



Patients' Awareness toward Implant-supported Prosthesis: An Observational Study

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ABSTRACT

Introduction: Implant-supported prosthesis has high predictability and success and improves quality of life. This study aims at assessing awareness among the patients regarding implant-supported prosthesis.

Materials and methods: A cross-sectional study was conducted among 391 study participants. A structured questionnaire was distributed to assess implant-related awareness among the study participants. The questionnaires were analyzed for the responses.

Results: Among the 391 respondents, 37.5% of the respondents reported having moderate knowledge regarding the tooth replacement options. Nearly 50% considered implants as a viable treatment option. The majority of them enlisted the dentist as the major source of information regarding implants, and media had a share of about 7.03% only. High cost was a major barrier in selecting implants as a treatment option.

Conclusion: This survey showed that awareness among people was low regarding the dental implants. Efforts need to be directed to increase the awareness levels by utilizing media as a tool to achieve the target.

Clinical significance: A patient who is aware of the advantages of the implant-supported dentures will make an informed decision for better functional stability and retention of the denture, especially in the mandibular arch.

Keywords: Awareness, Implant-supported prosthesis, Knowledge.

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INTRODUCTION

Implant dentistry mainly deals with the replacement of lost teeth or congenitally missing teeth with artificial prosthesis, which mimics a natural root. The prosthesis can be used for single tooth replacement, for supporting complete denture, or even for obturators used in maxillectomy patients. Such prosthesis has the advantage of better associated quality of life and improved function of the patient.¹⁻³ High predictability and success rates have increased the associated clinical implications of this treatment modality.^{1,4}

Assessing the awareness of the people regarding implants helps in predicting better the felt need of the patients. Various studies have reported the awareness levels in different populations ranging from 42 to 79%.⁴⁻⁹ Recently, implant therapy has gained popularity and, hence, it is vital to assess the awareness levels among populations, so as to help them make informed decisions. Undergoing implant therapy has been reported to be a positive experience among many people and has improved their quality of life.^{8,9}

Implant therapy can be offered among patients with severely compromised local host bone, and it offers them improved phonetics and esthetics with good prognosis.^{10,11} Thus, the aim of this study was to assess the awareness levels among the patients regarding implant-supported prosthesis.

MATERIALS AND METHODS

A cross-sectional survey was conducted among the patients attending a dental outreach setting of the dental school. Random sampling technique was used to select the study

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participants, and a convenience sample of 400 study participants was used for the study. Consent was obtained from all the willing participants, and all of them were given a chance of refusal from participation. Ethical approval was obtained from the Institutional Ethics Committee prior to the start of the study.

A questionnaire was administered to all the willing participants in the local language. The questionnaire was adapted from the study of Kohli et al.⁷ All the responses were entered in an Excel sheet, and the descriptive statistics was calculated using Statistical Package for the Social Sciences version 17.

RESULTS

Among the 400 patients who were approached for the study participation, 9 refused to participate; so, the final sample was 391. The sample included 173 females and 218 males. Of the total responses retrieved, none of the participants had undergone implant therapy. Nearly 47.8% of respondents belonged to age group of 16 to 40 years and 31.7% belonged to the age group of 41 to 60 years.

About 60% of the respondents had completed high school. Nearly 68% of the respondents reported one or more missing teeth (Table 1).

None of the respondents had undergone implant therapy. Nearly 37.5% of the respondents reported having moderate knowledge and 50% reported having poor knowledge of available options of teeth replacement. Only 50% of the respondents were aware of implants as a treatment option. The dentist was reported to be the major source of implant-related knowledge and media was a source of information for 7.03% of the respondents (Table 2).

Nearly 91% of the respondents reported that they “would like to get more information regarding dental implants.” More than two-thirds of the respondents felt that the dentist would be a reliable source of information.

Table 1: Demographic and clinical characteristics of the study participants

Variables		Study participants (n)	Total sample (n)
Gender	Males	218	391
	Females	173	
Age (years)	16–40	187	391
	41–60	124	
	61 and above	80	
Education	High school	237	391
	College/graduation	126	
	University/postgraduation and above	28	
Presence of missing teeth	No missing teeth	123	391
	One or more missing teeth	268	

Table 2: Distribution of study respondents for various study questions

Variables		Study participants (n)	Total sample (n)
Have you had dental implant treatment before?	Yes	0	391
	No	391	
How well do you subjectively feel informed about alternatives of replacing teeth?	Very well	13	391
	Well	36	
	Moderately well	147	
	Poor	196	
	No answer	–	
Are you aware of the alternatives for missing teeth replacement?	Implant-supported dentures/bridges	199	391
	Partial dentures	387	
	Complete dentures	389	
	Bridges	387	
	None of the above	3	
Source of information regarding dental implants	Television/radio	14	199
	Internet	28	
	Dentist	99	
	Relatives/friends	22	
	Someone who has received an implant	36	

Table 3: Distribution of study respondents for various study questions

Variables		Study participants (n)	Total sample (n)
Would you like to get more information regarding dental implants?	Yes	356	391
	No	35	
From where would you like to get information about dental implants?	Television/radio	50	391
	Internet	59	
	Dentist	302	
	Relatives/friends	42	
	Someone who received an implant	38	
What do you think are the advantages of nonremovable versus removable dentures?	More comfortable in the mouth	364	391
	Better appearance	356	
	As good as own teeth during function	303	
What do you think are the disadvantages of implant-supported dentures/bridges?	High cost	330	391
	Lack of knowledge	346	
	Need of surgery	78	
	Long treatment time	109	

More than two-thirds of the respondents believed that fixed/nonremovable prosthesis will be “more comfortable in the mouth” and have a “better appearance.” For majority of the respondents, “high costs” and “lack of knowledge” were barriers to using implant-supported dentures/bridges (Table 3).



DISCUSSION

This study was conducted to assess the awareness and knowledge of implant-related prosthesis among the patients reporting to an outreach center. It was observed that the majority of the respondents who had heard about the implants belonged to the 16 to 40 years age group and had completed college or a higher level of education. This trend can be attributed to the interest among this age group toward advancements in dental technology. A study in Norway reported that people of 45 years and above with higher education were more aware of implants. These findings are similar to studies conducted by Saha et al,⁶ Kohli et al,⁷ and Chowdhary et al,⁸ where a similar trend was observed.

We found that nearly half of the study participants were aware of dental implants as a viable treatment option. These results are different than those reported by Berge¹² (70.1% awareness) and Zimmer et al⁹ (77% awareness). However, our findings are comparable to studies in the Asian context, which reported awareness levels in the range of 41.7 to 47%.^{6-8,10,13,14}

In this study, nearly half of the respondents were moderately informed to well informed regarding the options of replacement of missing teeth. This highlights the need to increase awareness among the people regarding implant-related treatment options. On analysis of the source of information for implants, the majority reported that the dentist was the main source of information, and media was the least reported source. These findings are similar to those reported by Pommer et al,⁵ Chowdhary et al,⁸ and Kohli et al.⁷ This emphasizes the need to utilize media through the medium of health magazines and articles to generate awareness among the population.

Nonremovable/fixed prosthesis was rated to be more comfortable and to have better esthetics and function by the respondents. On the contrary, high cost and lack of knowledge proved to be the major barriers to seek implant treatment. Similar findings are reported in studies conducted within and outside this country. These barriers can be lowered by providing patient education with special emphasis on the point that the benefits of improved quality of life outweigh the higher cost.

CONCLUSION

This survey showed that awareness among people was low regarding the dental implants. Efforts need to be directed to increase the awareness levels by utilizing media as a tool to achieve the target. Such an effort would help people be aware preliminarily about the viable treatment options, so that additional information can be

furnished at dentists' office to help them make informed decisions regarding their oral health.

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