

ORIGINAL RESEARCH

Awareness of various treatment modalities for replacement of missing teeth among patients visiting government dental college, Srinagar: A survey

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Received: 14 March, 2023

Accepted: 19 April, 2023

ABSTRACT

Background: The loss of teeth is a serious, debilitating condition which can affect the individual's physical as well as psychological well-being. A variety of treatment modalities are available to replace the missing teeth and the awareness of such among the population is of importance. Hence, the purpose of this study is to evaluate the awareness of treatment modalities for replacing missing teeth among the patients visiting Government Dental College, Srinagar. **Materials and Methods:** The study was conducted in the Outpatient Department of Government Dental College, Srinagar amongst 100 patients. A questionnaire consisting of 10 closed ended questions was distributed to the participants after explaining the aim of the study and taking informed consent. Patients with at least one tooth missing (excluding third molars) and above the age of 20 years were included in the survey. The data collected was then analyzed using SPSS software Version 20.0. **Results:** A majority of the subjects ((59.2% males and 52.6% females) had been edentulous for more than 1 year and less than 5 years. 67% of males and 63% females stated that dental caries was the cause of tooth loss, 23% males and 28% females stated the reason as natural causes and 9% males and 7% females stated trauma as the cause of tooth loss. Almost 87% males responded that there was difficulty in mastication due to loss of teeth, 92% females felt that it hampered the esthetics. When asked about their preference, almost 50% males and 47% females chose fixed partial denture as an option. Only 12 % males and 10% females chose dental implants as a treatment of choice. **Conclusion:** The findings indicate that there is a lack of awareness among the patients regarding the various treatment modalities for replacement of missing teeth. The focus of a dental practitioner must be on improving the awareness and understanding the needs of the patient for achieving a better quality of life.

Keywords: Awareness, Treatment Modalities, Preferences, Edentulous, Missing teeth.

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INTRODUCTION

Tooth loss can be considered as a serious, life altering condition that can occur due to a variety of reasons such as dental caries, periodontal diseases, endodontic failure, trauma or certain iatrogenic factors. Tooth loss can lead to certain lifestyle changes and cause physical as well as psychological readjustments. The World Health Organization classifies edentulous patients as physically impaired due to loss of an important part of their body¹. Edentulous or partially edentulous patients can face multiple complications such as masticatory deficiency, temporomandibular joint disorders, phonetic issues, loss of facial form and esthetics and an overall loss of confidence and social embarrassment.

Prosthetic rehabilitation is a must for such patients and hence there is a need to create a sense of awareness among the population regarding various treatment modalities that prosthodontics as a branch has to offer. The traditional approach for replacement of missing teeth consists of complete dentures in case of completely edentulous cases, removable partial dentures and fixed partial dentures. Within the last few decades, dental implants have been gaining popularity as a superior treatment option for edentulous and partially edentulous cases. It has been associated with better retention, stability and higher masticatory efficiency. Patients experience a better quality of life, assurance and self-confidence. However, the treatment modality should be an amalgamation of the patient's

choice, needs and financial status and the clinical judgement of the dental professional. It is the prosthodontist's responsibility to make the patients aware about the treatment modalities and help choose the best option.

The presence of teeth in the oral cavity helps to maintain a positive outlook in life². The perceptions and attitude of patients regarding prosthetic rehabilitation is changing slowly. There is a greater sense of expectations and demands from dental treatment. Hence, this study aims to evaluate the awareness among patients visiting Government Dental College, Srinagar regarding the treatment modalities for replacement of missing teeth.

MATERIALS AND METHODS

A questionnaire based cross-sectional survey was carried out among 100 patients reporting to the Outpatient Department of Government Dental College, Srinagar. Patients with at least one tooth missing (excluding third molars) and above the age of 20 years were included in the survey. The participants were informed about the aims of the study and consent was taken.

The questionnaire consisted of the participant's demographic data such as name, age and occupation. 10 close-ended questions were included in the questionnaire asking about the subject's awareness about their edentulism, cause of tooth loss, various treatment options to replace missing teeth and patient's preferences. The data obtained was analyzed using SPSS Version 20.0 software.

RESULTS

When the subjects were asked about their awareness regarding absence of teeth in their oral cavity, 2.1% males and 1.7% females were surprisingly unaware about it and responded negatively. The second question asked about the duration of their edentulism and it was seen that a majority of participants (59.2% males and 52.6% females) had been edentulous for more than 1 year and less than 5 years. 22.6% males

and 32.4% females had been partially edentulous for less than 6 months. Only 15% males and 18.2% females had been partially edentulous for more than 5 years.

The reason for tooth loss was asked and it was found that 67% of males and 63% females stated dental caries as the cause, 23% males and 28% females stated the reason as natural causes (may include periodontal problems) and 9% males and 7% females stated trauma as the cause of tooth loss. The remaining participants were unaware about the cause of tooth loss.

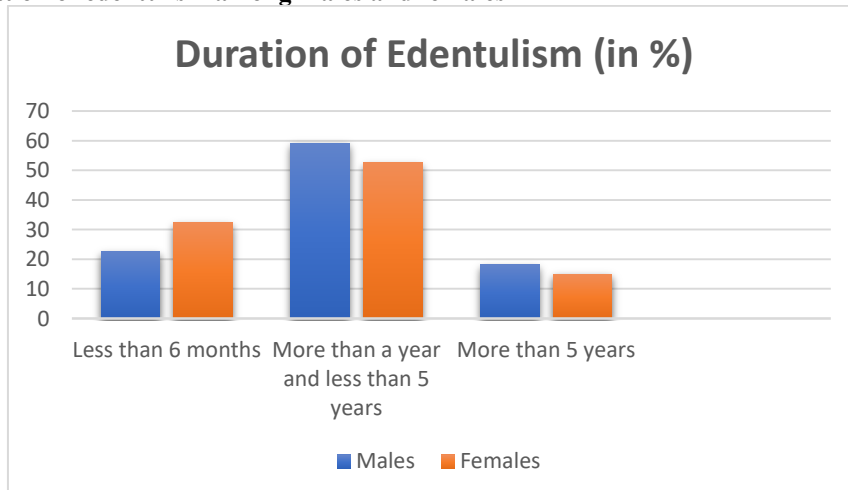
The subjects were asked whether the loss of tooth caused difficulty in mastication and hampered esthetics. Almost 87% males responded there was difficulty in mastication, 92% females felt that it hampered the esthetics. 13% males and 8 % females stated both as their answer.

When asked about their willingness to replace missing teeth, only 75% males and 77% females responded positively whereas the rest gave a negative response.

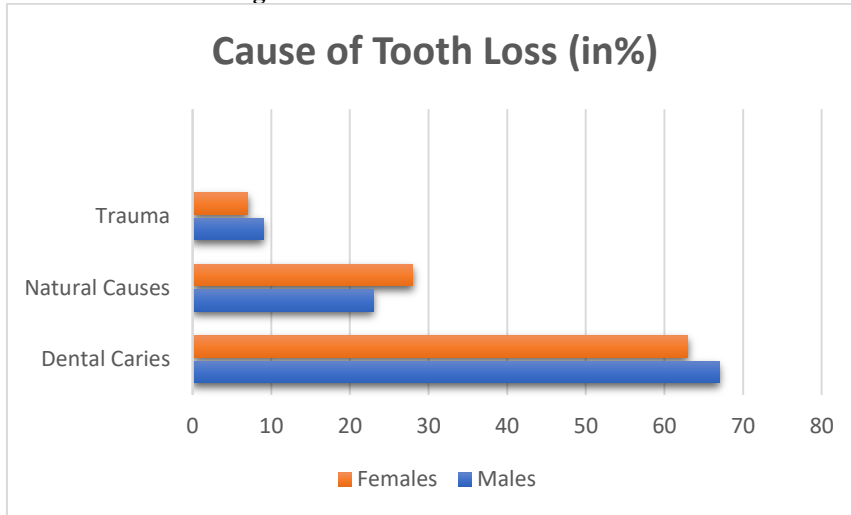
The subjects were then asked about their awareness regarding treatment modalities to replace missing teeth. Most of the males and females were aware about removable dentures and fixed partial dentures. Only 56% of the subjects were aware about implants as a choice of prosthodontic treatment.

A majority of men and women considered dental implants as a superior choice of treatment. When asked about their preference, almost 50% males and 47% females chose fixed partial denture as an option. Around 38% males and 43% females preferred removable dentures and only 12 % males and 10% females chose dental implants as a treatment of choice. A majority of subjects stated cost factor to be the reason of their preference, the other reasons stated were pain, lack of time and lack of availability of superior treatment options in the dental clinics near their vicinity. At last, the subjects were asked whether this survey created an awareness to seek more information about the treatment choices and almost all the subjects responded positively.

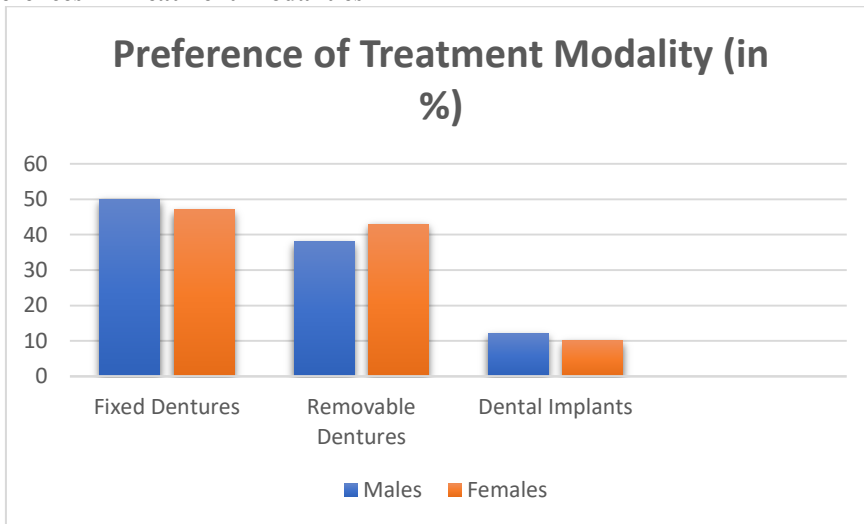
Graph 1: Duration of edentulism among males and females



Graph 2: Reasons of tooth loss among males and females



Graph 3: Preferences in Treatment Modalities



DISCUSSION

There is an ever-growing shift in the understanding of dental treatment and its importance among the population. The preferences and needs of patients are a subject every dental surgeon must be aware of and should take into consideration before the treatment. This study aimed to gain the knowledge about patient’s awareness regarding treatment options when it comes to replacement of missing teeth. Out of the 100 participants, 97.9% males and 98.3% females were aware about their state of edentulism. Similar findings were also documented in a study conducted by Prabhu N et al (2009). In their study they found that females had a higher incidence of partial edentulism as compared to their male counterparts³. 59.2% males and 52.6% females were found edentulous for more than a year and less than 5 years. These findings suggest a lack of urgency and need for treatment immediately post-exfoliation of teeth. Most of the studies found dental caries as the main cause of tooth loss followed by periodontal problems and trauma. A majority of male participants stated

masticatory deficiency as a main complication of loss of teeth whereas majority of female participants felt lack of esthetics as the major problem. This suggests that females have greater aesthetic expectations than their male counterparts. These findings are similar to a study conducted at Lahore by Amjad and Azeez et al, females were more concerned about their esthetics as compared to males⁴. Although most of the participants felt dental implants to be a superior choice of treatment, almost 50% males and 47% females chose fixed partial denture(bridges) as their preferred treatment option. Only 10% females and 12% males chose implants as their treatment of choice. The rest of the participants chose removable dentures as their preference. The main reason for this was found to be the cost factor. This suggests that although patients would undergo implant treatment, they lack the financial aid to claim a superior treatment of choice. The last question asked the participants whether there was an increased awareness to gain more knowledge about the treatment options available to replace

missing teeth. The positive response of a majority of subjects sheds a light on the changing views and increasing expectations among the population regarding dental treatment and hence, the patients should be made aware about the treatment choices to achieve a better quality of life.

CONCLUSION

As displayed in the results, there is still a lack of awareness and knowledge about the various treatment modalities that the branch has to offer for replacing missing teeth. Hence, our focus as a dental practitioner should be on understanding the needs of the patient, improving the awareness and knowledge that they have regarding prosthetic treatment and achieving good results so that the patient receives the best treatment and leads a higher quality of life.

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