ORIGINAL ARTICLE

TRENDS, AWARENESS, AND ATTITUDES OF PATIENTS TOWARDS REPLACEMENT OF MISSING TEETH AT UNIVERSITY COLLEGE OF DENTISTRY

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ABSTRACT

This study was carried out among the out patients seen in the University College of Dentistry (UCD) with the aim to assess their trends and attitudes towards tooth replacement. Patients with at least one missing tooth (excluding the third molars) were included. The study was conducted using a questionnaire. Majority of the patients (n=180) did not have previous experience of any sort of prosthesis. Although most of the patients preferred to have fixed partial denture (n=195) some of them responded that they would be comfortable with removable partial denture (n=33). Low felt need was the most common reason among this study group for delay in seeking dental replacement, while 5% patients were in the post extraction healing period. Dentists were found to be the most important driving force for patient awareness regarding replacement of teeth. Majority of the patients agreed that dental visits should be regular. Some patients (8.8%) did not appreciate the importance of restoring teeth while 62.5% of the patients had the perception that artificial teeth were not equivalent to natural teeth.

Key Words: *Trends, attitudes, knowledge, replacement, missing teeth.*

INTRODUCTION

Smile is a window into one's personality. Teeth play a significant part in the maintenance of a healthy personality and an affirmative self-image.[1] Tooth loss is psychologically a very traumatizing and upsetting experience, and is considered to be a serious event in the life of a person, requiring significant psychological readjustment.[2,3] Patients may suffer real or perceived detrimental effects following the loss of one or more teeth which substantially reduce the quality of life affecting the patient emotionally, socially, physically and psychologically.[4,5]

In the recent past, prosthetic treatment involved replacement of missing teeth by means of removable partial dentures (RPD's), fixed dental prosthesis (FDP's), complete dentures, or over dentures. Recently, requirements such as esthetics and functional comfort are considered more important and more easily achieved with dental implants.[6-8]

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Attitudes are not taught but caught or acquired by social interaction. Previous literature shows that media and dental professionals are the main sources of information regarding oral health.[9] Health behavior as defined by Steptoe and colleagues is "the activities under taken by people in order to protect, promote or maintain health and to prevent disease".[10]

Some factors that could influence a community's behavior regarding health include: common beliefs, knowledge, values, skills, finances, time and the influence of family personnel, friends, and co-workers.[11] Adults nowadays have more expectations of their dental health as compared to the past.[12]

Clinical dental examination, and clinicians view point and beliefs have long been used as the mechanism for formulating treatment plans for patients. Conversely, now, equal importance is given to other mechanisms such as patient's demand for treatment and self-reported oral status.[13] There is a direct relationship between the number of teeth present and total satisfaction with oral status.[14,15] However, the challenge mainly is to satisfy the patient's demand and replace the missing teeth for improving the function, esthetics and quality of life without harming the remaining teeth or gingival tissues.[16]

The present study was done to assess the level of knowledge, attitude, and awareness among patients aged 20-65 years toward the options available for tooth replacement.

METHODOLOGY

This cross sectional survey was carried out on a sample of 240 patients seen at the Out Patient Department of University College of Dentistry, between June 2012 to August 2012. All patients with at least one tooth missing (excluding third molars) had the opportunity to participate in the study. Subjects were informed of the nature of the investigation and their consent was obtained. Patients who did not give consent and those below 18 years were excluded from the study.

A single trained investigator recorded answers from the patients. The study involved completion of a pre-designed and structured questionnaire containing 12 close ended questions. The questionnaire included questions regarding reasons for not visiting a dentist on a routine basis and awareness towards the prosthetic options along with source of information for these options. The data obtained were analyzed using SPSS version.[19]

RESULTS

A patient population of 240 participated in this study of which 52.5% were males and 47.5% were females. Mean age of the study subjects was 41.8 ± 10.6 with 20 and 65 years being the youngest and oldest participant respectively.

Majority of the male patients included in the study wanted to improve function while the females also had esthetic concerns in addition to function alleviation as shown in Table 1. Reasons for delay in tooth replacement are shown in Table 2.

Patients who did not have previous experience with any sort of prosthesis constituted the major part of study group (n=180). Although most of the subjects preferred to have fixed partial denture (n=195) some of them responded that they would be comfortable with removable partial denture (n=33) Fig 1.

A Low felt need was the most common reason among the present study group for delay in seeking dental replacement while 5% patients were in the post extraction healing phase Fig. 2.

Dentists were found to be the most important driving force for patient awareness regarding replacement of teeth, while magazines and newspapers were the sources providing least information about the importance of tooth replacement Fig 3.

TABLE 1: REASON FOR TOOTH REPLACEMENT: COMPARISON BETWEEN MALE AND FEMALE

Options	No. of patients (N)		Frequency	
	Male	Female	Male	Female
Appearance	3	15	16.7%	8303%
Function	72	30	70.6%	29.4%
Combination	51	69	42.5%	57.5%

TABLE 2: REASONS FOR DELAY IN TOOTH REPLACEMENT

Options	No. of patients (N)	Frequency (%)
Lack of Time	48	20%
Financial	72	30%
Low Felt need	78	32.5%
Lack of knowledge	30	12.5%
Waiting	12	5%

TABLE 3: PERCEPTIONS REGARDING MISCELLANEOUS (TWO POINT SCALE) QUESTIONS

Questions	Yes n (%)	No
Requirement of restoration	219 (91.3%)	21 (8.8%)
Regularity in dental visits	180 (75%)	60 (25%)
Maintenance of prosthesis	234 (97.5%)	6 (2.5%)
Equivalence of prosthesis to natural teeth	90 (37.5%)	150 (62.5%)
Perception regarding prosthesis causing problems	156 (65%)	84 (35%)

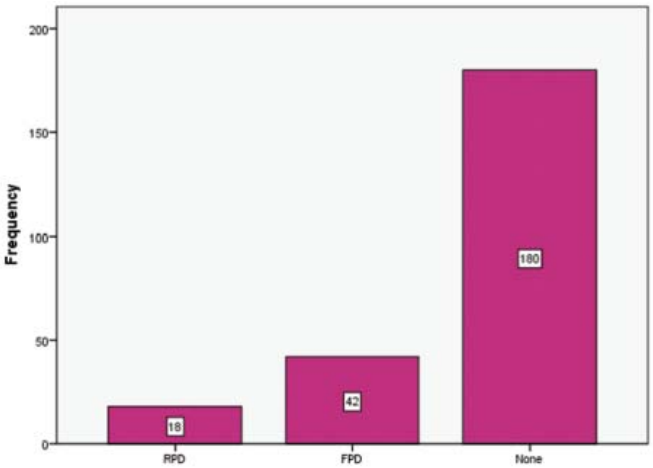

Fig 1: Previous experience with type of prostheses

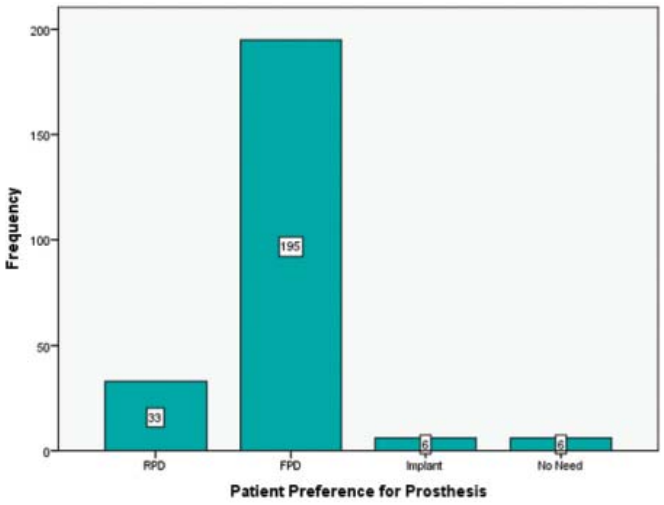

Fig 2: Preference/prioritization for tooth replacement

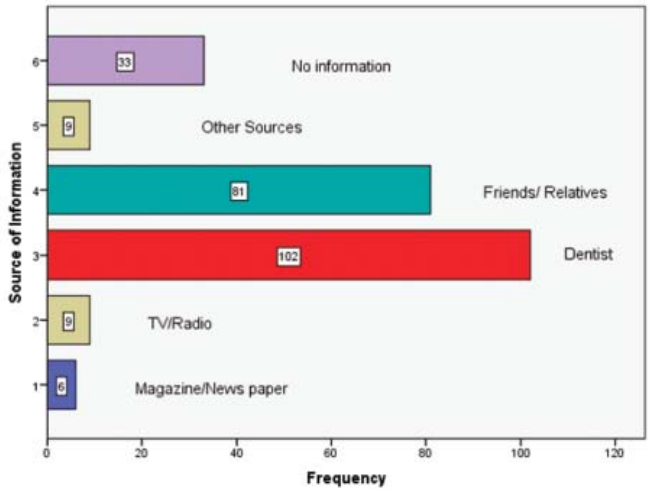

Fig 3: Source of information

Table 3 enlightens about patient perceptions to various questions. Majority of the patients (n=180) agreed that dentists should be visited regularly for oral health related issues. Some patients (8.8%) did not appreciate the importance of restoring teeth and 62.5% of the patients had perception that artificial teeth were not equivalent to natural teeth.

DISCUSSION

In Pakistan, scanty epidemiological information on patient's attitudes towards tooth replacement exists. Therefore, the present study was an attempt to find out about the attitudes of patients towards replacement of missing teeth at the University College of Dentistry, Lahore.

The patients reported on their own to the institute for replacement of teeth. This study contrasted to that of Akeel who found that about 82 percent of the subjects had the perception of tooth replacement.[17] Elias and Sheiham conducted a review of literature and found that, in general, patients were more likely to seek replacement of a missing anterior tooth than a posterior tooth, and rated aesthetics above function in their priority for tooth replacement. It is easy to appreciate the very negative effects of loss of an anterior tooth in terms of self-confidence and aesthetics.[18] The Adult Dental Health Survey of 1998 in the UK, also noted that patients with a reduced dentition were more likely to seek replacement of an anterior tooth, but a significant proportion felt that they would also prefer to have missing posterior teeth replaced.[19] Osterberg et al. reported that an individual's subjective need for the replacement of missing teeth was based mainly upon esthetic rather than functional factors. Therefore demand of tooth replacement is strongly associated to the location of the absent tooth. Patient's perception plays a major role in decision for replacement of posterior teeth, and cosmetic dental treatment.[20] Current study shows that female patients were concerned about esthetic as well as functional replacement while males wanted prosthesis for mastication mainly. The reasons could be that most males are either aware of only the masticatory function of teeth or their preference of esthetics and phonetics comes second to functional needs. But for the female patients the most important teeth were anterior teeth and for males preferred teeth to be replaced were posteriors. According to Leake et al. patient's subjective needs for replacement of teeth, especially posteriors, is mostly low as they rarely improve the social status.[21] As far as the males subjects are concerned our study was in agreement with Leake et al's study.

In the current study larger number of females demanding FPS is in correlation with studies done by Napankangas and Casamassimo where largest number of patients wanting FPS and other esthetic dental services were women.[22,23] This study is in concord with the findings of Macek et al's study in which lack of time and low felt need were the reasons among males and cost was the main barrier for females for obtaining prosthesis.[24]

When asked about the maintenance of prosthesis and its equivalence to natural teeth, both genders gave a positive response regarding awareness of prosthesis maintenance. All participants considered prosthetic replacement as non-equivalent to natural teeth. At the same time they perceived that dental prosthesis also create problems, the reason for which could be that most patients participating in the current study

did not have previous experience of any prosthesis and the answers were given on the basis of perception or experiences of family members and friends.

In the current study the main source of information about the replacement of missing teeth was dentist for both genders which is in accord to a previous study carried out by Mukatash et al in Jordan.[13]

Present results were similar to Mukatash's study which established that family and friends were significant motivators for oral maintenance in general and tooth replacement in particular.[25]

In order to enlighten the negative effects of missing teeth on oral health, the importance of different types of media cannot be overlooked. It is therefore recommend that Pakistan's mass communication program be strengthened at district and local levels to stimulate the development of awareness toward the indications and contraindications of the options available for replacement of missing teeth, which can satisfy esthetic and functional needs along with improving the perception of patients regarding their dentition.

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