

Patient Satisfaction Index Undergoing Orthodontic Treatment In Dental Hospital Based Institution Across Chennai: A Questionnaire Study

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ABSTRACT

Background: The aim of the present study was identifying patient and treatment factors associated with patient satisfaction in a group of adolescent patients.

Materials and method: A questionnaire study was carried out among outpatients attending the dental hospital-based institutions across Chennai during 2019-2020 to 200 subjects undergoing orthodontic treatment.

Result: Overall data shows that 53% of patient were satisfied with the orthodontic treatment and 47% of patient were not satisfied with the orthodontic treatment.

Conclusion: This study shows that the satisfaction of patients with orthodontic treatment has significantly increased in the present days. No correlation was found between gender and patient satisfaction.

Keywords: Patient satisfaction index, orthodontic treatment, dental hospital.

INTRODUCTION

Malocclusion is one of the most important dental condition which may negatively impact the individuals self-esteem and their emotional status apart from affecting the dental functions and the facial aesthetics.^(1,2,3) Several studies in the literature can be found regarding the impact of orthodontic treatment in the speech, appearance, social and inter personal relationship thereby improving the quality of the life of the individuals.^(4,5,6) Many factors such as quality of care, competence of the dentist, relationship between orthodontic treatment provider and patients, accessibility and convenience, and the cost of treatment determine patient's satisfaction ⁽⁷⁾.

Many studies state that orthodontic treatment improves the smile aesthetics of the patient that has an influence on patient's confidence and social interaction ⁽⁸⁾. The aim of the present study was identifying patient and treatment factors associated with patient satisfaction in a group of adolescent patients.

MATERIALS AND METHODS

In order to assess the patient's satisfaction index, a questionnaire study was carried out among outpatients attending the dental hospital-based institutions across Chennai during 2019-2020. Inclusion criteria included patients with Angles

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Class I, Class II, Class III malocclusion who are undergoing orthodontic treatment in the age group of 15 -25 years and willing to take part in the study. Patients who are above 25 years and below 15 years, patients with mental disorders and patients who have undergone or will undergo orthognathic surgery were excluded from the study.

The questionnaire was pre -tested by four experts in the field of Dentistry and necessary alterations were done before administration to 200 subjects based on a previous study ⁽¹⁰⁾. The study sample included 110 females and 90 males. Questionnaire was distributed to them during the waiting period in the hospital. The questionnaire was mainly concerned with aesthetics, function and social well - being of the patients.

Table 1: Following yes /no questions were asked in this study.

Q.NO.	Question	Yes /No
1.	Are you in orthodontic treatment in our college more than a year ?	
2.	Do you think your teeth need to be corrected ?	
3.	Is it your decision to undergo orthodontic treatment ?	
4.	Do the doctors motivate you regarding orthodontic treatment?	
5.	Did the doctor recognize you by name in recall visits?	
6.	Are you been properly informed about orthodontic treatment procedures?	
7.	Have you been properly cared at your scheduled revisits?	
8.	Do you have any financial issues with your care provider?	
9.	Have you been made to wait for longer time during recall visits?	
10.	Are you reporting back exactly on your appointment date for recall visits?	
11.	Did you experience pain & discomfort when braces are debonded?	
12.	Do you had any pain or discomfort during any of the recall procedure ?	
13.	Are your debonded brackets are replaced immediately during next your visit?	
14.	Have you been transferred to a new orthodontist during your treatment period?	
15.	Are you satisfied with the treatment procedure of your new orthodontist ?	
16.	How will you rate our treatment success ?	
17.	Any other comment	

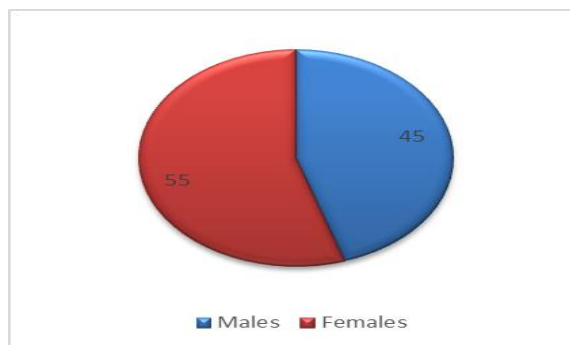
Statistical Analysis

Statistical analysis was done using SPSS software version- 2.0, and descriptive statistics were done.

RESULTS

In the present study, 200 patients were included and their responses were received. The study sample included 110 females and 90 males with a mean age was 20.83 ± 2.13 (Graph 1). Overall data shows that 53% of patient were satisfied with the orthodontic treatment and 47% of patient were not satisfied with the orthodontic treatment (Graph 2). Table 1 shows the responses of the patients regarding the orthodontist and the treatment provided. More than 65 % of patients were aware of their dental problems and the need for orthodontic treatment. Orthodontist care and concern for the patient and the transparency in the treatment procedure done was well appreciated by the patients. Most of the patients complain about the longer waiting hours and the pain experienced during the orthodontic treatment procedure.

Graph 1: Distribution of study subjects based on gender.



Graph 2: Distribution of study subjects based on overall responses.



Table 1: Individual questions with patients responses.

Questions	Yes	No
1. Are you in orthodontic treatment in our college more than a year?	62.7%	37.3%
2. Do you think your teeth need to be corrected?	69.6%	30.4%
3. Is it your decision to undergo orthodontic treatment?	71.6%	28.4%
4. Do our doctors motivate you regarding orthodontic treatment?	78.4%	21.6%
5. Did your doctors recognize you by name in recall visits?	63.7%	36.3%
6. Are you been properly informed about orthodontic treatment procedures?	72.5%	27.5%
7. Have you been properly cared at your scheduled revisits?	69.6%	30.4%
8. Do you have any financial issues with your care provider?	48.0%	52.0%
9. Have you been made to wait for longer time during recall visits?	50.0%	50.0%
10. Are you reporting back exactly on your appointment date for recall visits?	55.9%	44.1%
11. Did you experienced pain & discomfort when braces are debonded?	58.8%	41.2%
12. Do you had any pain or discomfort during any of our recall procedure?	42.2%	57.8%
13. Whether your debonded brackets are replaced immediately during next your visit?	69.6%	30.4%
14. Have you been transferred to new orthodontist during your treatment period?	34.3%	65.7%
15. Are you satisfied with the treatment procedure of your new orthodontist?	53.9%	46.1%
16. How will you rate our treatment success?	66.7%	33.3%

DISCUSSION

Professional success can be measured by the level of patient satisfaction, not only in relation to results achieved with changes of occlusion in a systematic and effective treatment, but also addressing the expectations of the patients. The present study was done with a 2:3 males to female ratio for the sample of orthodontically treated patients who were referred to the department. The finding reflects the fact that females are more concerned with their facial aesthetics and are more interested in pursuing the orthodontic treatment. The study

results were compared between the patients who were satisfied and unsatisfied with the treatment.

Recognition of another person by name is the crux in enhancing the human relationships. In this study, the professional recognized most patients by name in both groups⁽⁹⁾. This suggests that the professional / patient relationship is improving in day today practice in dental hospital-based institutions, despite the presence of private clinics in which the patient is treated by different people or in an environment where two or more patients are treated simultaneously.

The factors such as failure to communicate with patients, decreased consultation time, maximization of financial revenue and transfer of the patients to another orthodontist plays a key point in rating the percentage of satisfaction by the patients. In our study, more than 48% of patients had issues with the cost of the treatment. Informally, it was observed in clinical practice that patients with financial problems becomes disinterested in collaborating with the orthodontic professional. Similarly, the orthodontist also is discouraged to give his utmost care in the consultation because of irregular appointments and shows indifference to those patients. This ultimately compromises the outcome of orthodontic treatment.

Statistically significant difference was seen between the two groups in relation to the acceptance of criticism and suggestions by the professional. In this study, among patients who thought they were dissatisfied, 60% felt that they had no freedom to express their opinions and suggestions. This suggests a failure of communication that existed in more than half of the professionals who have transferred patients. This fact serves to alert the professionals to build good rapport with the patients. The present study also showed that the ability to hear and accept patients' suggestions along with the technical skill of the professional was important in gaining patient satisfaction.

The present study also showed that the patient satisfaction in orthodontic treatment depends on the motivation given by the professional. Among patients who considered themselves dissatisfied, 70 % were not motivated. These professionals are not complying with their obligations such as motivation, guidance and patient encouragement.

The importance of this factor was evident as a determinant of patient satisfaction, as nearly 90% of patients who considered themselves satisfied endorsed the actions of the chosen professionals.

Integration of patients during consultation also showed statistically significant difference, as more than 60% of dissatisfied patient felt displaced during the consultations, which suggests that these professionals often performed automated procedures and were not concerned about clarifying the doubts and anxieties, maintaining a poor personal relationship thus resulting in an unhappy patient. This may be attributed to the fact that most of the patients in educational based institutions are treated by trainee doctors or post graduates who are in a learning curve regarding patient management and working skills.

Thus based on results presented and discussed, it became evident that the patient's satisfaction in relation to professional performance depends essentially on the good relationship. This ensures the integration of patient in the clinical setting, settling patients doubts and prompt treatment and also might provide the referral of the professional to the patient's relatives and friends.

CONCLUSION

- In the present study, it was shown that the satisfaction of patients with orthodontic treatment has significantly increased in the present days.
- No correlation was found between gender and patient satisfaction.
- The doctor-patient relationship still seems to be the most important factor in patient satisfaction. Orthodontists should be aware that a good relationship with the patient may be even more important for the patient than just a technical successful treatment alone.
- Further investigations are necessary to search for a possible relation between the expectations and motivations of orthodontic patients at the beginning of their treatment and their satisfaction at the end of treatment.

CONFLICTS OF INTEREST

The authors declare they have no potential conflict of interests regarding this article.

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