



PROSTHODONTIC NEEDS AND ATTITUDE OF THE PATIENT TOWARDS PROSTHETIC REPLACEMENT IN RELATION TO SOCIOECONOMIC STATUS AMONG THE MORADABAD POPULATION

Dental Science

Vyom Ragini Dubey Post graduate student, Department of Prosthodontics and Crown & Bridge, Kothiwal Dental College & Research Centre,

Ravi Madan Professor, Department of Prosthodontics and Crown & Bridge, Kothiwal Dental College & Research Centre,

Samarth Kumar Agarwal Professor, Department of Prosthodontics and Crown & Bridge, Kothiwal Dental College & Research Centre,

ABSTRACT

The loss of teeth results in significant disabilities, which can be profoundly disrupted social activities and its functional needs. The major areas that determine acceptability of treatment are socioeconomic status, comfort, function and aesthetics. Total of 1600 individuals aged 16 years and above participated to determine patient's attitude about replacement of teeth. Close ended questionnaire was recorded, followed by clinical examination. There is strong interaction among socioeconomic status and prosthodontic needs and also attitude of a patient towards replacement of missing tooth. It was concluded that socioeconomic status effects patient's prosthodontic need and attitude towards tooth replacement. Younger individuals paid more importance to aesthetic.

KEYWORDS

Attitude, Replacement, Needs, Socio-Economic Status

Introduction

The loss of one or more natural teeth often results in oral disability, as essential daily living activities, such as speaking and eating can be impaired.¹ A modern view of dentistry is one that recognizes the emotions or psychological essence of the patient in relationship to the dental situation, dental health care, and especially esthetics²⁻³. The main role of prosthodontics is the rehabilitation of patients after loss of teeth and oral function. Many treatment modalities are available for replacing a single missing tooth. Several factors affecting the final treatment decision regarding the replacement of a missing tooth, these factors are case dependent.⁵⁻⁹

The objective of this study was to evaluate prosthodontics needs and attitude of the patient towards prosthetic replacement in relation to socio-economic status among the Moradabad population

Materials and Method:

Total number of 1600 subjects, reported to the outpatient department of Kothiwal Dental College and Research Center, Moradabad were randomly selected. All subjects aged 16 years and above were included in the study. Patient with congenital missing teeth was not considered. Participants were divided into two groups: group 1 include subjects without missing teeth, group 2 include subjects with missing teeth. Fifteen closed – ended questionnaire was recorded, followed by a clinical examination. The questionnaire consisted of two parts. Part A included questions on socioeconomic factors and part B includes questions designed to determine the patient's attitude regarding replacement of teeth. Kuppuswamy's SOCIOECONOMIC STATUS scale (SES) was used for calculating the status and prosthetic need

according to WHO criteria.

Results: Following results were obtained:

Table 1: Distribution of study population according to SES

	N	%
High	101	6.3
High middle	770	48.1
Middle	599	37.4
Low	130	8.1
TOTAL	1600	100

Table 2: Association between Prosthodontic Need and Age

Prosthetic need	Total	Age						Chi square value	P value
		16-38 Yrs		39-60 Yrs		>60 Yrs			
		No.	%	No.	%	No.	%		
No need	791	531	57.2	225	41.0	35	28.7	435.249	0.00* p < 0.05
One unit	335	247	26.6	87	15.8	1	0.8		
Multi unit	231	118	12.7	109	19.9	4	3.3		
Combined	98	27	2.9	40	7.3	31	25.4		
Full mouth	145	6	0.6	88	16.0	51	41.8		
Total	1600	929	100	549	100	122	100		

The above table showed younger patient had less no of missing teeth then older one and required less prosthetic need.

Table 3: Association between Prosthodontic Need and SES

Prosthodontic need	Total	Socioeconomic Status								Chi square value	P value
		High		High Middle		Low Middle		Low			
		No.	%	No.	%	No.	%	No.	%		
No need	791	54	53.5	390	50.7	266	44.4	81	62.3	100.5911	0.00* p < 0.05
One unit	335	17	16.8	171	22.2	130	21.7	17	13.1		
Multi unit	231	12	11.9	119	15.5	97	16.2	3	2.3		
Combined	98	1	1.0	63	8.2	31	5.2	3	2.3		
Full mouth	145	17	16.8	27	3.5	75	12.5	26	20		
Total	1600	101	100	770	100	599	100	130	100		

Above table showed that middle classes reported significant higher need of teeth replacement as compared to other socio economic groups.

Table 4: Association between Reason for Non-replacement and SES

Reason for non-replacement	Total	Socioeconomic Status							
		High		High Middle		Low Middle		Low	
		No.	%	No.	%	No.	%	No.	%
Financial reason	79	0	0	3	0.7	44	13.3	32	65

Didn't feel the need	83	1	2.1	28	7.3	45	13.5	9	18.3
No time	439	28	59.5	233	61.3	176	52.8	2	4.08
Any other reason	208	18	38.2	116	30.5	68	20.4	6	12.2
Chi square value	1688.700								
P value	0.00 (p < 0.05)								

The reason for not replacement of teeth having no time was reported maximum in high & middle socio economic group. Financial reason was showed in low class.

Table 5: Association between Prosthetic Need and Reason for Non-replacement

Prosthetic need	Total	Reason for Non-replacement							
		Financial reason		Did not feel need		No time		Any other reason	
		No.	%	No.	%	No.	%	No.	%
No need	791	0	0	0	0	0	0	0	0
One unit	335	21	26.9	44	53	193	44	77	36.8
Multi unit	231	13	15.4	31	37.3	119	27.1	68	32.5
Combined	98	7	9.0	8	9.6	56	12.8	27	12.9
Full mouth	145	38	48.7	0	0	71	16.2	36	17.2
Total	1600	78	100	83	100	439	100	209	100
Chi square value	183.234								
P value	0.00 (p < 0.05)								

Most of the subjects require Prosthodontic treatment but few opted when less number of teeth were missing and maximum subjects refused to get treatment when all the teeth were missing due to financial reason while some subjects refused due to lack of time.

Table 6: Association between replacement criteria and gender

Replacement Criteria	Total	Gender				Chi square value	P* value
		Male		Female			
		No.	%	N	%		
Aesthetic	165	119	72.1	46	27	23.09	0.00* p < 0.05
Speech	0	0	0	0			
Function	454	276	60.7	178	39.2		
Combination	190	90	47.3	100	52.6		
Total	809	585	72.3	224	27.7		

Males reported esthetic and female both reported combination as the major reason behind replacement of teeth.

Table 7: Association between Replacement Criteria and SES

Replacement Criteria	Total	Socioeconomic Status								Chi square value	P* value
		High		High Middle		Low Middle		Low			
		No.	%	No.	%	No.	%	No.	%		
Aesthetic	165	5	3	82	49.6	74	44.8	4	2.4	12.045	0.01* p < 0.05
Speech	0	0	0	0	0	0	0	0			
Function	454	37	8.1	202	44.4	207	45.5	8	1.7		
Combination	190	5	2.6	96	50.5	52	27.3	37	19.4		
Total	809	47	100	380	100	333	100	49	100		

The high middle class reported esthetic and combination as the reason behind replacement of teeth. The low middle class reported function as the major reason behind replacement of teeth.

Table 8: Association between Replacement criteria and Age

Replacement Criteria	Total	Age						Chi square value	P* value
		16-38 Yrs		39-60 Yrs		>60 Yrs			
		No.	%	No.	%	No.	%		
Aesthetic	165	102	61.8	60	36.3	3	1.8	124.19	0.04* p < 0.05
Speech	0	0	0	0	0	0			
Function	454	130	28.6	96	21.1	56	12.3		
Combination	190	65	34.2	168	88.4	29	15.2		
Total	809	297	100	324	100	88	100		

The 16-38 years age group reported aesthetic as the major reason behind replacement of teeth 39-60 years age group has combination as major criteria

Maximum subjects desired fixed treatment for esthetics reasons while removable was preferred for combination.

Discussion:

As the age increases the need for prosthesis increases this result had similarity with study done by Kuo et al.⁹ As higher SES people showed less prevalence of tooth loss so there is less need for teeth replacement.^{9,7} This is because of lower SES tend to place very little value for health in general and oral health in particular. They give little or no importance for preservation of their teeth for the entire lifetime and prefer extraction over restoration. Male subjects reported that they had no time while females' subjects had financial constraints. It is in accordance with Macek et al's, Pallegedara.^{8,9}

In the present study both the gender, high SES and younger subjects prefer esthetic for replacement of tooth than any other factor while low

Table 9: Association between Replacement Criteria and Prosthesis Type

Replacement Criteria	Total	Prosthesis Type				Chi square value	P* value
		Removable		Fixed			
		No.	%	No.	%		
Aesthetic	165	37	22.4	128	77.5	1453.56	0.001* p < 0.05
Speech	0	0	0	0			
Function	454	210	46.2	244	53.7		
Combination	190	108	56.8	82	43.1		
TOTAL	809	355	100	454	100		

SES and older subjects prefer mastication as criteria for replacement it is in accordance to study done by Leles et al.⁶

In this study patient preferred fixed treatment over removal prosthesis. None of the subjects reported for the replacement because of phonetic complaint because people give more importance to esthetics reason in choosing the type of prosthesis. Osterberg et al in his study find that esthetic rather than functional factors determine an individual's subjective need for the replacement of missing teeth, which was confirmed in the present study¹²

Conclusion:

It was concluded that

1. SES affects the prosthodontic need & attitude of a patient towards replacement of missing tooth.
2. Male were more concerned about aesthetics for replacement of teeth and female for combination as a reason for replacement. Younger patients give more importance to aesthetics.
3. Maximum number of subjects opted for fixed as the treatment option in which aesthetics was prime concern.

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