Original Study

STUDENTS PERSPECTIVE ON DENTAL IMPLANTS

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ABSTRACT

Aim: Study is aimed to determine the awareness about dental implants among the dental students in Jeddah.

Materials & Method: The cross sectional study population included the students of dentistry program who were from second year to interns. Etical approval had been taken for the study from the ethical committee of the institution. The questionnaire was also translated into Arabic and was distributed to the students in their break time so that they could get sufficient time to fill the questionnaire. The questionnaire had socio-economic details of the participants including the gender and levels of education. It detailed all the information about the knowledge of the students on dental implants, their awareness towards the implant therapy, implant surgery and implant prosthetic procedures. The opinion of the undergraduate students was taken on masters in implants to be added as a specialty branch in dentistry.

Results: There were two hundred and eighty-five students who had filled the questionnaire and were included into the analysis of the results. The comparison of the scores of the knowledge regarding dental implants between dental students has shown a statistically significant difference. For the study it was very clear that the respondents are aware of different procedures involved in Dentistry including Implants. Therefore the survey response is from the respondents who are aware and have sufficient basic knowledge about the different procedures involved in Dentistry.

Conclusion: Students from second year right up to internship are aware that implants should be added as a specialty in Dentistry. The students are very eager and expressed so to have this knowledge imparted to them both as a part of undergraduate curriculum as well as Masters' program.

Key words: Dental Implants, Dental Students, Dentists

Introduction

The loss or removal of the one or more of the natural teeth results in disabilities in daily activities such as eating, speaking, or leading to social embarrassment. In such conditions, the role of the dental practitioner is very important regarding the choice of the replacement of the teeth.[1] The aim of modern dentistry is to restore the patients' teeth to normal function, aesthetics, speech and health. Implant dentistry is unique in possessing the ability to achieve these ideal goals.[2] It has been recorded as the most noteworthy advancement in dentistry within the last five decades. The interest in aesthetically flawless teeth and also a nearly natural substitute of teeth such as an implant supported over denture has grown over the years.[3] Implant treatment is one of the best choices and requires the future dentists to have all the latest developments and information in the area. The awareness among the dental students concerning the dental implants can help in understanding the advantages of the procedure. Any possible lack of understanding of the methodology, procedure and the advantages of the implant techniques needs to be eliminated with proper communication on this new advancement amongst the community in general.

Due to its importance, a study was conducted aimed at determining the awareness about dental implants among the dental students in a private school in Jeddah.

Materials & Method

The study was carried out in a private dental school in Jeddah, Saudi Arabia. The questionnaire was finalized after conducting a pilot test on thirty students to check the validity of the questionnaire. The final questionnaire had twenty-two questions in total after the feedback taken from the pilot study. The dentistry program in the kingdom of Saudi Arabia involves seven years including one year of internship. The cross sectional study population included the students of dentistry program who were from second year to interns. Ethical approval had been taken for the study from the Ethical Committee of the Institution. The questionnaires were distributed among the students of the dental college randomly among two hundred and eighty-five participants. Consent was taken from all the participants and it was informed that confidentiality of the data would be maintained. The questionnaire was also translated into Arabic and was distributed to the students in their break time so that they could get sufficient time to fill the questionnaire. The questionnaire had socio-demographic details of the participants including the gender and levels of education. The questionnaire detailed all the information about the knowledge of the students on dental implants, their awareness towards the implant therapy. The questionnaire contained questions about the implant surgery and implant prosthetic procedures. The opinion of the undergraduate students was taken on masters in Implants to be added as a specialty branch in dentistry.

The data was analyzed using SPSS (statistical package for social sciences) version 17. The association of the responses to the questionnaire was seen with the education levels using chi-square test and p value < 0.05 was considered statistically significant.

Results

Two hundred and eighty-five responses were included into the analysis of the results. The comparison of the scores of the knowledge regarding dental implants between students has shown a statistically highly significant difference. The details of all the questions and their statistically significant

probability values has been detailed in Table 1. In accordance to the years of study of the participants. When the comparison of the scores of the knowledge was done between students of all years both the preclinical and clinical years, it was found that the students from the clinical years are superior in knowledge about the awareness of implant therapy as an alternative for missing teeth. The second year students 6.2%, third year students 16.9%, fourth year students 33.9%, fifth year students 17.8%, sixth year students 16.1% and the interns 9.1% have agreed that the implants are an alternative for missing teeth.

When we compare the scores between all the years the fourth year students are had more knowledge about the placement of implant (34.4%) and about the restoration to be placed on the implant the third year students are had a greater awareness (33.8%). Majority of the dental students estimated the functional life of an implant to be between 10-20 years (121 students from all the years). 28.7% of the third year students knew that the oral hygiene care to be taken for implants placed is more than the natural teeth. Amongst the students 8.4% second year students, 16.3% third year students, 30.2% fourth year students, 17.7% fifth year students, 19.1% sixth year students, 8.4% interns agreed that implant placement was superior to fixed prosthetic denture. Dental implants appear to be an efficacious substitute for missing teeth and 211 students out of 285 students agreed with this. There is a statistical significant difference between the opinions of all the year students on Implants to be added as a specialty branch in dentistry. Among the students 12.8% second years, 18.8% third years, 34.2%, fourth years, 17.9% fifth years, 11.1% sixth years, 5.1% interns are willing to undergo implant procedure as a replacement of edentulous; but the remaining were under the opinion that high cost was a consideration for the placement of implants. 6.1%, 17.5%, 34.4%, 17.0%, 14.6%, 10.4% respectively according to the ascending years of study have seen a placement of an implant surgical procedure. The main source for watching the implant surgical procedure was internet. 7.4%, 18.6%, 34.8%, 15.2%, 15.2%, 8.8% respectively according to the ascending years of study have seen a placement of an implant prosthetic procedure. Oral surgery, according to many of the students, is the specialty in dentistry which would be most suitable for placing an implant and after that came prosthodontics, periodontics and rest a combination of the specialties. The responded have chosen prosthodontics specialty to be the best to restore an implant. The best way to place and restore an implant according to the participants is integration between the specialties.

Discussion

Dental Implants have merged into an important branch in dentistry and it is playing a very important role in improving the quality of oral health among patients. Implants have proved to be a major part of the treatments provided to the patients in private practice but that much amount of importance is not being focused in the undergraduate curriculum. This study was conducted to explore the levels of knowledge on implants from the dental students' perspective in the various levels of education in dentistry. The study on Dental students' perspective on implants was conducted among the students in a private college in Jeddah, Saudi Arabia. The study population included the students of dentistry program who were from 2nd year to interns and the preparatory year students were not included in the study. Dental implants are taught implicitly among the various courses in dentistry. There is no specific course on Dental Implants. It is taught as a part of Pre-clinical Fixed Prosthodontics, Periodontics, Clinical Prosthodontics and Oral Surgery courses of the Dentistry program.

A simple questionnaire was made and filled by undergraduate dental students. The numbers of students were randomly selected and a total of 285 responses were finally analyzed in the results.

The universe of the survey consists of the following:

Year of Study	Responses N (%)
2nd Year	24 (8)
3rd Year	55 (19)
4th Year	89 (31)
5th Year	49 (17)
6th Year	46 (16)
Interns	22 (8)

As can be seen from the table above the respondents studying in the fourth year are highest, which indicates that outcome of the survey is the opinion of students who have already spent three years that is half of the learning life in the institute and are going to be beneficiaries of their suggestion if it is implemented.

For the study it was very clear that the respondents are aware of different procedures involved in Dentistry including Implants. Therefore the survey response is from the respondents who are aware and have sufficient basic knowledge about the different procedures involved in Dentistry.

The students have shown an understanding of the basic knowledge about implant therapy as an alternate for missing teeth. Sources being dentists, books and journals. Studies by Chaudhary *et al*,[2] (23.24%), Kaurani *et al*,[4] (38%) and Saxena *et al*.[3] showed that the perception of the students was the same as was found in our study. The students were aware that implants placement procedure and the post placement done involved many steps for replacement of the edentulous spaces in the oral cavity.

According to the majority number of students the functional life of the implants is 10-20 years in our study as was found in the studies by *Rustemever et al,*[5] Tepper *et al*,[6] Saxena *et al*.[3] And this could be attributed to the fact that the knowledge on durability of dental implants was taught to the students. There is an extra amount of care to be taken for the implants placed over the care for natural teeth which was also agreed by the in the study.

The placement of implants is superior to the placement of a prosthetic denture and it can be used to replace a single tooth, multiple teeth and a complete denture to restore dental arches. Prashanthi *et al*.[7] have done a study in which 46.6% of the subjects responded that implants are superior to the placement of any other prosthetic treatment options. The studies also showed that majority of the respondents are aware that implants can be used for single and multiple teeth replacements.

The placement of implants is not cost effective so for a majority of the patients it is not the first option that is to be chosen for replacement of the teeth; this matches the opinion of the participants in this study. Studies by Chaudhary *et al*[2] have shown that the students have not come to a consensus in cost being a factor for the implants placement as the students are exposed to textbook based knowledge which is a major limitation. In the studies by Saxena *et al*.[3] and Rustemever *et al*.[5] the student respondents have expressed their opinion that the implant therapy is a very good option although cost is a limitation. Students are not completely aware of the total cost involved/cost effectiveness of the implants. This is clear from the insignificant p value. Further, it is to be noted over a period of time with developments in implant technology, material development, and increasing use in implants for patients cost may come down.

The many advances in implants and the changes in the types of implants that have been introduced into the market are much more affordable to the patients. The dental students have to be made aware of the latest advances in dental implants. The increase in knowledge about implants among the patients will enable them to have a treatment option with a more functional life. But there is always a factor of the patient's general health which has to be considered in implants placement as it is a surgical procedure.

The students have shown an enthusiasm in responding that they should have dental implant training as part of the undergraduate curriculum. The results of this study are in accordance to the study of Chaudhary *et al*.[2] and the respondents also want masters in Implants to be added as a specialty branch in dentistry. There is a successful group of dentists practicing implant dentistry and there is an increasing demand from patients for getting prosthesis for edentulous area which has successful long term results. So as the need of the patients is increasing there is a necessity of introducing Implants as a course in undergraduate curriculum.

Oral surgery or Periodontics as a specialty to place an implant surgically and prosthodontics as a specialty to restore it has been chosen. However although they have chosen individual specialties as an option for placement and restoration of lost teeth, a majority of them responded that integration of all specialties only is the best chosen route to replace lost teeth.

Out of the total 285 respondents Oral Surgery 93(33%), Prosthodontics 83(29%) and Periodontics 63(22%) are considered to be specialties possibly involving implant placement. Fifty three percent (152 out of 285) students felt that the best way to place and restore an implant is integration between more than one specialties that is Oral Surgery, Prosthodontics and Periodontics. From this it is clear that the knowledge in regard to implants should be provided along with other specialties in addition to providing an integrated specialty course on implants. By the end of fourth year normally students are provided with sufficient basic knowledge in regard to specialty courses like Oral Surgery, Prosthodontics and Periodontics. So starting implants from 5th year onwards will facilitate integrating implants with other specialties.

In case of augmenting the implants with crown (restoring an implant) Prosthodontics 139(49%), Oral Surgery 63(22%), and Periodontics 46 (16%) are specialties integrated with implants which is the same finding as for the placement of implants.

The results of a survey conducted on dental patients in Riyadh showed that majority of the subjects were aware of the use of dental implants as an alternative to missing teeth. It also showed the necessity of providing information to the patients about this treatment modality. So when we evaluate the patients response in the study by Al-Johany *et al*.[8] and the students perspective in our study there is a gateway open for the introduction of dental implants as a separate course into the main subjects in dentistry. Both the studies are not representative of all the students and patients in Saudi Arabia and much more in-depth data collection may be required to take an administrative decision of inclusion of dental implants into the main subjects in dentistry. It is incumbent upon the students and staff to identify all the areas of teaching dental implants to explore the possibility of introducing dental implants into the curriculum. It is recommended that implants be made as a mandatory requirement for the students in the final year before their internship.

Students from second year right up to internship are aware that implants should be added as a specialty in Dentistry. The respondents are aware of the various disciplines of Dentistry including implants. The percentage of the student respondents that it has to be introduced at graduate level is 211 students out of 285 which is 74%. The second year students respondents were 20 out of 24(83%), third year students 38 out of 55(69%), fourth year students 59 out of 89(66%), fifth year students 35 out of 49(71%), sixth year students 40 out of 46(87%) and interns 19 out of 22(86%). The percentage of responses indicate that all the year students have responded that implant training should be a part of undergraduate curriculum. The response that implants has to be added as a specialty branch in Post-Graduation is 200 out of 285 which is70%. The second year students respondents were 18 out of 24(75%), third year students 30 out of 55(55%), fourth year students 59 out of 89(66%), fifth year students 36 out of 49(73%), sixth

year students 37 out of 46(81%) and interns 20 out of 22(91%). The percentage of responses indicate that all the year students have responded that Masters in Implants should be added as a specialty branch in Dentistry.

The results of the study confirm:

1) Students are fully aware of the basic knowledge about implants such as
    a. Special skills are necessary
    b. Patients may not be aware of the cost effective treatment
    c. Implants is only one of the many options such as Prosthodontics available at lower cost without much specific benefits to the patient.
2) Implants should be conducted as a separate course just like Prosthodontics, Endodontics, Restorative Dentistry, Oral Surgery, Periodontics Pedodontics, Orthodontics and Dental Public Health so that the students after completing Dentistry course they can practice it just like other mentioned specialties.

With much larger samples a study among different knowledge and sectors of patients regarding their perceptions of the implant technology may be necessary. This study will supplement the present study of perceptions of students to take a logical decision regarding introduction, extent and depth of theoretical and practical coverage of the subject at a graduate level. Guest lectures by Implant specialists to share the knowledge and experience to the students both in theory, laboratory and practice. Students from second year right up to internship are aware that implants should be added as a specialty in Dentistry. The students are very eager and expressed so to have this knowledge imparted to them both as a part of undergraduate curriculum as well as Masters' program.

The study is presently confined to one of the three important stake holders that is students, patients and Institutions.

From the above discussions it can be appreciated that

1) Students starting from third year onwards up to internship are aware of basics of Implants such as the pros and cons, cost involved, durability, convenience etc.
2) Specialties Oral Surgery, Prosthodontics and Periodontics are to be integrated with Implants which implies that students should have full knowledge of the former before Implant course is introduced.
3) It is also clear that students in the third year have expressed affirmative response in respect of the above. Also generally during the 6th year of undergraduate dentistry in Institutions in the Kingdom of Saudi Arabia by the end of fourth year students are important and sufficient knowledge in regard to Oral Surgery, Prosthodontics and Periodontics. So it is clear from the study that implants is best introduced both as theoretical as well as practical level from fourth year onwards. So that the students would have been equipped with sufficient knowledge both theoretical and practical to practice implants after their successful completion of the undergraduate program. However since this is relatively newer subject it is necessary to provide expert lectures from the practicing implant experts on a regular basis which will augment the course provided by the Institution.
4) Depending upon the demand from the patients about implants super specialty course in Post graduate level can be added.

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Table 1: Distributionof the response of the participnts according to the years of study on the dental students

Question	Responses	2nd Year students	3rd Year students	4th Year students	5th Year students	6th Year students	Interns	Total
Are you aware of implant therapy as an alternative for missing teeth? *p=0.001	Yes	15	41	82	43	39	22	242
		6.2%	16.9%	33.9%	17.8%	16.1%	9.1%	
	No	9	14	7	6	7	0	43
		20.9%	32.6%	16.3%	14.0%	16.3%	0.0%	
If Yes then where did you get to know about it *p=0.001	From dentist	10	19	50	23	20	11	133
		7.5%	14.3%	37.6%	17.3%	15.0%	8.3	
	Books, Internet, Journals	5	23	26	16	15	4	89
		5.6%	25.8%	29.2%	18.0%	16.9%	4.5%	
	Others	0	1	0	0	1	0	2
		0.0%	50.0%	0.0%	0.0%	50.0%	0.0%	
	From both dentist, books, internet, journals	1	1	8	5	3	7	25
		4.0%	4.0%	32.0	20.0%	12.0%	28.0%	
	Didn't answer	8	11	5	5	7	0	36
		22.2%	30.6%	13.9%	13.9%	19.4%	0.0%	
Do you have knowledge of the implant placement procedure? *p=0.000	Yes	15	45	84	46	39	15	244
		6.1%	18.4%	34.4%	18.9%	16.0%	6.1%	
	No	9	10	5	3	7	7	41
		22.0%	24.4%	12.2%	7.3%	17.1%	17.1	
Do you think the placement of implant is a one step procedure? *p=0.000	Yes	13	10	24	21	9	15	92
		14.1%	10.9%	26.1%	22.8%	9.5%	16.3%	
	No	11	45	65	28	37	7	193
		5.7%	23.3%	33.7%	14.5%	19.2%	13.6%	
Do you have knowledge of the implant restoration procedure? *p=0.005	Yes	14	31	71	41	37	16	210
		6.7%	14.8%	33.8%	19.5%	17.6%	7.6%	
	No	10	24	18	8	9	6	75
		13.3%	32.0%	24.0%	10.7%	12.0%	8.0%	
Do you think the placement of implant restoration is a one step procedure? *P=0.000	Yes	11	15	28	29	4	12	99
		11.1%	15.2%	28.3%	29.3%	4.0%	12.1%	
	No	13	40	61	20	42	10	186
		7.0%	21.5%	32.8%	10.8%	22.6%	5.4%	
How do you estimate the functional life on an implant? p=0.052	< 5 years	3	5	8	5	0	5	26
		11.5%	19.2%	30.8%	19.2%	0.0%	5.0%	
	10-20 years	6	19	37	27	26	6	121
		5.0%	15.7%	30.6%	22.3%	21.5%	5.0%	
	20-30 years	8	20	30	9	16	8	91
		8.8%	22.0%	33.3%	9.9%	17.6%	8.8%	
	No idea	7	11	14	8	4	3	47
		14.9%	23.4%	29.8%	17.0%	8.5%	6.4%	
What is the oral hygiene care to be taken for the implants compared to natural teeth? *p=0.000	More	7	24	47	33	37	16	164
		4.3%	14.6%	28.7%	20.1%	22.6%	9.8%	
	Similar	12	14	25	15	4	6	76
		15.8%	18.4%	32.9	19.7%	5.3%	7.9%	
	Less	2	7	5	0	3	0	17
		11.8%	41.2%	29.4%	0.0%	17.6%	0.0%	
	No idea	3	10	12	1	2	0	28
		10.7%	35.7%	42.9%	3.6%	7.1%	0.0%	
Is implant	Yes	18	35	65	38	41	18	215

placement superior to fixed prosthetic denture? P=0.085		8.4%	16.3%	30.2%	17.7%	19.1%	8.4%	
	No	6	20	24	11	5	4	70
		8.6%	28.6%	34.3%	15.7%	7.1%	5.7%	
Implants can be used to replace a *p=0.000	Single tooth	8	23	13	5	3	6	58
		13.8%	39.7%	22.4%	8.6%	5.2%	10.3%	
	Multiple teeth	3	7	10	8	3	1	32
		9.4%	21.9%	31.2%	25.0%	9.4%	3.1%	
	Complete denture	1	0	4	0	0	1	6
		16.7%	0.0%	66.7%	0.0%	0.0%	16.7%	
	All of the above	12	25	62	36	40	14	189
		6.3%	13.2%	32.8%	19.0%	21.2%	7.4%	
Is cost a factor to be considered for implant placement instead of a fixed partial denture? p=0.123	Yes	21	40	74	43	42	20	240
		8.8%	16.7%	30.8%	17.9%	17.5%	8.3%	
	No	3	15	15	6	4	2	45
		6.7%	33.3%	33.3%	13.3%	8.9%	4.4%	
Should implant training be a part of undergraduate curriculum? P=0.063	Yes	20	38	59	35	40	19	211
		9.5%	18.0%	28.0%	16.6%	19.0%	9.0%	
	No	4	17	30	14	6	3	74
		5.4%	23.0%	40.5%	18.9%	8.1%	4.1%	
In your opinion Masters in Implants should be added as a specialty branch in dentistry? *p=0.013	Yes	18	30	59	36	37	20	200
		9.0%	15.0%	29.5%	18.0%	18.5%	10.0%	
	No	6	25	30	13	9	2	85
		7.1%	29.4%	35.3%	15.3%	10.6%	2.4%	
Are you willing to undergo an implant procedure if needed as a treatment option? p=0.074	Yes	9	33	49	28	33	16	168
		5.4%	19.6%	29.2%	16.7%	19.6%	9.5%	
	No	15	22	40	21	13	6	117
		12.8%	18.8%	34.2%	17.9%	11.1%	5.1%	
If No is it *p=0.001	Cost	5	19	16	10	8	4	62
		8.1%	30.6%	25.8%	16.1%	12.9%	6.5%	
	Surgical procedure	5	1	14	6	4	0	30
		16.7%	3.3%	46.7%	20.0%	13.3%	0.0%	
	Fear	4	2	7	0	0	0	13
		30.8%	15.4%	53.8%	0.0%	0.0%	0.0%	
	Not clear of the procedure	1	0	3	5	1	2	12
		8.3%	0.0%	25.0%	41.7%	8.3%	16.7%	
	Didn't answer	9	33	49	28	33	16	168
		37.5%	60.0%	55.1%	57.1%	71.7%	9.5%	
Have you seen any implant surgical procedure? *p=0.003	Yes	13	37	73	36	31	22	212
		6.1%	17.5%	34.4%	17.0%	14.6%	10.4%	
	No	11	18	16	13	15	0	73
		45.8%	32.7%	18.0%	26.5%	32.6%	0.0%	
If Yes from which source *p=0.000	Internet	8	32	46	26	7	7	126
		6.3%	25.4%	36.5%	20.6%	5.6%	5.6%	
	Internet /promotion by company	0	0	3	1	1	0	5
		0.0%	0.0%	60.0%	20.0%	20.0%	0.0%	
	Internet /promotion by company /lectures	0	0	1	1	0	0	2
		0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	
	Internet/ lectures	0	3	6	1	8	0	18
		0.0%	16,7%	33.3%	5.6%	44.4%	0.0%	
	Promotion by a company	2	1	2	1	2	1	9
		22.2%	11.1%	22.2%	11.1%	22.2%	11.1%	
	Lecture	4	3	11	5	8	9	40
		10.0%	7.5%	27.5%	27.5%	12.5%	20.0%	

	Lecture/in private clinic	0	0	1	0	3	0	4
		0.0%	0.0%	25.0%	0.0%	75.0%	0.0%	
Have you seen any implant prosthetic procedure? p=0.201	Yes	15	38	71	31	31	18	204
		7.4%	18.6%	34.8%	15.2%	15.2%	8.8%	
	No	9	17	18	18	15	4	81
		11.1%	21.0%	22.2%	22.2%	18.5%	4.9%	
If Yes from which source *p=0.000	You tube/in a private clinic	0	0	4	0	0	0	4
		0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	
	Internet	12	30	36	17	10	4	109
		11.0%	27.5%	33.0%	15.6%	9.2%	3.7%	
	Internet /promotion by company	0	0	0	1	0	2	3
		0.0%	0.0%	0.0%	33.3%	0.0%	66.7%	
	Internet/ Promotion by company/ Lectures	0	0	0	0	1	0	1
		0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	
	Internet /promotion by company/ Lectures/in private clinic	0	0	0	1	0	0	1
		0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
	Internet/ Lecture	0	2	9	2	5	0	18
		0.0%	11.1%	50.0%	11.1%	27.8%	0.0%	
	Internet/ Lecture/ in private clinic	0	0	0	0	1	0	1
		0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	
	Internet/ in private clinic	0	1	0	0	0	0	1
		0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	
	Promotion by company	1	1	0	0	2	1	5
		4.2%	1.8%	0.0%	0.0%	40.0%	20.0%	
In your opinion which specialty in dentistry would be the best to place an implant? *p=0.000	Endodontics	8	4	6	2	2	0	22
		36.4%	18.2%	27.3%	9.1%	9.1%	0.0%	
	Periodontics	3	4	6	14	25	11	63
		4.8%	6.3%	9.5%	22.2%	39.7%	17.5%	
	Periodontics/oral surgery	0	0	1	2	4	2	9
		0.0%	0.0%	11.1%	22.2%	44.4%	22.2%	
	Periodontics/ Oral surgery/prosthodontics	0	0	0	2	1	0	3
		0.0%	0.0%	0.0%	66.7%	33.3%	0.0%	
	Periodontics/ prosthodontics	0	1	1	1	1	0	4
		0.0%	25.0%	25.0%	25.0%	25.0%	0.0%	
	Oral surgery	8	26	32	15	10	2	93
		8.6%	28.0%	34.4%	16.1%	10.8%	2.2%	
	Oral surgery/ prosthodontics	1	1	3	1	0	2	8
		12.5%	12.5%	37.5%	12.5%	0.0%	25.0%	
	Prosthodontics	4	19	40	12	3	5	83
		4.8%	22.9%	48.2%	14.5%	3.6%	6.0%	
In your opinion which specialty in dentistry would be best to restore an implant? *p=0.000	Endodontics	2	5	6	4	3	0	20
		10.0%	25.0%	30.0%	20.0%	15.0%	0.0%	
	Endodontics/ oral surgery	1	0	0	0	0	0	1
		100%	0.0%	0.0%	0.0%	0.0%	0.0%	
	Periodontics	4	6	17	8	9	2	46
		8.7%	13.0%	37.0%	17.4%	19.6%	4.3%	
	Periodontics/ oral surgery	0	0	0	0	3	0	3
		0.0%	0.0%	0.0%	0.0%	100%	0.0%	
	Periodontics/oral surgery/prosthodontics	1	0	1	0	2	0	4
		25.0%	0.0%	25.0%	0.0%	50%	0.0%	
	Periodontics/prosthodontics	0	0	0	3	0	0	3
		0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	

	Oral surgery	9	21	23	7	3	0	63
		14.3%	33.3%	36.5%	11.1%	4.8%	0.0%	
	Oral surgery /prosthodontics	0	3	1	1	1	0	6
		0.0%	50.0%	16.7%	16.7%	16.7%	0.0%	
	Prosthodontics	7	20	41	26	25	20	139
		5.0%	14.4%	29.5%	18.7%	18.0%	14.4%	
The best way to place and restore an implant is in your opinion by an *p=0.000	Individual specialty	12	34	46	15	11	15	133
		9.0%	25.6%	34.6%	11.3%	8.3%	11.3%	
	Integration between more than one specialties	12	21	43	34	35	7	152
		7.9%	13.8%	28.3%	22.4%	23.0%	4.6%	

**p = statistically significant*