

Assessment of Difficulties Faced by People Wearing Complete Denture in the rural area of Patna.

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ABSTRACT

Background: Aim: Complete denture is essential to rehabilitate the stomatognathic system by improving masticatory efficiency, phonetics and aesthetic appearance of completely edentulous patients. New complete denture wearing may be associated with some complaints like lack of retention and stability, pain or discomfort, accumulation of food under the denture, altered speech, difficulty in chewing, unsatisfactory appearance and retching. So this study was done with the aim to assess the difficulties faced by the people complete dentures prosthesis in the rural area of Patna. **Methods:** A total of 100 complete denture wearers consisting of 58 males and 42 females, within the age group of 60 to 70 years were selected and examined from the rural area of Patna. A self-structured questionnaire was designed to know the complaints of patients regarding dentures. Data was analyzed using SPSS version 22.0. Statistical significance was accepted at $p < 0.05$. **Results:** The results revealed that most of complete denture wearers have problems in difficulty in chewing, sore spots, had low confidence and low self-esteem. It is observed that difficulty in chewing is more prevalent problem among males (63.33%) whereas in females sore spots are more prevalent (67.5%). Confidence level was low in both males (53.33%) and females (65%). Difficulty in speech is more common social problem among both males (66.66%) and females (62.5%), [Table 3]. Majority of males (56.66%) and females (45%) have problem of oral stomatitis. **Conclusion:** This study suggested that complete denture patients faces difficulties hence, as a Prosthodontist, it is our duty to evaluate and treat the root of the cause for a patient's discomfort.

Keywords: Complete denture, Edentulous, Prosthodontist.

INTRODUCTION

Edentulism occurs in about one-tenth to one-fifth of the general population, and in about half of the population of age over 65 years. Losing natural teeth occurs throughout life for different reasons. It has a significant impact on patients' life, appearance and function and needs to be replaced by prosthesis, removable or fixed.^[1] Complete denture is essential to rehabilitate the stomatognathic system by improving masticatory efficiency, phonetics and aesthetic appearance of completely edentulous patients.^[2] Attention has been focused on patient's expectations of their dentures. Patients may have unrealistically high expectations of their dentures, often believing that the dentures will be comparable to their natural teeth.^[3]

Hence, the follow-up care of complete denture is an important step as it helps to correct minor problems and complaints,^[4] faced by wearing complete dentures with problems and complaints may have

adverse effects on the health of denture supporting tissues. These effects can be categorized into direct and indirect sequelae.^[5]

The wearing of a new complete denture may be associated with some complaints especially shortly after the insertion of the denture. The complaints may be lack of retention and stability, pain or discomfort, accumulation of food under the denture, altered speech, difficulty in chewing, unsatisfactory appearance and retching.^[6] Other complaints are bone resorption in edentulous alveolar ridges and sometimes overgrowth of tissue under denture which is caused by the forces generated by the mandible, during function and parafunction as the mucosa is sandwiched between the denture base and the underlying bone and hence all the forces are transmitted through this atrophic tissue.^[7] The purpose of this study was to assess the persons of complete dentures experiencing difficulties with their prostheses.

MATERIALS & METHODS

A total of 100 complete denture wearers consisting of 58 males and 42 females, within the age group of 60 to 70 years were selected and examined from the rural area of Patna. Persons those who have been

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wearing dentures for at least 1 year were included in the study. Persons those who were suffering from chronic or debilitating conditions such as diabetes were excluded from the study. A self-structured questionnaire was designed to know the complaints of patients regarding dentures. Data was analyzed using SPSS version 22.0. Student's t-test was used to find the significance of difference in the means scores. Statistical significance was accepted at $p < 0.05$.

RESULTS

Table 1: Physical problems faced by complete denture wearers. Total participants (N= 100)

Physical problems faced by complete denture wearers	Male participants N=60	Female participants N= 40
Difficulty in chewing	38(63.33%)	23(57.5%)
Sore spots	34(56.66%)	27(67.5%)
Painful gums	26(43.33%)	22(55%)

Table 2: Psychological problems faced by complete denture wearers. Total participants (N= 100)

Psychological problems faced by complete denture wearers.	Male participants N=60	Female participants N= 40
Low confidence	32(53.33%)	26(65%)
Psychological gagging	15(25%)	25(62.5%)
Low self esteem	26(43.33%)	14(35%)

Table 3: Social problems faced by complete denture wearers. Total participants (N= 100)

Social problems faced by complete denture wearers	Male participants N=60	Female participants N= 40
Difficulty in speech	40(66.66%)	25(62.5%)
Difficulty while eating	20(33.33%)	23(57.5%)
Halitosis	13(21.66%)	6(15%)

Table 4: Clinical observation of complete denture wearers. Total participants (N= 100)

Clinical observation of complete denture wearers.	Male participants N=60	Female participants N= 40
Angular Chelitis	20(33.33%)	12(30%)
Denture related hyperplasia	12(20%)	14(35%)
Oral stomatitis	34(56.66%)	18(45%)
Accumulation of plaque and calculus	12(20%)	5(12.5%)
Mandibular dysfunction	7(11.66%)	10(25%)

The total study population was 100 from the rural areas of Patna district in which 60 were males and 40 were females. It is observed that difficulty in chewing is more prevalent problem among males (63.33%) whereas in females sore spots are more prevalent (67.5%), [Table 1]. Confidence level was

low in both males (53.33%) and females (65%) [Table 2]. Difficulty in speech is more common social problem among both males (66.66%) and females (62.5%), [Table 3]. Majority of males (56.66%) and females (45%) have problem of oral stomatitis [Table 4].

DISCUSSION

The initial wearing of a new complete denture is usually associated with some problems especially in a short time after the insertion of the denture. The discomfort caused might be due to lack of looseness, mastication problems, pain or discomfort, altered speech, food accumulation and bad breath⁶.

The current study found that complete denture wearers have difficulty in chewing which is more prevalent problem among males (63.33%) whereas in females sore spots are more prevalent (67.5%). It also shows that low confidence, difficulty in speech and problem of oral stomatitis are common difficulties present in complete denture wearers.

Gosavi et. al conducted a cross-sectional study in 178 patients to investigate the problems faced by patients having complete dentures and the cleanliness of dentures by the patients. Results of this study showed that mastication discomfort and looseness of denture were the most common complaints followed by lack of retention (35.4%), bad breath (29.8%), tongue restriction (26.4%) and food accumulation (24.7%).^[8]

Singh et. al conducted a study to know the problems faced by complete denture wearers in rural areas in Jammu district. The results revealed that majority of respondents complained of difficulty in chewing, sore spots, painful and swollen gums, difficulty in speech, low confidence and low self esteem. Clinical observations revealed that the commonest condition associated with denture wearing was Oral Stomatitis/ Burning mouth Syndrome, Superimposed infection and Angular cheilitis.^[9]

Bekiroglu et. al conducted a study to observe and determine oral complaints of people aged 55 years or older and reported that problems were mostly seen in older ages, especially those over 75 years old and women were more aware of halitosis than men¹⁰. In another study most commonly encountered complaints were identified as pain while inserting or removing dentures, difficulties in masticating their food, loose dentures, discomfort in speaking, ulceration, restricted space for tongue¹¹. Salih et. al reported that pain (27%) was the most common problem in patients of both genders, loose denture complaint was lowest among male (5%), while complaint relating to mastication and eating had the lowest number among females (9%), speech problem had the highest incidence among patients within the age group of up to 60 years (5.5%), while the highest incidence among patients within the age group of above 60 years, were pain complaint

(22.5%). Complaint relating to eating and mastication had the lowest incidence (17%) among both age groups.^[12]

CONCLUSION

The results of the study revealed that the complete denture wearers suffer from wide range of difficulties. These problems affect the quality of life of the elderly people. There are still no reliable methods to predict the outcome of complete denture treatment and there are many problems related to treatment with complete dentures. As a Prosthodontist, it is our duty to evaluate and treat the root cause for a patient's discomfort.

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