



AWARENESS AND ATTITUDE OF PATIENTS REGARDING DENTAL IMPLANTS AS A TREATMENT MODALITY, AT KALOL TOWN, GUJARAT.

Dental Science

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ABSTRACT

Aims: The purpose of this survey was to know awareness and attitude of patients regarding dental implants as a treatment modality, at Kalol Town, Gujarat. **Methods and Material:** A cross-sectional study was conducted amongst 400 patients over a period of 2 months. A self-explanatory questionnaire with informed consent was given to the patients above the age of 18 years on their routine dental visit. Statistical analysis used: The collected data was analysed by using SPSS 20 software. **Results:** Out of 400 patients, 234(58.5%) were males and 166(41.5%) were females, 256(64%) subjects knew about dental implants. In 216(54%) patients, dentists were the main source of information about dental implants and the rest had heard it from other sources like newspapers 80(20%) and friends 58(14.5%). Among them 208(52%) patients were willing to undergo the treatment if needed. **Conclusions:** The survey concluded that an acceptable number of patients had heard of dental implants as a treatment option for replacing missing teeth, with dentists being the main source of information.

KEYWORDS

Awareness, Dental Implants, Patients, Survey

INTRODUCTION

The aim of modern dentistry is to restore the patient's normal function, aesthetics, speech and health by different modalities. Implants are unique because of their ability to achieve these ideal goals. Currently, dental implants are widely accepted as a treatment option for completely or partially edentulous patients.^{1,2}

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.^{3,4}

The treatment of edentulism with traditional removable dentures is less accepted due to many factors like anatomical, physiological, psychological and also Prosthodontic factors like it can often induce impaired masticatory function due to limited retention and stability, especially in the lower jaw.⁵ Implant treatment has come into focus since this treatment option has provided excellent long term results by increased retention, stability, functional efficiency and quality of life.⁶

As it is an elective procedure in most of the cases so complete information on implant treatment and other alternative therapies must be provided to guide the patient in choice of the most appropriate option.⁷ Source of information plays a key role in improving the level of awareness of dental implants which can be provided by various means.

As India is still considered as a developing country, in towns with people having low levels of awareness regarding dental implants and their uses, there is paucity of information regarding the awareness of patients about dental implants in this country. Considering this, a study was conducted with an aim to know awareness and attitude of patients regarding dental implants as a treatment modality, at Kalol Town, Gujarat.

SUBJECTS AND METHODS

A questionnaire based survey was conducted among 400 patients attending dental clinics, at Kalol town, Gujarat over a period of 2 months. All the patients visiting dental clinics and who were willing to give informed consent and above the age of 18 years were included. A self-explanatory questionnaire was designed to assess the patient's knowledge and awareness about dental implants.

The questionnaire of 11 MCQs were handed to patients during their regular dental visits. They were informed about aims and objectives of the study. Questionnaire was prepared both in English and Gujarati (local language) to get better understanding of questions by the patients.

Questionnaire

Patient's name:
Gender: Male / Female
Age: a. 21-40 years

- b. 41-60 years
c. 60-80 years
d. 80 years & above

Education:

- a. illiterate
b. Up to high school
c. Up to graduation
d. Up to post graduation and above

1. Do you have any missing teeth? : Yes/ no
2. If yes what is the cause of it?

- a. extraction
b. shedding
c. congenitally missing
d. don't know

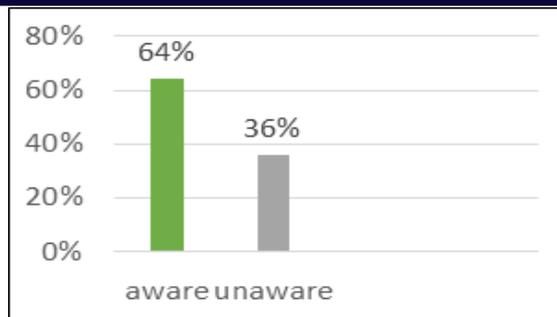
3. Have you heard of Dental Implants? : Yes/ no

4. Do you know that implants can be used for replacement of missing teeth? : Yes / No

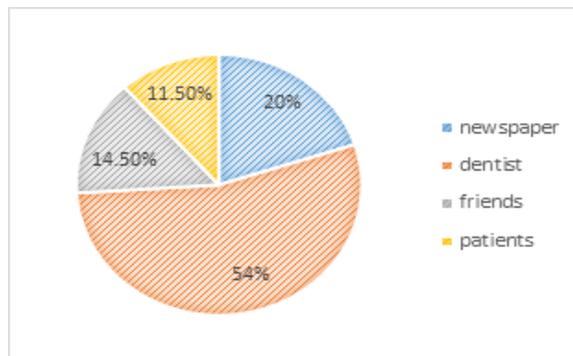
5. What were your first sources of information about implants?

- a. Newspaper/television
b. Dentist
c. Friends
d. Patients

6. Where do you think dental implants are placed?
- In the jawbone
 - In the gums
 - In / on the neighbouring teeth
 - Don't know
7. What do you think is the main advantage of dental implants as compared to other tooth-replacement modalities like removable/fixed partial denture?
- Aesthetics; looks nicer
 - More conservative; does not require any adjacent tooth reduction
 - Longevity; lasts longer
 - No additional advantage
8. Do you feel that dental implants require additional oral hygiene maintenance and care?
- No, are cleaned like natural teeth
 - Yes, need more care than natural teeth
 - No, need less care than natural teeth
 - Do not know
9. How long do you think a dental implant lasts?
- 5 years
 - 10 years
 - Up to 20 years
 - Lifetime
10. Up to which amount are you prepared to pay as an additional payment for implant?
- Rs. 6000-10000
 - Rs. 10000-15000
 - Rs. 15000-20000
 - Rs. 20000-25000

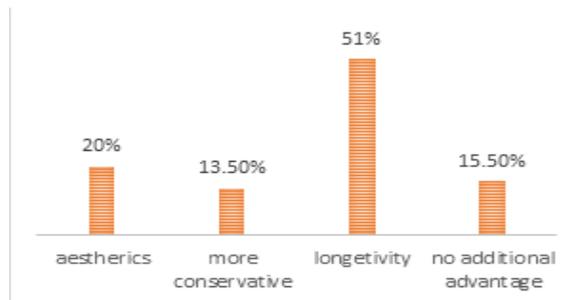


Graph 1: awareness of implant



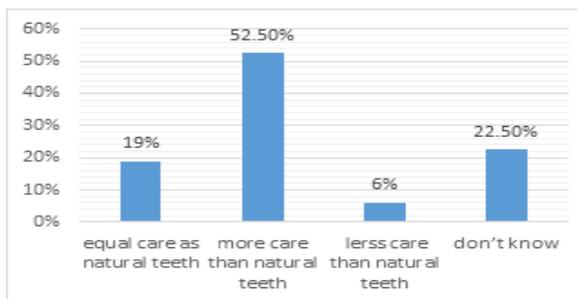
Graph 2: Source of information about implants

According to this study 51% of patients believed that the main advantage of dental implants as compared to other tooth replacement modalities like removable or fixed partial denture was its longevity that implants lasts longer and 20% patients felt that implants had better aesthetics over other tooth replacement modalities.(Graph 3)



Graph 3 Main advantage of dental implants

When patients were asked about oral hygiene maintenance and care required for the dental implants 52% of patients believed that implants require more care than natural teeth.(Graph 4).



Graph:4 oral hygiene maintenance and care required for dental implants.

Almost half of the patients (52%) were willing to opt for dental implants while remaining (48%) refused the dental implants and wanted to go for alternative options.

11. Would you like to get implant treatment if NEEDED?: YES / NO

STATISTICAL ANALYSIS

The collected data was analysed by using SPSS version 20. Descriptive statistics were employed and results were presented as percentages. Tests of association between variables were conducted using chi square test, with the level of statistical significance set as p < 0.001.

RESULTS

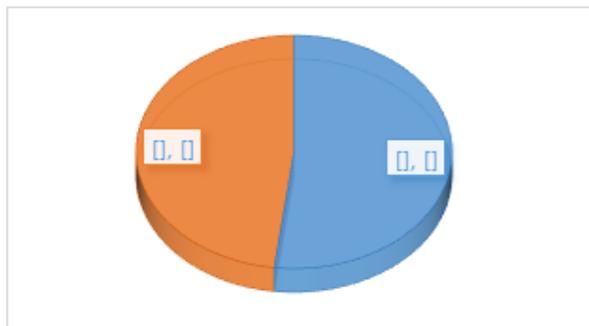
All the 400 questionnaires were collected and analyzed. Demographic data of the patients (Table 1), out of total patients 234 (58.5%) were males and 166 (41.5%) were females. Nearly half of the patients were in the age group of 21 to 40 years. Patient education status was also included in our demographic data. Almost half of the patients completed secondary education.

Table 1: demographic data of the study

Demographic data (n=400)	Factor	No.(%)
Gender	Male	58.5%
	Female	41.5%
Age	21-40 years	46%
	41-60 years	44%
	60-80 years	8.5%
	80 years & above	1.5%
Education	Illiterate	2.5%
	Up to high school	41%
	Up to graduation	36.5%
	Up to post graduation & above	20%

Out of 400 patients 128 had heard about dental implants, around 64% of patients were aware about dental implants.(Graph 1) For most of them dentist being the main source of information 54% followed by newspapers 20%.(Graph 2).

(Graph 5). Around 39% of patients are not ready to pay more than 10,000 Indian rupees for dental implant treatment.



Graph: 5 Acceptance of implant as a treatment modality

DISCUSSION

Dental implant treatment has been at the forefront of clinical dental practice for over a decade now. With increasing success rate of dental implant treatment more patients are opting implants as premier choice for replacement of missing teeth. Around one million dental implants are inserted each year, worldwide. However information which is available to the patients regarding the procedure and its success, is often fragmentary.

This survey noticed that 64% of the subjects were aware of dental implants. However the findings were lower than studies conducted by Zimmer et al, (1992), Berge, (2000), and Tepper et al, (2003) which reported the level of awareness as 77%, 70.1% and 72%, respectively.^{8,9,10} This might be because this survey is done at town level. Whereas Chowdhary R et al had shown lower results among Indian population (2010) & Suprakash et al (2013).^{11,12}

According to Pommer et al., in Austria, there was, over the course of 5 years, a dramatic escalation in interest of implant treatment. At the time of the second survey (2008), 79% of participants expressed desire for implant treatment in comparison with 56% in the first survey (2003).¹³

A survey from Sweden in 1999, reported a histrionic rise in interest of implant treatment to 95% over a period of 10 years. Zimmer et al in 1992 demonstrated a high awareness rate as well as general positive attitude toward oral Implantology.

Dental professionals were the most common source of information about dental implants (54%). This finding was similar to study done by Johany SA et al (2010), Choudhary et al (2010), Saha A et al (2013) which also stated that most of the people got to know about implants by the dental professionals. However studies conducted by Zimmer et al, (1992), showed that media was found to be the main source of information about dental implants. Similarly Berge (2000)⁷ and Best (1993)¹³ also observed media as first source followed by dentists.^{14,15} In a survey conducted in Ahmedabad city, Gujarat 69.35% had heard about dental implants from dentists.¹⁶

The study results reveal that patients in India get to know about the treatment modality only when they visit a dental office as compared to other countries where media plays a important role. In India private practisioners are more than dental hospital chains who advertistise.

When question asked about maintenance and care of implants 52.5% patients feel that implants need more oral hygiene maintenance and care compared to natural teeth.

When question asked about how much amount the patient are prepared to pay as an additional payment for implant. Majority (61%) of patients are not prepared to pay more than 10000 RS for implant so the high cost is also a reason for not accepting implant treatment. The high costs of the implant indicated that there is a need for dental insurance to cover this option of treatment for better and more acceptance of implant amongst the people.

CONCLUSION

The survey concluded that an acceptable number of patients had heard of dental implants as a treatment option for replacing missing teeth, with dentists being the main source of information thus indicating the importance of clinicians in spreading awareness among common

people. As most of the patients found dental implants treatment to be expensive and unaffordable efforts should be made to reduce the cost of dental implants to a more affordable rate.

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