Knowledge, Attitude and Oral Hygiene Practice Among Patients Wearing Fixed Partial Dentures In South Coastal Karnataka Region

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ABSTRACT

The purpose of this study was to assess the knowledge, attitude and the oral hygiene measures undertaken by the patient wearing fixed partial denture visiting the Department of Prosthodontics in A.B Shetty Memorial Institute of Dental Sciences, Deralakatte, which is located in the south coastal Karnataka region. To improve the oral hygiene practices and to impart further knowledge among the patients, it is necessary to know the current status. The sample size of the present study was 200 and a written consent form was obtained from the patients before conducting the survey using a questionnaire.

The study showed that 35% of the sample chose fixed prosthesis by their choice, 55% as it was suggested by the dentist and the rest 10% due to others' suggestions. .40% preferred fixed prosthesis due to esthetic and functional reasons whereas 36% solely because of functional benefits and 24% for esthetic reasons.61.5% of the population knew the material with which their prosthesis is fabricated which indicates that majority of the people are aware of prosthesis they have. Among this79.6% had metal-ceramic crowns, 15.4% had all metal and 4.8% have all ceramic crowns which shows that the patients are more inclined towards esthetic restorations. From the questions regarding the fit of prosthesis, colour matching and shape of prosthetic teeth 8.5% patient found the quality of prosthesis excellent,52.5% good,35.5% average and3.7% poor. Regarding the oral hygiene practices, 72% of the sample brushes only once a day, 27.5% twice a day and 0.5% more than twice. Also 80% were unaware of the type of bristles in their brushes.

KEYWORDS: Fixed partial denture, knowledge, attitude, oral hygiene practices.

INTRODUCTION:

Teeth play an important role in the maintenance of a positive self image.¹Loss of teeth had hampered the social life of people. But with the advancement of technology in the field of prosthetic rehabilitation, increased awareness among people and improvements in the health care system people are able to achieve better treatment for lost teeth through fixed dental prosthesis. In order to impart further knowledge among the patients and to improve the oral hygiene practices it is necessary to access the knowledge, attitude and hygiene practices among the patients wearing fixed partial dentures.

The purpose of this study was to assess the knowledge, attitude and the oral hygiene measures undertaken by the patient wearing fixed partial denture visiting the Department of Prosthodontics in A.B Shetty Memorial Institute of Dental Sciences, Deralakatte, which is located in the south coastal Karnataka region. The study was conducted to evaluate the knowledge or source of knowledge about the fixed prosthesis, to assess the level of satisfaction and efficiency of fixed prosthesis post insertion and to assess the hygiene practices and maintenance of fixed prosthesis among the patients.

MATERIALS AND METHODS:

SAMPLE SELECTION: 200 patients visiting the Department of Prosthodontics in A.B Shetty Memorial Institute of Dental Sciences, Deralakatte were selected. A written informed consent was obtained from each patient prior to starting the survey.

After obtaining the consent of the patients who are having a fixed dental prosthesis to participate in the study, patients were asked to fill the questionnaire form which was later evaluated to assess the knowledge, attitude and oral hygiene practices among the patients.

RESULTS:

Among the 200 fixed partial denture wearers 110 chose fixed prosthesis as it was suggested by the dentist and 70 by their own choice and 20 due to other reasons.(Fig 1) This indicates a lack of knowledge or decision making ability of the patient.

48/200 patients preferred fixed prosthesis due to esthetic reasons, 72/100 due to the functional benefits and 80/100 due to both(Fig 2). Among 61.5% who knew the material with which their prosthesis is made of 79.6% have metal ceramic crowns, 15.4% have all metal and 4.8% have all ceramic crowns(Fig 3).

Evaluation of the attitude of the patients towards the fixed dental prosthesis was found to be good. 8.5% patient found the quality of prosthesis excellent, 52.5% good, 35.5% average and 3.7% poor(Fig 4).

Assessment of oral hygiene practices among the fixed partial denture wearers showed that 143/200 patients brush once a day, 55/200 twice a day and 2/200 more than twice. 16/200 patients uses other aids to clean the prosthetic area whereas the remaining patients do not use any other aids(Fig 5) .Among the 8% who uses additional aids 14/16 uses floss and 2/16 uses interproximal brushes(Fig 6).

DISCUSSION:

Various studies have been carried out in the country and various parts of the world to determine the prevalence, prosthetic status and attitude of patients towards fixed prosthetic treatment. There has been an increased trend towards fixed prosthesis compared to removable prosthesis in recent years.

In this study, the knowledge, attitude and oral hygiene practices among the fixed prosthesis wearers in south coastal region were evaluated using a questionnaire. The sample size of the present study is 200 and a written consent form was obtained from the patients before conducting the survey. According to the survey 35% of the sample chose fixed prosthesis by their choice, 55% as it was suggested by the dentist and the rest 10% due to others suggestions. This may be due to the lack of education and decreased accessibility to the internet sources in the rural areas. Knowledge among the rural population should be improved so that patients can have better decision making skills regarding their prosthesis. 40% preferred fixed dental prosthesis due to esthetic and functional reasons whereas 36% solely because of functional benefits and 24% for esthetic reasons.61.5% of the population knew the material with which their prosthesis is fabricated which indicates that majority of the people are aware of prosthesis they have. Among this 79.6% had metal-ceramic crowns, 15.4% had all metal and 4.8% have all ceramic crowns which shows that the patients are more inclined towards esthetic restorations. The cost factor was the major reason that prompted few patients to opt for all metal prosthesis. The study conducted by Napankangas et al in Finland showed overall, 12.4% of men and 12.1% of women had single crowns, while 4.8% of men and 8.0% of women had FPDs. A logistic regression analysis showed that the presence of crowns and FPDs was significantly associated with a southern place of residence, high and middle levels of education and high frequency of dental visits.² The finding from the study conducted by Shigli et al in Belgaum also indicate that awareness need to be increased regarding esthetics and phonetics.³ A higher frequency of removable restorations was present in older age groups, in subjects living in rural areas, in those from a lower socio-economic

status and in subjects with less education and lower incomes according to the study by Zitzmann et al.⁴

From the questions regarding the fit of prosthesis, colour matching and shape of prosthetic teeth 8.5% patient found the quality of prosthesis excellent,52.5% good,35.5% average and3.7% poor. This data shows a positive attitude towards the fixed prosthetic treatment. Imparting knowledge about the fixed prosthesis will allow the population to make better judgement and decision regarding their prosthetic rehabilitation.

Regarding the oral hygiene practices, 72 % of the sample brushes only once a day, 27.5% twice a day and 0.5% more than twice, also 80% were unaware of the type of bristles in their brushes. It is mainly due to the ignorance and lack of literacy among the population. Only 8% of patients use other aids to clean the prosthetic area in the oral cavity. This indicates a need to increase the awareness among the population regarding oral hygiene practices so as to increase the longevity of the prosthesis and improving oral health. Even the study by Patil V.V et al emphasized the need for improved dental health awareness and availability of dental facilities to industrial workers in Belgaum.⁵Cross sectional study by Gutshow et al also found a highly significant association between level of school education and the need of prosthetic treatment.⁶

CONCLUSION:

There has been a dramatic increase in the number of crowns and fixed dental prosthesis provided according to the studies conducted in Scotland and Finland.^{7,8} The same trend is seen all over the world regarding the prosthetic rehabilitation.

According to the survey conducted among the patients visiting the Department of Prosthodontics in A.B Shetty memorial institute of Dental Sciences, it was found that knowledge among the patients wearing fixed partial dentures about the prosthesis were good. Majority of the patients were well satisfied with the prosthesis and was having a positive attitude towards the fixed prosthetic replacement. The awareness about oral hygiene practices were comparatively less among the conducted sample and require further reinforcement regarding the same. Though variety of cultural influences, attitudes ,beliefs, educational background and financial status determine the treatment received by the patient; increase of awareness among the patients will definitely help in enhancing the oral health and social attitude of the patients.

REFERENCES:

1. Roessler D M.Comlpete denture success for patients and dentists.Int Dent J 2003;53:340-5.

- 2. Napankangas R, Haikola B, Oikarinen K, Soderholm AL.Prevalence of single crowns and fixed partial dentures in elderly citizens in the southern and northern parts of Finland. J Oral Rehabil. 2011; 38: 328-32.
- 3. Shigli K, Hebbal M, Angadi GS.Attitudes Towards Replacement of Teeth Among Patients at the Institute of Dental Sciences, Belgaum, India. J Dent Educ. 2007; 71(11): 1467-75.
- 4. Zitzmann NU, Hagmann E, Weiger R.What is the prevalence of various types of prosthetic dental restorations in Europe. Clin Oral Impl Res. 2007; 18(3): 20-33.
- 5. Patil VV, Shigli K, Hebbal M, Agrawal N.Tooth loss, prosthetic status and treatment needs among industrial workers in Belgaum, Karnataka, India. J Oral Sci. 2012; 54: 285-92
- 6. Gutschow F, Jakstat H.Cross-sectional study on the prevalence of prosthodontic reconstructions in young men. Deutsche Zahnarztliche Zeitschrift. 1991;56: 602–605.
- 7. Fyffe HE.Provision of crowns in Scotland a ten year longitudinal study. Community Dent Health. 1992;9:159–16
- 8. Ranta K, Tuominen R, Paunio I.Rehabilitation with fixed prostheses among Finnish adults. Community Dent Health. 1986;4:137–142.