Knowledge and Awareness regarding Dental Implants in Patients visiting Dental College of Udaipur, Rajasthan, India

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ABSTRACT

Introduction: Dental implant is an artificial tooth root that restores a lost tooth so that it looks, feels, fits, and functions like a natural tooth. Dental implants are generally accepted as a prosthetic treatment of edentulous patients currently. The aim of the study was to assess the awareness of the patients regarding implant-retained prosthesis as an option for tooth replacement and the knowledge about tooth replacement.

Materials and methods: A cross-sectional survey was conducted among the patients visiting Pacific Dental College & Hospital, Udaipur. The survey was conducted over a period of 2 months. A total of 560 study subjects were participated in the study.

Results: The study participants consisted of 54.5% males and about 37.9% were aged between 51 and 70 years. Among the 560 respondents, 87.9% were aware of dental implants; 92.5% were aware of complete dentures; 41.6% mentioned relatives followed by dentists, newspapers, and internet; 97.5% of the respondents were willing to consider dental implant treatment if needed; 87.1% of the respondents stated high costs; 97.5% of the respondents thought that dental insurance is needed in our country for dental implant treatment.

Conclusion: This survey showed that many patients were not aware of using dental implants as an option for replacing missing teeth. Efforts must be directed at increasing the awareness levels by using media, newspapers, etc. as a source to achieve the target. Oral health education is essential for developing positive behavior among people regarding dental implants.

Keywords: Awareness, Dental implants, Treatment.

INTRODUCTION

Art of Modern Dentistry aims to help patients maintain good dental health and restore the patient to normal function, esthetics, and speech. Dental implant is an artificial tooth root that restores a lost tooth so that it looks, feels, fits, and functions like a natural tooth. Dental implants are generally accepted as a prosthetic treatment of edentulous patients currently. Dental implant is an artificial tooth root, i.e., inserted into the jawbone surgically. Its clinical indication is increasing due to its high success rates and predictability. Dental implant treatment is increasing in demand as a treatment option. Less information is available to patients regarding the procedure and its success. This problem is more in developing countries, such as India where there is lack of proper education and awareness among population regarding dental implants as a missing tooth treatment modality. Whole information on dental implant treatment should be provided to guide the patient in the choice of the most accurate option.

Assessing the awareness of the people regarding implants helps in predicting better the need of the patients. Many studies have stated the awareness levels in different populations ranging from 42 to 79%.

Various studies have been done in many parts of the world with regard to the awareness of dental implants as a treatment option.

Thus, the aim of the study was to assess the awareness of the patients regarding implant-retained prosthesis as an option for tooth replacement and the knowledge about tooth replacement.

MATERIALS AND METHODS

Study Design, Setting, and Population

Across-sectional survey was conducted among the patients visiting Pacific Dental College & Hospital, Udaipur. The
survey was conducted over a period of 2 months. A total of 560 study subjects participated in the study.

Ethical Clearance and Official Permission

The study protocol was reviewed by the ethical committee of dental college and hospital and was granted ethical clearance.

QUESTIONNAIRE

Figure 1 depicts the survey form which included self-explanatory questions in correspondence to previous studies conducted by Chowdhary et al.,10 Berge,12 and Kohli et al.9 A random sampling method with convenient sample size was used. Questionnaire was prepared both in English and Hindi (local language) to improve the participants’ understanding of the questions.

The patients took 10 to 15 minutes to complete the questionnaire. Filled questionnaire pro forma was collected and analyzed.

Statistical Analysis

The data were entered in Microsoft Excel spreadsheet and processed using the Statistical Package for Social Sciences version 20 (SPSS Inc. Chicago, Illinois, USA). Descriptive analysis was done (in percentages).

RESULTS

Table 1 shows the details of demographic profile of patients including age, sex, and education. The study participants consisted of 54.5% males and about 37.9% were aged between 51 and 70 years. Majority of the participants (24.8%) were graduates.

Table 2 shows awareness regarding dental implant as an alternative for missing teeth. Among the 560 respondents, most were aware of dental implants (87.9%).

Table 3 shows alternatives for missing teeth. Among the 560 respondents, most were aware of complete dentures (92.5%).

Table 4 shows information sources regarding dental implant. Among the 560 respondents, most said relatives (41.6%) followed by dentists, newspapers, and internet.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes (N %)</th>
<th>No (N %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you aware of dental implant treatment as an alternative for missing teeth?: Yes/No</td>
<td>492 (87.9%)</td>
<td>68 (12.1%)</td>
</tr>
<tr>
<td>Total</td>
<td>560 (100%)</td>
<td></td>
</tr>
</tbody>
</table>
Table 5: Willingness to consider dental implant treatment

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you willing to undergo an implant treatment if needed</td>
<td>546 (97.5%)</td>
<td>14  (2.5%)</td>
</tr>
<tr>
<td>Total</td>
<td>560 (100%)</td>
<td></td>
</tr>
</tbody>
</table>

Table 6: Limitations of dental implant treatment

<table>
<thead>
<tr>
<th>Question</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do you think are the limitations of implant-supported crowns/bridges/dentures?</td>
<td></td>
</tr>
<tr>
<td>a. High costs</td>
<td>488 (87.1%)</td>
</tr>
<tr>
<td>b. Lack of knowledge</td>
<td>72 (12.9%)</td>
</tr>
<tr>
<td>c. Need of surgery</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>d. Long treatment time</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Total</td>
<td>560 (100%)</td>
</tr>
</tbody>
</table>

Table 7: Insurance coverage needed in our country for dental implant treatment

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think insurance coverage is needed in our country for dental implant treatment?</td>
<td>546 (97.5%)</td>
<td>14  (2.5%)</td>
</tr>
<tr>
<td>Total</td>
<td>560 (100%)</td>
<td></td>
</tr>
</tbody>
</table>

Table 5 shows responses of willingness to consider dental implant treatment. About 97.5% of the respondents were willing to consider dental implant treatment if needed.

Table 6 shows limitations of dental implant treatment. About 87.1% of the respondents stated high costs.

Table 7 shows insurance coverage is needed in our country for dental implant treatment. About 97.5% of the respondents thought that dental insurance is needed in our country for dental implant treatment.

DISCUSSION

This study was conducted to assess the awareness and knowledge of implant-related prosthesis among the patients visiting Pacific Dental College & Hospital, Rajasthan, India.

A total of 560 participants were surveyed and all the willing participants were divided according to different factors as gender, level of education, and age. It was observed that the majority (87.9%) of the respondents had heard about the implants. When these results were compared with other studies, similar findings were observed in the studies done by Saha et al., Kohli et al., and Narayanan et al., but these results were not in accordance with the present study where dentists were the main source. Other reports indicate media and newspapers as an information source.

Among the participants, 97.5% were willing to undergo an implant treatment if needed, whereas 2.5% refused for implant treatment if needed. This is in agreement with Kohli et al., Santhosh Kumar et al., and Narayanan et al.

Total of 87.1% participants thought high cost as a limiting factor for dental implant treatment. This was in accordance with the study conducted by Saha et al., Al-Johany et al., Kumar et al., and Narayanan et al.

Among the participants, 97.5% stated that insurance coverage is needed in our country for dental implant treatment. Similar findings were found in the study done by Kohli et al.

CONCLUSION

This survey showed that many patients were not aware of using dental implants as an option for replacing missing teeth. Efforts must be directed at increasing the awareness levels by using media, newspapers, etc., as a source to achieve the target. Oral health education is essential for developing positive behavior among people regarding dental implants. This study also concludes that maximum participants found implant treatment to be very expensive and one of the major factors against the willingness of patients to undergo this treatment. So, efforts should be made to reduce the cost of dental implants to a more affordable rate.

REFERENCES


