

# Attitudes of edentulous patients towards replacement of missing teeth at Dhaka Dental College Hospital

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## Abstract:

This cross-sectional study was conducted among 240 patients to assess attitudes towards replacement of missing teeth among edentulous patients aged 18-77 years who reported to the department of prosthodontics of Dhaka Dental College Hospital. Answers to a 12-item close ended questionnaire regarding teeth replacement were recorded. It was followed by clinical assessment in which the chief complaints were recorded, and existing and missing teeth were charted. Eighty five percent of patients were partially edentulous and remaining 15% were completely edentulous. About 28% of patients were in forty-eight to fifty-seven years age group, followed by 20% in the thirty eight to forty-seven years age group. Majority of male patients reported that improvement of function was the main reason for tooth replacement while in females aesthetic reason was on the top. Around 62% of patients who had lost teeth only in anterior segment needed tooth replacement for aesthetic reason: 81% of patients who had lost teeth only in posterior segment needed tooth replacement for mastication. A low felt need was the most common reason, while financial constraint was next reason for delaying in tooth replacement. The study reveals that gap exists in awareness of patients regarding other functions of teeth like esthetic and speech. The results of the present study may be helpful as a baseline for further assessment of attitudes of edentulous patients towards replacement of missing teeth.

(Bangladesh Dental Journal 2014; 30: 16-18)

## Introduction:

Mouth is the gate way of health. Teeth have a very important role in the maintenance of quality of life. There is no doubt that tooth loss affects the appearance of a person.<sup>1</sup> Tooth loss is psychologically a very traumatizing and upsetting experience, and is considered to be a serious event in the life of a person, which requires significant social and psychological readjustment.<sup>2, 3</sup> Patients seek dental treatment for both functional and esthetics or cosmetic reasons, and dentists have been successful in restoring or improving many a patient's appearance.<sup>2</sup>

Although it is true that almost all edentulous patients who consult a dental surgeon want to replace missing teeth, it must not be assumed that they are all equally willing to take their part in making dentures successful for

replacement of teeth. An attitude of mind will have been formed by the patient's own past experience of dentures, if any, or from his observation of friends or relatives who wear dentures.<sup>4</sup>

Studies have shown that a patient's attitude & level of expectation can profoundly influence the treatment outcome. Complete denture failure can result from a misunderstanding between the dentist and patient. Patients in one study reported that after selection, the most important characteristic of the dentist is his or her willingness to discuss the patient's dental problems. In order to open a line of communication with the patient, the dentist must be able to assess the patient's overall "prosthetic attitude". This does not amply that a dentist should attempt psychoanalyze suspect patients. These patients should be referred to a clinical psychologist or psychiatrist for proper diagnosis and treatment. The dentist should, however, be able to identify negative and positive responses which can influence treatment outcome.<sup>5</sup>

Patients' attitudes towards 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<sup>6</sup>. In Bangladesh, the attitudes of patients' towards replacement of missing teeth has not been investigated as much as in western countries.

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Therefore the purpose of this study was to carry out a clinical survey to assess attitudes towards replacement of missing teeth among edentulous patients aged 18-77 years who reported to the department of prosthodontics of Dhaka Dental College Hospital.

#### **Materials and Methods:**

A cross-sectional study was conducted among 240 patients seen at the prosthodontics department of Dhaka Dental college Hospital during February, 2010 to November, 2010. All patients aged 18-77 years with at least one missing tooth (excluding third molars) were included. Subjects were informed of the nature of the study and their consent was obtained.

Answers to a 12-item close ended questionnaire were recorded. The questionnaire included questions regarding reasons for tooth replacement, reasons for delay in seeking treatment for tooth replacement, reasons for tooth replacement according to the segment in which tooth was lost. The questionnaire was followed by a clinical examination in which the chief complaints were recorded, existing and missing teeth were charted. Missing teeth were categorized as anterior and posterior to make distinction between esthetic and functional needs. A single trained investigator recorded answers from the respondents followed by a clinical examination. Collected data were analyzed by using statistical software (SPSS, version 17).

#### **Results:**

This cross-sectional study was carried out among 240 patients, out of which 46.66% were males and 53.33% were females: 36 patients were completely edentulous, 204 patients were partially edentulous (Table-1).

**Table-I**  
*Distribution of patients according to gender and dentition status*

Characteristics	Number of patients	% of patients
Male	112	46.66
Female	128	53.34
Completely edentulous	36	15.00
Partially edentulous	204	85.00

About 28% of patients were in forty-eight to fifty-seven years age group, followed by 20% in the thirty eight to forty-seven years age group (Table-II).

**Table-II**  
*Distribution of patients according to age (in years)*

Characteristics	Number of patients	% of patients
18-27	31	12.92
28-37	24	10.00
38-47	48	20.00
48-57	68	28.33
58-67	44	18.33
68-77	25	10.42

Majority of the male patients reported that improvement of function was the main reason for tooth replacement while in females aesthetic reason was on the top (Table-III).

**Table-III**  
*Distribution of patients according to reasons for tooth replacement in male & female*

Characteristics	Number of Patients		Frequency	
	Male	Female	Male	Female
Appearance	10	29	25.00	75.00
Function	48	32	68.00	32.00
Combination	54	67	44.16	55.84

Around 62% of patients who had lost teeth only in anterior segment needed tooth replacement for aesthetic reason: 81% of patients who had lost teeth only in posterior segment needed tooth replacement for mastication, while 55% patients who had lost teeth in both anterior and posterior segment (Table-IV).

**Table-IV**  
*Distribution of patients according to the segment in which tooth was lost and reason for tooth replacement*

Reason for Tooth Replacement	Anterior (%)	Posterior (%)	Combination (%)	Total (%)
Aesthetic	13(61.90)	0(0.00)	6(3.30)	19(7.92)
Speech	0(0.0)	1(2.70)	1(0.55)	2(0.83)
Function	1(4.76)	30(81.08)	101(55.50)	132(55.00)
Combination	7(33.33)	6(16.21)	74(40.65)	87(36.25)
Total	21	37	182	240

A low felt need was the most common reason, while financial constraint being next for delaying in tooth replacement. Four percent patients were on post-extraction healing period (Table V).

**Table-V**  
*Reasons for delay in tooth replacement*

Reasons for delay	No. of Patients	Frequency (%)
Time Constraint	54	22.50
Financial	66	27.50
Low felt need	84	35.00
Lack of knowledge	26	10.84
Post-extraction healing period	10	4.16

### Discussion:

In Bangladesh, Epidemiological information on patient's attitude towards missing teeth replacement is not adequate. This study was conducted in an attempt to explore the attitudes towards replacement of missing teeth among the patients attending out-patients department of Dhaka Dental College Hospital.

Most of the patients in this study belonged to fifty-eight to sixty-seven years of age group. Geriatric patients pay less attention in dental care, which is reflected by fewer patients in >65 years of age group. Mobility problems, more priority in medical than dental care, misconceptions about value of dental visits –all have been described as contributing factors to this seemingly disinterest in seeking dental care among geriatric patients.<sup>7</sup>

As the patients of this study had reported to the OPD, on their own, it was reasonably understandable that all the subjects had expressed that missing teeth had to be replaced. This finding was in contrast to that of Akeel who found that about 82% of the subjects had perceived a need for replacement of teeth.<sup>8</sup> The difference may be due to the fact that the subjects in that study were selected from a screening clinic. A low felt need was the most frequently mentioned reason for not replacing teeth and is in agreement with the findings of Faiza and Salman<sup>9</sup>. Osterberg et al. reported that individual's decision for replacing missing teeth was determined mainly by esthetic rather than functional factors.<sup>10</sup> Position of missing teeth plays an important role in the demand for replacement of missing teeth.

In this study, aesthetic was the main reason for tooth replacement in those who had lost teeth only in the anterior segment; who had lost teeth only in the posterior segment needed tooth replacement for mastication; and who had lost teeth in both (anterior and posterior) segments needed tooth replacement for mastication. In Bangladesh, many people are aware of only masticatory function of teeth. Aesthetic and speech as functions of teeth are less

perceived by them. As tooth loss occurs usually over a period of time, people get adapted to situation with less discomfort. This is why many older people usually do not perceive a need for dentures even when they lose a significant numbers of teeth.<sup>11</sup>

### Conclusion:

The study reveals that gap exists in awareness of patients regarding other functions of teeth like esthetic and speech. The results of the present study may be helpful as a baseline for further assessment of attitudes of edentulous patients towards replacement of teeth. This gap should be fulfilled through educating the patients and thereby improving patients' compliance with acceptance of prosthesis.

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