

Assessment of Knowledge and Perception of Dental Implants among Undergraduate Dental Students: A Cross-Sectional Study

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ABSTRACT

Background: Dental implants are evolved as mainstream of replacement of missing tooth. The main factor of replacement of teeth is to maintain normal function, speech, Esthetic of the patient. This study was conducted aiming to determine knowledge and level of awareness about dental implants amongst the first- and second-year dental students of a tertiary Dental College.

Material and Methods: A total of One Hundred and eighty students of First and Second year BDS program were selected randomly for this study. One Hundred and eighty self-explanatory questionnaire forms which included 5 questions about implants were distributed among the students out of which 150 returned the completely filled questionnaires. Thus the results were calculated from the data collected from 150 students.

Results: In response to first question whether they know about implant therapy as a method of replacement of missing teeth, 142(94.6%) answered in a yes while 8(5.3%) said they don't know about implants. When asked about the knowledge regarding procedure of implant placements, 125(83.33%) answered in a yes while 25(16.60%) said they don't know much about the procedure of implant placement. Question regarding the source of information of implants, 69(46%) students answered they got to know about dental implants from Television, reading newspapers or through net.

Conclusion: Knowledge regarding dental implants in the course of undergraduate dentistry needs to be increased if we want the future dentists to be well informed and confident regarding dental implant therapy.

Keywords: Dental implants, Knowledge, Questionnaire, Undergraduate.

INTRODUCTION

There are many treatment techniques available for the replacement of missing teeth. The prime emphasis is to maintain normal function, speech, esthetics and health of the patient. In the last few years, the treatment of missing teeth has been changed many folds due to the frequent use of dental implants in rehabilitation of partially or

completely edentulous patients.¹ Dental implants are evolved as mainstream of replacement of missing tooth. The main factor of replacement of teeth is to maintain normal function, speech, Esthetic of the patient. Few decades later, treatment plan for missing teeth has changed more folds; implants played a vital successive role of treatment

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among partial or completely edentulous patients. Improvement and quality of life of patients had generally brought about by dental implants. Dental implants have mainly two phases; a surgical phase and a prosthodontic phase. For many years, there were only ways to replace the crown but not the root but root replacement is now a possibility. Endosseous dental implants are as alternative. Tooth roots and implant-supported prostheses are considered the best substitute for missing teeth.²⁻⁶

Though dental implant as a modality of treatment for missing teeth is an optional one, patients must be provided with complete information about dental implants and their uses to give their consent about the treatment.¹ The general population is educated by modern day healthcare providers about latest treating modalities in the field of dentistry/medicine. Awareness among the undergraduate dental/medical students regarding any new update in their field will supplement the above said purpose. Awareness among the undergraduate dental students regarding dental implants can help in removing any kind of fear regarding this procedure among general population due to lack of adequate information.⁷ There are numerous articles regarding awareness about dental implants among the general public but few articles were found to assess the awareness in the dental profession. Many surveys have shown that the primary source of patient information on dental implants are dentists.^{8,9,10}

Since these undergraduate dental students will be future dentists, they should have thorough knowledge about latest technologies in dentistry as implant treatment. Thus this study was conducted aiming to determine knowledge and level of awareness about dental implants amongst the first and second year dental students of a tertiary Dental College.

MATERIALS AND METHODS

Our study was a cross-sectional one to find out how many dental students were aware about dental implants from first and second year of a tertiary care Dental College of India. A total of One Hundred and eighty students of First and Second year BDS program were selected randomly for this study. One Hundred and eighty self-explanatory questionnaire forms which included 5 questions about implants

were distributed among the students out of which 150 returned the completely filled questionnaires. Thus the results were calculated from the data collected from 150 students.

Data collection was done during the clinical postings of the interns and an effort was made to include a maximum number of interns. It was supervised and monitored by the investigators themselves. The recorded data was compiled and entered in a spreadsheet computer program (Microsoft Excel 2007) and then exported to data editor page of SPSS version 15 (SPSS Inc., Chicago, Illinois, USA). Descriptive statistics included computation of percentages, means and standard deviations. For all tests, confidence level and level of significance were set at 95% and 5% respectively.

RESULTS

The present study gives information about dental undergraduates of first and second year student's knowledge and awareness about dental implants for the treatment of missing teeth in prosthodontic department of a tertiary care Dental College of India. Out of a total of 180 students 150 returned the completely filled questionnaire. Table shows the response of these students for different question asked.

Table 1: Knowledge and perception of Implants among study participants.

Questionnaire	Categories	Response: n (%)
Are you aware of the implant therapy as an alternative for missing teeth?	Yes	142 (94.6)
	No	8 (5.3)
If yes, do you have the knowledge of implant placement procedure	Yes	125 (83.3)
	No	25 (16.6)
Lifespan of implants	<10 years	82 (54.6)
	10-20 years	24 (16)
	No Idea/Don't Know	44 (29.3)
What should be the minimum amount payable for implant treatment?	5000	34 (22.6)
	10000	95 (63.3)
	>15000	21 (14)
Source of information of implants	Dentists	45 (30)
	TV/Newspaper	69 (46)
	Others	36 (24)

Since the introduction of the concept of osseointegration in dentistry, the dental implants treatment has become quite popular for the replacement of the lost or missing teeth.⁵ In developed countries, dental implant therapy is becoming popular among patients and dentists with the help of various education and health related programs while the scenario is quite different in developing countries like India. Despite the success of implant therapy, the implant procedures are neglected in undergraduate dental curriculum, as a result of this, the dental students are lacking knowledge about dental implants. The goal of this study was to know the awareness about dental implants amongst undergraduate dental students. A total of One Hundred and eighty students were included in the survey and questionnaires were distributed among them. Only 150 out of 180 returned the duly filled forms.

In response to first question whether they know about implant therapy as a method of replacement of missing teeth, 142(94.6%) answered in a yes while 8(5.3%) said they don't know about implants. When asked about the knowledge regarding procedure of implant placements, 125(83.33%) answered in a yes while 25(16.60%) said they don't know much about the procedure of implant placement.

Question regarding the source of information of implants, 69(46%) students answered they got to know about dental implants from Television, reading newspapers or through net, which is in accordance with the study conducted by Saxena et al¹² on the contrary study done by Kaurani et al¹¹ reported that dentists were the main source of information about dental implants however direct comparisons could not be made as this study was conducted on patients. Maximum students opined for print and electronic media as main source of information shows that there is increased access to internet among students.

When asked about lifespan of implants, 82(54.6%) students answered it would be less than 10 years which is contrary to Saxena et al¹² in which 14.37% said it would be less than 10 years. 24 students (16%) said implants last from 10-20 years while 44(29.3%) said they don't have any idea about the

lifespan of implants. The cost of implants is a major key factor in this type of treating modality. When asked about the approximate cost of implant treatment, 34 students (22.6%) said should be around 5000 INR while 95(63.3%) said they think 10000 INR would be approximate cost for dental implants while only 21(14%) believed implant treatment should cost more than 15000 INR.

Level of knowledge among UG students is inadequate. The UG students had knowledge on Basic but they are inadequate or insufficient knowledge on other aspects. Moreover dental faculties should promote more CDE programs and more hands on courses to improve their clinical exposure. The UG students should be educated more and should enhance their knowledge without which they cannot be good practitioners. This may be an obstacle for neet preparations and attending more number of government exams. Upcoming years, the level of competence will increase, and also need for more awareness. So dental faculty should resolve this insufficient knowledge through promoting education since there is wide discrepancy in teaching methodology.

CONCLUSION

Knowledge regarding dental implants in the course of undergraduate dentistry needs to be increased if we want the future dentists to be well informed and confident regarding dental implant therapy. This study suggested that there is a need for more structured teaching program about dental implants for treating missing teeth.

CONFLICTS OF INTEREST

The authors declare they have no potential conflict of interests regarding this article.

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