

## Research Article

# To Assess Socio- Demographic Distribution of Patients with Fixed Prostheses Running Title: Fixed Prostheses

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**\*Corresponding author:** Ashish Pandey, Department of Prosthodontics, Daswani Dental College & Research Centre, India**Received:** November 25, 2019; **Accepted:** December 30, 2019; **Published:** December 31, 2019**Abstract****Background:** Total or partial edentulism is a good indicator of the oral health of a population. The present study was conducted to assess socio-demographic distribution of patients with fixed prostheses.**Materials and Methods:** The present study was conducted on 280 patients of fixed prostheses. Five socioeconomic groups: professionals and managerial officers and retirees of this type, skilled Workers, Semi-skilled Workers, Unskilled workers and dependents were assessed.**Results:** Age group 20-30 years had 20, 30-40 years had 59, 40-50 years had 74 and 50-60 years had 127 patients. 110 patients were dependent, 67 were unskilled, 46 were semi skilled, 34 were professional, and 23 were skilled workers. The difference was significant ( $P < 0.05$ ). Fixed prostheses were seen in both anterior and posterior teeth in 112 cases, anterior in 110 cases and posterior in 58 cases. The difference was non- significant ( $P > 0.05$ ).**Conclusion:** Authors found that fixed prostheses were commonly among dependents followed by unskilled and semi skilled workers.**Keywords:** Fixed prostheses; Socio- demographic; Semi-skilled

## Introduction

Total or partial edentulism is a good indicator of the oral health of a population. The prevalence and extent of tooth loss has decreased significantly in many developed countries during recent decades. Some studies have reported that the incidence of edentulism correlates with educational level and income status, with those in lower levels exhibiting higher risks of becoming totally edentulous [1].

Dental prosthesis could either be fixed or removable. It has been postulated that socio-demographic characteristics influencing the prevalence of dental restorations varies from country to country. This variability may be influenced by ability to afford this type of treatment, accessibility of treatment and attitudes toward it. Although a high proportion of individuals require some sort of dental prosthesis, treatment involving the use of dental prosthesis is infrequent in developing countries. Social and geographical variations in dental prosthetic replacement may be associated with differences in both patients' and dentists' attitudes towards oral health as well as socioeconomic status [2].

The general requirements of dental prostheses are obvious from the goal of prosthodontics. Thus, the most important aim of restoration is to rehabilitate oral function, especially the masticatory function [3]. It means that the individual geometry of the dental prostheses is needed to establish appropriate and efficient occlusal contacts. For example, the detailed characteristics of the cusps of the posterior artificial tooth, like the cuspal inclination, height, and geometry, should match those of the opposite fossa. Then, the two opposite posterior teeth should form a pestle-and-mortar-like structure that is efficient for grinding food [4]. The present study was conducted to assess socio- demographic distribution of patients with

fixed prostheses.

## Materials and Methods

The present study was conducted in the department of prosthodontics. It comprised of 280 patients of fixed prostheses. The study protocol was approved from institutional ethical committee. All patients were informed regarding the study and written consent was obtained.

Data such as name, age, gender etc. was recorded. Five socioeconomic groups: professionals and managerial officers and retirees of this type, skilled Workers, Semi-skilled Workers, Unskilled workers and dependents were assessed. Results were tabulated and subjected to statistical analysis. P value  $< 0.05$  was considered significant.

## Results

Table 1 shows that age group 20-30 years had 20, 30-40 years had 59, 40-50 years had 74 and 50-60 years had 127 patients.

Table 2 and Figure 1 shows that 110 patients were dependent, 67 were unskilled, 46 were semi skilled, 34 were professional and 23 were skilled workers. The difference was significant ( $P < 0.05$ ).

Table 3 shows that fixed prostheses were seen in both anterior and posterior teeth in 112 cases, anterior in 110 cases and posterior in 58 cases. The difference was non- significant ( $P > 0.05$ ).

## Discussion

Prosthodontics pertains to the diagnosis, treatment planning, rehabilitation, and maintenance of oral function, comfort, appearance, and health of patients with clinical conditions associated

**Table 1:** Age wise distribution of patients.

Age group (Years)	Number	P value
20-30	20	0.01
30-40	59	
40-50	74	
50-60	127	

**Table 2:** Occupation of patients.

Occupation	Number	P value
Professional	34	P value
Skilled worker	23	
Semi skilled	46	
Unskilled	67	
Dependent	110	

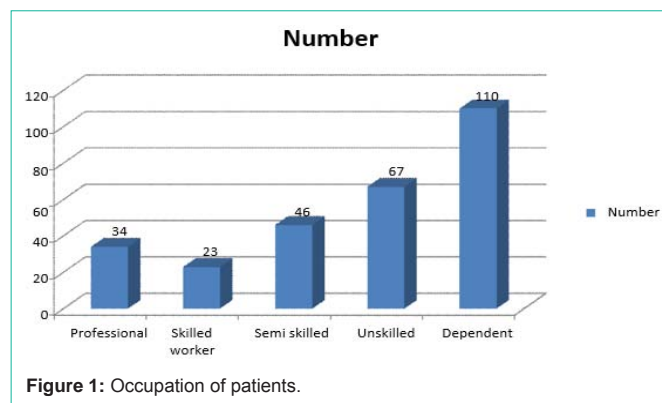
**Table 3:** Distribution of fixed prosthesis by tooth type.

Tooth type	Number	P value
Anterior	110	0.07
Posterior	58	
Both	112	

with missing or deficient teeth, and/or maxillofacial tissues using biocompatible substitutes. The subject highlighted in this chapter is special prostheses for tooth and dentition [5]. Fixed dental prostheses are treatment/restorations for the replacement of missing tooth structure, teeth, or oral tissues. The general requirements of dental prostheses are obvious from the goal of prosthodontics. Thus, the most important aim of restoration is to rehabilitate oral function, especially the masticatory function [6]. It means that the individual geometry of the dental prostheses is needed to establish appropriate and efficient occlusal contacts. For example, the detailed characteristics of the cusps of the posterior artificial tooth, like the cuspal inclination, height, and geometry, should match those of the opposite fossa. Then, the two opposite posterior teeth should form a pestle-and-mortar-like structure that is efficient for grinding food [7]. The present study was conducted to assess socio- demographic distribution of patients with fixed prostheses.

In present study, age group 20-30 years had 20, 30-40 years had 59, 40-50 years had 74 and 50-60 years had 127 patients. Enabulele et al. [8] included a total of 256 patient records for the study. The patients' age ranged from 18 to 83 years with a mean age of 38.86 ± 15.86 years. There was a decline in number of patients who received fixed prosthesis as age increased with those ≤ 30 years of age recording the highest frequency. Skilled workers accounted for the majority (35.2%) of the patients while dependent and professionals accounted for 32.0% and 22.7% respectively. More than half (52.0%) of the patients were married. A higher proportion of females had crowns provided for them while a higher proportion of males had fixed partial denture provided for them and this was statistically significant.

We found that 110 patients were dependent, 67 were unskilled, 46 were semi skilled, 34 were professional and 23 were skilled workers. Fixed prostheses were seen in both anterior and posterior teeth in



112 cases, anterior in 110 cases and posterior in 58 cases. Aesthetics is one of the reasons why missing tooth parts and teeth are replaced. This becomes imperative and foremost when the tooth to receive the prostheses is an anterior tooth which is prominent during smiling and speech. The anterior teeth represent one's personality, presentation, carriage and aesthetics when compared to the posterior teeth. Hence, more than half of the patients had anterior fixed prostheses treatment done [9].

Baran et al. [10] conducted a study in which 510 partially and/or totally edentulous patients were studied using a questionnaire. The questionnaire consisted of questions; age, gender, education level, income status, problems with dentures, necessity for new dentures. Also asked was the place that the subjects would prefer to get their denture treatment, irrespective of their income level. The number of male patients with complete dentures was more than the number of females, with an opposing trend for partial dentures. Irrespective of gender, each patient had had nearly two dentures by the time of questioning. It was also observed that the university clinics were generally preferred by patients from higher income levels with a higher educational level ( $\chi^2=25.206$ ,  $P<.00$ ). When patients were asked where they would prefer denture treatment, regardless of cost, private practice was the preferred-choice.

### Conclusion

Authors found that fixed prostheses were commonly among dependents followed by unskilled and semi skilled workers.

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