# Exploring the Reasons for Seeking Orthodontic Treatment among the Patients Attended in Selected Private Settings

Rubby MG<sup>1\*</sup>, Sultana N<sup>2</sup>, Mamun AA<sup>3</sup>, Jannath F<sup>4</sup>

#### AFFILIATION:

- 1. Dr. Md. Golam Rubby
  - Associate Professor and Head, Department of Orthodontics, Mandy Dental College & Hospital, Dhaka, Bangladesh
- Dr. Nihar Sultana Assistant Professor and Head, Department of Dental Anatomy, Mandy Dental College & Hospital, Dhaka, Bangladesh
- Dr. Abdullah Al Mamun Lecturer, Department of Dental Anatomy, Dhaka Dental College & Hospital, Dhaka, Bangladesh
  Dr. Fatema Jannath
  - Junior Consultant (Dental), Sarkari Karmachari Hospital, Fulbaria, Dhaka, Bangladesh

#### Article info.

Received: 20 September 2022 Accepted: 09 November 2022

#### Volume: Vol-13, Issue-1, April 2023

#### DOI: https://doi.org/10.3329/updcj.v13i1.63357



© Authors retain copyright and grant the journal right of first publication with the work simultaneously licensed under Creative Commons Attribution License CC - BY 4.0 that allows others to share the work with an acknowledgment of the work's authorship and initial publication in this journal.

https://creativecommons.org/licenses/by/4.0/ Publisher: Update Dental College, Dhaka, Bangladesh Web: www.updatedentalcollege.edu.bd E-mail: updcj@hotmail.com



Scan QR code to access your article on UpDCJ BanglaJOL index.

#### \* Corresponding Author

Dr. Md. Golam Rubby Associate Professor and Head, Department of Orthodontics, Mandy Dental College & Hospital, Dhaka, Bangladesh E-mail: russeld36@gmail.com Cell: +8801711007946

## ABSTRACT:

Introduction: This study was conducted to explore the reasons and influential factors for seeking orthodontic treatment among the orthodontic patients. Methods: A total 126 patients were interviewed for the duration of four months with a semi structured questionnaire who attended at two private dental settings in Dhaka and Jeshore city. In depth interview was conducted with some patients and with their guardians to explore the influential factors for seeking orthodontic treatment. Results: The study result showed out of 126 patients majority 82.5% were female, the mean age of the patient was 17.9(±5.9) years with range 7-36 years. Social harassment like teasing or bullying experiences was the influential factor for seeking orthodontic treatment mentioned by majority orthodontic treatment seeker. Other influential factors noted as desire to have better facial or aesthetic appearance, better career opportunity. Conclusion: Present study concluded that patients seek orthodontic treatment mainly due to psychosocial reason like to get rid of social harassment, also to improve their dental appearance and aesthetic.

#### **KEYWORDS:**

Orthodontic patients, Explore, Influential factor, Orthodontics.

## **INTRODUCTION:**

Orthodontics is a special branch of dentistry which mainly deals with the correction of malaligned teeth, correction of occlusion, functional and aesthetic improvement of patients. Malocclusion or malaligned teeth can cause aesthetic and psychosocial problems in patients, which may be defined as an irregularity of teeth or malrelationship of dental arches beyond the accepted normal range.<sup>[1,2]</sup> Many studies showed that the problems associated with malocclusion such as traumatic occlusion, periodontal diseases, temporomandibular joint pain might resolve after orthodontic treatment.<sup>[3]</sup> The lifestyle of a person can adversely impacted by malocclusion due to its psychosocial as well as other functional disturbances like eating, talking and aesthetics.<sup>[4]</sup> Various reasons and factors may influence patients in seeking orthodontic treatment. Parents and dentists are likely to play a vital role in initiating and motivating patients in seeking for orthodontic treatment.<sup>[5-7]</sup> Therefore present study aimed to explore the influential factors for seeking orthodontic treatment among the orthodontic patients.

### **MATERIALS AND METHODS:**

A mixed method study was conducted among 126 patients attended at two private dental settings in Dhaka and Jeshore city for the duration of four months from June 2021 to September 2021 with the objective to explore the influencing factors for seeking orthodontic treatment among them. Data were collected from these patients with a semi structured interview administered questionnaire prior taking verbal consent from them and from their guardians to participate in the study. The questionnaire consists two parts, first part includes the demographic information and the orthodontic information like spacing, crowding, open bite, over jet, over bite ect. examined and noted by orthodontist after clinical examination. The second part of the questionnaire focused on the influential factors for seeking orthodontic treatment. This part was the qualitative part of the research, where the orthodontic patients briefly mentioned about the reasons for seeking orthodontic treatment individually and they were encouraged to brief their emotion and thoughts about the subject matter. As the qualitative part of the research, in depth interview was conducted from the patients who were interested to participate in the discussion to explore their feelings, experiences, thoughts for seeking orthodontic treatment. The collected data were analyzed and the results were presented in frequency and percentages.

## **RESULTS:**

Table 1 shows half of the patients (50.8%) were in 11-15 years age group, majority (82.5%) orthodontic patients were female, majority (89.7%) patients were students, almost half (53.2%) patients belonged to upper socio economic status.

Socio demographic details		n (%)
Age (in years)	≤10	7 (5.5)
	11 – 15	64 (50.8)
	16 - 20	42 (33.3)
	>20	13 (10.4)
	Mean (± SD) : 17.9(±5.9)	year, Range : 7
	36 years	
Sex	Female	104 (82.5)
	Male	22 (17.5)
Occupation	Student	113 (89.7)
	Housewife	8 (6.3)
	Service &/or others	5 (4.0)
Socio economic status	Upper	67 (53.2)
	Middle	53 (42.1)
	Lower	6 (4.7)

Figure 1 shows out of 126 patients more than half (55.6%) were diagnosed as Class I malocclusion; Class II Division I, Class II Division II and Class III were diagnosed in 30.1%, 9.5%, 4.8% patients respectively.

Figure 1 : Malocclusion pattern of patients by Angle's and incisor classification, (n=126)

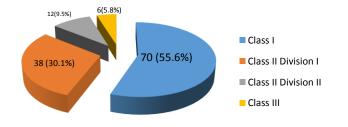


Table 2 shows majority (81.7%) orthodontic patients mentioned social harassment as influencing factor for seeking orthodontic treatment, followed by improvement of facial appearance (76.9%), facing marriage problems or issues (66.7%), lack of confidence (49.2%).

Table 2: Influencing factors for seeking orthodontictreatment (n=126)

Influencing factors		n (%)
Psychosocial	Social harassment	103 (81.7)
factors	Teasing experience / Bullying experience	96 (76.1)
	Facing marriage problems or issues	84 (66.7)
Personal factors	Lack of confidence	62 (49.2)
	For better career opportunity	47 (37.3)
	For the improvement of facial appearance / aesthetic appearance	97 (76.9)
Aesthetic and functional factors	For better facial appearance	97 (77.0)
	Improvement of speech	48 (38.1)
	Improvement of chewing	30 (23.8)
	Improvement of dental health	43 (34.1)
Other factors /	Suggested by guardian	26 (20.6)
Miscellaneous	New trend / Others wearing orthodontic appliances	7 (5.6)

\*Multiple response

**DISCUSSION:** 

Present study was conducted to explore the influential factors for seeking orthodontic treatment among the orthodontic patients. The study findings revealed that the mean age of orthodontic patients was 17.9 (±5.9) years with range 7-36 years, half of the patients belonged to 11-15 years age group. Similar findings were observed in the study Al-harbi et al.<sup>[8]</sup>, Sawai et al.<sup>[9]</sup> Another study conducted by Baheti et al.<sup>[10]</sup> reported that 60% of the study participants belonged to 13-20 years age group, which was close to current study result. According to American Academy of Orthodontics (AAO) the best phase of seeking orthodontic treatment is between 11 and 14 years,<sup>[11]</sup> which is visible in the current scenario that majority patients were seeking orthodontic treatment belonged to 11-15 years age group. Present study reported majority (82.5%) orthodontic patients were female, which was consistent with different studies like Al-harbi et al.<sup>[8]</sup>, Sharma <sup>[12]</sup>, Alhaija et al.<sup>[13]</sup> and Sawai et al.<sup>[9]</sup> The probable reasons of female predominance as orthodontic patient could be female are more concern about aesthetic issues than male. But male predominance for seeking orthodontic treatment reported by Shah et al.<sup>[14]</sup> which was contrast with present study. More than half of the patients were student and belonged to upper socio economic status. Present study reported more than half (55.6%) patients pattern of malocclusion was Class I

Website: https://www.banglajol.info/index.php/UpDCJ

## Update Dental College Journal (UpDCJ): Vol- 13, Issue- 1 April 2023

malocclusion according to Angles classification, which was consistent with previous Bangladeshi studies by Rita et al.<sup>[15]</sup>, Rahman et al.<sup>[16]</sup>, where they reported Class I malocclusion is the most prevalent type of malocclusion among Bangladeshi population. Current study recorded some influential factors for seeking orthodontic treatment mentioned by the respondents covering the psychosocial aspect, personal aspect, aesthetic and functional aspect. It was noted that social harassment was the influential factor for seeking orthodontic treatment mentioned by majority (81.7%) orthodontic treatment seeker, other influential factors noted as improvement of facial / aesthetic appearance (77.0%), teasing or bullying experiences (76.1%), improvement of confidence level (49.2%), better career opportunities (37.3%). Considering the psychosocial aspect, aesthetic or functional aspect, personal aspect and other aspects present study revealed that social harassment, teasing or bullying experiences, marriage issues were the major influential factors for seeking orthodontic treatment mentioned by majority orthodontic treatment seeker. In depth interview was conducted with some orthodontic patients in front of their guardian, where they expressed their circumstances and opinion for seeking orthodontic treatment. From the in depth interview session it was noted that orthodontic patients faced challenges in the society in the form of bullying or teasing by the surrounding people due to their facial appearance and malaligned teeth. Aesthetic problem was the major concern among them than the functional problem. The desire to have a better facial appearance was an important reason for seeking orthodontic treatment. Expected improvement in career opportunities, improvement in social life and self-confidence were also major factors for seeking orthodontic treatment, rather it was observed that they were not so concern about the functional problems due to the malaligned teeth.

### **CONCLUSION:**

Present study concluded that psychosocial factors are important ones in leading patients to seek orthodontic treatment. Demographic factor such as age, sex may have some influences on patients. But most of the patients seek orthodontic treatment because of psychosocial reasons like social harassment, teasing or bullying experiences, to have a better aesthetic appearance which can lead to a better social as well as professional life. Present study recommended that the patient's motivation in seeking orthodontic treatment should be determined before the treatment commences to increase the chances for a mutually satisfying result for both orthodontists and patients.

# **CONFLICT OF INTEREST:**

The authors declares that there is no conflict of interest regarding the publication of this article.

# **GRANT SUPPORT:**

This research did not receive any specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

## **REFERENCES:**

- 1. Walther D P, Houston W J, Jones M L, Oliver R G. Walther and Houston's Orthodontic Notes. 5th Edition, Wright, Oxford,1994.
- Kenealy P, Frude N, Shaw W. An Evaluation of the Psychological and Social Effects of Malocclusion: Some Implications for Dental Policy Making. Social Science and Medicine, 1989; 28, 583-591. <u>https://doi.org/10.1016/0277-9536(89)90253-0</u> PMid:2928834
- Houston W J B, Stephens C D, Tulley W I. A textbook of Orthodontics. 2nd Edition. Cambridge, Redwood Books 1993; pp. 6-12
- 4. Proffit W R, Fields H W. Contemporary Orthodontics. 3rd Edition, Mosby Inc., St Louis, MO, 2000
- Ingervall B, Hedegard B. Awareness of malocclusion and desire of orthodontic treatment in 18-year old Swedish men. Acta Odontol Scand 1974; 32: 93-101 <u>https://doi.org/10.3109/00016357409002538</u> PMid:4524924
- Gosney M B E. An investigation into some of the factors influencing the desire for orthodontic treatment. Br J Orthod 1986; 13: 87-94

https://doi.org/10.1179/bjo.13.2.87 PMid:3456796

- 7. Breece G L, Nieberg L G. Motivations for adult orthodontic treatment. J Clin Orthod 1986; 20: 166- 171
- Al harbi A A, Alkhulayfi A S, Alharbi A T, Al harbi M, Al harbi A S, Al harbi N S. Knowledge of patients about association between orthodontic treatment and periodontal diseases. Int J Oral Care Res 2018;6:43 6
- Sawai DS, Singh P, Tushar, Dogra M, Sultana R, Khan SA. Perception, awareness, and practice among patients seeking orthodontic treatment toward maintenance of periodontal health and factors affecting the same among patients visiting dental clinics in Patna. J Family Med Prim Care 2019;8:3695-9 <u>https://doi.org/10.4103/jfmpc.jfmpc 773 19</u> PMid:31803675 PMCid:PMC6881928
- Baheti M, Toshniwal N. Survey on oral hygiene protocols among orthodontic correction seeking individuals. J Dent Herald 2015;3:4 8 <u>https://doi.org/10.4103/0974-7761.178020</u>
- WHAT'S THE BEST AGE TO START ORTHODONTICS? Available from: https://gormanbunch.com/ whats the best age to start orthodontics/. [Last accessed on 2022 Aug 23].
  Sharma J N. Pattern of distribution of malocclusions. Health Renaissance 2010;8:93 6. <u>https://doi.org/10.3126/hren.v8i2.4419</u>
- Alhaija E S A, Al Saif E M, Taani D Q. Periodontal health knowledge and awareness among subjects with fixed orthodontic appliance. Dental Press J Orthod 2018;23:40,1 9. <u>https://doi.org/10.1590/2177-6709.23.5.40.e1-9.onl</u> PMid:30427500 PMCid:PMC6266317

### **Cite this article:**

Rubby MG, Sultana N, Mamun AA, Jannath F. Exploring the Reasons for Seeking Orthodontic Treatment among the Patients Attended in Selected Private Settings. Update Dent. Coll. j [Internet]. [cited 2023 Apr. 5];13(1):14-16.

Available from:

https://www.banglajol.info/index.php/UpDCJ/article/view/63357