

Awareness and Knowledge about Dental Implant among the Patients Visiting A Dental Hospital

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ABSTRACT

Background: To evaluate the awareness and knowledge about dental implants among the patients visiting a Dental college.

Materials and Methods: This survey Study was done using 14 questions based validated questionnaire among the patients visiting the OPD of dental hospital from August 2019 to November 2019.

Results: Among the 340 patients, 234 (68.4%) agreed to participate in the study. Among the 234 participants 103 (44%) were males and 133 (56.8%) were females. The mean age was 35.35 years of age, and mean being 37.3 for males and 33.4 for females. Most of the patients were not aware of implants as an option for replacement and denture support. Most of them did not have adequate knowledge about implant and its outcomes as well.

Conclusion: There is a severe lack of awareness and knowledge among the patients, so we need to plan programs, advertisements and education modules for the same.

Keywords: Implant; awareness; edentulousness.

INTRODUCTION

Edentulousness is the absence of teeth which can be because various causes like dental caries, trauma or genetics.¹ The replacement for edentulousness can be done primarily by removable, fixed partial dentures. Recently Dental implants have emerged as boon to dentistry serving as a replacement for single tooth to support for a complete denture. It has gained quite a amount of popularity for being unique and advantageous of not involving bone loss as in removable denture and not involving crown cutting as in fixed partial dentures.² It has also proven to provide a more stable and long lasting partial/complete dentures support.³ The knowledge

about the implant is growing among the general public around the globe as well as in India. Knowing the expectations, requirement, opinion of the individuals will help dentist to better produce a treatment plan for them. So, there have been few studies among the patients in India at the individuals center level. But unfortunately, there has been very few such studies according to our literature search in a dental hospital. So, we planned this study among this population with an objective to assess the level of knowledge awareness and attitude of dental implants as a treatment modality among patients.

Received: Nov. 5, 2020; Accepted: Dec. 21, 2020

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MATERIALS AND METHODS

The present cross-sectional questionnaire-based survey study was done with the help of a prepared questionnaire, which was made on the basis of validated questionnaire used by Tepper G et al. in 2003⁴ and it was modified according to our scenario and population. The questionnaire was again validated by a pool of subject experts and finally approved for use in evaluation. The final version of prepared questionnaire consisted of 14 questions apart from the demographic profile including the age, gender and all the patients and patients' attenders visiting the dental hospital from period of August 2019 to November 2019 were included in the study. Among them all those who gave their consent to participate in the study and above 18 years of age were included in the study, those with cognitive disorders/difficulty (hearing and speaking) or below 18 years were excluded from study. The questionnaire consisted of 32 questions

A dentist in the patient's understandable language and upon making sure that they have understood it fully, answers were asked and marked in the questionnaire by the dentist explained all the questions. More than one answers were possible for many of the questions. The collected data was entered in Microsoft excel and transferred to the SPSS for statically frequency analysis.

RESULTS

Among the 340 patients, 234 (68.4%) agreed to participate in the study. Among the 234 participants 103 (44%) were males and 133(56.8%) were females. The mean age was 35.35 years of age, and mean being 37.3 for males and 33.4 for females. As an alternative for replacing missing teeth, 186(79.48) were aware of Crowns-bridgework, 186 (57.69 %) Metal dentures, 10 (4.27 %) Implants/implant-supported reconstructions, 201 (85.89 %) Full dentures. (Table 1 and Figure. 1). On asking how well informed do they feel about the different ways of replacing missing teeth, about implants and about other ways of replacing missing teeth, 41 (17.52%) responded as Not at all, 128(54.70%) as Poorly, 60 (25.64%) as Moderately well and 5 (2.13%) as Very well. (Table 1 and Figure. 2). About which tooth replacement has more advantages, 96 (41.02%) responded as non-

removable, 87 (37.17%) as removable, 51 (21.79 %) as don't know. (Table 1). On asking about view on the advantages of non-removable vs. removable dentures, 32 (13.67 %) responded as they are good as one's own teeth in function, 34 (14.52 %) Less annoying in the mouth, 23 (9.82%) Look nicer, 138 (87.21%) can't say, 7 (2.99 %) Others (table 1). On asking about if they would be content with a removable replacement/denture. 103 (44.01 %) said Yes, 95 (40.59 %) said No and 36 (15.38%) said don't know. (Table 1). On asking about source of information about alternatives for replacing missing teeth, about implants, or about other alternatives, most of them i.e 163 (69.65%) said Dentist GP, 82 (35.04%) Friends, 5 (2.13%) Television, 15 (6.41%) magazines and 128 (54.7%) Internet/social medias. On asking if they would like to know more about implants, most of them i.e 136 (58.11) said Yes and 98 (41.88%) said no. (Table 2) On further asking, If so, where from would you like to get the information, most of them i.e 129 (94.85%) said Dentist GP, 0 said Friends, 12 (8.82%) magazines, 9(6.61) Television and 29 (12.39%) Internet/social medias. (Table 2 and Figure 3). On asking, where in the jaw do you think implants are anchored, most of them i.e 154 (65.81%) answered Do not know, 42 (17.94%) in the jaw bone, 23 (9.82%) in the gums and 15 (6.41%) in/on neighboring teeth. (Table 2). About the disadvantages of implant-supported dentures/bridges most of them i.e 118 (50.42%) answered High-cost Surgery, 24 (10.25 %) takes long until fully functional and 63 (26.92 %) said don't know. (Table 2). On asking how long do you think an implant lasts, 12 (5.12%) said up to 5 years, 9 (3.84 %) up to 10 years, 18 (7.69%) up to 20 years, 195 (83.45 %) for a lifetime. (Table 2). On asking, do you think implants need special care and hygiene? 124 (52.99 %) said No, are cleaned like natural teeth, 36 (15.38 %) No, need less care than natural teeth 31.62 (74%) said Yes, need more care than natural teeth (Table 2). On asking, do you know whether your dentist provides implants as a treatment alternative? 108 (46.15%) yes, provides implants, 59 (25.21 %) No, does not provide implants and 67 (28.63 %) said Do not know (Table 3). On asking, do you, quite generally, think a dentist who provides implant treatment is better qualified than his/her colleagues who do not? most of them i.e 205 (87.60 %) said Yes and 29 (12.39 %) said No. (Table 3)

Table 1: Showing knowledge of patients regarding replacement options.

Questions and options	Number (n)	Percentages (%)
1. Which of the following alternatives for replacing missing teeth are you aware of ? (more than one answers possible)		
a) Crowns-bridgework-adhesive bridges	186	79.48
b) Metal-based dentures	135	57.69
c) Implants/implant-supported reconstructions	180	76.92
d) Full dentures	201	85.89
2. How well informed do you feel subjectively about the different ways of replacing missing teeth? About implants About other ways of replacing missing teeth		
a) Very well	5	2.13
b) Moderately well	60	25.64
c) Well Poorly	128	54.70
d) Not at all	41	17.52
3. which tooth replacement has more advantages in your view?		
a) Non removable	96	41.02
b) Removable	87	37.17
c) Don't know	51	21.79
4. In your view, what are the advantages of non removable vs. removable dentures?		
a) Less annoying in the mouth	34	14.52
b) Are as good as one's own teeth in function	32	13.67
c) Look nicer	23	9.82
d) Others	7	2.99
e) Can't say	138	87.21
5. Assume you would lose some teeth. Would you be content with a removable replacement/denture?		
a) Yes	103	44.01
b) No	95	40.59
c) Don't know	36	15.38

Table 2: Showing knowledge and awareness of patients about Implants.

Questions and options	Number (n)	Percentages (%)
1. Would you like to know more about implants?		
a) Yes	136	58.11
b) No	98	41.88
2. If so, where from would you like to get the information?		
a) Dentist GP	129	94.85
b) Friends	0	
c) magazines	12	8.82
d) Television	9	6.61
e) Internet/Social Medias	29	12.39
3. Where in the jaw do you think implants are anchored?		
a) In the gums	23	9.82
b) In the jawbone	42	17.94
c) In/on neighboring teeth	15	6.41
d) Do not know	154	65.81
4. What do you think are the disadvantages of implant-supported dentures/bridges?		

a) High cost Surgery	118	50.42
b) Takes long until fully functional	24	10.25
c) Others	29	12.39
d) Don't know	63	26.92
5. How long do you think an implant lasts?		
a) Up to 5 years	12	5.12
b) Up to 10 years	9	3.84
c) Up to 20 years	18	7.69
d) For a lifetime	195	83.45
6. Do you think implants need special care and hygiene?		
a) No, are cleaned like natural teeth	124	52.99
b) No, need less care than natural teeth	36	15.38
c) Yes, need more care than natural teeth	74	31.62

Table 3: Showing perception of patients about their dentist if they provide implant.

Questions and options	Number (n)	Percentages (%)
1. Do you know whether your dentist provides implants as a treatment alternative?		
a) Yes, provides implants	108	46.15
b) No, does not provide implants	59	25.21
c) Do not know	67	28.63
2. Do you, quite generally, think a dentist who provides implant treatment is better qualified than his/her colleagues who do not?		
a) Yes	205	87.60
b) No	29	12.39

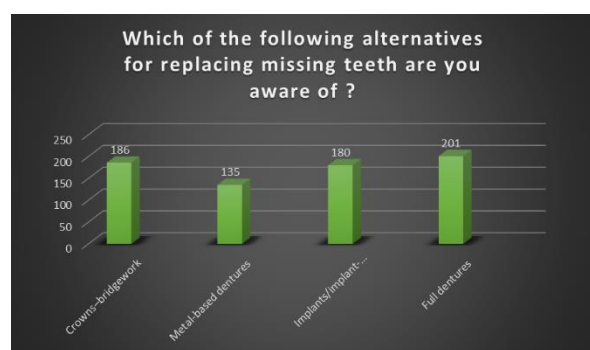


Fig 1: Graph showing knowledge of patients regarding replacement options.

DISCUSSION

Tooth loss is both natural and artificial process. It leads to the difficulty in chewing which in turn leads to the psychological and behavioral changes in the individuals. WHO have categorized edentulousness as a disability? Patients with edentulousness have multiple options for replacements. Implant being

one of the best suited one should be definitely considered as an option by individuals. The idea about the knowledge and awareness about implant among the patients will help us to design a plan to make them aware by knowing the deficient part.

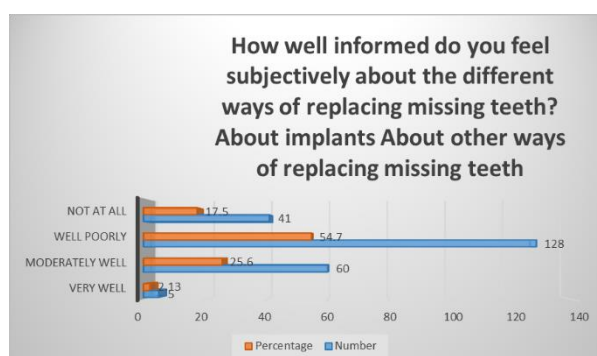


Fig 2: Graph showing perception of patients regarding their knowledge about replacement options.

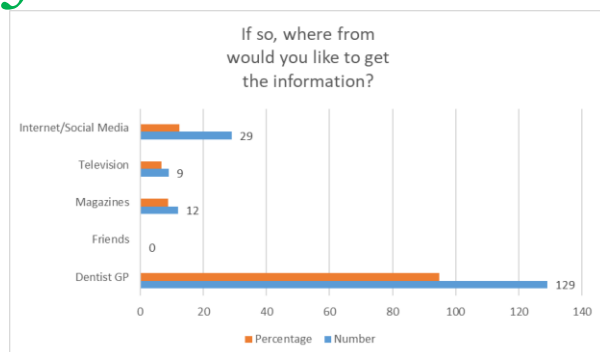


Fig 3: Graph showing view of patients regarding source for knowing more about Implants.

Our study was designed for the same purpose. Our questionnaire-based study (15 questions) showed a good participation from patients as each of them were approached directly with a printed form while they were waiting for their turn for checkup.

Our patients knew most of the methods of replacement, and maximum of them knew about complete denture but almost equally they knew about other treatment options as well which was also seen in studies by Mohammed Siraj et al⁵ and Kumar S. et al⁶ but the study done by Emaan Ahmed Siddique et al⁷ showed a difference with maximum patients knowing about fixed dentures than removable dentures. Most of our patients felt they are poorly informed about implant and other ways of replacements which was similar in study by Tepper et al⁴ whereas most of the patients in study done by Suwal, et al⁸, kohli S et al. and Siddique EA et al⁷ most of the patients felt moderately or well informed. Most of our patients considered non removable as better than removable which was similarly found by study done by Siddique EA et al⁷, although most of them couldn't say anything on advantages of non-removable which was similarly seen by Kumar S. et al⁶ but in study by Kohli S et al⁹. most of the patient knew about the advantages fixed dentures. Most of our patients have heard about implants from dentists and social medias advertisements which was similarly found in study by AlQahtani SM¹⁰, Sultan Ali Alanazi¹¹, Kohli S et al⁹, Tepper et al⁴ Kumar S. et al⁶ which was not similar to study done by Suwal et. al⁸ where he found friends and aquatances as major source of information's. Most of our patient would be content with a removable denture in spite of feeling fixed dentures as advantageous, this might be because of their knowledge about fixed to be expensive. Most

of our patient wanted to know more about implants and the method being the dentist, which was similary found in study by AlQahtani SM¹⁰, Sultan Ali Alanazi¹¹, Kohli S et al⁹, Tepper et al⁴ which shows the level of trust and clarity they expect from a dentist. Most of our patients were not aware where exactly the implant was placed which in contrast to study by Siddique EA et al⁷, Mohammed Siraj et al⁵ and AlQahtani SM¹⁰, where patients were aware about jaw bone. Most of our patients found high-cost surgery as the biggest disadvantage, which was similarly found by AlQahtani SM¹⁰, Suwal et. al⁸, Kumar S. et al⁶. Most of our patient thought that implants last lifelong which was similarly found by Siddique EA et al⁷, Kumar S. et al⁶, Suwal et. al⁸ and AlQahtani SM¹⁰. Most our patient thought that no extra care is required implant, its like for natural tooth which was similar to study done by Siddique EA et al⁷ but in contrast to study by Mohammed Siraj et al⁵ whose patients thought extra care is required

most of our patient said that they don't know if their dentist provides implants which was similarly found by Tepper et al.⁴ Most of our patients thought the dentist who provide implants are better than those who don't which was similar to study done by Sultan Ali Alanazi¹¹, Tepper et al.⁴ but in contrast to study by Suwal et. al⁸ where patient preferred to answer don't know. We could not compare all our answers from other studies as we could not found the exact study as ours. There was different questionnaire used in various studies with various other options as answers.

CONCLUSION

We would like to conclude by saying that still there is lack of knowledge about dental implant in this part of the world/country. we would need more of awareness programmed or advertisement on televisions and social media to make population aware about implant.

CONFLICTS OF INTEREST

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

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