



## Knowledge and awareness of dental implants: A survey done among patients visiting to s b Patil dental college and hospital Bidar

\*<sup>1</sup> Dr. Md Imran Ul Haque, <sup>2</sup> Dr. Rajkumar

<sup>1</sup> Assistant Professor, Department of Prosthodontics, SB Patil Dental College and Hospital Bidar, Karnataka, India

<sup>2</sup> Professor, Department of Prosthodontics, SB Patil Dental College and Hospital Gulbarga, Karnataka, India

### Abstract

**Background:** Currently, dental implants are widely accepted as a prosthetic treatment of completely or partially edentulous patients. To assess awareness of Dental Implants as a treatment modality among people visiting S B Patil Dental College & Hospital, Bidar.

**Methodology:** A cross sectional survey was conducted among 114 patients visiting S B Patil Dental College & Hospital, Bidar using a self-explanatory questionnaire.

**Results:** Out of the 384 dental patients, only 40.4% had heard about dental implants as a treatment modality, most of them being in the age group of 17- 60 years (44.73%). 25.4% had heard it from their dentist and the rest had heard it from other sources like internet and friends. 18.4% of the people were willing to undergo the treatment if needed and 75.3% cited high costs as the main reason for refusal of the treatment.

**Conclusion:** Most of the studied subjects were not having information regarding implants. It showed need for providing more information to the patients about this treatment modality.

**Keywords:** dental implant, awareness, high cost

### 1. Introduction

The aim of modern dentistry is to restore the patient to normal function, aesthetics, speech and health. Implants are unique because of their ability to achieve these ideal goals. Currently, dental implants are widely accepted as a prosthetic treatment of completely or partially edentulous patients.<sup>1, 2</sup> Dental implants have improved denture retention, stability, functional efficiency, and quality of life. Implant are elective procedure in most of the cases.<sup>3</sup> so complete information on implant treatment and other alternative therapies must be provided to guide the patient in choice of the most appropriate option.<sup>4</sup> Little information is available to patients regarding the procedure and its success. This problem is more in developing nations where there is lack of education and awareness amongst people about dental implants as a dental treatment modality. Therefore, complete information on implant treatment must be provided to guide the patient in the choice of the most appropriate option. Therefore the aim of the present study was to assess the awareness of dental implants as a treatment modality for replacement of missing teeth amongst people visiting S B Patil Dental College & Hospital, Bidar (Karnataka State )

### 2. Methodology

A descriptive cross sectional study among adult patients attended outpatient clinics in SB Patil Dental College and

Hospital, Bidar. Data was collected who met the following criteria were involved:

1. Adults 18 year or more;
2. Not inpatient; and
3. With no previous dental implant.

#### Excluded were

1. Very old uncooperative patients; and
2. Children and mentally or physically disabled.

A total of 384 participants fulfilled the required criteria during study period were surveyed. They were selected by non-probability convenience sampling technique (as it is difficult to determine the frame and total number of targeted population). The relatively large sample size, the hospital where the study was conducted (ABRDC) with some limitations, assumed representing the patients from the whole Division. Closed ended questionnaire was constructed with a total of 22 items in five sections designed to assess the patient's acceptance, awareness and knowledge about dental implants as a treatment modality for replacement of missing teeth. Demographic data, socioeconomic status and level of education were assessed. The questionnaire was prepared trilingually (Kannada, English and Hindi) to correspond with the reading and comprehension levels of patients with different levels of education. Eligible illiterate patients were

interviewed. It took 7-10 minutes to answer all the questions and it filled in the waiting hall of outpatient clinic. A pilot study was conducted among a sample of 25 patients (fifteen literate patients by self-administered and ten illiterate by interview) by using the structured questionnaire to ensure comprehensibility and reliability. These 25 questionnaires were not included in the final study. The collected data was cleaned, coded, entered in master sheet and analyzed by Statistical Package for Social Sciences SPSS, software. Chi-square test was used to compare two categorical data in contingency table. Frequency tables were used to determine the proportion level of variables among surveyed patients, with the Level of significance set at  $P = 0.05$ .

### 3. Results

Out of the total participants females were slightly predominant than males. About 65% of participants were in the age group of 17-27 and 28-38 year. Patients education status was also included, 91.1% of the patients had some kind of formal education.

**Table 1:** Summarizes the demographic structures of the interviewed population

	Year	No.	Percentage
Age	17-27	126	32.8%
	28-38	135	35.2%
	39-40	59	15.4%
	50+	64	16.7%
Gender	Male	181	47.1%
	Female	203	52.9%
Education level	Illiterated	34	8.9%
	Basic school	71	18.5%
	Secondary school	110	28.6%
	Graduate	159	41.4%
	Postgraduate	10	2.6%

When assessing the level of knowledge in using different approaches in replacing missing teeth, 83.3% were aware about removable dentures and fixed partial dentures and 68.5% were aware about dental implants. Only 34.6% of the respondents know the difference between the implants and other conventional treatments and 33.1% think implant is more successful than other treatment modalities. The main source of information about implants were relatives and friends (38.2%) followed by dentist (35.7%), the percentage of other sources were displayed in (fig 1).

About 93.2% of those questioned were interested in having more information about dental implants while 6.8% were not. To assess the level of general knowledge about dental implants; a question about the site of implant placement in the oral cavity, 53.1% of the sample did not know where the dental implants are placed comparing to 25.5% who thought that it is placed in the jawbone.(Table 2).

**Table 2:** Respondent’s knowledge regarding intraoral site of implant.

Where in the oral cavity do you think the dental implant is placed?	Percentage
In the jaw bone	25.5%
In the gum	17.7%
On the neighboring teeth	3.6%
I don’t know	5.3%
Total	100%

Concerning oral hygiene in the care of implants, 49.7% said that implants should be cleaned similar to natural teeth. 6.8% said it needs more care than natural teeth, while 6.3% said it needs less care than natural teeth and 37.2% don’t know about it. With regard to the durability of implants, 56.8% don’t know for how long the implant last and 19.3% think it last forever. 7.3% think it last more than 10 years and 10.7% said less than 5 years. The majority of the patients (97,37%) will not choose dental implant for teeth replacement because of lack of information and 29.1% think it’s very expensive (Table 3). And when participants were asked to rate the treatment charges which are involved in dental implant procedure, more than half (52%) didn't know, while 33% felt that it is not affordable. On the other hand, 41.9% of the participants didn't know who is opt for dental implant, and 34.1% felt that implant is expensive and only for rich people

**Table 3:** Respondents not had taken dental implant as treatment option for replacing missing teeth.

Reasons for not tacking dental implant as a treatment option for replacing missing teeth despite the advice by the your dentist	Frequency	Percent
Very expensive	23	29.1%
Take long time	3	3.79%
Fear	11	13.9%
Needs surgery	12	15.19%
lake of information about implant	30	37.97%
Total	79	100%

The association between patients educational level and knowledge about dental implant as treatment option for replacing missing teeth is statistically significant with the  $P$ -value = 0.000

### Conclusion

This study showed that only 40.4% of subject had information about dental implants and this information was provided to them mostly by dental professionals (25.4%). This clearly indicates creating awareness among the people regarding dental implants. Patients who were not opting for dental implant as a treatment the main limiting factor was high cost. As this survey was performed in a limited population, further

detailed surveys are needed to learn more about awareness of dental implant.

## References

1. Pommer B, Zechner W, Watzak G, Ulm C, Watzek G, Tepper G. Progress and trends in patients' mindset on dental implants. I: level of information sources of information and need for patient information. *Clin Oral Implants Res.* 2011; 22(2):223-9.
2. Zimmer CM, Zimmer WM, Williams J, Liesener J. Public awareness and acceptance of dental implants. *Int J Oral Maxillofac Implants.* 1992; 7(2):228-32.
3. Berge TI. Public awareness, information sources and evaluation of oral implant treatment in Norway. *Clin Oral Implants Res.* 2000; 11(5):401-8.
4. Tepper G, Haas R, Mailath G, Teller C, Zechner W, Watzak G, *et al.* Representative marketing-oriented study on implants in the Austrian population. I. Level of information, sources of information and need for patient information. *Clin Oral Implants Res.* 2003; 14(5):621-33.
5. Chowdhary R, Mankani N, Chandraker NK. Awareness of dental implants as a treatment choice in urban Indian populations. *Int J Oral Maxillofac Implants.* 2010; 25(2):305-8.
6. Suprakash B, AR Yusuf Ahammed, Amit Thareja, Raghuvendrs Kandaswamy, Nilesh kumar, Sarvesha Bhondwe. Knowledge and attitude of patients towards Dental Implant as an option for replacement of missing teeth. *J Contemp Dent Pract.* 2013; 14(1):115-118.
7. Johany SA, Zoman HA, Juhaini MA, Refeai MA. Dental patients' awareness and knowledge in using dental implants as an option in replacing missing teeth: A survey in Riyadh, Saudi Arabia. *Saudi Dent J.* 2010; 22:183-8.
8. Saha A, Dutta S, Vijaya V, Rajnikant N. Awareness among patients regarding Implants as a treatment option for replacement of missing teeth in Chattisgarh. *J Int Oral Health.* 2013; 5(5):48-52
9. Best HA. Awareness and needs of dental implants by patients in New South Wales. *Aust Prosthodont J.* 1993; 7:9-12.
10. Naert I, Koutsikakis G, Duyck J, Quirynen M, Jacobs R, Van Steenberghe D. Biologic outcome of implantsupported restorations in the treatment of partial edentulism. Part I: a longitudinal clinical evaluation. *Clin Oral Implants Res.* 2002; 13(4):381-9.
11. Naert I, Koutsikakis G, Quirynen M, Duyck J, van Steenberghe D, Jacobs R. Biologic outcome of implantsupported restorations in the treatment of partial edentulism. Part 2: a longitudinal radiographic study. *Clin Oral Implants Res.* 2002; 13(4):390-5.
12. Zitzmann NU, Sendi P, Marinello CP. An economic evaluation of implant treatment in edentulous patientspreliminary results. *Int J Prosthodont.* 2005;18(1):20-7
13. Guyatt GH, Cook DJ. Health status, quality of life, and the individual. *J Am Med Assoc.* 1994; 272(8):630-1.