



An Analysis into Chief Complaint and Dental Status in Patients Indicated for Full Mouth Rehabilitation

Sagana M¹, Suresh Venugopalan*², Jeevitha M³

¹Saveetha Dental College and Hospitals, Saveetha Institute of Medical and Technical Sciences (SIMATS), Saveetha University, Chennai, Tamil Nadu, India

²Department of Prosthodontics, Saveetha Dental College and Hospitals, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai, Tamil Nadu, India

³Department of Periodontics, Saveetha Dental College and Hospitals, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai, Tamil Nadu, India

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ABSTRACT

Full mouth rehabilitation is the procedure when restoration of missing teeth involves the complete restoration of the oral cavity, in terms of function and esthetics. Proper diagnosis and careful treatment assessment should be made in managing FMR patients. This study aims to analyse the chief complaint and dental status in patients indicated for full mouth rehabilitation. A total of 58 patients meant for full mouth rehabilitation were included in this study. The study was conducted at Saveetha Dental College. Data were collected by analysing patients' records between June 2019 and March 2020. All the data were recorded and analysed statistically using SPSS software. Based on the analysis, it is found that the most common chief complaint reported by FMR patients was prosthetic related. About 23% of patients indicated for full mouth rehabilitation presented with four missing quadrants. About 74% of patients indicated for full mouth rehabilitation presented with no previous endodontic treatment. Chief complaint and dental status play a crucial role in making a proper diagnosis in patients meant for full mouth rehabilitation.



*Corresponding Author

Name: Suresh Venugopalan
Phone:
Email: suresh@saveetha.com

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INTRODUCTION

Full mouth rehabilitation ought to re-establish a state of functional also as biological potency where teeth and their periodontal structures, the muscles of mastication and therefore the temporomandibular

joint mechanisms all function together in synchronous harmony (Kazis and Kazis, 1960; Ashok, 2014). The objective of full mouth rehabilitation isn't only reconstruction and restoration of the worn-out dentition, however additionally maintenance of the health of the whole stomatognathic system (Tiwari, 2014; Ariga, 2018).

Full mouth rehabilitation seeks to change all hostile forces on the teeth that indeed hold pathologic conditions, into favourable effects that alter the normal function and so induce the healthy condition. The beneficial forces increase tolerance of supporting structure to masticatory pressures (Goldman, 1952). Removable acrylic resin partial denture tends to adversely affect the periodontal parameter when teeth are in contact with resin base (Ganapathy et al., 2016; Jyothi, 2017) and in implants, the fit of non-original abutments to implants at the implant-abutment junction should be evaluated (Duraisamy,

2019). Another study reported that veneers fabricated using leucite reinforced disilicate exhibited the least marginal discrepancy (Ajay, 2017; Jain et al., 2017). So, Correct analysis, technique sensitivity (Ganapathy et al., 2017) and a choice of treatment should be wisely made (Subasree et al., 2016; Kannan and Venugopalan, 2018) while treating full mouth rehabilitation patients.

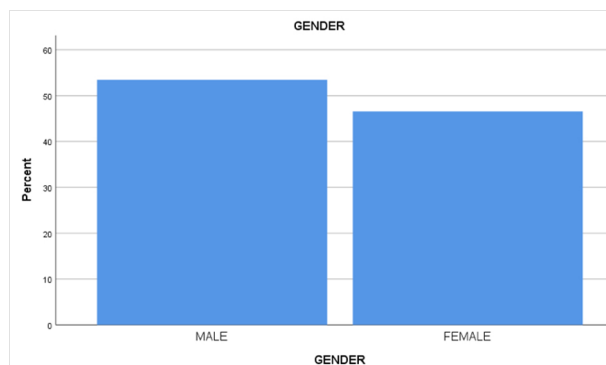
Esthetic (Venugopalan, 2014) and functional rehabilitation of worn out dentition is often a major clinical challenge. The gradual wear of teeth could be a normal process throughout the life of a patient. However, excessive occlusal wear results in pulpal pathology and esthetic disfigurement (Turner and Missirlian, 1984). Tooth wear is often classified as an abrasion, attrition and erosion depending on its cause (Smith, 1989).

Correct analysis and comprehensive treatment should be done because the aetiology of severe occlusal tooth wear is complex and variable (Fardal et al., 2001; Selvan and Ganapathy, 2016). Full mouth rehabilitation enhances the patient's vanity, confidence and quality of life. Patient's input is an essential part of clinical management. The opinion of patients may be central to decision making (Fardal et al., 2001; Vijayalakshmi and Ganapathy, 2016). The chief complaints of patients are significant because they help to quickly access what is important to patients as well as patients' knowledge about their dentition. Attention to chief complaints can guide admitting triage, diagnosis and early treatment (Brunsvold et al., 1999). To hold functional oral fitness, right dental treatment and patient cooperation are vital (Basha et al., 2018). This study aims to analyse the patient's chief complaint and dental status who were indicated for full mouth rehabilitation.

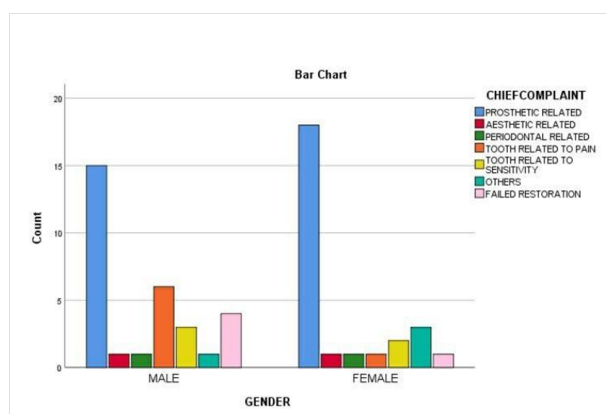
MATERIALS AND METHODS

The study was done in Saveetha Dental College and Hospitals, Chennai. Data of patients who were undergoing full mouth rehabilitation were collected by reviewing the records of 86000 patients. Sample collected was from June 2019 to March 2020. A total sample data of 58 patients were included in this study who were undergoing full mouth rehabilitation treatments. The case sheets were reviewed and cross verified with photographs. Both internal and external validity is available. Approval from the ethical committee was taken before the start of the study.

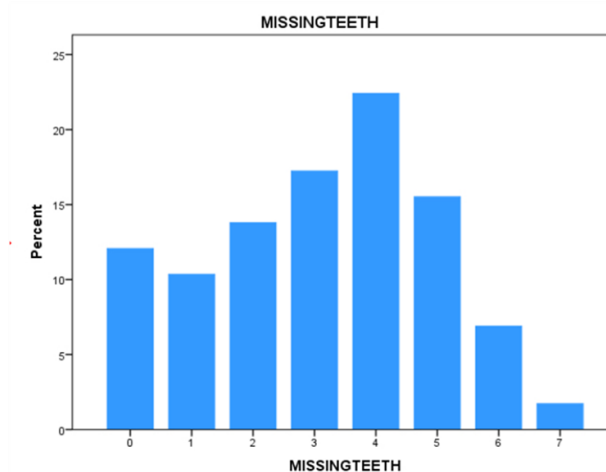
Data collected are age, gender, chief complaint, number of missing quadrants and endodontic status. Various chief complaints were categorised into



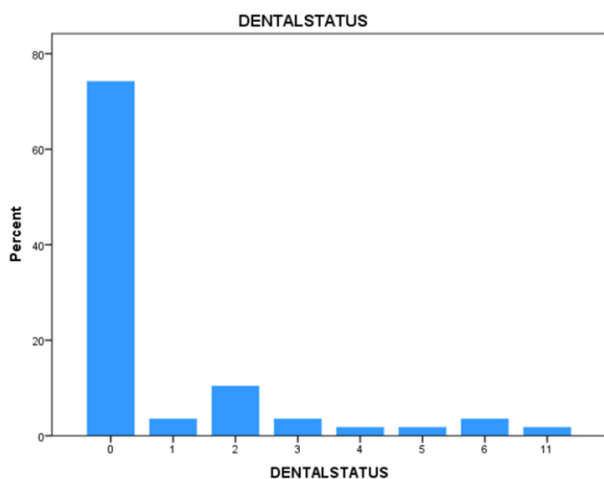
Graph 1: Bar graph represents Gender distribution among patients indicated for full mouth rehabilitation



Graph 2: Bar graph representing patient's chief complaint among patients indicated for full mouth rehabilitation



Graph 3: Bar graph represents missing teeth quadrantwise among patients indicated for full mouth rehabilitation



Graph 4: Bar graph represents endodontically treated tooth among patients indicated for full mouth rehabilitation

(1) Prosthetic related (2) Aesthetic related (3) Periodontal related (4) failed restoration (5) Teeth related to pain and sensitivity (6) others

The patients who were indicated for full mouth rehabilitation were included in the study. Incomplete and rejected data were excluded. All these dates were entered in Microsoft excel sheet and analysed by SPSS software.

RESULTS AND DISCUSSION

Out of these 58 patients, it is found that 53% of patients indicated for full mouth rehabilitation were male, and 47% were female. The proportion of patients who were undergoing for FMR was considerably higher in Male Graph 1. X axis denotes the gender and Y axis denotes the percentage of patients indicated for full mouth rehabilitation. From the graph, it was evident that the full mouth rehabilitation patients have slight Male predilection.

From the analysis, the most common chief complaint presented by the patients indicated for full mouth rehabilitation were prosthetic related (55%). The second common chief complaint presented was teeth related to pain (12%) and about 9% of patients reported with failed restoration and teeth related to sensitivity Graph 2. X axis showing the gender and Y axis showing the patients indicated for full mouth rehabilitation. Here, blue colour denotes the prosthetic related chief complaints, red colour denotes the aesthetic related chief complaints, green colour denotes the periodontal related chief complaints, orange colour denotes the chief complaints regarding the tooth related to pain, yellow colour denotes the chief com-

plaints regarding the tooth related to sensitivity, pink colour denotes the chief complaints regarding the failed restoration and turquoise colour denotes other chief chief complaints. From the graph, it was evident that the highest number of chief complaints presented by full mouth rehabilitation was prosthetic related more among females. It was statistically significant $p < 0.05$ with Chi Square test Pearson value of 90.9, p value = 0.000.

Based on the analysis, it is shown that about 23% of patients undergoing full mouth rehabilitation presented with four missing quadrants Graph 3. X axis showing the number of missing quadrants and Y axis showing the percentage of patients indicated for full mouth rehabilitation. From the graph, it was evident that the highest number of patients indicated for full mouth rehabilitation presented with four missing quadrants.

About 74% of patients indicated for full mouth rehabilitation with no previous endodontic treatments Graph 4. X axis showing the number of endodontically treated tooth and Y axis showing the percentage of patients indicated for full mouth rehabilitation. From the graph, it was evident that the highest number of patients with full mouth rehabilitation presented with no previous endodontic treatment.

Full mouth rehabilitation is a procedure when restoration of missing teeth involves the complete restoration of the oral cavity. The prosthetic rehabilitation of a patient with a functionally compromised dentition involves a multidisciplinary approach that requires crucial treatment planning (Upadhyay *et al.*, 2019). So, a proper diagnosis should be made by assessing the chief complaint and dental status while treating full mouth rehabilitation patients.

The common complaints of the patients of full mouth rehabilitation were difficulty in chewing (Ashok, 2017). Our study findings state that the most common chief complaint indicated by the patients reported for full mouth rehabilitation were prosthetic related (57%). Our study findings are comparable with literature. A study by (Abduo and Lyons, 2012) stated that the alteration of a vertical dimension is due to the loss of multiple teeth is a possibility. Our study findings reported the patient with full mouth rehabilitation commonly presented with four missing quadrants. There was also a relevance between the incidence of chief complaint among females and the number of missing teeth units indicating a statistical significance $p < 0.05$ based on the chi-squared analysis. Our study findings are in concordance with the other literature

studies that have reported that missing teeth have an impact on both oral and general health. The effect of tooth loss on oral health are bone loss, impaired mastication, dyskinesia and can be accompanied by functional and sensory deficiencies of buccal mucosa, oral musculature and the salivary glands (Emami, 2013). However, many studies have reported that patients have inadequate knowledge about the consequences of missing teeth and they are not aware of their edentulous conditions (Shetty et al., 2019; Mohril and Manekar, 2018). A study reported that many patients were not informed of various treatments regarding the replacement of missing teeth (Ashok and Suvitha, 2016).

Several clinical studies (Jacob, 2009; Dua et al., 2011; Gottumukkala and Raju, 2012; Lanzara, 2020) based on full mouth rehabilitation included Male patients. Our study findings correlate with the literature. Several clinical case studies (Gottumukkala and Raju, 2012; Sarita and Thumati, 2014; Zeighami et al., 2015) stated that the chief complaint of patients who were indicated for full mouth rehabilitation was prosthetic related. Many patients with missing and worn out teeth reported with difficulty in chewing. Some patients present with aesthetic complaints because of missing and worn out teeth. These studies support our study findings and correlation between the outcomes between the missing teeth quadrants and associated patient complaints. The limitations of the present study are chief complaints, and dental status was observed in patients undergoing for full mouth rehabilitation with the fact that subjects examined represent a selected population and sometimes reported for some acute dental pain and replacement. The data which were collected for dental status was recorded at the first visit, subsequent extraction or tooth that is treated endodontically were not considered.

CONCLUSION

Chief complaint and dental status are the most critical factors that facilitate diagnosis and treatment planning. But the chief complaint shows the patients insights or awareness as only missing teeth, whereas it could be a complete rehabilitation. Awareness should be created on the knowledge about negligence and importance of rehabilitations due to various reasons.

Conflict of Interest

The authors declare that they have no conflict of interest for this study.

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