

PATIENTS' PERCEIVED NEED FOR PROSTHETIC REPLACEMENT OF TEETH AT THE TIME OF EXTRACTION

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Introduction

Dentists tend to assess the need for prosthetic treatment clinically based on the presence and location of edentulous spaces in the dental arch (Smith and Sheiham, 1980). Compared with the normative treatment need in a society, the perceived need for replacement was considerably lower (Akeel, 2003). People tend to have a more positive assessment regarding their oral health condition than professionals (Water et al., 2001).

The perceived need for tooth replacements is based on aesthetic, functional and social factors (Wall and Taylor, 1989). The socio economic status of patients has an effect on the perceived need for dental care independent of educational level (Unell et al., 1996). The majority of patients get their missing teeth replaced in order to improve or restore their appearance. (Tickel and Worthington, 1997). The perceived need for replacement is reported to be slightly greater for missing anterior and premolar teeth than for molars. The subjective needs for replacing missing teeth are greatest at the age of fifty years (Trovik, 2002).

The aim of this study was to (a) assess the subjective need for the tooth / teeth replacement at the time of extraction and for the existing edentulous spaces already present which were not restored and (b) to assess the perceived problems experienced by the patients due to the existing edentulous spaces.

Materials and methods

A convenient sample of patients attending the clinics in the Department of Oral Surgery and Out Patients Department, Dental Hospital (Teaching) for extraction of teeth were selected for this study. The data were recorded, using a questionnaire by the dental surgeons and undergraduate dental students who carried out the extractions. The questionnaire consisted of the following parts, (a) socio demographic data, (b) the type of tooth / teeth extracted, (c) patients' wish to

replace the tooth/ teeth extracted at that visit, (d) the perceived problems due to the existing edentulous spaces and their need for replacement of those spaces, (e) the usage of any existing dentures by the patients. The data analysis was done using a chi-square test to determine the statistical significance of the results.

Results

The total number of patients in this sample of study was 584. The age of the patients ranged from 11-86 years (Mean age: 39.5 ± 15.31).

Among the patients who expressed a wish to get the extracted teeth replaced at the time of extraction, there was a significantly higher percentage of patients in the groups between 41 years and 70 years compared to the age group between 11 years and 40 years. (Pearson chi-square value = 62.52, $P < 0.001$).

Of the patients who wanted replacement of their extracted teeth at the time of extraction the percentage females was significantly higher when compared with male patients. (Pearson chi-square value = 7.31, $P < 0.005$).

The table 1 shows that of the patients who had their anterior teeth and 1st premolar extracted had a statistically significant percentage of need for replacement at the time of extraction when compared within the patients who had their 2nd premolar and molar teeth extracted (Pearson chi-square value = 102.3, $P < 0.001$).

Among patients with existing edentulous spaces, the number who had perceived aesthetic problems and wanted replacement was significantly higher number when compared with those who did not want replacement (Pearson chi-square value = 102.3, $P < 0.001$). It was also observed that patients (57%) with subjective problems with chewing had higher perceived treatment need (85%) for replacement of their missing teeth (Pearson chi-square value = 122.2, $P < 0.001$).

Among the patients with subjective problems with speech a significantly higher percentage of patients perceived the need for replacement.

Discussions

This study shows that the age groups between 41 years to 70 years had significantly higher percentage of perceived need for replacement of teeth at the time of extraction when compared with the age groups between 11 years to 40 years. This may be attributed to the lack of experience of problems associated with tooth loss, faced by the younger patients when being partially edentulous. This is in agreement with the finding of other studies (Trovik, 2002). The perceived treatment need for replacement among female patients was significantly higher when compared with those who did not want replacements. This finding may be due to the fact that females are more concerned with their appearance and comfort when compared with males.

At the time of extraction the patients who had their front teeth extracted expressed significantly higher percentage of perceived need for replacement compared to those who had their back teeth removed. This shows the influence of aesthetics as a predictor for seeking replacement of lost teeth. This finding is in agreement with another study carried out in a Finnish adult population (Trovik, 2002).

In this sample the percentage of patients who expressed the problems with chewing was relatively similar to the findings of Akeel (2003) from Saudi Arabia. Among those edentulous patients with the subjective problem with chewing food 85% of them had the perceived need for replacement of their lost teeth. The perceived problem of speech was found in 21% of patients. This finding shows that speech is also adversely affected by loss of teeth.

Conclusion

The most important predictors of patients' perceived need for replacement were tooth type, problems with aesthetics and chewing. There was a significant number of females who had perceived need for replacement and the wish for replacement increased with age.

References

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Table 1. Distribution of patients according to the percentage of need for replacement at the time of extraction of anterior teeth and posterior teeth

Teeth group	No of patients who wanted replacement	Percentage within the group	No of patients who didn't want replacement	Percentage within the group
Anterior teeth and 1st Premolars	157	85.3%	27	14.7%
2nd Premolars and Molar teeth	205	51.03%	195	48.8%