



Research Article

ATTITUDE AND KNOWLEDGE OF VARIOUS PROSTHETIC OPTIONS FOR TEETH REHABILITATION AMONG PARTIALLY EDENTULOUS PATIENTS

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ARTICLE INFO

Article History:

Received 04th May, 2018
Received in revised form 16th June, 2018
Accepted 25th July, 2018
Published online 28th August, 2018

Key words:

Partial edentulism, prosthetic options, Removable partial denture, fixed partial denture, Dental implant supported prosthesis.

ABSTRACT

Introduction- Dental science aims in rehabilitation of patient's oral health, function and aesthetics. Removable partial denture, fixed partial denture and Dental implant supported prosthesis are the treatment options available for replacement of missing teeth. Hence study was done to assess the Attitude and knowledge of various prosthetic options for teeth rehabilitation among partially edentulous patients.

Materials and methods- The self administered questionnaire was given to partial edentulous patients visiting the out patient department of GDCH, Nagpur .The sample size being 180.

Results- The awareness of Fixed partial denture was 11%, Removable partial denture was 7% and dental implant supported prosthesis was 0.6% which is poor.

Conclusion- The study concluded that the awareness of different treatment modalities was low. The knowledge about dental implant supported prosthesis was the poorest. The awareness further depended upon the age, sex and educational status. Hence increasing the awareness regarding prosthetic options is need of an hour.

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INTRODUCTION

Teeth plays important role in maintenance of positive self image. Tooth loss is very traumatic and upsetting regarded as a serious life event that requires social and psychological readjustment^[1]. Long term partial edentulousness led's to various undesirable sequel like occlusal discrepancy, spacing of teeth, supraeruption and temperomandibular disorders etc^[2]. Hence replacement of missing teeth is of at most importance. Removable partial denture (RPD), Fixed partial Denture (FPD), Dental implant supported prosthesis are the treatment modalities available for replacement of missing teeth. Patients knowledge and awareness about dental prosthesis is one of the important factor in selection of particular dental prosthesis. Awareness is influenced by factors like age, sex, educational status, socioeconomic factors etc.

Aim

Attitude and knowledge of various prosthetic options for teeth rehabilitation among partially edentulous patients.

Objectives

To assess the knowledge of various treatment modality for replacement of missing teeth and to evaluate awareness of various prosthetic options available.

This institution based cross sectional study was done in 2016 from January to May. Sample size estimated from the cross reference was 180. PICO- The patients reported to theout patient clinic of Department of oral diagnosis and radiology with one or more missing teeth were questioned. Intervention was the identification of partial edentulism, questionnaire was filled for their awareness about prosthesis option and counselling for the same. Expected outcome was increase in awareness of patients towards their partial edentulism, need of prosthesis and prosthesis options available.

The permission was taken from the Institutional ethical committee. A written consent was taken from all the participants prior to the survey. The inclusion criteria is the partial edentulous patients between the age of 14-75 years. Completely edentulous patients, mentally and physically handicapped and non cooperative patients were excluded from the study.

The sample size calculation was done from the reference of study by SahaAdutta *et.al*^[3]. Relative proportion of awareness 41%; Relative precision- 20%; Confidence level-95%; Required sample size -157%; Assuming 10%non response -173. Hence 180 subjects was the sample size.

The method followed was

1. Identification of partially edentulous patient from OPD
2. Filling of questionnaire with consent

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3. Counseling of patient with interactive session and models
4. Feedback of patients

The consent of the participants was taken .A self administered validated questionnaire was filled by all the participants. The first part of the performa was designed to collect personal data of patients including age , sex and socioeconomic and educational status .The second part of he questionnaire consisted of 4 questions which focused on accessing the knowledge of partial edentulous condition and awareness of the prosthetic options available. Clinical examination of each of the participants was done to record no. Of missing teeth. Periodontal status and mobility of the existing teeth was also checked. . (Table 1 is the questionnaire). Statistical analysis- SPSSv16.0 has been used for the data analysis. Descriptive and inferential statistics were computed. Frequency and Percentages were calculated for qualitative data. Chi-sqaure test has been used to assess the awareness of prosthetic options in partially edentulous patients

Table 1 Questionnaire

Study-Attitude and knowledge of various prosthetic options for teeth rehabilitation among partially edentulous patients.

Consent- I _____ willing to participate in the undergoing survey 'Attitude and knowledge of various prosthetic options for teeth rehabilitation among partially edentulous patients. I have completely understood the terms and condition of the survey . I give my consent to publish the results .

Name – _____
Age- _____
Sex- _____
Address- _____
Occupation – _____
Education – _____

Are u aware of any missing teeth ?

- a. Yes
- b. No

If yes , which and how many teeth are missing ?

Are u aware of any prosthesis options available for replacement of missing teeth

- a. yes
- b. no

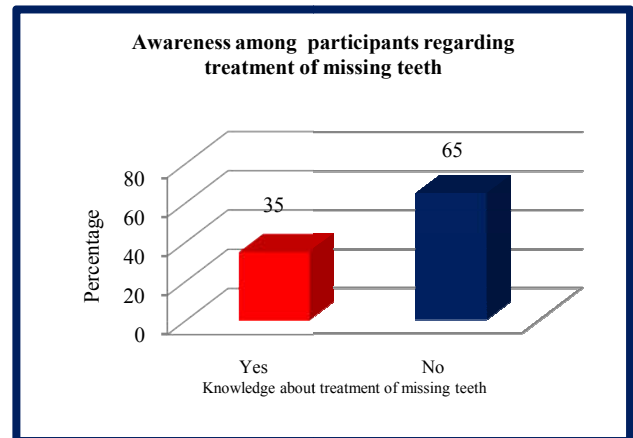
If yes, which of the following treatment modalities are u aware of?

- a. Removable partial denture
- b. Fixed partial denture
- c. Implant supported prosthesis
- d. All of the above

RESULTS

180 partially edentulous patients were interviewed .Among them 13.9% were below 30yrs, 37.2% were between 30-

45years and 48.9% were more than 45 years of the age. 54.4% females and 45.6% males constituted the study. The data of patients regarding knowledge of prosthetic option or treatment options available for replacement of the missing teeth suggested that 65% of the subjects were unaware of the prosthetic options available and 35% were aware about prosthetic options.



Graph 1 Awareness among participants for treatment of missing teeth

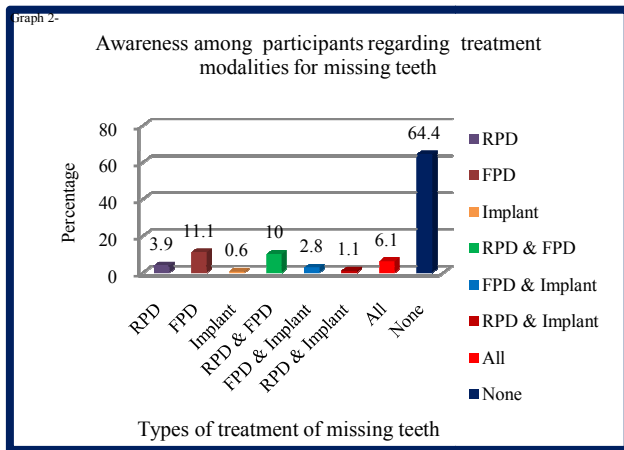
Table 2 Association between socio-demographics & Knowledge about treatment of missing teeth among study participants

		Yes	No	P* value
Age	<30 yrs	9 14.3%	16 13.7%	0.72
	30-45 yrs	21 33.3%	46 39.3%	
	>45 yrs	33 52.4%	55 47.0%	
Sex	Male	36 57.1%	46 39.3%	0.01
	Female	27 42.9%	71 60.7%	
Education	Primary school or Illiterate	21 33.3%	72 61.5%	0.001
	Secondary school	17 27.0%	20 17.1%	
	Junior college or higher	25 39.7%	25 21.4%	
	Total	63 100.0%	117 100.0%	

*- Chi-square test

The sociodemographic factors affect the awareness regarding different prosthetic options . Out of 35% who were aware of different prosthetic options, 52.4% were above 45years old. The awareness shows slight sex predilection i.e males (57.1%) were more aware than females. 61.5% who have attended primary school or illiterate were unaware of prosthetic options available. Hence the educational status greatly influences the awareness and thus being not aware the choice of treatment is affected.

Although the awareness regarding various prosthetic options was quite less (35%), among this majority (11.1%) were knowlegable about Fixed Partial Denture. The awareness regarding dental implant supported prosthesis was exceptionally low i.e 0.6%. 6.1% knew about RPD, FPD and dental implant supported prosthesis.



Graph 2 Awareness Among Participants For Treatment Modalities For Missing Teeth

DISCUSSION

According to results obtained in study by Mehmood Hussain et al^[4] the awareness of prosthetic options was low. In present study 65% of population are unaware of the prosthetic options i.e the awareness was fairly low. Further awareness of prosthetic option was more in older patients (>45years) in contrast to the study.

This study found that 64.4% participant were unaware of any prosthetic options, 11.1% were aware of FPD, followed by RPD (3.9%). 10% had knowledge of RPD and FPD. The awareness of Dental implant supported prosthesis was 0.6% which was very low. 6.1% subjects had knowledge of all prosthetic options - RPD, FPD and dental implant supported prosthesis. This results greatly varies from study by Mehmood Hussain et al which found that about 77% subjects were aware of RPD, 60.6% subjects aware of FPD and 5.5% about dental implant supported prosthesis.

In this study majority of the participants were aware of the fixed partial denture. The study by NaveedaIdress^[5] concluded with the fact that FPDs were more favoured than RPDs. Demand and need for FPD were higher in males and in those with better social educational and economic level. Sahadutta et al^[3] conducted a survey about awareness among patient regarding dental implants supported prosthesis as a treatment in Chhattisgarh. More than half of participants were not aware regarding implants. This study also implies that awareness for implant was exceptionally low and there is need to increase the same.

CONCLUSION

Dental science is being developed very fast with technological development. The goal of modern dentistry is to return patients to oral health in a predictable fashion. Removable Partial Denture(RPD), Fixed Partial Denture(FPD) and dental implant supported prosthesis are three treatment modalities which are available for replacement of teeth in partially edentulous patients .Muller De Van “The preservation of that which remains is of at most importance and not meticulous replacement of that which has been lost”. According to the study the knowledge of prosthetic options is fairly low. The awareness about dental implant supported prosthesis is poorest. Hence their is need to increase the awareness regarding different treatment modalities for replacement of missing teeth among the population. Limitation- The study is institutional based and hence may have biased the results. The population based study can remove this bias.

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How to cite this article:

Kalyani.R.Moharil and Varsha .S. Manekar (2018) 'Attitude and Knowledge of Various Prosthetic Options for Teeth Rehabilitation Among Partially Edentulous Patients ', *International Journal of Current Advanced Research*, 07(8), pp. 14631-14633. DOI: <http://dx.doi.org/10.24327/ijcar.2018.14633.2661>
