

KNOWLEDGE AND ATTITUDE OF PATIENTS TOWARDS DENTAL IMPLANT AT ARMED FORCES INSTITUTE OF DENTISTRY, PAKISTAN

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ABSTRACT

Objective: Assessment of the patient knowledge and attitude towards dental Implants at a tertiary care dental hospital.

Study Design: A cross sectional descriptive study.

Place and Duration of Study: Armed Forces Institute of Dentistry, Rawalpindi from Jan 2014 to Jun 2014.

Material and Methods: A survey was conducted on 150 partially dentate male and female patients having age 20 years and above using a self-explanatory questionnaire. Completely dentate and edentulous patients were excluded in study. Age and gender of the patients were noted. Data were analyzed using SPSS 17.0. Frequencies of age, knowledge, sources and limiting factors were calculated.

Results: Sixty percent of the patients were aware of dental implants. Dentists were the main sources of information regarding the dental implants followed by friends and relatives. A majority of patients (65%) had objection on the cost of implant therapy. Major disadvantage and deterrent to implant therapy were cost and surgery.

Conclusion: The study showed that most of the patients were aware of dental implants. Dentists and electronic advertising media plays an important role in educating patients about dental implants. Cost was a major limitation in provision of dental implants.

Keywords: Awareness, Dental implants, Missing teeth, Oral health.

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INTRODUCTION

The prosthodontic treatment aims towards restoring function and aesthetics of edentulous patients while improving oral and psychological health of the individuals, particularly in patients with complete tooth loss¹.

Removable Dentures are a versatile, cost effective and reversible treatment method for partially dentate as well as completely edentulous patients in a wide range of age groups. They improve the overall quality of life of edentulous patients². However, various complications can be associated with dentures such as pain and discomfort, loss of retention, soreness and ulceration, loss of artificial teeth and

fracture of denture base/artificial teeth³. Few patients do not tolerate removable dentures at all while most of them find it difficult to adapt to removable prostheses⁴.

Fixed partial dentures are a common treatment opted for replacement of teeth with few soft and bony considerations. There is better patient compliance and esthetics however they accompany with them disadvantages like natural abutment tooth loss, postoperative sensitivity and increase incidence of caries and periodontitis of neighboring teeth⁵.

The advent of dental implants has broadened the horizon of a clinician to restore edentulous sites⁶. Edentulous patients are treated with dental implants to enhance denture stability, retention, function, and quality of life⁷⁻⁸. Dental implants are now accepted as a treatment of choice for replacing single missing tooth⁵. Advantages of Implant supported prostheses are maintenance of bone, increased masticatory

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efficiency, improved esthetics and phonetics and reduced treatment morbidity^{9,10}.

Planning for provision of better health service includes dissemination of information regarding dental implants⁹. The survey aimed towards assessment of attitude and knowledge of the patients about dental implants. Analysis of major sources of knowledge and limiting factors was carried out. An insight of these variables may enable the clinicians to optimize patient care by better patient education and minimizing such limitations in prosthodontic treatment modalities.

MATERIAL AND METHODS

This descriptive cross sectional study was done over a period of 6 months during Jan 2014 - Jun 2014 for assessment of the knowledge and

decreased salivation, neuromuscular disorders, diabetes mellitus) attending Oral Surgery and prosthodontics department of AFID Rawalpindi were included in the study (Using WHO sample size calculator (1.1), Confidence level 95%, anticipated population proportion 0.88820 and absolute precision required 0.06 and n=15020). Completely dentate and completely edentulous patients were not part of the study. After taking informed consent from the patients, a questionnaire was filled in by the principal investigator containing questions about age, gender, income, education, occupation, level and sources of information regarding implants and awareness and knowledge of implants,. Data were analyzed using SPSS 17.0. Mean ± S.D was calculated for quantitative variables like age. For

Table-I: Demographic data of the patients.

Age	No	%
Under 30 years	15	10
30-50 years	90	60
Above 50 years	45	30
Gender		
Male	105	70
Female	45	30
Income		
Below Rs 20,000	45	30
Rs 20,000-40,000	45	30
40,000 and above	60	40
Education level		
High School	45	30
Graduate	75	50
Postgraduate	30	20
Occupation		
Student	15	10
Housewife	30	20
Professional	180	60
Businessman	15	10

attitude of patients towards dental implants as a tooth replacement option. Non probability consecutive sampling technique was used. One hundred fifty partially dentate patients of age 20 years and above having history of no systemic disease (Parkinson’s disease, Myasthenia Gravis,

qualitative variables like gender and knowledge, frequency and percentage was calculated

RESULTS

After evaluating the data sheets of sample selected for the study (n=150), the results showed that mean age of the patients was 44.07 ± 9.31.

60% of the subjects were of the age between 30-50 years and patients above 50 years were 30%. 105 patients (70%) were male patients while 45 patients (30%) were female patients. Demographics are enlisted in table-I.

The level of knowledge about 3 major tooth replacement options i.e, dental implants, fixed partial denture and removable partial denture was assessed. It was evaluated in terms of duration of treatment, care and hygiene, postoperative complications survival rate and cost. Ninety percent had awareness about removable partial dentures, 85% about fixed partial dentures and 60% about dental implants.

implants as a tooth replacement option in dental patients at a Armed forces dental hospital.

A study showed that most patients believed use of dental implants increased the overall quality of life¹². Zimmer et al found through a survey in the USA that only 17% of 120 participants obtained information about implants first from dentists, with media and friends (77%) playing much more important role¹³. Another study in Netherlands showed 52% of patients received their information from written public press or from relatives¹⁴. In our study, 60% received information from dentists, 20% of patients received initial information from friends

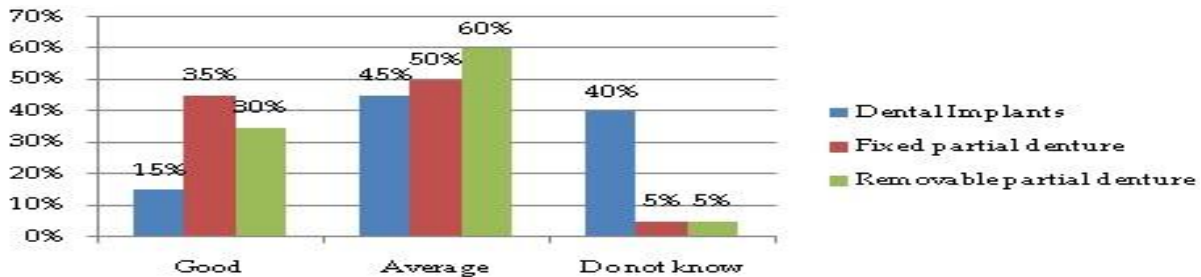


Figure-1: Patient’s level of attitude for the different options for tooth replacement.

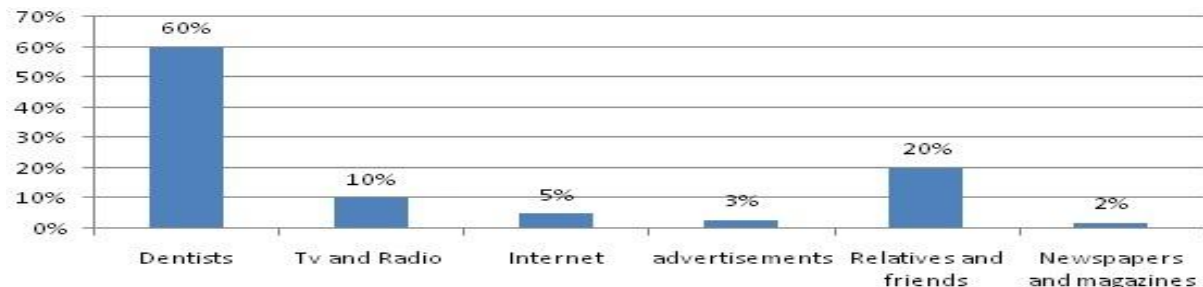


Figure-2: Major sources of information about dental implants.

This is shown in fig-1. Figure-2 gives major sources of information about dental implants.

DISCUSSION

Oral disorders such as caries and periodontitis, trauma and iatrogenic procedures contribute towards tooth loss. It substantially affects overall quality of life. Use of restorative means such as implants has a success rate reported to be 94%¹¹. The present survey gives information about subjects’ knowledge and their need for more information related to dental

and 10% of them received from radio and TV.

A study in Japan had informed just 20% of patients received their information about dental implants from their family dentists¹⁵. In our study in 65% of cases dentists were first source for their awareness, comparing other research dentists have the most effective role in knowledge of patients.

Fifty percent of patients believed that dental implant needs more care, 30% of them equal care to natural tooth and 15% believed implants need

less care and hygiene than tooth in our study. Tapper et al reported 4% of patients believed that using implants needed less care, 46% more care and 44% equal to natural dentition. Tapper also showed 54% of patient believed expected mean durability of implant is 10-20 years¹⁶. In this study 15% of the patients believed durability of less than 10 years and 20% of the patients believed 10-20 years for durability but most of patient had no idea, this means patients had insufficient information about dental implants (fig-2).

The cost of implant is chief limitation of implant therapy. In a study by Tapper the strongest argument was reported 76% of subjects to be the high cost¹⁶. This were supported by Zimmer et al whereby the cost is an important and inhibitor factor for choice implant as a proper treatment¹⁶.

Dental implants outweigh all other viable treatment options for restoration of edentulous sites due to their superior biocompatibility, strength and success rates. Recent inclusion of CAD/CAM and zirconia abutments has added unsurpassed esthetics to these restorations. This study indicated many patients believe that dental implants need care and hygiene equal even more than natural teeth. Most of them had no idea about durability of dental implants. More patients believed that cost was inhabitant factor for implant therapy. There is a need for dental insurance to cover this option of treatment for better and more acceptance of implant amongst the people. Studies are needed to be conducted on a larger scale to evaluate the level of awareness about dental implants as this survey was conducted in a limited group of participants in an urban population.

CONCLUSION

Within limitations of this study, a large number of subjects were aware of dental

implants. Dentists were the most common source for patients. Dentists and electronic media play an important role in educating patients about dental implants. Cost was a major limitation in provision of dental implants.

CONFLICT OF INTEREST

This study has no conflict of interest to declare by any author.

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