



AWARENESS, KNOWLEDGE, AND ATTITUDE OF PATIENTS TOWARDS DENTAL IMPLANTS: A QUESTIONNAIRE STUDY

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ABSTRACT

AIM AND OBJECTIVES: Technological advancements are invading every discipline and dentistry is no exception to it. Oral rehabilitation trends have changed drastically in recent years. As the use of endosseous dental implants has revolutionized current dental practice, its thorough knowledge is an important requisite for the patient too for successful restorative results. The aim of this article is to assess the knowledge of patients regarding dental implants.

MATERIALS AND METHODOLOGY: A questionnaire was given to 200 patients visiting various dental clinics in Moradabad city and their response was assessed.

RESULTS: A fair share of participants had heard about dental implants and had some knowledge about it.

CONCLUSION: Although patients had some knowledge about dental implants, still an effort on the part of dentist is required to spread proper awareness.

KEYWORDS : Dental Implant, Edentulism, Implantology

INTRODUCTION

Loss of natural teeth is a debilitating and irreversible condition and described generally as final marker of disease burden for oral health¹, leading to functional, cosmetic and psychological morbidities. The edentulous state represents a compromise in the integrity of the masticatory system, frequently accompanied by adverse functional and esthetic sequelae, which are varyingly perceived by the affected patient.

Replacement of tooth structure has undergone a revolutionary change from traditional ivory dentures to present day implants. Introduction of endosseous implant treatment has initiated a revolution in oral rehabilitation for both partially and fully edentulous patients. Over a past few years, a paradigm shift in implant planning from "Bone driven implantology" to "Restoration driven implant practice" has taken place. Due to its high success rates and predictability, its clinical implication is increasing rapidly. Recently, it has become the focus of the patients interest and hence for dentist, it is vital to assess their level of knowledge regarding dental implants.

So, the objective of this study was to assess knowledge regarding dental implants in the patients visiting various dental clinics in Moradabad city.

MATERIALS AND METHOD:

Subjects: This cross-sectional observational study performed on 200 patients visiting various dental clinics in Moradabad city. A consent form was obtained from each participant in this study.

Inclusion Criteria:

Partially edentulous patients visiting the dentist.

Exclusion Criteria:

Completely Edentulous subjects.

Patient's Questionnaire

A standard close-ended objective type questionnaire of 15 questions was made and the questions are divided into four parts.

Part 1 included: 3 questions regarding demographic data which involved age, marital status and education.

Part 2 included: 5 questions to investigate the level of knowledge about dental implants, involving different ways

of replacing missing teeth, information about dental implants, source of information, duration of dental implants, possible disadvantages of implants.

Part 3 included: 4 questions to assess the attitude towards dental implants which included the interest in knowing about the dental implants, the source of information, importance of functional outcome of implants, amounts that can be paid over implants, and importance of dentist in treating implants.

Part 4 included: 3 questions about awareness of patients regarding dental implants, which included oral hygiene for implant-tooth more than normal-tooth, preference replacing normal teeth with implant teeth, need for dentist to provide implants.

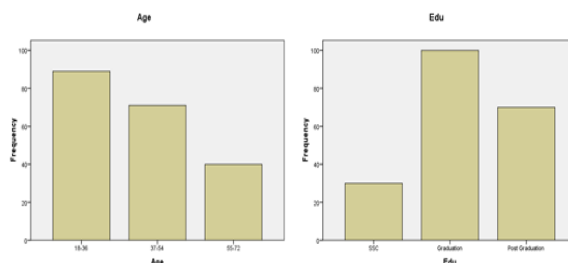
Data Analysis:

All statistical calculations were done using computer program IBM SPSS (Statistical Package for the Social Science; IBM Corp, Armonk, NY, USA). P values less than 0.05 was considered statistically significant. Data was statistically described in terms of mean \pm standard deviation (\pm SD), or frequencies (number of cases) and percentages when appropriate. Comparison between the study groups was done using Chi-square (χ^2) test.

RESULTS:

This study included 200 participants of which 100 were males and an equal no. of participants were females.

The participants were in the age range of 19-77 years (fig 1). Most of the individuals were married with a percent of 59.5% (119), followed by lesser percentage of single individuals 39% (78), whereas only 1.5% (3) were divorced (fig 2).



(Fig1)

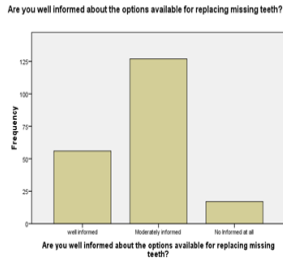
(Fig 2)

Part 2 of the questionnaire was to investigate the level of knowledge about dental implants. It included a total of six questions.

Q1: Are you well informed about the options available for replacing missing teeth?

- a) Well informed 28%
- b) Moderately informed 63.5%
- c) Not informed at all 8.5%

56 respondents thought they were well informed, 127 were moderately informed whereas 17 were not informed at all (fig 3).

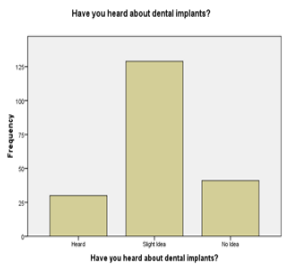


(Fig 3)

Q2: Have you heard about dental implants?

- a) Fair amount of idea 31.5%
- b) Slight idea 64.5%
- c) No idea 4%

63 respondents had fair amount of idea, 129 had slight idea and 8 had no idea at all (fig 4).

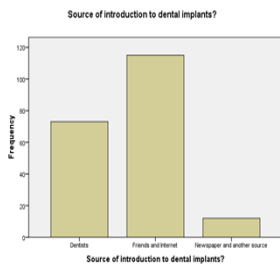


(Fig 4)

Q3: Source of introduction to dental implants?

- a) Dentists 36.5%
- b) friends and internet 57.5%
- c) newspapers and another source. 6%

73 respondents had heard about dental implants from dentists, 115 from friends and internet and 12 from newspapers and another source (fig 5).



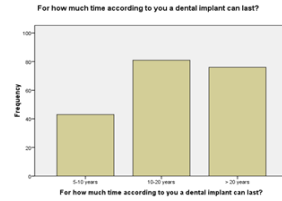
(Fig 5)

Q4: For how much time according to you a dental implant can last?

- a) 5-10 years 21.5%
- b) 10-20 years 39.5%
- c) >20 years 39%

According to 43 respondents, an implant can last upto 10

years, 79 thought it can last upto 20 whereas 78 were of the view that it can last more than 20 years (fig 6).

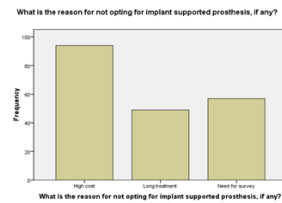


(Fig 6)

Q5: What is the reason for not opting for implant supported prosthesis, if any?

- a) High cost 47%
- b) Long treatment time 24.5%
- c) Need for surgery 28.5%

94 respondents were of the view that implant has high cost, 49 think that the treatment time is longer whereas 57 don't want surgical procedure to be done (fig 7).



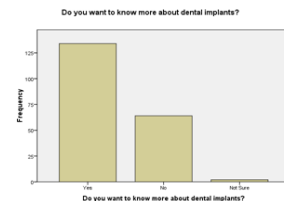
(Fig 7)

Part 3 of the questionnaire included five questions to evaluate attitude toward dental implants of the responders.

Q1: Do you want to know more about dental implants?

- a) Yes 67%
- b) No 32%
- c) Not sure 1%

134 respondents wanted to know more about dental implants, whereas 64 had no interest and 2 were not sure about the same (fig 8).

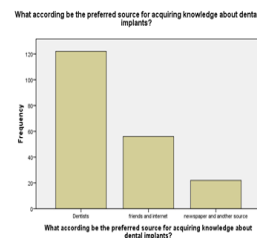


(Fig 8)

Q2: What should be the preferred source for acquiring knowledge about dental implants?

- a) Dentists 61 %
- b) Friends and internet 28%
- c) Newspapers and another source 11%

122 respondents wanted to know more about dental implants from dentists, 56 from Friends and internet and 22 from Newspapers and other sources (fig 9).

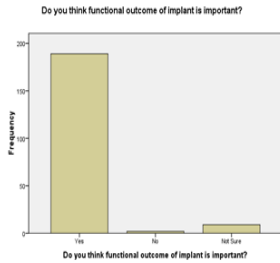


(Fig 9)

Q3: Do you think functional outcome of implant is important?

- a) Yes 94.5%
- b) No 1%
- c) Not Sure 4.5%

189 respondents think functional outcome of implant is important, whereas 2 had opposite views and 9 were not sure about the same (fig 10).

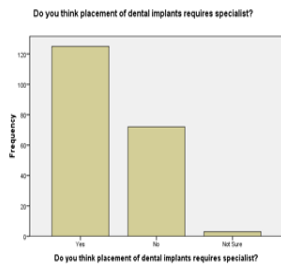


(Fig 10)

Q4: Do you think placement of dental implants requires specialist?

- a) Yes 62.5%
- b) No 36%
- c) Not Sure 1.5%

125 respondents think placement of dental implants requires specialist, whereas 72 had opposite views and 3 were not sure about the same (fig 11).



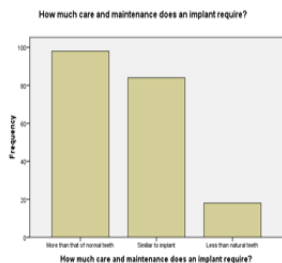
(Fig 11)

Part 4 of the questionnaire was designed to investigate awareness of participants about dental implants, and it included three questions.

Q1: How much care and maintenance does an implant require?

- a) More than that of normal teeth 48.5%
- b) Similar to implant 42%
- c) Less than natural teeth 9.5%

Most of the participants 97 thought that oral hygiene for caring of the implant is more than that of normal teeth, while 84 thought that both need similar oral hygiene. 19 thought that oral hygiene was less in case of the caring implant (fig 12).



(Fig 12)

Q2: What is your preference for replacement of missing

teeth?

- a) Implant 27%
- b) Fixed dental prosthesis 50.5%
- c) Removable prosthesis 22.5%

54 respondents preferred implants, 101 Fixed dental prosthesis whereas 45 removable prosthesis for replacement of their teeth (fig 13).



(Fig 13)

Q 3: Who would you prefer for placing your implant?

- a) Specialist dentist 53.3%
- b) General dentist 38%
- c) Not sure 8.5%

Most of the individuals 107 preferred the specialist dentist to perform implants, 76 preferred their dentists to provide the dental implants while 17 weren't sure about the same (fig 14).



(Fig 14)

DISCUSSION

Dental implant has gained a lot of popularity since the last decade and currently is the prosthesis of choice among partially or completely edentulous patients.

In the present study, a high percentage of participants (96%) heard about the dental implant, while in another investigation,⁵ only 23.24% of urban population heard about dental implants. In general, Turkish population, it was found that a vast majority of⁶ individuals were unaware of the dental implants. The results of this study reflect moderate knowledge of the participants.

Individuals can be provided with information about dental implant by several ways including media, dentists and friends. In a survey conducted in United States 77% people got most of the information⁷ from the press with little contribution from their dentists. Also, a study in Japan revealed that dentists did not provide more than⁸ 20% of the information about dental implants to patients. The opposite was found in our study, where more of participants get their knowledge from their dentists, while lower percentages of participants were found to get their information from newspaper and other sources respectively. Also, most of our participants preferred to get more information from the dentist, and this shows that the dentists have a significant role in awareness of patients as patients trust them.

In a study by Tomruk et al, they revealed that the source of

information of the persons was mainly from a dentist, and some from media, friends, and family. In the current study, 30.1% got information from their friends followed by 6.9% by a newspaper.^{9,10} In a report by Tepper et al., they found that dentist was the source of information of 68% of participants, followed by printed media 23% and finally friends 22%. In a study that was performed on Austrian general public, it was found that their source of information about implant knowledge was their dentist whereas lower percentage got¹¹ information from media.

The disadvantage of dental implants was the high cost (47%) followed by long treatment time (24.5%) and finally the need for surgery 28.5% in the point of view of our participants. Tepper et al. reported that the high cost was a significant disadvantage of dental implants; this is in agreement with our study. 21.5 % of individuals in this study thought that implant would last for up to 10 years, while the least percent 39% believed that implants would last for more than 20 years.

In the present study, we found that 48.5% of participants thought that implants need more oral hygiene than healthy teeth, while 42% thought that caring of implants as the same natural teeth.

It was mentioned that the younger public showed better awareness to dental implant strategy, while the old persons¹² demonstrated less knowledge. It is recommended that dental implants should be placed even if patients are still in good health regardless of the age that is why we included young age participants, although they are young, they may need to use the implant.

The qualified, trained dentist is the one who can practice dental implant treatment, most of the participants in this study thought that, while others thought that this type of treatment needs the specialist. Also, the majority of our participants preferred the only specialist to perform dental implants; this shows that individuals had awareness about dental implants. Only 27% of participants in the present study preferred and chosen to perform implant in case of missing teeth.

CONCLUSION

As stated by DeVan 'We must first meet the mind of people, before we meet their mouth'. Fair amount of knowledge and awareness regarding dental implants was found in general population in Moradabad City. Most of the participants had heard about dental implants, and they were well informed mainly by their dentists. They wanted to know more about dental implants from their dentists, and they cared about the functioning outcome of the implant. Also, most of them showed that they prefer to choose dental implants. However, more knowledge and awareness should be provided to individuals by their dentist as they have some misconceptions which need to be addressed by the dentist. Also, we can conclude that dentists play an essential role in the patient's awareness.

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