

## PATIENTS' EXPECTATIONS OF ORTHODONTIC TREATMENT DURING THEIR INITIAL VISIT: A QUESTIONNAIRE STUDY

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**ABSTRACT:** **Aim:** The aim of this study was to assess the patients' expectations from orthodontic treatment in order to provide optimal treatment based on their expectations resulting in patient satisfaction. **Materials and methods:** A pre-validated questionnaire was used to measure the patients' responses, which included questions about expectations of their initial visit, the type of orthodontic treatment expected, problems associated with treatment, duration and frequency of attendance, benefits and complications of treatment. Descriptive analyses were used to calculate the responses of the patients. **Results:** This study showed that improved dento-facial appearance and gain in confidence were the most common expectations among the patients' in both the genders. **Conclusions:** Measuring patients' expectations from orthodontic treatment before initiation of treatment by the orthodontists might lead to more satisfaction and less disappointment.

**KEYWORDS:** First visit; Treatment expectation; Treatment satisfaction

### INTRODUCTION

Awareness of patients' demands by an orthodontist is important in fulfilling the patients' desires or expectations through productive clinical discussions.<sup>1</sup> Understanding the oral health needs, treatment satisfaction and perceived overall quality of health of a patient is possible only through proper assessment of patients' expectations from orthodontic treatment.<sup>2</sup> Any differences arising between the treatment provided and patient desire, might result in decreased satisfaction to the patient. Orthodontists should take care not to underestimate patients' expressions of desire for care, and should ultimately aim towards fulfillment of those expectations.<sup>3</sup> The quality of treatment provided should be continuously and systematically evaluated and documented through clinical assessments utilizing standardized surveys.<sup>4</sup>

Satisfaction with dentofacial appearance and expectations of orthodontic treatment have been correlated with age, whilst no such relation among gender has been reported.<sup>5,6</sup> The aim of the present study was to assess the patients' expectations from orthodontic treatment in order to provide optimal treatment based on their expectations resulting in patient satisfaction.

### Materials and methods:

The study sample included a total of 100 subjects (both male and female) with age range 15-29 years. This cross

sectional study included a sample consisting of new patients' with no previous history of orthodontic treatment presenting to the orthodontic OPD during the period from July, 2015 to December, 2015. Differently-abled patients and those with craniofacial syndromes or anomalies were excluded from the study.

A structured questionnaire used in previous studies was modified, pre-validated and used in the present study. Study protocol was explained to the participants in the study and the participation was voluntary. Written informed consent was obtained from the subjects. The questionnaire was completely answered and returned by the subjects. Participants who partially filled the questionnaire were excluded from the final study sample. Non-probability consecutive sampling technique was used. The study was approved by the ethical review committee of the hospital. A total of 100 patients' completed the questionnaire in full. Sample attrition was 18 patients due to incomplete questionnaire. Descriptive analyses were used to calculate the responses of the subjects.

### Results:

The final study sample included a total of 100 subjects. They were asked closed questions about expectations of their initial visit, the type of orthodontic treatment expected, problems associated with treatment, duration

Table 1. Responses to patients' expectations from orthodontic treatment

Questions	No. of responses
Q1. What are your expectations of first visit?	
a. Examination and diagnosis	39
b. Discussion	12
c. X-rays	18
d. Braces	20
e. Impressions	11
Q2. What types of orthodontic treatment do you expect?	
a. Fixed braces	55
b. Extraction of teeth	14
c. Removable appliances	31
d. Jaw surgery	00
Q3. What experiences / side effects do you expect from orthodontic treatment?	
a. Restrict eating or drinking	22
b. Pain/discomfort in teeth	16
c. Speech problems	12
d. Difficulty cleaning teeth	26
e. Embarrassment with appliances	11
f. Ulcers of mouth	08
g. Problems of gums	05
h. Headache	00
Q4. What benefits of orthodontic treatment do you expect?	
a. Improved appearance of teeth	51
b. Improved chewing & speech	14
c. Improved smile	06
d. Improved oral & dental health	02
e. Gain confidence	19
f. Improvement in psycho-social wellbeing	05
g. Decreased gums exposure	03
h. Break habits	00

and frequency of attendance, benefits and complications of treatment. Responses to patients' expectations regarding orthodontic treatment on their first visit are shown in Tables 1 and 2.

#### Discussion:

This study aimed to assess the patients' expectations of orthodontic treatment from their initial visit. The findings of our study revealed that improved dento-facial appearance and gain in confidence were the most common expectations among the subjects. This agreed with findings of other authors with the exception of variations in the study sample selected.<sup>7-9</sup>

Patients' expectations of orthodontic treatment have been analyzed in many studies in the literature. Most studies regarding patients' expectations have directed their questions to the parents of the children involved. Very few studies have measured the expectations directly from the patient involved in the orthodontic treatment. Studies had reported differences among gender in reasons for seeking orthodontic treatment. Whilst, females focused more on their improved appearance, males

presented for orthodontic treatment with expectations of improved social well-being.<sup>10</sup> However, in our study both the genders had the same expectation of improved appearance and gain in confidence after orthodontic treatment.

Most studies conducted previously on expectations of orthodontic treatment provided little information regarding response to the problems and complications associated with orthodontic treatment and, frequency and duration of the treatment. In the present study, we found increased awareness among the patients about the possible complications and also the duration and frequency of the orthodontic treatment.

Barriers to orthodontic treatment include the visibility of appliances, discomfort, and difficulties in chewing and maintenance of oral hygiene. Recent advances in the orthodontic appliances including the use of clear aligners has been reported to reduce these barriers including sequelae such as white spot lesions, dental caries and periodontal disease.<sup>11</sup> These clear aligners are becoming

Table 2. Responses to patients' expectations from orthodontic treatment

Questions	No. of responses
Q5.What duration of orthodontic treatment do you expect?	
a. 2 months	0000
b. 6 months	10
c. 1 year	32
d. 2 years	36
e. 3 years	22
f. 4 years	00
Q6.What reaction do you expect from others/public towards your treatment?	
a. None	05
b. Positive	73
c. Negative	22
Q7.What do you expect about frequency of orthodontic visits?	
a. 4 months	00
b. 2 months	10
c. 6 months	01
d. Once a month	66
e. Twice a month	19
f. Once a week	04
Q8.Which complications of treatment do you expect?	
a. Tooth decay	18
b. Mobility of teeth	19
c. Relapse (return of orthodontic problem)	02
d. Pain in jaw muscles & joints	36
e. Bleeding & swollen gums	24
f. Root shortening	00

more popular due to its marketing campaign utilizing evolving technologies in internet and media platforms. Subjects in the present study showed increased awareness regarding the type of orthodontic treatment, especially the use of clear aligners appliance system [eg: *Invisalign™*, *Clearpath™*]. Most patients' showed preference to this clear aligners system among their expectations in the type of treatment.

Subjects who partially filled the questionnaire were excluded from the final study sample. The limitations of the present study included small sample size and bias arising due to random measurement error, response style bias and mood bias. Discussions with patients' regarding their expectations from orthodontic treatment before initiation of treatment by the orthodontists might lead to more satisfaction and less disappointment.<sup>12</sup>

## CONCLUSION

Patients' responses of different types of expectations revealed that there was an increased awareness regarding the various aspects of the type of orthodontic treatment available, duration, frequency and complications associated with orthodontic treatment. The current study should be regarded as a pilot for further comprehensive

studies that look into the aspect of fulfilling the patients' expectations from orthodontic treatment.

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