Knowledge and Awareness among Patients about Dental Implants

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Abstract
Objective:
Replacement of lost teeth with dental implants is considered as a positive experience by patients. Dental implants are widely accepted as a method of prosthetic treatment for completely or partially edentulous patients. The objective of this study is to assess the level of knowledge, attitude and acceptance of dental patients regarding dental implant as a treatment modality for replacing missing teeth.

Methods:
Descriptive cross sectional hospital based study among 100 adult males and females patients who attended outpatient dental clinics in Saveetha Dental college and hospital. Participants were selected at random and the questionnaires were used to assess their knowledge, attitude and acceptance of Dental implant as treatment option for replacement of missing teeth. The data extracted were tabulated and statistically analysed and results obtained.

Results:
58% of patients were not aware of implants and more than 50% of them were hesitant to consider implants for replacement of missing teeth as they felt it was too costly.

Conclusion:
Most of the patients did not have a clear idea about implant therapy which emphasizes the need to educate them.

Keywords- Dental implant, Prosthodontic teeth replacement, Implant awareness

INTRODUCTION
Dental implant is an artificial root that is surgically inserted into the jawbone to support a single tooth replacement, fixed partial, complete denture or maxillofacial prosthesis. [1] It has become increasingly important as majority of patients treated with implant-supported prosthesis have reported improvement in their quality of life, assurance, self-confidence including psychological benefits and moreover conservation of the tooth structure adjacent to the teeth to be replaced.[2] Due to its high success rates and predictability, its clinical implication is increasing rapidly. Implant treatment is an increasingly popular treatment option with a high success rate. [3] Recently, it has become the focus of the patients interest hence for dentist, it is vital to assess their level of knowledge with regards to dental implants and whether their perception of dental implants does in fact reflect reality in order to guide patients who do not have the education or background knowledge to make an informed decision between implant supported dentures and removable dentures. Overall aspiration for improved oral health related quality of life has become a truth after the arrival of dental implants. Replacement of missing teeth with implant supported prosthesis has been accepted and rated as a positive experience by patients who have undergone implant treatment.[4]

Many studies have been done in different parts of the world with regards to the awareness of dental implants as a treatment option. An overwhelming majority of patients with severely compromised local host bone can be offered implant-supported rehabilitation with a very good prognosis and improved esthetics, phonetics and function. Thus, the aim of the study was to assess the awareness of the patients regarding implant-retained prosthesis as an option for tooth replacement and the knowledge about tooth replacement as a whole including source of information and attitude towards it.

MATERIALS AND METHODS
The study was conducted during the academic year in January – February 2016 among patients who were attending clinics as out patients in Saveetha Dental College and Hospital, Chennai, Tamilnadu, India. The patients who were present at the day of the particular study and were willing to participate were included in the study and those who were not willing to participate were excluded.

Study Sample Size
The descriptive cross sectional hospital study was based among 100 adult male and female patients who attended outpatient dental clinics in Saveetha Dental college and
hospital. Participants were selected at random and the questionnaires were used to assess their knowledge, attitude and acceptance of Dental implant as treatment option for replacement of missing teeth.

**Questionnaire**
The questionnaire was not targeted at a specific group but at all the patients in general to assess their knowledge and awareness about implants. A validated questionnaire was distributed among all the patients participating in the study. This included questions about the awareness on the prevalence of dental implants, the patient’s knowledge of dental implants and how they learnt about it, various questions about implant awareness and implant site. The questions were based on simple answers that the subjects could answer easily by choosing any of the options given accordingly. The data extracted were tabulated and statistically analysed and results obtained using SPSS.[USA Software].

**RESULTS**
Out of 100 subjects, 54% of them had missing teeth and the rest of the 46% had all the teeth. [Fig 1] Among the subjects that had missing teeth, 43% have replaced by using removable partial dentures, 22% replaced by using fixed partial dentures, 2% of the subjects are undergoing or completed treatment involving implants and about 33% have opted not to replace their missing teeth. [Fig 2] When the subjects were asked if they were aware of implants, 58% of the subjects were not aware of implants and the other 42% were aware through their dentists, newspapers and various other modalities. [Fig 3] The subjects were also asked about the site of placement of implants and about 55% of the people were not aware of the implant site and 26% of the subject identified the site of implant as the jaw bone, while some answered as gum tissue. [Fig 4] 57% of patients were willing to replace their existing removable prosthesis with implants. [Fig 5] More than 50% of them interviewed felt implants to be too costly for considering as a replacement option for missing teeth. [Fig 6]


**DISCUSSION**

The perspective and outlook of the south Indian population towards dental implants are less known. So our study was done to assess the level of knowledge about dental implants among patients. Several studies have been conducted to show the patients’ awareness about implants in different countries. Chawdhary et al.[5] reported that the level of awareness of implant treatment was 23.24% in 2010. Zimmer et al. in 1992 [6] demonstrated a high awareness rate as well as general positive attitude toward oral implant therapy.

In our study 57% of patients were willing for implant supported dentures after knowing about the benefits of implant therapy which is in accordance to a study by Narby et al conducted on a Sweden population, where more number of people were interested in implant treatment.[7,8]

Within the limitations of this study, it can be concluded that 42% of the population have heard of dental implant treatment. This survey among patients attending dental college showed that the many of the patients were unaware about dental implants as an option for replacing missing teeth. In a study done in Turkey [9] showed that a subpopulation in Istanbul have limited awareness about dental implants in accordance to our study. In another study only 33% of patients had heard of implant therapy.[10] In contrary in a study done on Malaysian population 76% of people were aware of dental implants.[11]

22% of people in our study said dentists were the main sources of information regarding dental implants amongst other sources. This is in agreement with Satpathy et al.[12] Makatast et al.[13] and Ravi Kumar et al.[14] all of which stated dentists as the main source of information.

This clearly indicates the lack of efforts by dentists and the governing bodies regarding taking necessary steps for creating awareness amongst the people. The high cost of the implants is one of the major limiting factors working against the willingness of patients to undergo this treatment. It also shows that most patients felt dental implants treatment to be expensive and unaffordable, but they were interested to know more about dental implants.

**CONCLUSION**

The present study shows limited knowledge and awareness about dental implants among the patients. This survey underlines the need for providing correct information through various means to the patients to improve awareness about this treatment modality. The dental surgeons should give more detailed information to the patients about dental implants in the future. Besides this, efforts should be made to reduce the cost of dental implants to a more affordable rate.

**REFERENCES**

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