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TOOTH LOSS;

ARE THE PATIENTS PREPARED FOR TOOTH LOSS: STUDY CONDUCTED AT ISLAMIC INTERNATIONAL DENTAL COLLEGE, ISLAMABAD.

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ABSTRACT… Objectives: To assess patients preparedness for tooth loss. **Study Design:** Descriptive cross sectional study. **Period:** 1st November 2015 to 30th April 2016. **Setting:** The study was conducted in outpatient department of Prosthodontics, Islamic International Dental College, Islamabad. **Methodology:** The survey-based questionnaire was distributed among 75 participants. Data was entered on SPSS version 23 and mean ± SD were calculated for quantitative variables like age and gender. Similarly frequency and percentage of qualitative variables were calculated and presented. **Results:** A total of 33 (43%) patients were prepared for tooth loss, while 42 (57%) patients reported not being prepared for tooth loss. Out of these 42 patients, 49 (65%) reported being unaware of the consequences. A total of 36 (47%) patients reported being tense, stressed or sad when considering tooth loss. **Conclusion:** These findings suggest that interventions need to be implemented in dental clinical settings to help patients cope with the experience of tooth loss in a better manner.

Key words: Cast Partial Denture, Immediate Denture, Implant, Patient Awareness, Patient Preparedness, Tooth Loss.

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INTRODUCTION

Although the face represents only a small proportion of the surface of the body, it embodies our social identities.[1] The body schema is heavily invested with emotional meaning and significant changes in body image can result in varying degrees of emotional instability.[2] The loss of natural teeth can occur due to many reasons[3-5] which may bring many adverse anatomic, esthetic and biomechanical sequelae in addition to proving a terrible psychological shock to many patients.[6] These psychosocial problems of tooth loss may have a profound impact on a person's daily routine by altering or disturbing his speech patterns, choice of food and/or chewing efficiency.[7] In order to fully understand "the burden of illness," one must cultivate an understanding of the physical as well as the psychosocial dimensions of tooth loss.[8]

An Insight into the feelings about tooth loss in both edentulous and partially dentate people in the United Kingdom has demonstrated that tooth loss can have a major impact on the people life, in those studies, 45 per cent of edentulous and 53 per cent of partially dentate people experienced difficulty in accepting tooth loss.[9] Major impacts on their lives as a result of tooth loss included decreased self-confidence, restriction in dietary choice or food selection and social activities, and the avoidance of forming close personal relationships.

The present study was designed to explore the (emotional/psychological) preparedness of patients for the forth coming tooth loss. This study will provide an insight into what our local patients feel towards losing their teeth, and how well can they handle the news. It may also be possible to identify patients who need extra time in counselling and longer explanations regarding their intra-oral conditions which may be contributing towards tooth loss.

AIM

This study was initiated to find the patient preparedness to face the forthcoming tooth loss.

METHODOLOGY

This cross-sectional survey was carried out in the Department of Prosthodontics at Islamic International Dental College, Islamabad, Pakistan for six months duration from 1st November 2015 to 30th April 2016. A convenience non-probability sampling technique was used to include male and female partially or completely edentulous patients of 25 to 85 years of age, Group I (aged 25 to 44 years), 31 (41.3%) belonged to Group II (aged 45 to 64 years) while 15 (20.0%) patients were included into Group III (aged 65 to 84 years). who had reported to the department for treatment purposes. Patients who had a history of facial trauma, chemotherapy, xerostomia, rampant caries and aggressive periodontal disease were excluded. Those patients who presented with an existing prosthesis and needed any modifications or tooth additions were also excluded from this study.

Approval from the hospital Ethical Review Committee was obtained and a self-designed close-ended questionnaire consisting of six relevant questions was devised along with its Urdu language version. It was filled in a consented interview with the selected patients. Initially, personal and demographic details of the patient were recorded. These included name, age, gender, socioeconomic status, education level, edentulous state, missing teeth, Kennedy's classification (where applicable), and length of the edentulous period.

Each selected patient was asked the questions developed relevant to their preparedness for tooth loss. The questions comprised enabled us to understand their perception of the cause of tooth loss, the level of difficulty in accepting tooth loss and their preparedness along with the reason for their mentioned response. The emotional level was also recorded when the news regarding tooth loss was conveyed by the dentist. Some of these questions had multiple choices to choose from, in which case only one response was needed from the patients. All items were to be answered as either Yes, No or Don't Know.

Data analysis was done by using the Statistical Package for Social Sciences (SPSS) version 19 software. Mean age and mean edentulous time of the study participants was computed along with the standard deviation. In order to generate correlations of the study variables, cross tabulation was done for age group, gender, edentulous state, socioeconomic status, education level and tooth loss preparedness.

RESULTS

A total of seventy-five patients were included in the study duration. The sample comprised of 42 (56%) males and 33 (44%) females. Among them, 29 (38.7%) patients belonged to Group I (aged 25 to 44 years), 31 (41.3%) belonged to Group II (aged 45 to 64 years) while 15 (20.0%) patients were included into Group III (aged 65 to 84 years). Subjects ranged in age from 25 years up to 84 years, with a mean age of 49.69 years (± 16.473). The mean edentulous period was 2.19 years (± 1.182). There were 25 (33.3%) completely edentulous and 50 (66.7%) partially edentulous patients in the sample.

According to the socio-economic status, only 17 (22.7%) patients were in the fully affording category, 35 (46.7%) were partially affording and 23 (30.7%) were non-affording. Based on literacy level, 13 (17.3%) were illiterates, 9 (12.0%) had primary education, 7 (9.3%) had up to middle school education, 16 (21.3%) had done matriculation, 10 (13.3%) had completed intermediate level of education and 20 (26.7%) had graduation level of education.

In response to the first question regarding the patient's own perception about the reason of their tooth loss, majority of the subjects (44%) stated it to be their own negligence. Table-I presents a detailed view of responses to this question. Table-II presents a detailed view of patient's preparedness for tooth loss. Overall, only 32 (42.7%) patients felt prepared enough for tooth loss. Among them, there were 20 (26.7%) males and 12 (16.0%) females. The remaining 43

(57.3%) patients did not feel prepared for their tooth loss. These included 22 (29.3%) males and 21 (28.0%) females.

After the loss of teeth, patients had different types of feelings. 21 (28.0%) patients felt nothing after their teeth had been extracted, 16 (21.3%) each felt either tensed or sad/gloomy, 9 (12.0%) felt relieved, 5 (6.7%) were not accepting this situation while 4 (5.3%) each either felt shocked or scared. When asked what would prepare them for the tooth loss, majority of the study participants i.e. 37 (49.3%) were of the opinion that good explanation by the dentist would be sufficient to this end, 14 (18.7%) thought that free dental consultations or talking with someone with previous experience of tooth loss would be beneficial, whereas only 5 (6.7%) patients said video presentations and 4 (5.3%) said that information brochures/ leaflets may be useful. Amazingly, only 1 (1.3%) patient did not know what could make him better prepared for tooth loss.

When patient preparedness was correlated with gender, the Chi-square test returned a non-significant association (P value 0.328). However, when patient preparedness was correlated with the age groups devised, as shown in Table-III, it became evident that with increasing age, more number of patients were prepared for tooth loss, while in younger ages more numbers of the patients were unprepared for their tooth loss. This was a highly significant finding (P value 0.005).

Reason for Tooth Loss	Frequency	Percentage
My own negligence	33	44.0%
God's will	15	20.0%
Financial issues	3	4.0%
Dentist's poor approach	3	4.0%
Ortho/Prostho reasons	2	2.7%
Aging/Natural	19	25.3%

Table-I. Patient-reported reasons for tooth loss

Preparedness	Reasons	Frequency	Percentage
Prepared	1. Dentist explained well	16	21.3%
	2. Tooth was seemingly bad	16	21.3%
	3. It is a sign of aging	2	2.7%
Unprepared	1. Dentist did not inform	12	16.0%
	2. Unaware of such consequences	27	36.0%
	3. Tooth condition was not bad enough to require extraction	1	1.3%
	4. Not sure what was happening to tooth	1	1.3%

Table-II. Reasons quoted by patients regarding their preparedness or unpreparedness for tooth loss

Age Group	Preparedness for Tooth Loss		Total
	Yes	No	
Group I (25-44 Years)	9 (12.0%)	20 (26.7%)	29 (38.7%)
Group II (45-64 Years)	11 (14.7%)	20 (26.7%)	31 (41.3%)
Group III (65-84 Years)	12 (16.0%)	3 (4.0%)	15 (20.0%)

Table-III. Association of age groups with patient preparedness

DISCUSSION

In this study, 42 (57%) patients were unprepared for the tooth loss which is quite similar to the results of the study conducted by okoje et al whereas 42 (33.1 %) patients felt that they were prepared for tooth loss[11] Table-III). This finding is less than the results shown in the study conducted by Davies D. M. et al. in the UK, in which 45% of the participants felt unprepared for their tooth loss.[9] In their study over three quarters of these cases felt that better preparedness by the dentist would have helped.

However, more than 40% of the patients feel that better explanation from the dentist would have helped them in preparing them to face the dental extraction procedure.[10] This is reflected in the various ranges of emotional effects of tooth loss on the participants. Qualitative and quantitative studies on the emotional effects of tooth loss have shown that many people find it difficult to come to term with tooth loss and often feel less confident, restrict their social activities and avoid forming close personal relationships.[11,12]

Of the respondents who felt unprepared for tooth loss, 40 (53%) felt that an explanation by the dentist would have made them better prepared, while a video about the tooth loss 20(26 %), a leaflet 9(12%), talking to someone with a prior experience 6 (8%) would have helped.

It is well established that people with dental facial abnormalities experience social consequences including degrees of social avoidance and being perceived as possessing negative personality characteristics. Minor abnormalities of the facial region can result in a social stigma. In order to bridge the gap between patient and dentist, effective communication is key.[13,14]

CONCLUSION

Our study suggests that patients are not well prepared for tooth loss since it can affect their social and private lives in numerous ways. Hence, a preprocedural preparatory discussion by the dentist can play a vital role to inform the patients of tooth loss and possible outcomes. Not only will it improve patient compliance but will also enable the dentist to provide the best possible treatment to a less apprehensive, well prepared patient.

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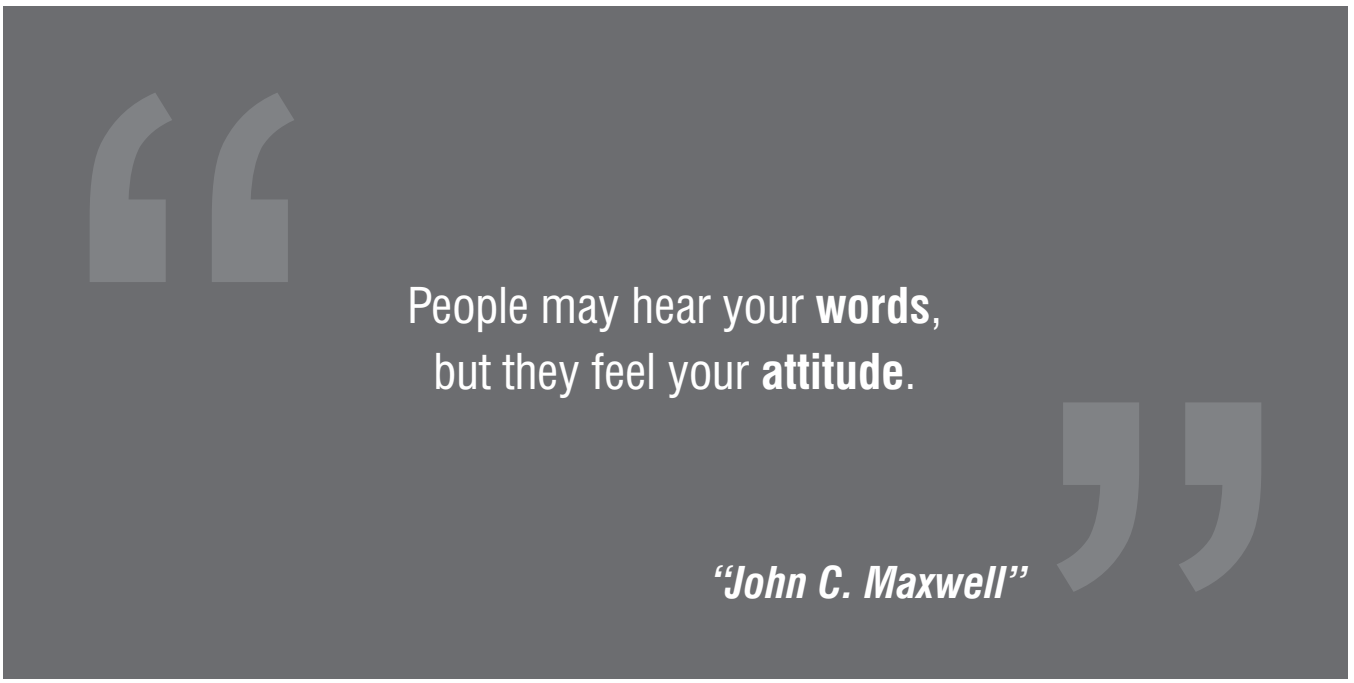

AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author-s Full Name	Contribution to the paper	Author=s Signature
1	M. Aamir Ghafoor Chaudhary	Idea, Abstract, Methodology, Discussion.	
2	Malik Arshman Khan	Conclusion, References.	
3	Fadia Butt	Introduction, Data collection.	
4	Saqlain Bin Syed Gilani	Literature search.	