



KNOWLEDGE AND AWARENESS OF DENTAL IMPLANTS AMONG ADULTS IN URBAN AREAS, CHENNAI

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ABSTRACT

Background: Replacement of missing teeth has become one of the most important needs for patients attending clinics to restore aesthetics and/or function. Many treatment modalities are available for replacing a single missing tooth; removable partial denture, fixed partial denture or dental implant. **Aim:** The objective of this study is to assess the knowledge and awareness of dental implants among adults in urban areas. **Methods and Materials:** A descriptive design using survey method was used in this study. The study was conducted among adults living in Chennai urban area. Convenient sampling technique was used to select the participants. The survey was conducted among 68 participants using a questionnaire which consists of demographic data and questionnaire on knowledge and awareness on dental implants. Descriptive statistics was used for data analysis. **Results:** The results of this study shows that more than half of the participants 37(54.4%) were aware of different dental implants and 31 (45.6%) were not aware of dental implants. About 40(58.8%) of them think that the best treatment for replacing missing teeth is dental implants. There were 22 (32.4%) of them who felt that high cost is the factor that prevents them from choosing implants for replacing the missing teeth. **Conclusion:** More than half of the participants were not having information regarding implants. It shows that there is a need for providing more information to the patients about this treatment modality. So, dental education is necessary for developing positive attitude among population regarding dental implants.

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INTRODUCTION

Replacement of missing teeth using implant supported prosthesis for aesthetic and functional rehabilitation has become an accepted and widely used treatment approach in dentistry. Oral rehabilitation is the discipline within dentistry which deals with diagnosis, treatment planning and restoration of larger tooth defects, congenitally or acquired missing teeth and other oral tissues. Awareness and patient's knowledge is one of the factors affecting the final treatment decision regarding the replacement of a missing tooth. Complete information on implant treatment and alternative therapies must be provided to guide the patient in the choice of the most appropriate option. This problem is more magnified in developing nations where there is lack of education and awareness amongst people about dental implants as a dental treatment modality. [1] The treatment can include restoration of teeth with crowns or replacement of teeth with implants, fixed partial dentures or removable dentures. [2] Around one million dental implants are inserted each year, worldwide. [3]

Public awareness, positive attitude and acceptance of dental implants were found to be low in a study conducted in Finland. [4] Also Reports from Saudi Arabia and India found levels of awareness about dental implant were 66.4% and 38% respectively. [5,6] The results of a study conducted by ElhadiMohieldinAwooda *et al.*, on 'Knowledge, Attitude and Acceptance of Dental Implants among Patients Attending Khartoum Dental Teaching Hospital' shows that 68.5% were aware about dental implant as treatment option regarding replacing missing teeth, Of the total participants; 56.8% didn't know how dental implant lasts, more than half (53.1%) did not know the place where the implant inserted. Majority (79.4%) could accept their dentist advice for replacement of missing teeth by implant, but 29.1% said expensiveness was main barrier against this option. [7]

Objective

The objective of the study is to assess the knowledge and awareness on dental implants among adults in urban areas.

MATERIALS AND METHODS

A descriptive design using survey method was used to determine the knowledge and awareness of dental implants

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among adults in urban areas. Convenient sampling technique was used to select the participants. Data was collected using a self-developed questionnaire. The questionnaire consists of demographic profile and questionnaire related to knowledge and awareness of dental implants. Closed ended questionnaire was constructed with a total of 8 items designed to assess the patient's acceptance, awareness and knowledge about dental implants as a treatment modality for replacement of missing teeth. In this survey, a total of 68 subjects participated. Descriptive statistics was used for data analysis. The results were analysed and presented in tables and figures. The study was approved by the Institutional Review Board. Informed consent was obtained from the participants before the data collection.

RESULTS

Figure 1 shows the results of the age of the participants. A majority of them 55(80.9%) were under 30 years old, 10(14.7) belonged to 30-50 years and only 3(4.4%) were above 50 years. Figure 2 shows that there were 30 (44.1%) males and 38(55.9%) were females. With regards to the educational status, a majority of them 49(72.4%) hold bachelor's degree. More than half of the participants 37(54.4%) were aware of different dental implants and 31 (45.6%) were not aware of dental implants.

Table 1 shows the response to the questionnaire on the level and knowledge of awareness of dental implants. To the question on where the dental implants are placed, 36(52.9%) responded as jaw bone, 8(11.8) as the gingiva, 1(1.5%) as neighbouring teeth and 23(33.8%) did not know the answer. When asked about the survival rate of dental implants, about more than half of them 37 (54.4%) of them did not know the answer. About 30 (44.1%) of the participants responded that implant failure could be due to poor oral hygiene.

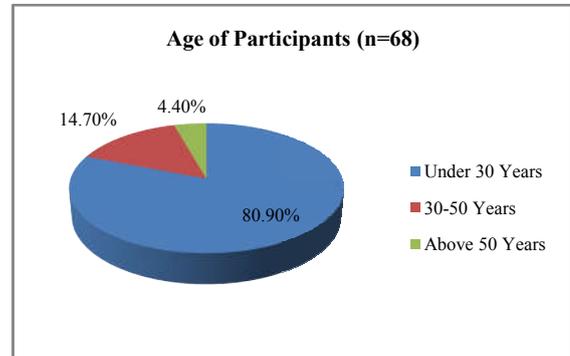


Figure 1 Age of the participants (n=68)

With regards to the care of implants, 32(47.1%) of them responded that implants needs more care than natural teeth and 15(22.1) did not know the answer.

Table 1 Level of knowledge and awareness of dental implants

Knowledge and Awareness questions	Frequency (n)	Percentage (%)
1. Dental implants are placed in		
a. the jaw bone	36	52.9
b. the gingiva	8	11.8
c. the neighbouring teeth	1	1.5
d. do not know	23	33.8
2. The survival rate of dental implants is		
a. less than 5 years	6	8.8
b. 5-10 years	13	19.1
c. 10-20 years	5	7.4
d. Up to 20 years	7	10.3
e. do not Know	37	54.4
3. Implant failure could be due to		
a. poor oral hygiene	30	44.1
b. type of dental implant	6	8.8
c. poor quality of treatment by dentists	12	17.6
d. improper care of implants by self	13	19.15
e. others	7	10.3
4. How are the implants cared for ideally?		
a. implants should be cleaned like natural teeth	21	30.9
b. Implants needs more care than natural teeth	32	47.1
c. Implants needs less care than natural teeth	0	0
d. Do not know	15	22.1
5. Which of the following treatment option do you think is the best treatment for replacing missing teeth?		
a. Dental implants	40	58.8
b. Fixed partial dentures	14	20.6
c. Removable dentures	10	14.7
d. Others	4	5.9
6. Which of the following factors prevents you from choosing implants for replacing the missing teeth?		
a. High cost	22	32.4
b. The need for surgery	13	19.1
c. Long-time treatment	6	8.8
d. Lack of sufficient knowledge and information about implants	20	29.4
e. Fear	7	10.3
7. Implants should only be inserted by specialists		
a. Yes	59	86.8
b. No	3	4.4
c. Do not know	6	8.8

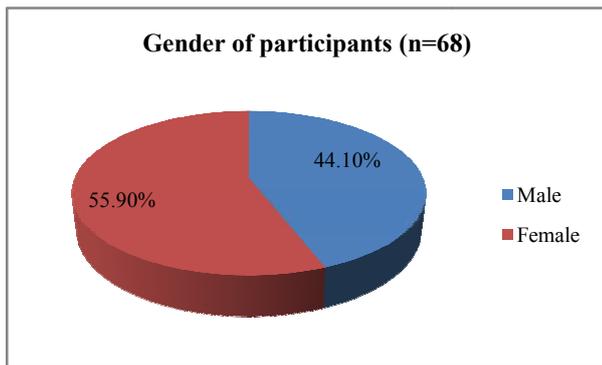


Figure 2 Gender of the participants (n=68)

About 40(58.8%) of them think that the best treatment for replacing missing teeth is dental implants. There were 22 (32.4%) of them who felt that high cost is the factor that prevents them from choosing implants for replacing the missing teeth. Only 7 (10.3%) had fear, which prevented them to choose implants. A majority of them 59(86.8%) felt that implants should only be inserted by specialist and 6(8.8%) did not know the answer.

DISCUSSION

The study results show that almost half of the participants 37 (54.4%) are aware of different implants. A majority of them 59(86.8%) are aware that implants should be inserted by specialists. The results of the study conducted in a Turkish sub population in 2014 shows that among the different options to rehabilitate tooth missing, 43.5% knew about dental implants as a treatment option.^[8]

The study results are also similar to the study conducted by Saha A *et al.*, on Awareness among patients regarding Implants as a treatment option for replacement of missing teeth in Chattisgarh, which showed around 41.7% of the subjects were aware of dental implants. High cost of the procedure was the main factor for not undergoing treatment procedure (35.2%). Studies conducted by Zimmer *et al.*, Berge and Tepper *et al.* reported high level of awareness as 77%, 70.1% and 72%, respectively.^[9,10,11] Since, in this present study, only 54.4% of the participants are aware of the implants in this study, dental education can be given to patients to provide sufficient and realistic implant information.

CONCLUSION

The study shows that the participants have limited awareness about dental implants. Many of them do not have the education or background knowledge on implants. Regardless of whether dentists are dealing with implants or not, it is crucial to know whether today's patients are aware of dental implants as a treatment option and whether the information that they have is realistic.

Awareness amongst patients regarding the dental implants can help in eliminating any negative image of the procedure that may have been caused due to lack of adequate information. As this survey was conducted in a limited group of people, further studies are needed to be conducted amongst a larger group of people.

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