

Evaluation of Patient's Personal Reasons and Experience with Orthodontic Treatment

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ABSTRACT

Background: The objective of the study is to evaluate patient's personal reasons and experience with orthodontic treatment. Also to find the problems faced during the orthodontic procedure.

Materials & Methods: A cross-sectional study was done using pretested questionnaire among 312 patients (178 – males and 134 – females) with a response rate of 85%. The overall mean age of the population was 21.34±62 years. The data was collected on excel sheet and analyzed by SPSS 15.0 software at p value 0.05 for the statistical significance.

Results: Half of the participants (52.4%) had undergone orthodontic procedure for straightening the teeth as they think that teeth are the important features that affect the facial profile. Around fifty percent judged themselves that they require this procedure. Most common problem faced by the participants during treatment was its longer duration (29.3%). Still 86.4% of them were satisfied with the treatment.

Conclusion: The study concluded most of the subjects themselves noted that they are in need of orthodontic treatment in them. There were many problems faced during the procedure by the participants but still most of them were satisfied after the results.

Key Words: Orthodontic Procedure, dental appearance, orthodontic experience.

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Introduction

Malocclusion is a misalignment of teeth which affects the facial appearance and psychosocial status of the patient. Epidemiological research indicates that at least 70% of the population is affected by some form of occlusal malrelations. Improving dento facial appearance is the main reason for undergoing orthodontic treatment.¹ Orthodontic intervention results in a good functioning and aesthetically pleasing dentition in harmony with the face.²

According to American Association of Orthodontists

every year, more than 5.75 million patients seek orthodontic treatment in the United States and Canada, which has grown by 43.75% over the past 10 years. But researches have shown that patients face many problems to start up with or during orthodontic treatment; one of the most common reasons are fear of pain, embarrassment, expensive and long duration of treatment etc.

Like any other medical treatment, orthodontic treatment along with its benefits, has also associated

complications. It is reported that 95% of the orthodontic patients experience varying degree of pain during orthodontic treatment.³

Considering the factors that more number of patients are seeking orthodontic treatment and growing concern of professionals in acquiring new patients and keeping them satisfied with the carried out orthodontic treatment, practitioners should focus their attention beyond the orthodontic mechano-therapy to the more subjective aspects of patients discomfort and attitude towards treatment. Hence the aim of the present study was to evaluate patient's personal experience with orthodontic treatment.

Materials and Methods

A cross-sectional survey was conducted among 312 patients who had orthodontic treatment from dental Institute and private clinics. Addresses of the patients were obtained from the respected dentists and postgraduate students from the college.

All the available and those who were willing to participate were included in the study. Patients with cleft lip and palate, having any syndromes, and with medical problems were excluded from the study. Informed consent was obtained from all the participants before filling the proformas.

A pilot study was conducted among a group of 30 subjects in order to ensure the level of validity and degree of repeatability (Cronbach's alpha=0.78).

A self administered questionnaire was developed to evaluate experience of the patients regarding orthodontic treatment. Questionnaire obtained data regarding teasing experience of treatment, reasons for orthodontic treatment, reasons for knowing orthodontic treatment, main reason to correct teeth, problems faced during treatment and satisfaction with treatment. The questionnaire was filled by the patient and later collected by the interviewer.

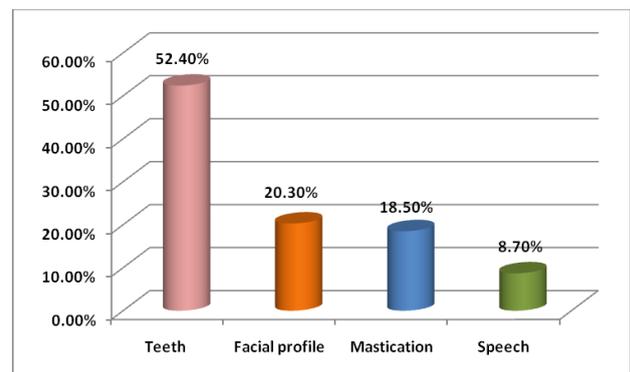
Data analysis:

The data was collected on excel sheet and analyzed by SPSS 15.0 software. p value is kept at 0.05 for the statistical significance.

Results

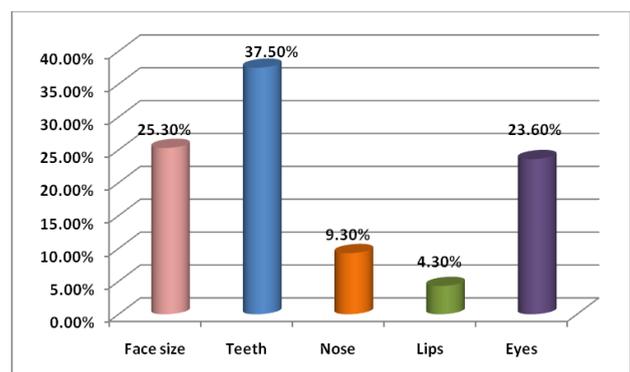
The total sample composed of 312 participants consisting of 178 – males and 134 – females with a response rate of 85%. The overall mean age of the population was 21.34±62 years.

In the present study, it was found that around half of the participants considered straightening of teeth is the most important factor to take orthodontic treatment, 20.3% for took better facial profile, 18.5% for mastication and 8.7% for better speech (Graph 1).



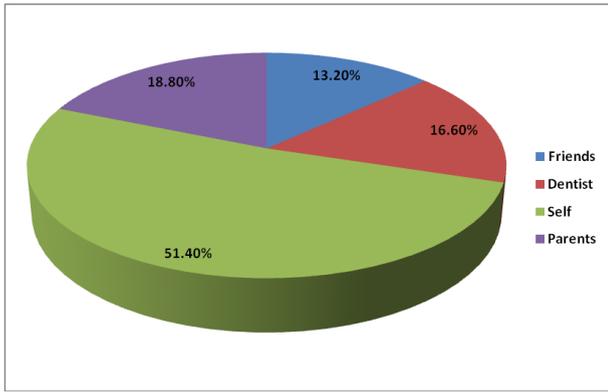
Graph 1: Showing factors for taking orthodontic treatment.

When it was asked regarding the most common facial feature that effect profile of the face. Most of the subjects (37.5%) answered teeth followed by face size and eyes as 25.3% and 23.6% respectively. Whereas few of them think that nose and lips play an role in overall facial profile (Graph 2).

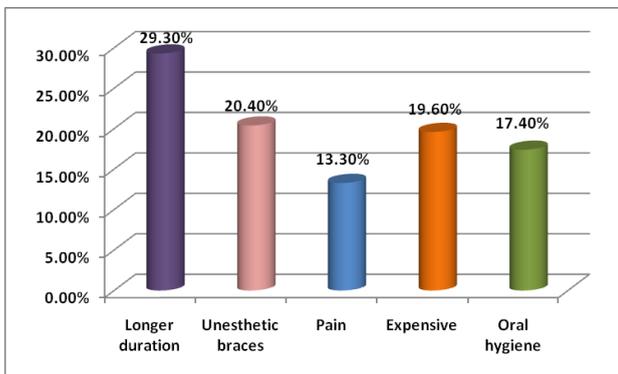


Graph 2: Showing facial features that effect profile of face.

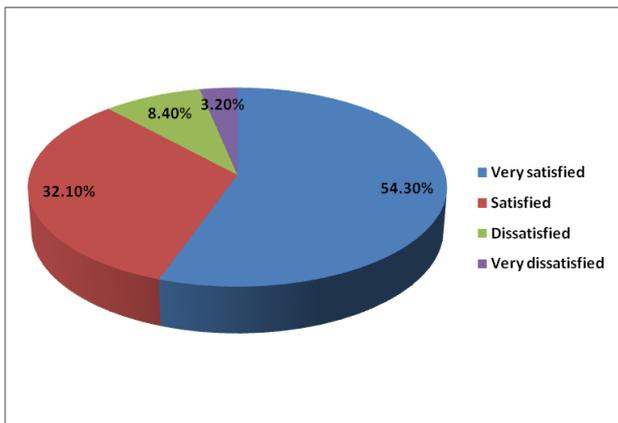
Most of the suggestions to the participating patients who had undergone orthodontic treatment were given by themselves only 51.4%. Some of the subjects were suggested by parents / relatives (18.8%). Dentist advised to around 16.6% of the participants and 13.2% were convinced by friends (Graph 3).



Graph 3: Showing suggestions for undergoing orthodontic treatment to the participants



Graph 4: Frequency of problems faced by patients with orthodontic treatment



Graph 5: Showing overall experience of the patients with orthodontic treatment

Problems faced by the participants during the treatment procedure was its longer duration (29.3%). 20.4% said that they had unaesthetic smile with braces, 19.6% found it costly, 17.4% had problems to maintain oral hygiene with orthodontic wires and 13.3% had

experienced pain while eating during treatment (Graph 4).

When overall experience of the study population was taken 54.3% of them were fully satisfied, 32.1% just satisfied, 8.4% were dissatisfied and very few subjects were totally dissatisfied (Graph 5). At the end it was asked that suppose if you are in the same pre treatment condition then will you go for this procedure and mostly (93.%) subjects gave positive response.

Discussion

Orthodontic treatment is done for better occlusion, which results in a good functioning and aesthetically pleasing teeth in harmony with the face.⁴ So people go for orthodontic treatment for these reasons and some of them face problems during the procedure which are discussed in the present study. These complaints have been highlighted in this paper so that clinician can improve their capabilities to decrease the difficulties faced by the patients as the procedure is lengthy.

The response rate in this study was 85% which was similar to study done by Al- Omiri and Alhaija in 2006⁵ where as higher than Zhou et al in 2001.⁶

A high proportion of the participants showed very satisfaction and satisfaction with the treatment and the results are comparable to Uslu et al study among Class III individuals.⁷ Similarly Bikeland et al mentioned high frequency of subjects with satisfaction in his study⁸ and Larsson and Bergsrom found that around 74% of the subjects were satisfied.⁹ The high rate of satisfaction may be due to better alignment of the dentition socially and aesthetically.

The present study found that teeth are the most important feature that effect the facial profile and the results were in agreement with Rajagopal study among patients from malocclusion.¹⁰

Most of the patients themselves noticed orthodontic problems in their teeth followed by parents (18.8%), dentists (16.6%) and friends (13.2%). Where as other studies had shown that dentists play an important role in guiding the patients for orthodontic procedures.¹⁰⁻¹²

The most common problems faced by the study subjects in the procedure was of longer duration of treatment and around 17.4% said its difficult to brush with braces and the findings were lesser compared to

with Williams et al in 2005.¹² Whereas 13.3% experienced pain during treatment and the same results were reported by Williams et al.¹²

It was found that half of the participants mentioned that most important factor for taking orthodontic treatment is straightening the teeth and the results were in agreement with Rajagopal's study in 2011.¹⁰ The common factor for this response may be due to the reason that people mainly think teeth are the most common features that effect facial profile.

When it was asked that if you are in the same pre treatment condition then will you go for this treatment and mostly (93.%) subjects gave positive answer which was similar to Uslu et al study.⁷

Conclusion

The study concluded that teeth are the most important factor for facial profile and mostly people know their problems regarding malocclusion by themselves only. Although the procedure is longer but still most of the patients were fully satisfied with this procedure.

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