

Attitude And Preference For Replacement Of Missing Teeth In Completely Edentulous Patients Visiting Department Of Prosthodontics At Goenka Research Institute Of Dental Science, Gandhinagar, Gujarat; A Cross Sectional Survey

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Abstract: Background: The purpose of this study was to assess the attitude towards replacement of teeth among patients who reported to the department of prosthodontics in Goenka research institute of dental science, Gandhinagar, Gujarat. Material and Method: A ten-item, closed-ended questionnaire was completed by 120 volunteer patients who were completely edentulous. Collected data were analyzed. The age of the subjects selected were more than 30 and divided into three groups. Results: Among these 120 patients, 35.83% of the patients gave financial constraints as the reason for not replacing teeth; 20% reported that they lacked the time to have teeth replaced; 28.33% had low felt needs; and 15.83% indicated they did not know that teeth could be replaced. The findings indicate that awareness needs to be increased regarding the other functions of teeth like esthetics and phonetics because many subjects in this study were aware of the function of mastication performed by teeth. Results shows 65% patients were illiterate, 23.33% patients got primary education, 11.66% patient studied till high school and no patient got higher education. Conclusion: Attitudes of patients should be taken into consideration to improve patient compliance with and acceptance of prostheses. [Shetty M Natl J Integr Res Med, 2020; 11(2):97-100]

Key Words: Attitude, patient education, replacement of teeth

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Introduction: A smile is a window into one's personality, where teeth play an important role in the maintenance of a positive self image.¹ The loss of teeth results in significant disabilities, which can profoundly disrupt social activities. Tooth loss is very traumatic and upsetting and is regarded as a serious life event that requires significant social and psychological readjustments.^{2,3} It has been suggested that adverse reactions towards edentulism as well as the individuals' feelings about dentures are important for the acceptance of any prosthesis.⁴

The attitude towards tooth loss is changing. Adults have greater expectations of their dental health than in the past.⁵ Research has demonstrated that several non-disease factors such as attitude, behavior, dental attendance and characteristics of the health care system play an important role in the decision to become edentulous. In addition, a significant relationship exists between the edentulous state and fiscal concerns that are usually associated with low literacy levels. It is therefore reasonable to conclude that edentulism is due to various combinations such as cultural, educational background, financial and dental diseases.

The best way to obtain the information necessary to analyze a patient's attitudes is to establish, as many psychiatrists does, a permissive, noncritical

climate that will reduce the patient's resistance to saying what he or she thinks.⁶ Generally, the three major areas that determine acceptability of treatment are comfort, function, and esthetics. Mechanical and biological factors determine comfort and function. However, a variety of social and cultural influences, attitudes, and beliefs may determine patients' acceptance of the esthetic aspects of prosthodontic treatment.⁷

Today, 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, esthetics.⁸ More emphasis is being placed on patient mediated concerns in prosthetic treatment planning. Patients' attitudes toward dentures, measured by means of a questionnaire prior to the patients' receiving new dentures, could be a prospective tool to determine satisfaction with new dentures.⁹

The purpose of our study was to conduct a survey to assess attitudes towards replacement of teeth amongst patients who reported to Goenka Research Institute of Dental Science, Gandhinagar which is located in the state of Gujarat in the western region of India. This institute provides selective basic dental treatments free of cost as a service to society.

Material and Methods: A study cum survey was carried out amongst the 120 patients visited at department of prosthodontics of goenka research institute of dental science over the period of two months. This study was based on form of ten close ended questionnaires followed by clinical examination. First ethical clearance was obtained from the committee at the institute. The feedbacks from the patients were recorded by single operator. Questionnaires included questions regarding attitude and need for replacement of missing teeth.

Inclusion Criteria : Patients who were completely edentulous. Patients who were willing to participate. Patient above the age of 30. Patients who were mentally and physically well being.

Exclusion Criteria: Patient below age of 30 years. Patient with any tooth or root piece present in oral cavity. Patient with maxillofacial defects. Physically and mentally challenging patients. Participants who were not willing to disclose detail regarding study. The subjects were informed about the nature of study and consent was taken from each of them. The questionnaire was completed personally for each patient who gave consent to participate in the study in form of interviews. The data was collected and analyzed.

Results: The questionnaire was answered by 120 patients that included 67 males and 53 females (Table - 1). About 7.5% of patients aged from 30 to 45 years, 52.5% aged from 45 to 60 years and 40% patient aged more than 60 years (Table - 2). 43.33% patients were edentulous since 1-2 years, 39.16% patients were edentulous since 2-5 years followed by 25.31% were edentulous since more than 5 years. (Table - 3)

Out of total number of Patient who reported to the department seeking complete denture, 65% were illiterate, 23.33% patients took primary education followed by 11.66 % patients who attended high school and none of the patient took higher education. (Table - 4)

Table 5 shows, out of total patients considered for the study 80.83% chose to pay for their general health. Observation of table 6 reveals that out of total patients studied for, not undergoing dental treatment till now. 35.83% due to financial reasons, 28.33% did not feel the

need, 20% did not find the time and 15.83% were unaware.

After coming in institute all 120 patients perceived that they had missing teeth that needs to be replaced. (Table - 7) When the question was asked about the need for prosthesis 26.66 % patients wanted prosthesis because of appearance, 5.83 % patients for speech, 33.33% for function followed by 34.16% for the combination of all. (Table - 8)

From the total number of patients surveyed, 82% felt artificial teeth will look like natural teeth, 15% felt there will be difference in natural and artificial teeth and 2.5% were not able to assume the results (Table - 9). 10% patients were assuming they will have problems with prosthesis, while others assumed that they will not face any problems. (Table - 10)

Table1: Distribution Of Patients According To Age

Characteristic	Number Of Patients	% Of Patients
Male	67	55.83
Female	53	44.17

Table 2: Distribution Of Patients According To Gender

Age	Number Of Patients	% Of Patients
30 – 45	9	7.5
45 – 60	63	52.5
>60	48	40

Table 3: Distribution Of Patient According To Years Of Edentulous

Years Of Edentulism	Number Of Patients	% Of Patients
1-2 Years	52	43.33
2-5 Years	47	39.16
5 Years	31	25.83

Table 4: Distribution Of Patient According To Education

Completed Education	Number Of Patients	% Of Patients
Illiterate	78	65
Primary Education	28	23.33
High School	14	11.66
Higher Education	00	00

Table 5: Distribution Of Patient According To Money Being Spent For Health Care

Money On Health Care	Number Of Patients	% Of Patients
Yes	97	80.83
No	23	19.16

Table 6: Distribution Of Patient According To Reason For Not Replacing Missing Teeth

Completed Education Due To	Number Of Patients	% Of Patients
Financial Reason	43	35.83
Did Not Feel Need	34	28.33
No Time	24	20
Did Not Know	19	15.83

Table 7: Distribution Of Patient According To Their Feel For Replacement Of Missing Teeth

Wants To Replace Teeth	Number Of Patients	% Of Patients
Yes	120	100
No	00	00

Table 8: If Yes, Distribution Of Patient According To Need Of Tooth Replacement

Need For Replacement	Number Of Patients	% Of Patients
Appearance	32	26.66
Speech	07	5.83
Function	40	33.33
Combination	41	34.16

Table 9: Distribution Of Patient According To Equivalence Of Artificial To Natural Teeth

Equivalence Of Artificial To Natural Teeth	Number Of Patients	% Of Patients
Yes	99	82.5
No	18	15
Do Not Know	03	2.5

Table 10: Distribution Of Patient According To Their Feel Of Artificial Teeth Creating A Problem Or Not

Problem With Artificial Teeth	Number Of Patients	% Of Patients
Yes	12	10
No	108	90

Discussion: Awareness and knowledge amongst the patients regarding the availability of treatment in the prosthodontics is one of the fields of investigation by dentists since long¹⁰. Data obtained from the surveys provide path to

formulate patient's education and motivation strategies. Present study is conducted to observe the attitude and awareness amongst the completely edentulous patients visited to the department of prosthodontics for replacement of missing teeth¹¹. Tooth loss gives physical as well as mental pain to the patient and affect the well being of the patient. So it's important to replace the missing teeth with prosthesis.

Maximum number of patient comes in 45-60 year of age group because patients were conscious for their esthetics, function, speech during these years. Geriatric patients' gives less priority to dental health due to age, physical challenges, economy etc.

A majority of the patients reported that they had reserved money for health care which may have been for general health rather than oral health. Majority of the patient in our study gave economic reasons for not replacing teeth lost was the main factor for not obtaining dentures and is in agreement with the findings of Macek et al¹². From the survey, it shows that only few people were unaware of treatment.

Osterberg et al.¹³ reported that aesthetic rather than functional factors determined an individual's subjective need for the replacement of missing teeth. The demand is strongly related to position of teeth. In our study more number of patients gave importance to function as well as combination of appearance, speech and function. Expectations represent attitudes that are complex and often difficult to change.¹⁴ When a question regarding equivalence of artificial teeth to natural teeth was asked, it indirectly represented the expectation of the patient. In our study more number of patients said that artificial teeth were equivalent to natural teeth. This may be because of their perseverance of matching of colour and anatomy of artificial teeth to natural teeth.

Future studies should determine how the dental profession and society might address an increased demand for services among people who have limited financial resources¹⁵. A thought of dental insurance should put forward in this direction.

Conclusion: The present result may serve as a baseline for the future evaluation of attitudes towards replacement of teeth. Attitudes of

patients towards replacement of teeth should be assessed to educate the patient accordingly and improve patient compliance with acceptance of prosthesis.

Thus, new and effective strategies are urgently needed to curb and discourage adolescent smoking as its toxic effects are reversible if discontinued at an early age. Extensive rehabilitation measures should be promoted and smokers should be provided with nicotinic substitutes for primordial prevention of major non-communicable diseases like CAD, malignancies, thromboembolic events and its complications.

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