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## Problems related to patients seeking orthodontic treatment

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**Abstract**--Introduction: The aim of this study was to determine the main cause of pursuing orthodontic treatment. Methods And Materials: This was a hospital-based study conducted at Orthodontic Department, 383 subsequent orthodontic patients were inquired to fill out a questionnaire designed specially for them. Nine questions were included in the questionnaire to gather information on demographics, the purpose for seeking orthodontic treatment. Results: The research

comprised 383 individuals, 110 males (28.7%), and 273 females (71.3%), Participants age 7 to 30, 94.3% of participants had cosmetic issues, 5.0% had functional issues, and 0.8% had TMD issues. Conclusion: Finally, malocclusions have a significant influence on appearance. However, research on the effects of malocclusion on Life is mixed. Understanding the effects of malocclusion on patients' lives is very significant because it highlights the specific effect on the life of an individual. No research has assessed the severity of the repercussions of known malocclusions, which requires more extensive and rigorous assessments.

**Keywords**--malocclusion, orthodontic patients, patients seeking, orthodontic treatment.

## Introduction

Malocclusion literally is not a disease of any kind with a good dental deviation that has a very negative effect on society <sup>(1)</sup>. Smiling is one of the most important aspects of personal appearance and attraction with all the important roles and responsibilities in human communication and interaction, which is why malocclusion can adversely affect social relations, and this will often affect your image and your fitness for people with malocclusion.<sup>(2)</sup>The effect of dental appearance varies between sexes, age groups, social and economic groups, and according to cultural norms, which is really important. The desire for dental treatment as a way to improve real beauty has a significant 'true' need. <sup>(1, 3)</sup> Women are often very much concerned about their presentation and appearance, therefore, malocclusion actually affects women more than men.<sup>(2)</sup> The most often reported motivating causes for the pursuit of orthodontic/orthodontic surgical treatment were Esthetic reasons, functional problems, temporomandibular disorders (TMD), headache and reasons related to self-assurance and self-reliance.<sup>(4-13)</sup>. Cultural values, treatment expenses, age, expected treatment outcomes, and gender can all influence treatment seeking.<sup>(14, 15)</sup>. TMD and pain problems are more common in women, which leads to more treatment demands.<sup>(15)</sup>.

Dental and facial anomalies are related with the severity of malocclusion <sup>(16, 17)</sup>. Dental aesthetic problems associated with malocclusion include crowding, spacing, rotations, increased / reverse overjet, increased over biting, and an open bite, to name a few (bad bite). Occlusal features in the anterior segments, such as spacing and incisal irregularity, are believed to have a major negative impact on a person's self-perceived dental appearance, particularly in men.<sup>(18)</sup> According to both self-perceived and examiner-evaluated data, the severity of malocclusion is linked to dental aesthetics. <sup>(17, 19-22)</sup> When comparing subjects with severe malocclusion to those with minor malocclusion, subjects with severe malocclusion had an 88 % greater incidence of poorer aesthetic self-perception.<sup>(22)</sup> Self perceived dental aesthetics typically correspond with the assessment of experts, however at best a weak or modest link has been established <sup>(17, 23)</sup>. It has also been observed that the rater's occupation, gender, and age all have an impact

on the aesthetic evaluation.<sup>(24-27)</sup> when judging aesthetics, orthodontists are sharp observers than other dentists or ordinary people.<sup>(25, 28)</sup>

### **Material And Methods**

This study was cross sectional study and non-probability consecutive sampling technique was used. The study was conducted in Department of Orthodontics, Liaquat University Hospital Hyderabad and Institute of Dentistry Jamshoro. The sample size of 383 patients is gathered through it. Collected data was be entered into SPSS version 24 for data analysis. Mean standard deviation will be computed for quantitative variable like age qualitative variables are summarized in terms of frequency and percentage. Data was presented using tables and graphical charts.

### **Results**

#### **Gender Distribution**

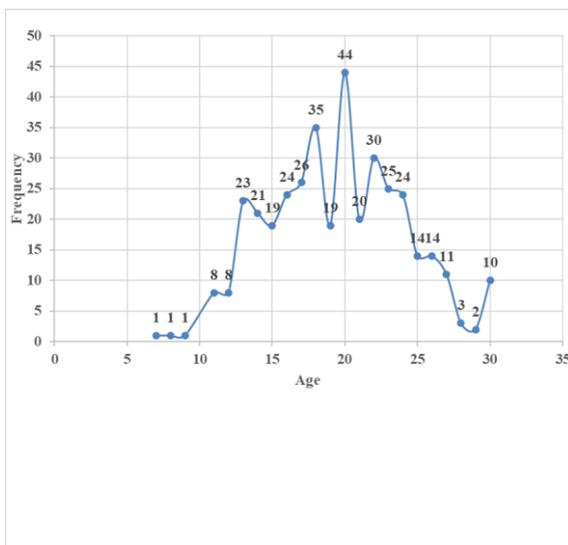
There were 383 participants which were included in the study, Male participants were 110 (28.7%) in number whereas female participants are 273 (71-3%).

#### **Age Distribution**

According to age, participants were taken from 7 to 30 years of age, the number of participants having 7-10 years were 3(0.9%), 11-15 years were 79(20.7%), 16-20 years were 148(38.7%), 21-25 years were 113 (39.5%), and 26-30 years were 40(10.5%), having Mean:19.4961, with Std. Deviation 4.61268, with Minimum:7 and Maximum:30.00 shown in Graph 1

#### **Problems of the Subjects**

Regarding the effect to the Problems of the subjects, 361 (94.3%) number of participants having aesthetics problem were, 19 (5.0%) participants had Functional Problems, and 3 (0.8%) participants had TMD issues, which is shown in the Chart 1



Graph 1: Age distribution of the subjects(N=383)

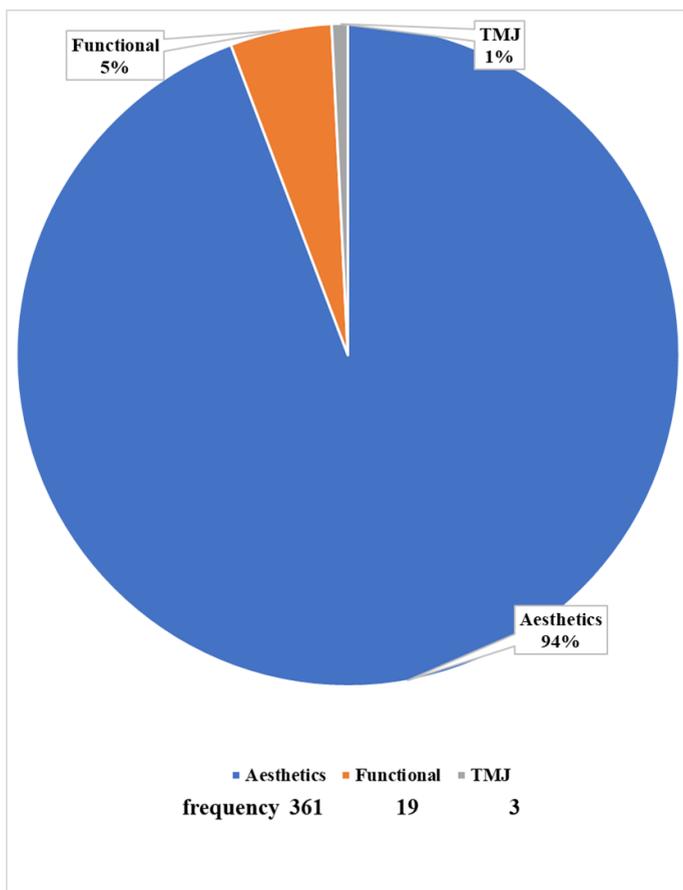


Chart 1. Problems of the subjects(N=383)

## Discussion

Patients' personal motivations for orthodontic / orthodontic surgery may differ from patient perceptions of recommendations.<sup>(15)</sup> Furthermore, individual patients' perceptions of the demand for orthodontic treatment may differ from specialist assessments.<sup>(29)</sup> Self-perceived dental irregularities and the unfavorable impact of dental aesthetics may have an impact on social interactions, self-confidence, and psychology.<sup>(30)</sup> Various studies on the purpose of the treating malocclusion in different places of Pakistan have already been published previously in past. The results of this study cannot be generalized on the total population of Pakistan, but it provides an idea about the malocclusion among orthodontic patients in the Hyderabad and Jamshoro districts. Patients pursuing orthodontic treatment were randomly allocated a questionnaire. It explored the purpose of orthodontic treatment on 7-30 years old patients seeking orthodontic treatment at LUMHS Jamshoro and ADCC Hyderabad. All of the patients were cooperative and expressive. The purpose of the study was explained to all participants and they actively participated in it. It was noted that women seek orthodontic treatment three times more often than men. This finding is consistent with prior research showing that girls are considerably more likely to undergo orthodontic treatment than males.<sup>(31-34)</sup>

According to the results of this survey, 94.3 percent of participants sought orthodontic therapy for cosmetic reasons, just 5.0 percent for functional reasons and 0.8 percent had TMD issues. Several studies have found that desire to improve one's appearance is almost always the main motivation for patients seeking orthodontic and orthodontic-surgery treatment.<sup>(37-39)</sup> The skeletal malocclusion of a patient reflects the appearance of their face, and this is one of the most important factors influencing their motivation and satisfaction during orthodontic and surgical treatment.<sup>(8, 40)</sup> As a result, the major responsibility of caregivers is to evaluate the need for treatment objectively, taking into account not only the child's oral health but also his or her overall aesthetic appeal and the child's subjective perception of the need for orthodontic treatment. It was concluded in the study that teaching institutes both public and private should include orthodontics into their curriculum and that appropriate treatment options should be discussed at all times in view of the ongoing need for care in this field. Extensive research is needed in the near future.

## Conclusion

In conclusion, malocclusions have a notable effect on appearance. However, there is contrasting information on the repercussions of malocclusion on well-being. Thorough and vast knowledge of the effects of malocclusion on patients' lives is crucial which can only be achieved through more detailed and rigorous evaluations.

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### Questionnaire (ANNEXURE-I)

#### Serial Number:

1. NAME: \_\_\_\_\_
2. AGE: \_\_\_\_\_  (7-15)  (16-25)  (26-30)
3. GENDER:  FEMALE  MALE
4. Participant Consent (Agreed):  Yes  No
5. Previous history of Orthodontic Treatment:  Yes  No
6. Participants having any history of systemic complications or facial deformities such as cleft lip and palate and history of trauma:  Yes  No
7. Pain (neither dental nor gingival):  Yes  No
8. Gingival Status:  Normal Gingiva  Mild Inflammation  Moderate Inflammation  
 Severe Inflammation
9. Problems of the subjects  
 Aesthetics  Functional  TMJ