



Awareness among Population of Visakhapatnam Regarding Dental Implants as a Treatment Option for Replacing Missing Teeth

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ABSTRACT

Aim: The aim of this study is to evaluate the awareness among population regarding dental implants as a treatment option for replacing missing teeth among the population of Visakhapatnam

Materials and methods: This study was conducted on 1000 subjects in different areas of Visakhapatnam. A closed ended questionnaire is prepared and the subjects were selected within the age group range of 24-45 years. Only the subject who are willing to participate are selected for this study.

Results: In this study a deficit level of knowledge and information about the dental implants was observed in the people of Visakhapatnam.

I. INTRODUCTION:

Currently dentistry has experienced many remarkable advancements in restorative materials, techniques and strategies that has improved the effectiveness of long term management of tooth loss. Partially edentulous patient or complete denture patient can now undergo replacement with multiple missing teeth or single missing teeth with the dental implants that provide the same function and esthetics as of the natural teeth without disturbing the natural teeth. ¹Implant dentistry has become increasingly important in oral structures reconstruction since the introral use of titanium implant was suggested in the late 1950's. Majority of the patients treated with implant supported prosthesis have reported improvement in their quality of life and self confidence.

The main role of prosthodontists is the rehabilitation of patient after the loss of teeth and

restore the oral function. In case of patients with poor education and those who are economically low the dental status is very poor due to lack of affordability. So affordability for dental implants as treatment option is very difficult for them. And also people who got customized to removable prosthesis do not show any interest in dental implants. But most of the most patients are not willing for the removable prosthesis and also exhibits dissatisfaction for the removable prosthesis however the best treatment was provided. Many people experience problems such as retention, speech and mastication due to removable prosthesis which may be due to anatomical, physiological, psychological and prosthodontic factors. Also there are many disadvantages with the fixed partial denture such as teeth preparation adjacent to edentulous area and also the ante's law requirements should be met. Dental implants were originally used for treatment of edentulous patients and are associated with improved denture retention, stability, and functional efficiency. Due to their high success rate and predictability their use in the rehabilitation of partially dentate and edentulous patients is increasing year by year.

II. MATERIALS AND METHODOLOGY:

The survey was conducted through a printed questionnaire composing of 11 questions with the intention of evaluating dental implant awareness among the people of Visakhapatnam in the year 2018. A random sampling with the convenient sample size was used. The questionnaire was prepared in English. People who are illiterate and those who are unable to understand the English



language the questionnaire was explained and the answers were noted. The questionnaire were handed to the people at

- ✓ KIIMS icon general hospital during their regular visit
- ✓ People working in Aurobindo pharmacy
- ✓ Gayathri vidya parishad engineering college students
- ✓ Household people

Most of the information was collected from common people.

INCLUSION CRITERIA:

Adults with the age group of 24-45 years of age
Those who are willing to participate in the survey

EXCLUSION CRITERIA:

People who are seriously ill / terminally ill
Mentally challenged people
People who are willing to participate in survey

QUESTIONNAIRE

NAME:

AGE:

GENDER:

EDUCATION:

OCCUPATION:

- 1) Do you have any missing teeth?
 - a. Yes
 - b. No
 - c. Don't know
- 2) Do you know about dental implants as an option to replace missing teeth?
 - a. Yes
 - b. No
- 3) Where did you get the information about dental implants?
 - a. Family
 - b. Dentist
 - c. Friends
 - d. Magazines and newspaper
 - e. Radio and TV
 - f. Internet
- 4) Do you want to know more information on dental implants?
 - a. Yes
 - b. No

5) Where do you think dental implants are placed?

- a. In the Gums
- b. In the bone
- c. With neighboring Teeth
- d. Not sure

6) How long do you think a dental implant lasts?

- a. life time
- b. more than 10 years
- c. <5-10 years
- d. not sure

7) Do you think implants need special care and oral hygiene maintainance?

- a. Much more than natural teeth
- b. Less than natural teeth
- c. Same as natural teeth
- d. No special care is required

8) Do you think cost factor is the main disadvantage of dental implants?

- a. Yes
- b. No

9) Would you go ahead and restore missing teeth with dental implants?

- a. Yes
- b. No

All the answers are recorded and the statistical analysis is carried out

III. RESULTS:

Of all the 1000 subjects, 32% people has missing teeth. Only 19% of the subjects know that the dental implants as the treatment option for missing teeth. The subjects has given the report most of the information about the implants was known from their friends and family members followed by the source of information from internet and then from dentist. 63% of the participants are interested to know the information about the dental implants. When the subjects were asked about the placement of dental implants only 43% subjects has given the answer that they were placed in bone and 23% has given that they are placed in gums. 59% people has given the report that longevity of the dental implants for life time and 38% has given the report that they last for upto 10 years. 85% of the people are willing for dental implants, but 91% of the subjects has reported that the cost factor is the main disadvantage of dental implants.



IV. DISCUSSION:

The prevalence of dental implants in today's dental practice is increasing. Among various alternatives to replace missing teeth, 63% of respondents in our study heard about dental implants. In a study done by ¹Pommer *et al.*, the prevalence of patients knowing about dental implants was 74%. The awareness rate about dental implants was found to be less than that of Malaysian population (81%)³, Saudi Arabian population (66.4%)², Norwegian population (70.1%)⁴, but it is found to be higher than some studies in India (33.3% aware about dental implants)⁶

The level of subjective and objective information was not closely matching as more than half of the respondents said that they knew about implants, but when they were asked objectively regarding implant recipient site, only 43% quoted jawbone as the site of implant placement which was coincided with study done by ⁷Awooda *et al.*, with 25.5% patients quoting jawbone as the site for placing implants. This objective knowledge was found higher in Austrian population (65% citing the jawbone)⁵ and Saudi Arabian population (49.9% quoting jawbone)²

It was found that there is poor public relation of dentists in terms of implant knowledge as very less (16% of total respondents) patients said that they had gotten information from dentists, rather many (33%) attributed friends as their source of information which has been matched with the Asian study conducted in Saudi Arabia with similar results (28.3% via dentists and 31.5% via relatives and friends)². In the present study, newspaper was quoted as another source of information about dental implants by 9% of the respondents. This finding is in contrast to the ⁵Austrian study where dentists were major source of information, followed by friends and printed media. The reason may be inadequate emphasis given to dental implants in the printed and electronic media in our country. ⁸Rustemeyer and Bremerich found that family dentists were primary source of information (41% of patients) in German patients, followed by the internet (25% of patients). Our findings correlate to a very old study, in which media and friends accounted for major source of information (77%) in contrast to dentists (17%). This would suggest that there is need for strong efforts from multiple stakeholders alongside dentists to raise awareness about dental implants among general population.

Asked about care and maintenance, 46% respondents reported that they need same care as natural teeth, 38% of respondents in our study think that implants need more care than natural teeth and 15% think that it requires less care which shows the

lack of knowledge about the maintenance of dental implants which was closely matched to the findings of the study done by Rustemeyer and Bremerich⁸.

In the current study, many respondents (59%) think that implant lasts forever which shows the unrealistic expectations. It is in contrast to the findings of Sudanese (19.3%) and Turkish (33%)⁹ studies. The attitude toward dental implant was found very high in our study with 85% showing interest to know more about implants. This is in agreement to Sudanese (93.2%)⁷ and slightly higher than that of Saudi Arabian (82.4%)² and Turkish (68.3%)⁹ study. 91% of the subjects has given that cost factor is the main disadvantage of dental implants which was coincided with the study done by ¹Tepper *et al.* where cost factor is the main disadvantage of dental implants.

Conclusion: Awareness about the implants to be imparted to the people. As many of the people got to know from their friends and relatives about the dental implants which may be due to poor relationship between the dentist and the common people.

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