

Knowledge, Awareness, and Attitude Regarding Maintenance of Fixed Partial Prosthesis amongst Western Maharashtra Patients: A Survey

Akanksha Kulkarni, Abhijeet Kore*, Vijayalakshmi N. Gachinamath, Sushma R, Pooja Disale, Shashikiran ND

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School of Dental Sciences, Krishna Vishwa Vidyapeeth (Deemed to be University), Karad, Maharashtra, India

***Corresponding Author:** Dr. Abhijeet Kore, School of Dental Sciences, Krishna Vishwa Vidyapeeth (Deemed to be University), Karad Email: abhijeet.kore@ymail.com

Abstract:

This survey investigates the levels of knowledge, awareness, and attitude among western Maharashtra patients concerning the maintenance of fixed partial prosthesis. By employing a structured survey, we assessed the understanding of patients regarding prosthesis care. Key findings indicate areas of improvement in patient education and awareness. It delves into the understanding of patients in this region regarding the care and upkeep required for FPP, aiming to identify gaps in knowledge and potential areas for improvement. By employing surveys and interviews, the research explores the level of awareness among patients, their attitudes towards maintaining FPP, and any existing misconceptions. The findings aim to contribute insights for healthcare professionals and educators to enhance patient education programs, ultimately improving the longevity and effectiveness of fixed partial prostheses in Western Maharashtra.

Keywords. fixed partial prosthesis, Western Maharashtra, survey, knowledge, awareness, attitude, patient education, oral health, dental care.

I. Introduction:

The maintenance of fixed partial prosthesis (FPP) stands at the forefront of long-term oral health, playing a pivotal role in preserving the functionality and aesthetics of the oral cavity. While the importance of prosthesis maintenance is widely acknowledged within the dental community, there exists a notable gap in understanding the knowledge, awareness, and attitude of patients towards the upkeep of their fixed partial prosthetic devices. This lacuna becomes particularly pronounced when examining the context of Western Maharashtra, where the cultural, socioeconomic, and educational landscape may influence patient perspectives on dental care. Despite the advancements in dental technology and the availability of comprehensive oral care, the success of FPPs is intrinsically linked to the diligence with which patients adhere to prescribed maintenance protocols. Proper care not only ensures the longevity of the prosthesis but also contributes significantly to the overall oral hygiene and health of the individual. Complications arising from inadequate maintenance not only pose a risk to the structural integrity of the prosthetic device but may also lead to secondary oral health issues, potentially requiring extensive interventions.

This study seeks to address this critical gap in research by conducting a comprehensive survey aimed at assessing the knowledge, awareness, and attitude of patients in Western Maharashtra regarding the maintenance of fixed partial prostheses. By gaining insights into the current understanding and practices of patients, we aim to identify areas that may benefit from targeted educational interventions. As we embark on this investigation, it is anticipated that the findings will not only contribute to the academic discourse surrounding prosthesis

maintenance but will also serve as a practical guide for dental practitioners. By making clear the specific challenges and opportunities in Western Maharashtra, we aspire to lay the foundation for enhanced patient education programs and, consequently, improve the overall oral health outcomes in the region.

II. Background

The background of this research is grounded in the fundamental importance of maintaining fixed partial prostheses (FPP) for long-term oral health. While the dental community recognizes the significance of proper prosthesis care, there exists a notable gap in understanding the knowledge, awareness, and attitude of patients towards the upkeep of their fixed partial prosthetic devices. This gap becomes particularly pronounced when considering the unique cultural, socioeconomic, and educational landscape of Western Maharashtra, where these factors may influence patient perspectives on dental care.

In the context of dental technology advancements and comprehensive oral care availability, the success of FPPs is intricately linked to the diligence with which patients adhere to prescribed maintenance protocols. The consequences of inadequate maintenance extend beyond the structural integrity of the prosthesis, potentially leading to secondary oral health issues that may require extensive interventions.

This study aims to address this critical gap by conducting a comprehensive survey in Western Maharashtra, specifically focusing on the knowledge, awareness, and attitude of patients regarding the maintenance of fixed partial prostheses. The research seeks to uncover current patient practices and understanding, identifying areas that may benefit from targeted educational interventions. By doing so, the study aims to contribute not only to academic discourse but also to serve as a practical guide for dental practitioners in Western Maharashtra.

The background emphasizes the importance of bridging the divide between clinical recommendations and patient practices, with a focus on the specific challenges and opportunities present in Western Maharashtra. Through a better understanding of patient perspectives, the research aims to lay the foundation for enhanced patient education programs, ultimately improving overall oral health outcomes in the region.

III. Research Objectives:

1) Assess Knowledge Levels:

A primary objective of this research is to assess the depth and breadth of knowledge among Western Maharashtra patients regarding the maintenance practices associated with fixed partial prostheses.

2) Explore Awareness Levels:

Another objective is to systematically investigate the levels of awareness among patients regarding the oral health implications arising from inadequate maintenance of fixed partial prostheses.

3) Examine Attitudes and Perceptions:

Furthermore, this study aims to delve into the attitudes and perceptions of patients towards the importance of regular check-ups and professional care in the maintenance of fixed partial prostheses.

3. Significance of the Study:

This research holds significance in bridging the gap between clinical recommendations and patient practices. By comprehensively understanding the knowledge, awareness, and attitudes of Western Maharashtra patients, it aims to inform oral healthcare practitioners and educators to develop targeted interventions, educational programs, and patient-centered approaches.

IV. Methods and Materials:

a. Study Design:

- Utilizing a structured survey to capture diverse facets of patient knowledge, awareness, and attitudes.
- The survey will be designed to address key dimensions of fixed partial prosthesis (FPP) maintenance.
- Administering the survey to a representative sample of Western Maharashtra patients who have undergone FPP.

b. Participants:

- Inclusion criteria: Western Maharashtra residents who have received fixed partial prostheses.
- Exclusion criteria: Individuals with cognitive impairments affecting survey comprehension.

c. Data Collection:

- Comprehensive set of questions covering various aspects of FPP maintenance.
- Offline questionnaire approach for data collection to ensure representative responses.
- Participants' responses will be collected through structured interviews for qualitative insights.

d. Data Analysis:

- Statistical methods to analyze quantitative data for patterns, trends, and correlations.
- Thematic analysis for qualitative data obtained from interviews to capture nuanced perspectives.

e. Ethical Considerations:

- Obtaining informed consent from participants.
- Ensuring confidentiality and privacy of participant information.
- Providing the option for participants to withdraw from the study at any point.

f. Limitations:

- Acknowledging potential limitations, such as reliance on self-reported data and the specificity of the sample to Western Maharashtra.
- Addressing any potential biases in the study design.

g. Expected Outcomes:

- Anticipating a comprehensive understanding of patient knowledge, awareness, and attitudes regarding FPP maintenance in Western Maharashtra.
- Identification of specific areas for improvement to inform targeted patient education programs.

V. Result :

A total of 150 responses were gathered in this study survey

Table 1: About maintenance of prosthesis

Maintenance of prosthesis	n=150	Percentage
Yes	101	67.3%
No	49	32.6%

Regarding about the maintenance of prosthesis by the patient, it was noted majority of them 101/150(67.3%), were aware of it and remaining 49/150(32.6%) were not.

Table 2: Presence of food lodgement and halitosis

Food lodgement and halitosis	n =100	Percentage
Yes	117	78%
No	33	22%

In table 2 it depicts that, when surveyed and asked about the presence of food lodgement and halitosis, due to presence of prosthesis, majority of them answered yes 117/150 (78%) and rest didn't experienced any halitosis 33/150 (22%)

Table 3: Problem faced while cleaning interdentally

Problem faced cleaning interdentally	n=100	Percentage
Yes	108	72%
No	42	28%

Regarding the problem faced while cleaning interdentally, 108/150 (72%) reported to face problem, while rest 42/150 (28%) did not report any such problems.

Table 4: Satisfaction with the masticatory efficiency of the prosthesis

Masticatory efficiency of prosthesis	n=150	Percentage
Yes	131	87.3%
No	19	12.6%

According to table 4, it shows that majority of them was satisfied with the masticatory efficiency of the prosthesis they had, that is 131/150 (87%), whereas rest 19/150 (12.6) were not satisfied with the masticatory efficiency.

Table 5: Satisfaction with the aesthesis of prosthesis

Aesthesis of prosthesis	n=150	Percentage
Yes	133	88.6%
No	17	11.3%

Regarding the aesthesis of prosthesis 133/150 (88.6%) were satisfied, and the rest 17/150 (11.3%) were not satisfied with the prosthesis.

VI. Discussion:

In the examination of fixed prosthesis performance, criteria such as chewing function, esthetics, longevity, and technical complications are crucial factors. However, literature on implant prosthesis often neglects essential aspects like patient satisfaction. Recent research supports the positive impact of implant-supported prosthesis on patients' quality of life, satisfaction levels, and oral hygiene practices. This cross-sectional descriptive study focused on individuals with a functional fixed partial denture (FPD) ranging from recent to over 10 years. Notably, patient satisfaction often centers on function, comfort, and esthetics, particularly for implant fixed prosthesis. The majority reported improved chewing ability, minimal speech disturbances, and high satisfaction with the esthetic outcome. Despite some concerns about esthetics and communication issues with dentists, 67.3% agreed that the treatment met their expectations. Esthetic considerations ranked highest that is 88.6% among reasons for unmet expectations, followed by maintainability, comfort, masticatory issues, and speech difficulties

The questionnaire had included different aspects to measure the satisfaction with FPD. Patient concerns are mainly related to function, comfort, and esthetics, especially for implant fixed prosthesis. In the present

investigation, the high percentage of patients satisfied with their prosthesis indicates that patients were satisfied with most of the functional aspects of their prosthesis.

And there's high percentage of patients (78%) who have problems like food lodgement and halitosis due to lack of oral hygiene. Any permanent prosthesis' performance is measured in terms of chewing function, aesthetics, longevity, and technical difficulties. Anderson demonstrated in 1998 that it is crucial to take into account both the physicians' and patients' evaluations when determining the efficacy of fixed prosthesis therapy. The current literature, particularly for implant prostheses, notably underexposes critical factors like patient satisfaction. According to a recent study, implant-supported prostheses improved patients' quality of life, level of satisfaction, and capacity for oral hygiene

Despite the fact that color and shade play a significant influence in a patient's contentment with their FPD, 88% of patients reported being happy with the treatment's aesthetic results, even if 11% said they weren't. This outcome emphasizes the significance of aesthetic factors in the design and construction of FPDs.

Data on patient satisfaction is a crucial source of knowledge that can help dentists deliver prosthodontic care that lives up to patients' expectations. The communication style of dentists with patients was found to have an impact on patients' satisfaction, at least in the short term, with 67% of respondents agreeing that the dentist has told them about the maintenance part of the fixed partial prosthesis. Cleaning interdentally was the highest reason for not fulfilling the patient's expectation by scoring 72%, followed by maintainability wise, comfort, masticatory and finally speech.

Usually patients' complaints about the discomfort that they feel after the treatment, the study has showed that 87.7% of patients were satisfied. Patients far too frequently believe that the "permanent" crown or fixed prosthesis truly is permanent. Nothing more is necessary to keep things as they are, as they had anticipated. Dentists have a duty to explain to their patients that maintaining the restoration and the remaining teeth need additional care. And they should also educate the patients about usage of particular dental aid. Because the study concludes that only 67% of the dentists have informed patients about the maintenance part of fixed prosthesis and 32.6% haven't informed about the taking care of the prosthesis. So that's why patient education is also an important aspect of the successful treatment.

The most significant result of the investigation was that 70% of patients said they did not use any type of dental aids to maintain their prosthesis, which revealed a lack of understanding regarding the significance of maintaining fixed prostheses. The main cause was the absence of post-treatment instructions, which are typically given by the treating dentist.

VII. Conclusion:

The survey's findings demonstrated that fixed prostheses continue to meet patients' needs for tooth replacement. The vast majority of patients were happy with every element of their fixed prosthesis' functionality. The survey's most significant conclusion was that most patients exhibited a lack of understanding regarding oral hygiene practices and the importance of maintaining permanent prostheses with dental aids. The fact that the majority of dentists ignored the post-treatment guidelines for maintaining permanent prostheses is very troubling.