Awareness and knowledge of various options for treatment of missing teeth in patients at a speciality dental hospital in Hyderabad, India

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ABSTRACT

**Background:** To replace missing teeth there are several options. Only few patients are aware of all the available options. **Aims and Objectives:** To know the awareness and knowledge of options for treating missing teeth among patients who visited to Neodent Dental Hospital in Hyderabad, Telangana State. **Materials and Methods:** A cross-sectional, questionnaire was designed and distributed to the 100 edentulous patients visited to Neodent Dental Hospital, Hyderabad, Telangana State from January 2015 to December 2015. The data was collected and analyzed statistically for number and percentage using EPI-Info statistical software version 6. The questionnaire included personal details of the patients i.e. age, sex, education and marital status and also about know the awareness and knowledge of patients to replace the missing teeth and the preference of replacement options. **Results:** The age of patients ranged ranged between 21-65 years. 150 patients were included in the study, out of which, 76 were females and 74 males. The number of patients awareness of treatment options was 112 (74.66 %), 85 (56.66%) and 20 (13.33 %) patients were aware for removable partial denture, fixed partial denture and implants respectively. **Conclusion:** We found that the patients awareness for diverse treatment options for missing teeth was low. Hence, measures should be taken to increase the awareness regarding replacement for missing teeth.

**Keywords:** leukoplakia, lipid, oral cancer, triglycerides, total cholesterol

Introduction

Edentulism either partial or complete is one of the major cause for patients visiting a dentist. The complications that are seen in edentulous patients are masticatory deficiency, speech problems, loss of facial support and esthetics. Apart from these complications, tooth loss also results in psychological stress to the patients. To avoid these complications, missing teeth should be replaced immediately. Otherwise there are chances of drifting of adjacent spaces and protrusion of opposite teeth in to the spaces, causing bite or gum problems and affecting the quality of life.[1, 2]

There are several options available to the patients to replace the missing teeth. Broadly there are two types of treatment modalities available, removable (RPD) and fixed prosthesis. Among fixed prosthesis, fixed partial dentures (FPD) and implants are the available options. The factors affecting the choice of either of these treatments are aesthetics, number of missing teeth, anterior or posterior teeth, cost, quality of ridge and alveolar bone, age, gender, socioeconomic conditions, patient’s choice etc. Hence there is a need to improve the patient awareness regarding available treatment options, pros and cons of each option, so that they can chose accordingly.[3, 4]

The aim of our study was to know the awareness and knowledge of options for treating missing teeth among patients who visited Neodent Dental Hospital, Hyderabad, Telangana State.

**Materials and Methods**

A cross-sectional, questionnaire was designed and distributed to the edentulous patients visited to Neodent Dental Hospital, Hyderabad, Telangana state from January 2015 to December 2015. All the participants were partially edentulous excluding the third molars. After obtaining consent, the patients were asked to fill the questionnaire. The first part of questionnaire...
included personal details of the patients i.e. age, sex, education and marital status. The second part of questionnaire focused about know the awareness and knowledge of patients to replace the missing teeth and the preference of replacement options. The data was collected and analyzed statistically for number and percentage using EPI-Info statistical software version 6.

Discussion

The speciality of prosthodontics mainly concentrates on replacing the lost teeth. Missing teeth can impact oral health and general health condition of the patient, by affecting the dietary intake and compromising the nutritional status. So there is a need to replace the missing teeth as early as possible. Removable partial dentures, fixed bridges and implants are currently available treatment options (Fig 1 and 2).[5-7]

Fig 1: Teeth preparation for FPD to replace 26  
Fig 2: FPD inserted after preparation

We designed a questionnaire to know about the awareness of treatment options for missing teeth. Similar such studies have been carried out by Rustemeyer and others.[1] Those studies primarily concentrated on specific treatments like implants, whereas we concentrated on all the available treatment options. Out of total 150 patients, 112 (74.66 %), 85 (56.66%) and 20 (13.33 %) patients were aware for removable partial denture, fixed partial denture and implants respectively (Table 1 and Graph 1).

<table>
<thead>
<tr>
<th>Treatment option</th>
<th>Number of patients</th>
<th>Percentage of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removable Partial Denture (RPD)</td>
<td>112</td>
<td>74.66</td>
</tr>
<tr>
<td>Fixed Partial Denture (FPD)</td>
<td>85</td>
<td>56.66</td>
</tr>
<tr>
<td>Implants</td>
<td>20</td>
<td>13.33</td>
</tr>
</tbody>
</table>

We found that the age of patients ranged between 21-65 years (Table 2 and Graph 2). In our study, there was a general trend that younger patients were aware of fixed prosthesis. Our findings are in accordance with
Abdurahiman et al. [3] This might be due to the fact that younger individuals are more educated and exposed to media.

Table 2: Number and percentage of patients according to age

<table>
<thead>
<tr>
<th>Age range</th>
<th>Number of patients</th>
<th>Percentage of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30 years</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>30-40 years</td>
<td>37</td>
<td>24.66</td>
</tr>
<tr>
<td>40-50 years</td>
<td>41</td>
<td>27.33</td>
</tr>
<tr>
<td>50-60 years</td>
<td>33</td>
<td>22</td>
</tr>
<tr>
<td>&gt;60 years</td>
<td>15</td>
<td>10</td>
</tr>
</tbody>
</table>

Graph 2: Number of patients according to age

Out of 150 patients, 76 were females and 74 males (Table 3, Graph 3). We found that females reported early to the dental department than males. This is in accordance with Abdurahiman et al.[3] This might be due to the fact that females are more consciousness about esthetics.

Table 3: Number and percentage of patients according to gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number of patients</th>
<th>Percentage of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>74</td>
<td>49.33</td>
</tr>
<tr>
<td>Female</td>
<td>76</td>
<td>50.66</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>100</td>
</tr>
</tbody>
</table>

Graph 3: Number of patients according to age
We also found that educated patients were more aware of fixed prosthesis. This finding is similar to Schutzhold et al and Mehmood Hussain et al.[2, 8] Only 20 (13.33 %) patients were aware of implants. Whereas Sahah et al found 41.7% of their subjects to be aware, which was very high.[5] Similarly the study conducted by Berge in Norway reported even more awareness about dental implant which was 70.1%.[9] This dissimilarity might be due to the changes in the socioeconomic background and literacy rate among the study population.

The results observed in our study showed that awareness of patients about diverse dental prosthesis is low, especially regarding dental implants. This lack of awareness is more in developing nations like India, where there is lack of education and awareness amongst people about treatment options for replacement of missing teeth, mainly dental implants. Hence, measures should be taken to improve awareness of the patients. To achieve this goal, oral health care providers, media, relatives have a major role to play. Patients should be made aware about the complications of not replacing missing teeth immediately and also about various treatment options. This will improve the attitude of patients towards latest treatment options available to replace lost teeth, thereby improving the quality of life in patients.[10-12]

Conclusion

Among our patients, we found that the patient awareness about diverse treatment options for missing teeth was low. Hence, there is a need to make the patients aware about a variety of dental prosthesis to replace missing teeth.

References


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