Understanding the Psychology of Geriatric Patients seeking Conventional Dentures

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ABSTRACT

Introduction: Rehabilitating an edentulous patient successfully is a challenge. Various factors have to be taken care of during the rehabilitation. The patient psychology and technical issues determine the success of the treatment.

Objectives: The purpose of this survey is to assess the success of conventional denture treatment.

Materials and methods: A questionnaire survey was conducted among the patients attending the outpatient department of the Department of Prosthodontics, School of Dental Sciences, to assess the success of conventional denture treatment.

Conclusion: From the survey, it can be concluded that there are numerous factors to be taken care of while treating an edentulous patient with complete conventional dentures. Understanding their psychology and expectations plays a major role in the success of the treatment.

Keywords: Esthetics, Conventional complete denture, Rehabilitation.


Source of support: Nil

Conflict of interest: None

INTRODUCTION

With improvements in almost every aspect of life, the life expectancy of a person has also increased, hence the number of geriatric patients who eventually at one point of time become partially or completely edentulous. This edentulism has an immense effect on the self-esteem as well as the health of a person. The preferred mode of rehabilitating a completely edentulous patient by conventional complete dentures is still the preferred mode of treatment given its various advantages, especially the cost factor and ease of fabrication. The improvement of satisfaction, capacity, efficiency, and masticatory performance in patients who are rehabilitated with new full dentures has been reported over the years by several authors. However, the satisfaction level of the patient rehabilitated by conventional dentures is influenced by several factors, including the denture quality and the plated area, the quality of interaction in the patient–dentist relationship, past experiences with full dentures, and the psychological personality. Hence, a study was designed to analyze the psychological status of geriatric patients before and after oral rehabilitation with conventional complete dentures in the population of Malkapur, Karad.

NEED FOR THE STUDY

Loss of teeth causes adverse esthetic and biomechanical sequelae. Psychological status in the elderly population gets compromised for a variety of reasons – medical conditions, decreased social acceptance, financial compromises, and most importantly the loss of teeth. The loss of natural dentition is directly related to the reduced level of acceptance of the edentulous patients in their family as well as in the society, hence the psychological consequences of teeth loss must never be overlooked.

Following a prosthodontic treatment protocol, when we rehabilitate the geriatric edentulous patients, how successful are we in rebuilding their social image? And even as we rehabilitate them, are they really happy about the treatment protocol or do we need to make certain changes in the protocol?

AIM

The aim of the article is to analyze the degree of psychological improvement of the geriatric patients undergoing complete oral rehabilitation with tissue-supported complete denture prosthesis in the local population of Malkapur, Karad.

OBJECTIVES

• To assess the psychological status of the geriatric patients before receiving complete denture treatment.
• To assess the psychological benefits seen/felt by geriatric patients after receiving complete dentures.
To determine if there is a need for a special treatment procedural protocol that needs to be followed from the patient’s point of view after receiving the complete dentures.

MATERIALS AND METHODS

Location

About 100 patients attending the outpatient department (OPD) of the Department of Prosthodontics of the School of Dental Sciences were approached and 90 gave their consent to participate in the survey.

Ethical Clearance

Ethical clearance was obtained by the concerned authorities from the university for this study.

Selection Criteria

Inclusion

• Edentulous patients reporting to the OPD of the Department of Prosthodontics who have completely edentulous upper and lower arches and have been diagnosed to be rehabilitated with tissue-supported complete denture prosthesis.

Exclusion

• Partially edentulous patients requiring partial removable denture or fixed partial denture.
• Patients opting for implant prosthesis.
• Patients requiring maxilla facial prosthesis.

Pilot Study

Content validity was assessed by the specialists (Fig. 1). The questionnaires were translated into the local language and translated back into English by a bilingual expert and validated.

Data Collection

• A validated set of 12 close-ended yes–no type of questions were posed to the subjects (Appendix 1): 4 questions before the treatment and 12 questions after the treatment. The answers were to be marked by the investigator.

Statistical Analysis

Data obtained were subjected to statistical analysis.

Appendix 1: Personal information of the patients

<table>
<thead>
<tr>
<th>NAME:</th>
<th>AGE:</th>
<th>SEX: □ Male □ Female</th>
</tr>
</thead>
</table>

QUESTIONNAIRE

1. How long have you been edentulous__________
2. Does, being edentulous reduce social confidence level? □ Yes □ No
3. Are you accepted well in your family after losing teeth? □ Yes □ No
4. Are you able to consume foods like vegetables and fruits? □ Yes □ No
5. How do you feel about your general health after losing teeth? □ Yes □ No
6. Has the treatment with dentures helped your social confidence level? □ Yes □ No
7. Is there a difference in the family acceptance level? □ Yes □ No
8. Are you able to consume foods of your choice? □ Yes □ No
9. Is there betterment in your general well being? □ Yes □ No
10. How do you feel when you come for the treatment in terms of interest shown by the treating doctor
   a. Very interested □
   b. Just interested □
   c. Not interested □
   d. Ignorant □
11. What is your opinion about the time gap between the appointments
   a. Very Good □
   b. Good □
   c. Neutral □
   d. Bad □
12. What is your opinion about the waiting period when you come for your appointment
   a. Good □
   b. Nil □
   c. Lengthy □
RESULTS

This survey was done to analyze the psychological status and well-being of the geriatric patients before and after oral rehabilitation and their attitude toward the dental students treating them with conventional complete dentures in the population of Malkapur, Karad.

Table 1 describes the percentage of male and female patients who gave their consent to participate in the survey. Among the 90 patients who participated in the survey, 55 were male and 35 were female.

Table 2 describes the period of edentulousness of the patients who participated in the study. Among the 90 patients who participated in the study, 43 patients were edentulous for a year. And there was only one patient who was edentulous for 26 years.

Table 3 describes the response of the patients to the questionnaire (Appendix 1) (Fig. 1).

For the first question about the social confidence level of the patients after losing their teeth, about 76.7% (n = 69) of the patients said “Yes” as the answer.

About 81.1% (n = 73) said that there was difference in the family acceptance level when they lost their teeth.

About 83.3% (n = 75) of the patients said during the edentulous period that they could not consume foodstuff such as vegetables, fruits, and meat. Almost 100% (n = 90) of the patients replied that their general health had gone down after losing their teeth.

Table 1: Male to female ratio who participated in the survey

<table>
<thead>
<tr>
<th>Sex</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid percent</th>
<th>Cumulative percent</th>
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<td>Male</td>
<td>55</td>
<td>61.1</td>
<td>61.1</td>
<td>61.1</td>
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<tr>
<td>Female</td>
<td>35</td>
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<tr>
<td>Total</td>
<td>90</td>
<td>100.0</td>
<td>100.0</td>
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</tr>
</tbody>
</table>

Table 2: Edentulous span in terms of years

<table>
<thead>
<tr>
<th>Years of Edentulousness</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid percent</th>
<th>Cumulative percent</th>
</tr>
</thead>
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<tr>
<td>Valid</td>
<td>1</td>
<td>43</td>
<td>47.8</td>
<td>47.8</td>
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<tr>
<td></td>
<td>2</td>
<td>12</td>
<td>13.3</td>
<td>13.3</td>
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<tr>
<td></td>
<td>3</td>
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<td>5.6</td>
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<td></td>
<td>4</td>
<td>5</td>
<td>5.6</td>
<td>5.6</td>
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<td>5</td>
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<tr>
<td></td>
<td>26</td>
<td>1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>100.0</td>
<td>100.0</td>
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</tr>
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</table>

About 94.4% (n = 85) of the patients said that the rehabilitation has helped their social confidence level. About 87.8% (n = 80) said that there is difference in the family acceptance level after the rehabilitation. When asked whether they were able to consume food of their choice after the rehabilitation, 83.3% (n = 75) said that they could consume food of their choice. About 97.8% (n = 89) of the patients said that their general well-being had improved after the rehabilitation.

About 70% (n = 63) of the patients said that the doctors were very interested in treating them, while 61.1% (n = 55) of them said that the time gap between the appointments was good, and about 57.8% (n = 52) of the patients said that waiting period when they came for their appointment was good enough, which is described in Table 4.
Geriatric population is on the rise, as the quality and availability of medical facilities are extensive and good, which is combined with the better knowledge of the patients about the nutrition and improved hygiene. This implicates that the number of geriatric patients seeking oral rehabilitation is also on the rise. The fabrication of complete denture or rehabilitation of an edentulous patient involves a number of technical procedures, such as the dentists’ knowledge about the physiopathological aspects of the edentulousness, patient cooperation, esthetics, and function. Birren\(^1\) identifies five sources of frustration for the population over 65 years of age: (i) An age status system that idealizes youth; (ii) pressures of time and money that restrict our former interests; (iii) physiological changes that demand attention; (iv) technological changes that increasingly outpatient the skills of ageing persons; and (v) with age, the individuals become more locked in, being less able to move out of a frustrating situation.

Denture patients classified into (i) Philosophical, (ii) exacting, (iii) hysterical, and (iv) indifferent. Patients with the philosophical mind are said to be the ideal kind of patients whereas patients who belong to the other three categories do not have the ideal adaptability to the edentulousness. Ettinger and Beck\(^4\) divided the elderly patients functionally into (i) functionally independent elderly: Live in community unassisted; (ii) frail elderly: Have lost some of their independence, but still live in the community with the help of support services; and (iii) functionally dependent elderly: Unable to live independently in the community. Winkler\(^5\) mentioned the following categories of patients: (i) The hardly elderly, (ii) the senile aged syndrome, (iii) the satisfied old denture wearer, and (iv) the geriatric patients who do not want dentures. O’Shea et al\(^6\) classified the ideal dental patient into complaint, sophisticated, and responsive.

No matter what classification the patient belongs to, one common concern in the elderly is edentulousness (partial or complete). Edentulousness brings about psychological anxiety in the elder population, which is shown through the treatment or posttreatment. This has a direct effect on the success of the treatment. According to a study conducted by Fiske et al,\(^7\) the emotional effect of tooth lasted almost for five stages of bereavement, i.e., denial, anger, depression, bargaining, and acceptance. Tooth loss and its acceptance are the major factors that determine the psychology of the geriatric edentulous patients. They are more skeptical, demanding, and at times quite a challenge to handle.\(^1\) Hence, patient satisfaction plays a major role in determining the success of the treatment. Many factors play a major role in satisfying a complete denture patient like functional efficiency (speech, mastication) and esthetics. The dentists’ main aim would be to satisfy the patient in terms of function and esthetics.\(^8\) Fenlon and Sherriff\(^9\) stated that quality of the mandibular residual alveolar ridges, retention and stability of the mandibular dentures, accuracy of reproduction of retruded jaw relationship, and patient adaptability were powerful determinants of patients’ satisfaction with new complete dentures. The results of a study done by de Liz Pocztaruk et al\(^10\) showed that satisfaction and the masticatory capacity were related to the comfort and the stability of the denture, with improvement on chewing and speaking ability and on the esthetics. Marinus\(^11\) showed that satisfaction with dentures for most patients is individually determined and, for dentist and patient, it is often unpredictable. In the present survey, an attempt was made to know the satisfaction level of the patient after receiving the conventional complete dentures through a questionnaire. About 90 patients gave their consent to participate in the study. The results of the present comparative study showed that the patients after losing the natural dentition had a low social confidence level (76.7%, n = 69). This is mainly because the loss of teeth is like losing a body part. Facial esthetics, hence the confidence level, gets compromised. This is especially true for people who have to continue with their social interaction or the job during the edentulous period. According to the present survey,
94.4% (n = 85) of the patients said that the rehabilitation has helped them gain their confidence level back. Around 81.1% (n = 73) said that there was a difference in the family acceptance level when they lost teeth and 87.8% (n = 80) said that their families accepted them better after the rehabilitation. About 83.3% (n = 75) patients said that they were unable to consume foodstuff of their choice before rehabilitation and about 83.3% (n = 75) said they were able to consume food of their choice after rehabilitation. Almost 100% (n = 90) of the patients said that their general health had become worse after losing teeth and 97.8% (n = 89) said they felt better with their physical health after the rehabilitation. All the above survey results indicate that the rehabilitation of the edentulous patients helps the geriatric population in more than one way and it is the responsibility of the treating doctor to understand the psychology of the individual patient and treat them so that they are able to lead a better life. A total of 70% (n = 63) of the patients said that the treating doctors were very interested in treating them, 61.1% (n = 55) said the time gap between the appointments is good and they have no complaints about that, 57.8% (n = 52) said that the waiting period was good enough that they did not have to wait for long hours and also said even if there is a delay in the waiting period, the patients do not mind and they understand that the doctors are busy, hence it becomes our duty and responsibility to treat them with compassion, understand them, and satisfy their needs and expectations.

**SUMMARY**

This survey was conducted to analyze the satisfaction level of the geriatric patient seeking conventional dentures before and after treatment. From the study, it is evident that patients have a remarkable improvement in life after treatment. However, there is scope for improvement for the treating doctors to reduce the waiting period. This kind of survey is necessary to know the satisfaction level of the patient and to know how we can better ourselves in giving the patients a better life.

**CONCLUSION**

Rehabilitating an edentulous patient is no less a challenge even to an experienced dentist, given the technical aspects, and more the psychology of the elder population. As given by Dr. Muller De Van “Meet the mind of the patient before we meet the mouth.” We as dental professionals need to understand the psychology of the patients, understand their expectations, counsel them, and then give them the best that is possible. An unhappy patient can break one’s dental practice, so it becomes mandatory for us not only to satisfy the patient’s expectations but also evaluate the success of the treatment.

**REFERENCES**