

Original Research

Questionnaire Based Assessment of the Knowledge and Awareness of Dental Implants as Related To Tissue Responses and Longevity; An Original Research Study

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ABSTRACT:

Background and Aim: Dental implant therapy often poses several clinical complications during its usage. In long term use, these issues could be the reason of ultimate implant failure. Therefore this questionnaire based study was planned and conducted to assess the knowledge and awareness of dental implants as related to tissue responses and longevity. **Materials and Methods:** A questionnaire model was planned and set of questions had been prepared by the authors. Authors recorded and processed the data obtained from 100 patients professionally. Informed signed consent was also obtained individually from all participating patients. Questions were about tissue responses following implant placement. These included pain, swelling, any discharge and any allergy. Questions were also focused on the overall longevity of the implant therapy and its clinical life. P value less than 0.05 was taken as significant. **Statistical Analysis and Results:** Statistical analysis was complete by SPSS software. Results showed that total 72 patients were satisfied by their implant treatment done. Total 8 patients reported for pus discharge and/or allergy near implant placement area. Total 65 patients confirmed about swelling in the implant which was placed for the rehabilitation of their missing teeth. Total 70 patients were aware of dental implant therapy being done for the replacement of the missing teeth and related tissues. Mostly patients were from low income grade population and more than 75 patients were belonging to rural areas. **Conclusion:** Authors concluded that the studied patients had fair levels of knowledge and awareness about dental implants. Patients showed moderate levels of the knowledge about the tissue responses and longevity. Most of the participating patients were from low economical group and from rural areas.

Keywords: Dental Implant, Teeth Rehabilitation, Implant Awareness, Swelling, Allergy, Pain

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INTRODUCTION

The high cost of the implants is one of the important determining factors conflicting with the enthusiasm of patients to experience this treatment. It also demonstrates that most patients felt dental implants treatment to be expensive and excessively classy, yet they were intrigued to find out about dental implants.¹⁻³ As dental implant supported prosthesis turn out to be better known option, the dominance of implant is worldwide and highly accepted. The maintenance of healthy tissue around the dental inserts is one of the key variables to get long haul achievement. Dental hygiene and care including delicate tooth brushes, embrasure brushes, uniquely planned cleaning instruments made in hard plastics

and mouth flushes help to counteract peri-implant disease.⁴⁻⁶ In Indian situations, most of the patients are relatively unaware about the post operative complications and other disturbing factors. People are especially unaware about the longevity and tissue responses of dental implant after their successful installation in the dental or alveolar tissues. This is particularly true about rural population and about people of low economical groups.⁷⁻⁸ Considering all these intermingling facts, authors planned this study to find out the current status about these factors. Thus, the aim of this questionnaire based study was to assess the knowledge and awareness of dental implants as related to tissue responses and longevity.

MATERIALS AND METHODS

This study was solely based on patients responses against preset questions about dental implants. Patients were asked about knowledge and awareness of dental implants as related to tissue responses and longevity. This study was primarily based on questionnaire model wherein set of questions had been prepared by the authors. Initially, total 120 regular OPD patients were approached for their responses. However after initial scrutiny and checking, this number was finally reduced to 100 only. Therefore, authors recorded and processed the data obtained from 100 patients professionally. The relative harm and benefits was explained in detail to all participating patients. Accordingly, informed signed consent was also obtained individually from all participating patients. Data related to participants included their demographic details. Questions were centered on the tissue responses following implant placement. These included pain, swelling, any discharge and any allergy. Questions were also focused on the overall longevity of the implant therapy and its clinical life. So it is basically about the success and failures of installed implants in the alveolar ridges. The survey questionnaires were given to the patients in their standard dental visits. The exclusion criteria for the study were patients who were not demonstrated for any expected healing; patients who have shown any timorous mass or cyst in relation to implant. Data was accumulated utilizing

a self-managed organized closed ended questionnaire. Final selected patients were asked for to take an interest after clarification of the reasons for the investigation. Those patients who had not known about dental implants as a treatment choice were explained in this respect. P value less than 0.05 was taken as significant.

STATISTICAL ANALYSIS AND RESULTS

All the accumulated data were arranged rationally and subjected to basic statistical analysis with SPSS statistical package for the Social Sciences version 22 for Windows. Nonparametric test, namely, chi-square test, was used for further data analysis; p-value. Out of 100 studied patients, 62 were males and 38 were females [Table 2, Graph 1]. P value was significant for the age group 15-25 years. Total 72 patients were satisfied by their implant treatment done. Total 8 patients reported for pus discharge and/or allergy near implant placement area. Total 65 patients confirmed about swelling in the implant which was placed for the rehabilitation of their missing teeth. Total 70 patients were aware of dental implant therapy being done for the replacement of the missing teeth and related tissues. Mostly patients were from low income grade population and more than 75 patients were belonging to rural areas. Other findings were also tabulated in the table 1. The overall p value was significant for these measured parameters (0.10).

Table 1: Demographic details of patients

Variables	Number	P value
Age		0.10
15-25	17	
26-35	43	
36-45	22	
>45	18	
Gender		
Male	35	
Female	65	
Education level		
Illiterate	10	
Primary school	17	
Secondary school	33	
Graduated	25	
Post graduated	15	
Monthly income		
Low	65	
Medium	30	
High	5	
Location		
Rural area	78	
Urban area	22	
Know about dental implants		
Yes	70	
No	30	
Willing to have dental implants		
Yes	35	
No	65	

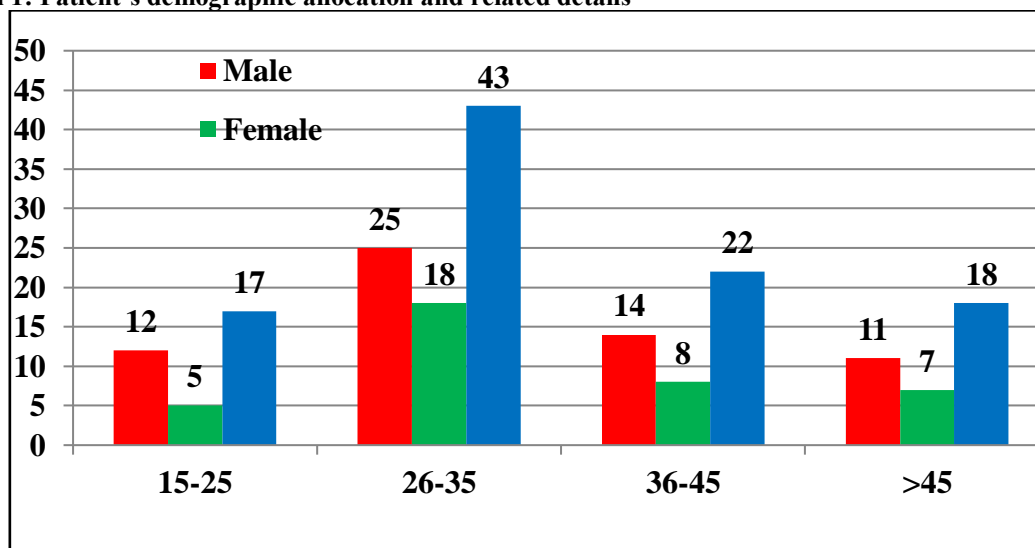
Already had implant surgery	
Yes	9
No	91
Pain after implant surgery	
Yes	71
No	29
Swelling after implant surgery	
Yes	65
No	35
Any discharge and any allergy after implant surgery	
Yes	8
No	92
Satisfactory Longevity/Success of implant	
Yes	72
No	28

Table 2: Age & gender based statistical description of contributing patients

Age Group (Yrs)	Male	Female	Total	P value
15-25	12	5	17	0.02*
26-35	25	18	43	0.12
36-45	14	8	22	0.80
>45	11	7	18	0.94
Total	62	38	100	*Significant

***p<0.05 significant**

Graph 1: Patient’s demographic allocation and related details



DISCUSSION

It is important to perform dental implant treatment in the indicated conditions.⁹⁻¹⁰ In the recent literature many pioneer researchers have studied extensively about dental implant and their prognostic outcomes. Many of similar studies have been conducted in India also. Sahoo and colleagues studied about Trends and attitude of edentate patients towards conventional and implant rehabilitative therapies in 2013. They also explained the basis of knowledge and awareness of the population about dental implants. Their study was highly comparable with our results.¹¹ Kumar and coworkers also studied about Infectious risks for dental implants. Their results were in agreement of our study results. They also showed different post

operative complications in the dental implant therapy in different time phases.¹² Sahoo and others in the year 2013 conducted a somewhat similar study in which they actually studied Awareness and need of dental implant therapy as pertinent to Indian situation. They also concluded that knowledge and awareness of dental implants was fair in the Indian situation.¹³⁻¹⁴ Implant is an inevitably prevalent treatment methodology for teeth supplanting with a high achievement rate. In created nations, with the assistance of wellbeing programs, implant is turning into the concentration of the patients' and dental specialists' advantage.¹⁵⁻¹⁸ Awareness among patients with respect to the dental implant can help in eliminating any off base or negative pictures of the

strategy that may have been caused because of absence of sufficient data.¹⁹⁻²⁰

CONCLUSION

Within the limitations of the study, authors concluded that the studied patients had fair levels of knowledge and awareness about dental implants. In the given questionnaire responses, patients showed moderate levels of the knowledge about the tissue responses and longevity. Most of the participating patients were from low economical group and from rural areas. All these findings indicate that general patients and populaces are quite aware about the dental implants and their related parameters. Authors also expect other long term studies to be conducted in order to establish other significant guidelines in these regards.

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