



AWARENESS OF DENTAL IMPLANTS AMONG UNDERGRADUATE DENTAL STUDENTS AT COLLEGE OF DENTISTRY, QASSIM UNIVERSITY, SAUDI ARABIA

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INTRODUCTION

Dental implantology is recklessly becoming a branch of learning in the field of dentistry. It has been recorded as the most noteworthy advancement in dentistry within the last 5 decades^[1]. Dental implant is a synthetic tooth root placed in the jaws to hold a replacement tooth or bridge.^[2] They are a supreme option for people with good general and oral health who have lost their dentition due to various dental problems like periodontal disease, dental caries, an injury or for any other reason. So, for the management of these edentulous patients, dental implants are used as a treatment option which improves the quality of life, denture retention, stability and functional efficiency.^[3]

KEYWORDS: Dental Implant, Implant, Awareness, Graduate, Dental Education.

There are an increased number of loaded implants continuously from 170,000 in 1999 to 380,000 in 2002 according to implant surgeons and dentists. It is predictable that there is another increase in the coming years to as many as 500,000 implants per year. Advantage of transplant technologies creates more possibilities in implication areas as well as prosthetic rehabilitation.^[4] Though Implantology has become an important part of the undergraduate teaching program in most of the institutions, the level of understanding and awareness among the students regarding implant therapy needs to be assessed.^[5]

This will aid in making necessary changes to standardize the teaching curriculum in dental institutions. The purpose of our present study is to assess the awareness of implants among undergraduate students.

METHODS

Structured questionnaire distributed among undergraduated dental students, "first level to fourth level" exclusion of fifth level and internships year, in Collage of Dentistry Qassim University. It was responded by 42 male and 58 female of all levels and 26 first level, 28 second level, 21 third level and 25 fourth level. Approval for conducting the study was obtained from the Dental Ethical Committee.

RESULT

The results revealed that out of 100 students who were participate on questionnaire of dental college in Qassim University (first, second, third, fourth) academic years 78% are agree about Implant training should be a part of

undergraduate clinical curriculum were 4% Disagree and 18% not sure.

A statistically significant difference existed is the source of information about dental implants which was concluded as the results showed that 91% of students take the information from Instructor while 7% were from classmate and 2% from Implantology Course.

Amongst the 100 students who were questioned, 62% of students who thinks Implants should be the first choice of replacement of missing tooth were 5% Disagree included (1%) of I year student, (3%) of II year students, (1%) of III year students. While 33% students had no knowledge about implants should be a superior to other prosthetic treatment options.

With regards limitations to use implants for patients with systemic conditions or local oral factors, there was a statistically significant difference between the results, where 11% of students their answers were 53% says No included (14%) of I year student, (10%) of II year students, (12%) of III year students, (17%) of IV year students. While 36% of students had no idea about limitations to use implants.

Only 2% students expected that Can Anyone Get Dental Implants, where 70% of students not agree and 28 of students had no knowledge about the indication and contraindication of Dental Implants.

Out of 100 students 74% of students questioned expected the best implant type is root from While 6% expected

plate form included 1% were I year students, 1% were II year students, 1% were III year students and 3% were IV year students.

While 20% of students estimated the subperiosteal form is best implant type in which 3% were I year students, 1% were II year students, 7% of III year students, and 9% of IV year students.

Amongst the students who consider the Mode of retention of implants in oral cavity, 3% students their opinion is fibrointegration, While 47% expected osseointegration included 6% were I year students, 7% were II year students, 18% were III year students and 16% were IV year students. While out 50% students were not sure about the retention of implants.

DISCUSSION

The Dental implants looks as an efficacious substitute for lost teeth. Dental implants have been increasingly used to replace missing teeth in a variety of clinical situations. Conventional fixed bridges may no longer offer the best solution. A survey was accomplished midst the undergraduate students (1st, 2nd, 3rd and 4th level) of Dentistry College of Qassim University in Saudi Arabia concerning the awareness about implants as a treatment modality.

After distribution of the questionnaire and filled by undergraduate dental students out of 100 students who participated in the questionnaire. Hence this study was intended to know the level of understanding among the undergraduate students regarding implant therapy. About 78% agreed that Implant training should be a part of the undergraduate clinical curriculum were 4% disagreed and 18% were not sure. In the present decade Implantology is no longer a branch of sheer wishful thinking and empiricism but has evolved into a more definitive entity.

Hence it can be justified that Implantology should be a separate specialty rather than being a part of various other specialties.

About 62% of students stated implants should be the first choice of replacement of missing teeth, 5% disagreed, while the remaining 33% did not acquire the knowledge regarding prosthetic treatment options. One must not forget that every treatment modality has its indications and limitations. What may be the treatment of choice for one patient may not be acceptable in another.

Regarding the source of information about dental implants that 91% of students obtained the information from their instructors, 7% from their classmates, and 2% gained their knowledge through dental implantology courses. In the study conducted by J. Rustemeyer et al⁶ reported that the contribution of internet, books and magazines was very low. It was recorded by Zimmer⁷ in 1992 that only 17% of the people were cited dentist as a

source of information. In this study are 91% of responses dentists were first source for their awareness, linking upper study dentists have the most effective role in awareness about dental implants. About placement of implants for patients with systemic conditions or local oral factors, where 11% of students believed that there should be limitations, 53% did not, included (14%) of 1st year students, (10%) of 2nd year students, (12%) of 3rd year students, (17%) of 4th year students.

While 36% of students had no idea about limitations using dental implants.

Surgical procedures, patient's systemic conditions and local oral factors were not considered as a major limitation by many students. Because dental implant placement is a surgical procedure, candidates must be in good overall health. Successful fusion of the bone to the implant requires good periodontal health. Hence people at higher risk of experiencing periodontal disease such as those with diabetes⁸ or those who smoke⁹ might not be good candidates for implant therapy.

About the indications and contraindications of dental implants, only 2% of students expected that anyone can get dental implants, where 70% of students did not agree, and 28% of students did not know. And 74% of students stated that the root-form type is the best implant type, while 6% showed favor to the plateform type while 20% of students estimated that the sub-periosteal form is the best implant type.

Amongst the students who were questioned about the mode of retention of implants in oral cavity, 3% of students chose fibrointegration, 47% answered with osseointegration, While 50% of students were not sure of the mode of retention of dental implants. This reflects on the poor curriculum being followed regarding the application of implants in various branches of dentistry.

CONCLUSION

Within the limitations of this study, it can be concluded that

- 1- Though Implantology has become an important part of the undergraduate teaching program.
- 2- The level of understanding and complete awareness among the students regarding implant therapy is poor. Necessary changes should be undertaken to standardize the teaching curriculum in Dental institutions.
- 3- Level of knowledge and experience increases with the academic year, clearly demonstrated improvement, educators need to place greater emphasis on dental implant education in dental colleges.
- 4- This study revealed a need for a more structured teaching program, with increased emphasis on knowledge of diagnostic and therapeutic options with dental implant therapy is, therefore, mandatory for dental students.

CONFLICT OF INTEREST

The authors report no conflicts of interest in this work.

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