

Evaluation of Public Awareness, Knowledge and Approval of Oral Implant Treatment: A Cross Sectional Study

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ABSTRACT

Presently, dental implants are favorable treatment alternatives for completely or partially edentulous patients. Research has reported substantial improvement in attitude of patients toward dental implants, however in developing nations with poorer access to dental care, acceptance of this treatment alternative isn't yet completely known. Objective: A survey from a representative sample of Indian population was made to assess the level of public awareness, sources of information, need for information and expectations from dental implants in semi urban southern part of India. Dentists were the biggest source of information and majority of the patients were not aware of the procedure, duration of treatment and expenditure involved. After receiving the

complete information about the procedure, majority were willing for the treatment and expected improved chewing efficiency. Conclusion: This research showed that the public is not completely aware of implants as an appropriate treatment choice for replacing missing teeth, and don't have complete information about procedures. Revealing a need disseminate relevant information to the public.

KEYWORDS - Dental implants; Behavior; Awareness; Knowledge.

INTRODUCTION

Dental implant is structure analogous to root of a tooth. Embedded in the bone it is the receptacle for prosthetic replacements and is an ideal option for people with reduced dentition. Restoring functional, aesthetic and psychological well-being of an individual, implant supported prosthesis aid in preservation of remaining healthy natural dentition and adjacent periodontal tissues.¹ Around one million implants are inserted each year, worldwide. Dental implants are widely accepted and popular within the dental community. However, the information which is available to the patient regarding the procedure and its success is often fragmentary. With patients having little or incomplete knowledge about the treatment and its use. The researchers from Himachal Pradesh in India⁵ and Australia⁶ have shown that dental implant therapy awareness rates in selected patient are approximately 47% and 64%, respectively. A survey study from Austria⁷ found that 72% of dental patients had awareness of dental implant procedures and 42% said that they had no knowledge about them, whereas only 4% of dental implant patients were well informed. The study concluded that information on general dentistry was slightly greater than information on implant dentistry. Source of information is an important aspect in improving and increasing the awareness about dental implants. It can be provided by numerous mediums like audio-visual or print media, internet, dental professionals etc. With communication industry highlighting the medical and dental failures, without proper information patients are ill informed and this may affect their acceptance of the treatment. Requiring the implementation of steps on the part of dental practitioners to spread the correct information. Research has reported substantial improvement in attitude of patients toward their dental health after treatment with implant prostheses.⁸ Information on public awareness and evaluations of oral implants will give valuable contributions to ability and distribution planning for the future treatment provision, in the sense of public health policies, particularly in proportions of the public who would consider this form of treatment for themselves if necessary. This study focuses to assess the level of public awareness, sources of information, need for information and expectations from dental implants as treatment option among a selected sample of dental patients in semi urban city of southern part of India.

KNOWLEDGE AND AWARENESS DENTAL PATIENTS

For some patients, oral health care consist solely of maintenance of teeth and gums, whereas for others, it also include impact on aesthetics, self-esteem and interaction with others. Loss of natural teeth is a debilitating and irreversible condition and is described as -final marker of

disease burden for oral health, leading to functional, cosmetic and psychological morbidities. In order to diminish these problems, various attempts made to replace the lost dentition resembling natural teeth. Dental implants are stronger, functionally effective and more durable than bridges and dentures. Public awareness of dental implants was found to be high in the US citizens in 1992. But low level of awareness was seen in Malaysian population. In our scenario, there is limited literature regarding status of knowledge and awareness of dental implant.

PUBLIC AWARENESS, KNOWLEDGE, ATTITUDE AND ACCEPTANCE OF DENTAL IMPLANTS

The use of dental implants for the replacement of missing teeth has been increased by leaps and bounds ever since the concept of Osseo integration has been identified and accepted. Recent publicity about the benefits of implant dentistry has generated considerable interest among dental professionals and the public. The literature on dental implants suggests that majority of patients treated with implant-supported prosthesis have reported improvement in their quality of life and self-confidence, along with psychological benefits. Moreover, the awareness of good general health, dental health, and nutrition has led to longevity of life of humans. Thus, there lies a need to replace the missing teeth with a focus on function as well as esthetics. Although the missing teeth can be replaced by removable and fixed prosthesis, there are a few disadvantages with both. Furthermore, the rate of acceptance of removable prosthesis is minimal in both the young as well as the older individuals, and fixed prosthesis requires the sacrifice of the adjacent teeth to be replaced. Most of the studies on the awareness of dental implants in various parts of India and other countries suggest the use of dental implants in the rehabilitation of partially edentulous and completely edentulous patients in metropolitan cities and among the upper-middle class, rich, and educated people. Thus, the need of the hour is to assess the level of awareness, knowledge, attitude, and acceptance of dental implants as a treatment option for missing teeth even in developing cities.

The use of dental implants for the replacement of missing teeth has been increased by leaps and bounds ever since the concept of osseointegration has been identified and accepted. The use of dental implants for restorations has revolutionized patient care and has given solutions for those clinical conditions, wherein conventional prosthodontics has failed to give satisfactory outcomes. With the ever-aging population and with the increase in the lifespan of individuals, it is but natural that longer an individual lives, more are the chances of him/her losing their teeth. Moreover, due to these, the replacement of missing teeth becomes more important so as to restore the individual to form, function, and esthetics for the life. In the early years of implantology, dental implants were targeted at replacing the completely edentulous foundations. However, with the increased awareness of dental implants pertaining to its function and esthetics, more and more patients are opting for dental implant treatment even for the replacement of a single missing tooth. However, most of the studies on the awareness of dental implants in various parts of India and other countries suggest the use of dental implants in the rehabilitation of partially edentulous and completely edentulous patients in metropolitan cities

and among the upper-middle class, rich, and educated people. The need of the hour is to assess the level of awareness, knowledge, attitude, and acceptance of dental implants as a treatment option for missing teeth even in developing cities.

In the present study, 93.4% patients had heard about dental implants, majority of them between the age group of 26–45 years. Only 29.6% patients did opt for removable prosthesis, and the participants who opted for the same were in the age group between 46 and 65 years. This could be attributed to increased interest and awareness of advancement in dental technology among the younger generation. Thus, the age and level of education have influenced the findings of this research.

In the present study, 13.8% patients were very well informed, 41% were relatively well informed, while 39.6% patients were moderately well informed about dental implants. About 60% patients felt that dental implant treatment was better than fixed prosthesis. However, 52.4% patients were not willing to undergo dental implant treatment. About 80.4% patients stated that dental implants were costly and 60% patients expressed that only the rich could afford for it. Thus, having dental insurance would definitely raise the willingness of patients for receiving the dental implant treatment. Pertaining to the dental implant care and hygiene, 54.4% patients felt that implants are cleaned like natural teeth. Thus, dental implant hygiene and maintenance also needs to be emphasized.

PUBLIC AND PATIENT KNOWLEDGE

Dental implants are becoming increasingly commonplace in clinical practice as the **gold standard** for replacing missing teeth. However, the general public is often uninformed or misinformed regarding whom to consult for such treatment and the costs involved, as well as the procedures performed and the proper aftercare. Understanding what patients know about dental implants and where their knowledge comes from is important for translation into improved clinical care. The purpose of this study was to determine whether patients presenting for consultation regarding the placement of dental implants are more knowledgeable than members of the general public, whether the information they have regarding dental implants is correct, and the sources they may have used to obtain their information. It was hypothesized that whereas patients presenting for implant treatment will be relatively well informed about the procedure, those in the general public will be less knowledgeable.

A successful implant experience involves patients not only having an understanding of the procedure involved, but also being aware of the importance of their role in such factors as postoperative care and maintenance of proper oral hygiene. The treating doctor plays an important part in seeing that such information is provided to the patient. However, the more informed the patient is before being treated, the more likely these issues will receive proper attention. Thus, it is essential that the treating doctor have some idea of not only the prior knowledge that patients who come seeking implants have, but also the accuracy of that information. In addition, it is important that the doctor have some idea of the factors that may cause patients to reject the idea of implant placement. This study has attempted to address some

of these issues by comparing patients presenting for a screening appointment for dental implants with a group of patients not seeking implants.

It was evident from this study that a large percentage of people are now aware of implants as a means of replacing missing teeth; however, the fact that 25% of group I respondents were unaware of this indicates that there is still a need for greater education of the general public. There was also a significant difference in where informed people obtained their information about implants. The largest number of respondents in group II generally received their information from a dentist, whereas the primary source for group I was friends or relatives. The latter group also relied more on television than did group II. This finding has been reported in other studies.²⁻⁴ These sources of information could be the reason fewer group I respondents correctly answered 2 of the 3 knowledge questions on the questionnaire, and this means that treating doctors will have to spend more time on correctly educating such persons should they become implant patients. Although the choices on the questionnaire were limited, it is evident that cost is a major factor in why patients may decide not to have implants.^{3,5} The fact that the participants in this study were a dental school population—individuals who often seek such care for economic reasons—may have contributed to this finding. However, cost is still an issue that needs to be addressed. In addition to the cross-sectional nature of this study, a limitation was the use of dental school emergency patients as representatives of the general population. This potentially could have positively influenced some of the answers to questions about implant awareness, knowledge, and concerns about implant cost because these patients were also in the process of seeking dental care. However, the fact that they were less informed about implants and correctly answered fewer knowledge questions than group II would indicate that this was not a significant factor. It is clear that there is still a need to continue educating the general public about dental implants and that dental provider need to reinforce this information. Although this study showed that patients presenting for dental implants generally are better informed than the general public, the fact that even in this group, some were less knowledgeable than others indicates that there is still a need for public education.

CONCLUSION

Dental implants have been widely used in treating partially and completely edentulous jaws, which particularly increased with the acceptance of the concept of osseointegration and had been a fixed clinical treatment modality due to its high success rate. The survey conducted in a section of population of dental patients from Indian population showed low level of awareness about dental implants as a suitable treatment choice for replacement of missing teeth. Thus, highlighting that adequate awareness and correct information are the essential means to spread the information regarding implant. The study proved that the dentist plays an important role in this along with implementation of dental education programmes, which lay emphasis on the procedure, advantages, and possible complications, which can occur during implant placement. The study demonstrates lack of a program or policy for coordinated dental implant information

dissemination and shows that the dental professionals should be more proactive in sensitizing the public about the possible benefits of such treatment mode by disseminating correct information.

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