old patients.

Fixed partial dentures (FPDs) have been the treatment of choice for the replacement of missing teeth for some years. A few number of them deal with patients' perceptions of clinical outcomes and level of satisfaction with FPD treatment. Edentulism and dental disease have been shown to affect patients adversely. Patients with the dental disease suffer from an altered self-image. They may be expected by others to be socially less competent and have less intellectual achievement. Dento-facial problems have known effects on patient's satisfaction with their dentition as they affect esthetics, performance, and function. Regarding prosthodontics, the literature is almost full with studies of patient satisfaction among complete denture wearers, although with little consensus on the factors influence it. Reports on satisfaction with implant-supported prostheses among edentulous patients have been both strongly positive and more equivocal. Studies of satisfaction among partial denture patients have largely focused on those treated with removable partial dentures, although there are some reports on patient groups treated by a variety of Prosthodontic means. In these studies, even though patient satisfaction with treatment received was reported as high, it was lower than had been expected before the start of treatment. The general conclusion is that patient satisfaction is a complex and multidimensional phenomenon, much of which remains unclear.

Satisfaction is an imperative component in assessment of the treatment. The Satisfaction level of the patient decides the achievement rate of the treatment. Subsequently, this overview

was led to gather data in regards to the demeanor of patients going to fixed prosthesis treatment. The motivation behind the examination is to check for the patient's satisfaction subsequent to accepting a fixed prosthesis.

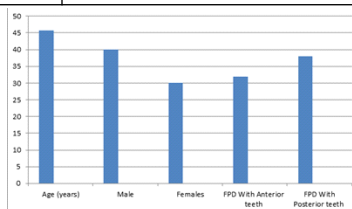
For all the study participants, inclusion criteria included the following: age between 21 and 85 years, ability to communicate by phone, accurate and complete dental records, and available treatment plan details. Patients with severe disabilities or systemic diseases that may affect oral health, such as uncontrolled diabetes and oral cancer, were excluded. A total of 178 patients treated with FPDs were then contacted by telephone. Of them, 120 patients responded. Of the 120, 70 patients (40 male and 30 female patients) agreed to participate in the survey (Table 1 & Graph 1). Each participant was asked questions that were explained over the telephone to determine their level of satisfaction and complaints with FPD usage, aesthetics, masticatory productivity, speech, and comfort (Table 2 & Graph 2). The first question was "From 1 to 4, how satisfied are you with the FPD?" The level of FPD satisfaction was classified as 1: not satisfied, 2: nearly satisfied, 3: satisfied, or 4: very satisfied. Patient demographics (age and sex) and information on the type of FPD were obtained from the patients' dental records.

**RESULT**

There were 82% of FPDs that were 3-4 units in outline and 47% included anterior teeth. The 5-year survival of the FPDs was 93.7%. Tolerant fulfillment with the useful parts of the FPDs was by and large high; 93% were certainly or to some degree happy with the aesthetic appearance, 91% with biting solace (chewing comfort), and 99% with the capacity to talk regularly. 87% observed the expenses to be unquestionably or to some degree sensible. 92% felt that the treatment had certainly or to some degree turned out as they had expected, 96% would or to some degree prescribe a similar treatment to companions, and 88% would experience a similar treatment once more. 21% of patients detailed utilizing some type of interdental aid and 82% revealed having the capacity to clean their prostheses without issues. Be that as it may, 31% announced some bleeding around their prostheses amid cleaning, and 69% of patients felt that bleeding around regular teeth and bridges amid cleaning was just a minor issue or not an issue.

**Table 1: Demographic details of patients with FPD**

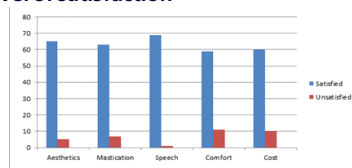
| Variables   |                      | Number   |
|-------------|----------------------|----------|
| Age (years) |                      | 45.7±7.5 |
| Gender      | Male                 | 40       |
|             | Females              | 30       |
| Type of FPD | With Anterior teeth  | 32       |
|             | With Posterior teeth | 38       |



**Table 1: Demographic details of patients with FPD**

| Variables   | Satisfied | Unsatisfied |
|-------------|-----------|-------------|
| Aesthetics  | 65 (93%)  | 5(7%)       |
| Mastication | 63 (91%)  | 7 (9%)      |
| Speech      | 69 (99%)  | 1 (1%)      |
| Comfort     | 59 (85%)  | 11 (15%)    |
| Cost        | 60 (87%)  | 10 (13%)    |

**Table 2: Level of satisfaction**



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**DISCUSSION**

The present study shows that the majority of patients were satisfied with their RPDs treatment. This result is in agreement with similar studies in other countries on the patient's satisfaction with FPDs [9]. There was no significant difference in FPD-related satisfaction level between men and women in the present sample. This finding is similar to those reported by previous studies. The mean age of RPD users in the present sample was 45.7±7.5). Previous studies also reported on a patient sample with a similar age range. There was no significant correlation between age and FPD satisfaction rate in the present study. This outcome is also comparable to that observed by a previous study [10]. Measuring results of biting capacity, esthetics, life span, and in addition specialized complexities assesses the execution of any fixed prosthesis. While surveying the proficiency of fixed prosthesis treatment, Anderson demonstrated that it is vital to consider both the clinicians' and also the patients' appraisals [11]. The present cross-sectional unmistakable examination explored patients with a practical FPD, which run from later up to over 5 years span. The poll had included distinctive viewpoints to quantify the fulfillment with FPD. The high rate of male among the explored test recommends that men were more worried about getting a substitution to their missing teeth. Our outcome is distinctive as contrasted and a past examination in which female were more basic about their dentofacial appearance [12,13]

Assessments of treatment results by clinicians don't really compare to the patients' own particular judgment which included both capacity and psychosocial adaption. Patient concerns are essentially identified with function, comfort, and aesthetics, particularly for implant supported prosthesis [14, 15]. In the present examination, the high rate of patients happy with their prosthesis shows that patients were happy with the vast majority of the useful parts of their prosthesis; 91% of patients announced that their biting capacity had enhanced subsequent to getting their FPD. Most of the patients had no discourse unsettling influences because of their prosthesis, and 99% did not confront any issues with their speech subsequent to accepting their fixed prosthesis. This comes into concurrence with Wismeijer et al. examination on patient's satisfaction of dental implant where it was inferred that there was no critical change in discourse, which was harder to explain [16]. In spite of the fact that shade and colour assume a vital part in patient's fulfillment with their FPD, 93% of the patients were satisfied with the aesthetic result of the treatment, despite the fact that 7% detailed not being happy with tasteful outcome. This outcome features the significance of stylish parameters in FPD outline and development. Understanding fulfillment information is a critical wellspring of data that can control dental specialists to give prosthodontics treatment that will satisfy patient's desires. There were greater part of individuals who concurred that the treatment has satisfied their desire, the way in which dental specialists speak with patients demonstrated to impact patient's fulfillment, at any rate for the time being.

Typically patients' grumbings about the time taken by the dental specialist to develop their FPD, the examination has demonstrated that 83 % of patients were fulfilled. Time after time, patients accept that the "permanent" crown or fixed prosthesis is quite recently that perpetual. They don't expect anything more is required to keep up this condition. It is the duty of the dental specialists to illuminate their patients that further care is important to keep up the rebuilding and the rest of the teeth [17]. The most vital finding of the present examination was that 79% of patients revealed that patients did not utilize any type of dental aids' to keep up their prosthesis, which had demonstrated the absence of learning with respect to the significance of support of settled prosthesis; the real reason was the absence of post treatment guideline which typically been given by the treating dental practitioner. A potential limitation of the present study is that the results were based on telephone interviews. The patients' own perception, time of calling, and social factors (such as work stress) might have affected their responses. Due to several significant clinical considerations influencing patient satisfaction with dentures such as abutment teeth status, denture bearing areas,

oral mucosal condition, saliva quality, and oral hygiene habits, further studies should be conducted in combination with clinical examinations.

## CONCLUSION

The patients in the present study were generally satisfied with the outcome of fixed prosthesis treatment. The most imperative finding of this review was the greater part of patients demonstrated an absence of information with respect to oral cleanliness measures and the noteworthiness of upkeep of fixed prosthesis utilizing dental aids' However, more long-term follow-up is desirable in future studies.

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