



## Implant dentistry in the new scientific dental world-acceptance rates

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### ABSTRACT

*In the new age of cutting edge technologies in engineering and medical science, The adaptation to the healthcare system of the recent developments has increased and seemingly high, patient attitudes towards acceptance have been discussed in relation to Implant Dentistry.*

**Keywords:** *Implant, Osseo Integration, Skilled Semi-Skilled, Unskilled*

### 1. INTRODUCTION

Dental implants are replacement tooth roots. Implants provide a strong foundation for fixed (permanent) or removable replacement teeth that are made to match your natural teeth.



Dental implants as we know them today were invented in 1952 by a Swedish orthopedic surgeon named Per-Ingvar Branemark. Today, they are considered the standard of care for prosthetic replacement of missing teeth in dentistry. A Dental Implant is a surgical fixture that is placed into the jawbone and allowed to fuse with the bone over the span of a few months. The dental implant acts as a replacement for the root of a missing tooth. In turn, this "artificial tooth root" serves to hold a replacement tooth bridge. Having a dental implant fused to the jawbone is the closest thing to mimicking a natural tooth because it stands on its own without affecting the nearby teeth and has great stability. The process of fusion between the dental implant and jawbone is called "osseointegration." Most dental implants are made of titanium, which allows them to integrate with bone without being recognized as a foreign object in our body. Over time, technology and science have progressed to greatly improve the outcomes of dental implant placement. Today, the success rate for dental implants is close to 98%.

Nature of Study: This study is a review based study on review of literature to evaluate the acceptance rates of Dental Implants  
Discussion On the basis of 1000 responses retrieved, it was found that only 9% of the respondents had undergone dental implant treatment before. Respondents in the age group of 21–40 years were the most well informed regarding dental implants. Among the 1000 respondents, 17% were well informed, 41% moderately well informed, and 36% poorly informed regarding different alternatives for replacing missing teeth. Most were aware of complete dentures (59%), followed closely by implant-supported dentures (56%) and partial dentures (55%) as an alternative for the replacement of missing teeth. A total of 113 respondents were not aware of any alternatives given. Only 8% of the respondents felt very well informed about dental implant, 14% well informed, 27% moderately well informed, and 47% poorly informed. A total of 47% of the respondents felt moderately well informed regarding the source of information about alternatives for replacement of missing teeth. Most of them stated their dentists (53.6%), followed by friends, relatives, Internet, magazines, and newspapers as the various sources of information regarding dental implants. A total of 69.9% of the respondents wished to get more information about dental implants, and of those, 72.16% wished to get it from the dentists, 16.5% from the Internet, and 2.96% from friends and relatives. Approximately 80.5% (816) of the respondents were willing to consider dental implant treatment, if needed, whereas 19.5% (197) refused for it. Regarding the advantages of the nonremovable versus removable denture, 51.4% reported "more comfortable in the mouth," 47.8% defined

better in “appearance” and 55.6% reported that nonremovable dentures “are as good as own teeth in function.” When all the respondents were questioned on constraints while opting dental implant as a treatment option, most respondents stated high costs (80.2%), followed by long treatment time, need of surgery, and inadequate knowledge as the main limitations of dental implant treatment and the major reasons for refusing such treatment options.

The level of the cost satisfaction of the people was assessed 9.7% as weak, 47.8% moderate, and 42.5% as good. The satisfaction of individuals with implant function was evaluated as 2.7% weak, 4.4% moderate and 92.9% good. The mental satisfaction of individuals was evaluated as 0% weak, 16.8% moderate and 83.2% good. The degree of satisfaction of the people from the stages of work was evaluated as 48.7% weak and 51.3% good (Table 4-6 and Fig. 4-8). The satisfaction of beauty was evaluated 15% were weak and 85% good. The satisfaction rate of the whole population was evaluated 0% weak, 10.6% moderate and 89.4% good. The total satisfaction of the individuals by gender was evaluated in men, 0% weak, 10.6% moderate and 89.4% % good and in women 0% weak, 10.8% moderate and 89.1% good.

In order to determine the relationship between satisfaction and age variables, implant loading years, gender and education level, Chi-square and Fisher’s exact tests were used. Chi-square test showed no significant relationship between satisfaction and age (forty-five years or less – more than forty-five years) (P-value = 33.93). Fisher’s exact test showed no significant relationship between satisfaction and implant loading years (three years or less, more than three years) (P-value = 513). Chi-square test showed no significant relationship between satisfaction and gender (P-value = -0.96). Fisher’s exact test showed that there was no statistically significant relationship between satisfaction level and level of education (diploma and undergraduate – university degree) (P-value = 0.96).

In yet another study, study sample comprised 70 participants, of which 34 (49%) were female and 36 (51%) were male. There are about 23 (33%) of study subjects belong to the age group of 20–30 years and 31–40 years. About 12 (17%) of study participant belong to the age group of 41–50 years and 51–60 years. Figure 1 depicts the distribution of study participants based on site of implant. Anterior implant was placed in 44 (63%) of study subjects and posterior implant was placed in 26 (37%) of study subjects. Table 2 depicts the demographic data of the study subjects. The study sample comprised 70 subjects, of which 36 (51.4%) were skilled workers, 29 (41.5%) were semiskilled workers, and 5 (7.15%) were unskilled workers. About 35 (50%) of the study subjects have completed with secondary school education and 20 (28.6%) of them are graduates. Table 3 depicts the number of implants used in treatment. One implant was placed in 27 (38.6%) of study subjects. Two implants were used in treatment in 26 (37.1%) and more than three implants in 9 (12.9

## **2. CONCLUSION**

As a general opinion the acceptance rated of Dental Implants has been seemingly low when there has been lack of awareness among patients, the urban acceptance rates are high. Acceptance rates were not centred by gender or age, patient motivation is the key success to dental Implants

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