ORIGINAL RESEARCH

Assessment of Patient’s Attitude towards Dental Implants

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ABSTRACT:
Introduction: Replacement of missing or lost teeth with dental prostheses supported by oral implants has been accepted and received positive evaluations from patients who have undergone implant treatment. In spite of this, information which is known to the patients regarding the procedure and its success is often incomplete. In view of this, the present study was undertaken to evaluate patients knowledge towards implants as well as to study factors acting as hindrances in undergoing dental implant procedures. Material and Methods: The present cross-sectional study was carried among 150 patients visiting either removal of teeth or for the replacement of missing teeth to evaluate the attitude and knowledge of patients toward dental implants as an alternative for replacement of missing teeth. Data was obtained from the participants using a self-administered structured closed ended questionnaire and was analysed using excel sheet and number and percentage was obtained accordingly. Results: 43\% participants revealed lifetime wish to undergo implant supported dentures/bridges. Regarding factors acting as hindrances in undergoing dental implants, 49\% reported financial issues, 40\% fear of surgery. Regarding source of information regarding dental implants among patients, 64\% reported dentists were the main source of information followed by friends and relatives, media (TV, newspaper and magazines) comprised 9\%, internet consisted of 3\% and other sources being 2\%. Conclusion: The present study concludes that patients knowledge regarding implants was not adequate and hence there is necessity to deliver correct information to the patients about this treatment modality. However, the incidence of biological and technical complications should not be underestimated and should be considered with caution. Key words: Dental implants; Edentulous patients; Prosthesis.

Received: 12 September 2018 Revised: 22 October 2018 Accepted: 26 October 2018

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INTRODUCTION
For decades dentists have applied clinical skills to partially and totally edentulous patients to provide satisfactory removable dentures. However, evidence indicates that many patients are not completely satisfied with removable dentures. Hence, implant systems have been introduced in the management of partially and totally edentulous patients.\textsuperscript{1} Replacement of missing or lost teeth with dental prostheses supported by oral implants has been accepted and received positive evaluations from patients who have undergone implant treatment.\textsuperscript{2} Dental implants were originally used for the treatment of edentulous patients and are associated with improved denture retention, stability, functional efficiency, and quality of life. Currently, dental implants are widely accepted as a prosthetic treatment of completely or partially edentulous patients. This led to widespread acceptance and popularity of dental implants within the dental professional community.\textsuperscript{3} It is approximated that about one million dental implants are inserted every year.\textsuperscript{4} In spite of this, information which is known to the patients regarding the procedure and its success, is often incomplete.
Furthermore, this hitch is more pronounced in developing nations. In view of this, the present study was undertaken to evaluate patients knowledge towards implants as well as to study factors acting as hindrances in undergoing dental implant procedures.

**MATERIAL AND METHODS**

The present cross-sectional study was carried in the department of Prosthodontics among 150 patients visiting departments of Prosthodontics and Oral and Maxillofacial Surgery for either removal of teeth or for the replacement of missing teeth to evaluate the attitude and knowledge of patients toward dental implants as an alternative for replacement of missing teeth. Data was obtained from the participants using a self-administered structured closed ended questionnaire. Prior to the commencement of the study, ethical approval was taken from the institutional ethical committee as well as informed consent was taken from all the patients. A pilot study was conducted among 25 participants to evaluate any shortcomings in the self-administered structured closed ended questionnaire and any required modifications were carried accordingly. All the patients aged above 15 years who attended the OPD of these two departments were included in the study during the mentioned time period. The questionnaire gathered information regarding preferable choice of alternatives for replacing missing teeth, lifetime wish to undergo implant supported dentures/bridges, factors acting as hindrances in undergoing dental implants and, sources of information regarding dental implants. Data so obtained was analyzed using excel sheet and number and percentage was obtained accordingly.

**RESULTS**

A total of 150 patients participated in the present study. Regarding preferable choice of alternatives for replacing missing teeth, 19% preferred complete denture, 40% Fixed teeth/bridges, 15% Implant supported dentures/bridges and 26% Partial removable dentures. 43% lifetime wish to undergo Implant supported dentures/bridges. Regarding factors acting as hindrances in undergoing dental implants, 49% reported financial issues, 40% fear of surgery (table 1). Regarding source of information regarding dental implants among patients, 64% reported dentists were the main source of information followed by friends and relatives, media (TV, newspaper and magazines) comprised 9%, internet consisted of 3% and other sources being 2% (table 2).

**Table 1: Knowledge and attitude towards dental implants**

<table>
<thead>
<tr>
<th>Question</th>
<th>n=150</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your preferable choice of alternatives for replacing missing teeth</td>
<td></td>
</tr>
<tr>
<td>Complete denture</td>
<td>28 (19%)</td>
</tr>
<tr>
<td>Fixed teeth/bridges</td>
<td>61 (40%)</td>
</tr>
<tr>
<td>Implant supported dentures/bridges</td>
<td>22 (15%)</td>
</tr>
<tr>
<td>Partial removable dentures</td>
<td>39 (26%)</td>
</tr>
<tr>
<td>Do you have lifetime wish to undergo Implant supported dentures/bridges</td>
<td>64 (43%)</td>
</tr>
<tr>
<td>Factors acting as hindrances in undergoing dental implants</td>
<td></td>
</tr>
<tr>
<td>Post surgical complications</td>
<td>42 (28%)</td>
</tr>
<tr>
<td>Fear/ phobia of surgery</td>
<td>61 (40%)</td>
</tr>
<tr>
<td>Fear of undergoing hassles due to surgical work such as leave from work</td>
<td>21 (14%)</td>
</tr>
<tr>
<td>Long duration of treatment</td>
<td>32 (21%)</td>
</tr>
<tr>
<td>Financial issues</td>
<td>74 (49%)</td>
</tr>
<tr>
<td>Lack of information/ irrelevant information</td>
<td>28 (19%)</td>
</tr>
<tr>
<td>Fear of failure of procedure</td>
<td>19 (13%)</td>
</tr>
<tr>
<td>Have you heard regarding the failure or complications of dental implant procedure?</td>
<td>32 (21%)</td>
</tr>
</tbody>
</table>

**Table 2: Sources of information regarding dental implants**

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dentists</td>
<td>64%</td>
</tr>
<tr>
<td>Friends and relatives</td>
<td>22%</td>
</tr>
<tr>
<td>Media (television, newspaper and magazines)</td>
<td>9%</td>
</tr>
<tr>
<td>Internet</td>
<td>3%</td>
</tr>
<tr>
<td>Other sources</td>
<td>2%</td>
</tr>
</tbody>
</table>
DISCUSSION

Today, modern implant dentistry appeals to a wide population, but the decision for and the success of implants depend on the knowledge and expectations of patients. The present study revealed that factors acting as hindrances in undergoing dental implants, 49% reported financial issues, 40% fear of surgery. Regarding source of information regarding dental implants among patients, 64% reported dentists were the main source of information followed by friends and relatives, media (TV, newspaper and magazines) comprised 9%, internet consisted of 3% and other sources being 2%. Suprakash B et al concluded that patients knowledge and attitude towards implants was below average as an option for replacing missing teeth. Dentists were the main sources of information regarding dental implants among all participants. The high treatment charge of the implants is one of the major factor against the willingness of patients to undergo this treatment. It also showed the need for providing more general and correct information to the patients about this treatment modality. Similarly, Zimmer CM et al investigated public awareness and acceptance of dental implants among US citizens and 77% had heard about dental implants, mostly through media and lay persons whereas only 17% named a dentist or physician as the source of information. Chowdhary R et al carried a nationwide survey from a representative sample of the general Indian urban population was made to assess public awareness of oral implant treatment and determine sources of information about implants and only 23.24% had heard of oral implants as a treatment modality as a treatment option for replacing missing teeth, with dentists being the main source of information. A study conducted by Grogono AL et al measured the psychologic attitudes of patients to implant prostheses and compared their status before and after therapy among the patients who had previously worn removable complete or partial dentures and satisfaction with the implant prosthesis was significantly greater than for the denture. Responses to individual questions indicated that confidence of the patients was improved (88%), implants were worth the trouble (97%), and overall dental health was improved (98%). This survey suggests that patients’ attitudes toward their dental health improve significantly after treatment with implant prostheses. Strassburger C et al reviewed the influence of prosthodontic and dental implant treatment on patient satisfaction and oral health-related quality of life (OHQOL) and reported that they benefitted significantly from the use of dental implants to support mandibular prostheses. In the present study, 28% patients reported Post surgical complications as a hindering factor in opting dental implants as a treatment option. Karoussis IK et al carried a study to compare the failure, success and complication rates among patients who received hollow screw implants and reported that patients with implants replacing teeth lost due to chronic periodontitis demonstrated lower survival rates and more biological complications than patients with implants replacing teeth lost due to reasons other than periodontitis during a 10-year maintenance period. Berglundh T et al carried a meta analysis of 51 studies indicated that implant loss prior to functional loading is to be expected to occur in about 2.5% of all implants placed in implant therapy including more than one implant and when routine procedures are used. Implant loss during function occurs in about 2–3% of implants supporting fixed reconstructions, while in overdenture therapy >5% of the implants can be expected to be lost during a 5-year period. Mahmoud AO et al carried a literature review regarding satisfaction with dental implants and revealed that dental implants provided promising and predictable results regarding patient satisfaction and various aspects of life assessment.

CONCLUSION

The present study concludes that patients knowledge regarding implants was not adequate and hence there is necessity to deliver correct information to the patients about this treatment modality. However, the incidence of biological and technical complications should not be underestimated and should be considered with caution.

REFERENCES


Source of support: Nil

Conflict of interest: None declared

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