

AWARENESS AND KNOWLEDGE ABOUT DENTAL IMPLANT IN PATIENTS REPORTING FOR DENTAL TREATMENT TO KHYBER COLLEGE OF DENTISTRY, PESHAWAR

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ABSTRACT

Objective: The objective of this study was to determine the awareness and knowledge about dental implant in patients reporting for dental treatment to Khyber College of Dentistry, Peshawar.

Material and Methods: In this cross sectional study 120 patients reporting to Khyber College of Dentistry, Peshawar were included. After obtaining informed consent, a Pre-structured questionnaire was used to collect the data regarding the awareness and knowledge of dental implants. The age range from 18 to 70 years, both genders and any educational level were included.

Results: Out of total, sixty-seven were males (55.8%) and 53 were females (44.2%). The mean age was 35.74 ± 13.21 years. The most common sources of information about dental implant were relatives and dentists among all age groups and was not statistically significant ($p=0.463$). When patients were asked about the results of implant treatment most of the patients replied with very good and good responses in all age groups. Very few patients told their implants' results are poor. Most of the patients responded that "definitely" and "likely" like the implant treatment.

Conclusions: Most of the patients were aware about dental implant treatment and the common source of knowledge was from relatives and dentists.

Key words: Knowledge, Dental implant, Missing teeth.

INTRODUCTION

Human teeth have many function including mastication, phonation, esthetics and forensic investigation¹. Multiple causes lead to loss of teeth which include dental caries, periodontal diseases and trauma or pathologies². The aim of modern dentistry is to restore the patient to normal function, aesthetics, speech and health. Implants are unique because of their ability to achieve these ideal goals. To restore the normal function many options are available in modern prosthodontics to replace the missing teeth³. There are adverse effects associated with removable dentures that should be kept in mind which might affect the remaining teeth especially, the abutments and the supporting tissues. These effects might extend to the muscles of mastication⁴.

The traditional treatment for a single edentulous space is a conventional fixed partial denture. A major shortcoming of this alternative is the significant tooth reduction of the abutments⁵. Subgingival margins are required in esthetic situations, but these are associated with increased gingival inflammation⁶. In addition, the longevity of a fixed partial denture is estimated at 8.3-10.3 years⁷. Consequently, a young patient would require numerous replacements of this restoration over a lifetime.

Since the early 1980s, the use of osseointegrated implants has become a well-established and predictable treatment. Initially, oral implants were used in the completely edentulous situation. Later, a high degree of success was achieved with implants in partly edentulous jaws. The single-tooth implant has also become a predictable treatment option⁸. Implants offer significant advantages over resin-bonded or conventional bridges. They prevent the needless restoration of sound teeth adjacent to the edentulous area as would be required for a fixed partial denture. In instances where the adja-

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cent teeth have no restorations, a single-tooth implant provides the opportunity to preserve the integrity of the existing teeth⁹.

Long-term clinical studies have confirmed the efficacy of implant therapy. Dental implants were originally used for the treatment of edentulous patients and are associated with improved denture retention, stability, functional efficiency, and quality of life¹⁰. Currently, dental implants are widely accepted as a prosthetic treatment of completely or partially edentulous patients. This led to widespread acceptance and popularity of dental implants within the dental professional community¹¹.

Most published studies have reported on satisfaction with treatment outcomes¹². Grogono¹³ reported that, of the patients questioned, 88% had an increase in their self-confidence after implant treatment, 89% said that they would accept to go through implant treatment procedure again, and 98% said their oral health had generally improved. AL-Dwairi¹⁴ reported that there was a high awareness about dental implants (DIs) among removable denture patients in Jordan population; however, this awareness was associated with a low level of accurate information.

As Pakistan is a developing country and has a low literacy rate especially in Khyber Pakhtunkhwa so knowledge about this advance sort of treatment modality for replacing teeth is very important. The objective of this study was to determine awareness and knowledge about dental implant in patients reporting

for dental treatment to Khyber College of Dentistry, Peshawar.

METHODS AND MATERIALS

In this cross sectional study, 120 patients reporting to Khyber College of Dentistry, Peshawar were included. After obtaining informed consent, a Pre-structured questionnaire was used to collect the data regarding awareness and knowledge of dental implants. The age range from 18 to 70 years, both genders and any educational level were included.

A trainee medical officer explained and asked the patients visiting the Khyber College of Dentistry, Peshawar for varied dental treatments individually. When a patient did not know about dental implants, they were explained fully and their responses were noted.

The data were analyzed using SPSS version 20.0. Percentages and frequencies were calculated for each response of the patients. Chi square test was applied to see the difference among age groups. P<0.05 was considered significant.

RESULTS

In this study, 120 patients were included. Sixty-seven were males (55.8%) and 53 were females (44.2%). The mean age was 35.74±13.21 years. The age range in this study was from 18 to 70 years. The most common age group was 26-40 years (35.8%) followed by 41-60 years (34.2%). The details of age distribution are given in table 1.

Patients reported multiple sources of information. The most common sources of information about dental implant were relatives and dentists among all age groups. The difference among ages was not statistically significant (p=0.463). (Table 2)

Table-1: Age distribution of the patients

Age group (yrs)	n	%
18-25	30	25.0
26-40	43	35.8
41-60	41	34.2
60-70	6	5.0
Total	120	100.0

Table-2: Source of information about dental implant

Age Group (years)	Relatives		Media		Dentist		Friend		Someone else who received implant	
	n	%	n	%	n	%	n	%	n	%
18-25	8	26.7	7	23.3	8	26.7	2	6.7	5	16.7
26-40	11	25.6	6	14.0	16	37.2	8	18.6	2	4.7
41-60	15	36.6	4	9.8	16	39.0	4	9.8	2	4.9
60-70	1	16.7	1	16.7	3	50.0	1	16.7	0	0.0

Chi-square (X²)= 11.79, P=0.463

Table-3: Responses of patients about ‘How do you evaluate the implant treatment?’

Age groups (years)	Very good		Good		Poor		Do not know	
	n	%	n	%	n	%	n	%
18-25	14	46.7	12	40.0	2	6.7	2	6.7
26-40	14	32.6	21	48.8	4	9.3	4	9.3
41-60	18	43.9	16	39.0	2	4.9	5	12.2
60-70	2	33.3	3	50.0	0	0.0	1	16.7

Chi-square (X2)= 3.629,P=0.934

Table-4: Responses of patients about ‘Would you like dental implant treatment?’

Age group (years)	Would like implant treatment									
	Definitely		Likely		May be		Definitely not		Not sure	
	n	%	n	%	n	%	n	%	n	%
18-25	11	36.7	10	33.3	7	23.3	1	3.3	1	3.3
26-40	19	44.2	14	32.6	2	4.7	2	4.7	6	14.0
41-60	13	31.7	16	39.0	5	12.2	2	4.9	5	12.2
60-70	3	50.0	3	50.0	0	0.0	0	0.0	0	0.0

Chi-square (X2)= 10.92,P=0.536

When patients were asked about the results of implant treatment most of the patients replied with very good and good responses in all age groups. Very few patients told their implants’ results are poor. Few patients cannot evaluate their implant results. Difference among age groups was not statistically significant (P=0.934). (Table 3)

Most of the patients responded that “definitely” and “likely “ like the implant treatment. Fourteen patients gave ‘may be’, five gave ‘definitely not’ and 12 patients were not sure in response to questions “would you like implant treatment?”. (Table 4).

DISCUSSION

The present study gives information about subjects’ knowledge and their need for more information related to dental implants as an option in replacing missing teeth, in a selected sample of dental patients in a sample of Peshawar population. This specific group sample was selected for ease of access and to increase the response rate as they are dental patients who were approached during their regular dental visits. Due to the limited access to the female patients, the responses of the females to the survey were less. The age distribution was chosen randomly.

This is a hospital-based study, in which age range above eighteen were selected. This was to select mentally mature patients. In this age there is many dental

disease(dental caries) is quite apparent. The more males in this study is due to fact males are outdoor going and have better access to dental facilities. Similar results are reported by Al-Johany S¹¹.

In the current study, the most common sources of information about dental implant were relatives and dentists. Media like TV/radio and newspaper were third source of information about dental implant treatment. This may be due to the low level of education of the patients. Similar results are reported by other study conducted in Lahore.¹⁵ In some countries media can play a major role in public dental education and contribute to an increased level of awareness about dental implants. In the United States, Zimmer¹⁶ reported that 77% of those questioned knew about dental implants, but their main source of information was the media, while their dentists did not contribute much. Similarly, In Japan, a study showed that dentists provided no more than 20% of the information about dental implants¹⁰.

In the present study when patients were asked “how you evaluate their dental implant treatment option?”, most of the patients said that their treatment option was good and they are satisfied. Al-Johany S¹¹ in their study on knowledge about dental implant reported that most of the patient did not about whether this was good treatment option or not. Al-Johany study was conducted six years back so there may was less awareness about implant.

In the current study, most of the patients considered dental implant as definite treatment option. This shows that people of our population are more aware about this sort of treatment. Similar results are reported by another study conducted in Lahore¹⁵.

CONCLUSIONS

Most of the patients were aware about dental implant treatment and the common source of knowledge was relatives and dentists.

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