



PSYCHOLOGY OF PATIENTS WITH MALOCCLUSION – A QUESTIONNAIRE SURVEY

SARASWATHI BALAN¹ AND DR.R.NAVANEETHAN*²

¹*Student, Saveetha Dental College, Chennai, Tamil Nadu, India - 600077*

²*Senior Lecturer, Saveetha Dental College, Chennai, Tamil Nadu, India - 600077*

ABSTRACT

Facial esthetics plays an important role in psychological and social development of an individual. The teeth are an important component of facial esthetics and influence the smile of an individual. Malocclusion or improper arrangement of teeth gives less pleasing effect to the smile and the face. This can result in a loss of self confidence in the individual. A study was conducted to determine how malocclusion influences the psychology of an individual. 100 individuals with malocclusion who reported to our institution for Orthodontic treatment were asked to answer a set of questions. The questions were aimed at assessing the effect of malocclusion on the individuals. The results of the study show that malocclusion has a profound influence on the individual's self-perception of his/her appearance. This in turn affected the self-confidence, self-esteem and the social life of the individual.

KEYWORDS: Malocclusion, Psychology, Esthetics, Orthodontic Treatment.

*Corresponding author



DR.R.NAVANEETHAN

Senior Lecturer, Saveetha Dental College, Chennai,
Tamil Nadu, India - 600077

INTRODUCTION

Malocclusion is characterized by malalignment of teeth in the jaws with or without an uncoordinated growth of the jaws. The concept of oral health related quality of life corresponds to the impact of oral health or disease of an individual on the daily functioning, wellbeing or the overall quality of life¹. Malocclusion is one of the most common factors which affect a person's oral health. It causes an increased accumulation of plaque and calculus which further leads to gingivitis and periodontitis, thus being a precursor for a bad oral hygiene. The smile has been found to be the second most important factor in the perception of esthetics by the general population, after attractiveness of the eyes². The attractiveness of smile is in turn affected by alignment of teeth. Previous studies have shown that most people are well aware of their malocclusion³. Malocclusion can thus affect the self perception of an individual over his attractiveness. Improperly arranged teeth can cause an individual to feel embarrassed about his looks that may lead to lowering of self-confidence and limiting his/her social life.

MATERIALS AND METHODS

A study was therefore conducted to see how often an individual with malocclusion is psychologically affected by the appearance of his teeth and smile. 100 patients who reported to our institution were given a questionnaire (Table 1) to assess the nature and degree to which his dental alignment and esthetics affects his /her sense of self-worth, confidence and social life. The study was approved by the institutional review board.

RESULTS

The results are tabulated in table 1.

Table 1
PSYCHOLOGY OF PATIENT WITH MALOCCLUSION - A QUESTIONNAIRE SURVEY

S. No	Questions	Excellent	Very Good	Good	Fair	Poor
1	The arrangement of teeth in your mouth is?	1	11	4	21	63
S. No	Questions	Never	Once/ Twice	Sometimes	Often	Every day / Almost everyday
2	Do you have bleeding gums?	14	22	25	8	3
3	Do you have bad breath?	9	20	28	10	33
4	Does food get stuck in or between your teeth	11	14	16	22	27
5	Do you have difficulty in biting or chewing?	9	13	25	14	39
6	Do you have difficulty in pronouncing words?	9	20	29	10	39
7	Do you have problems in drinking with a straw?	52	9	1	9	9
8	Have you ever felt irritable or frustrated? (because of your teeth)	13	16	21	20	30
9	Have you ever felt less confident? (Because of your teeth arrangement)	21	10	28	8	33
10	Have you ever felt shy or	19	9	23	14	35

	embarrassed?(because of your teeth)					
11	Do you care for other's opinion about your teeth?	15	14	22	28	21
12	Have you ever worried that you are not as good looking as others?	20	15	23	13	29
13	Do you find it difficult to speak or read out loudly?	15	16	17	19	33
14	Have you ever avoided yourself from participating in any event because you felt embarrassed or shy due to your teeth?	16	15	16	9	44
15	Have you ever avoided smiling or laughing when around others?	18	14	14	18	36

DISCUSSION

All the individuals who had participated in the study had come for Orthodontic treatment. They were all aware that they had an irregular arrangement of teeth. They only varied in their perception of how bad their malocclusion was. Malocclusion has been shown to be responsible for increased plaque and calculus accumulation⁴. Numerous studies have demonstrated that there was plaque accumulation in the region of malaligned teeth compared to the fairly well aligned tooth region in the same individual^{4,5,6}. The plaque accumulation leads to further degradation of the oral health. This often manifests as gingivitis and bad breath and progresses to periodontitis with loss of attachment and bone loss. Only 14% and 9% of the individuals did not complain about bleeding gums and bad breath respectively. This is indicative of the general prevalence of gum disease in individuals with malocclusion, which conforms to the above mentioned studies. The ability to chew and bite as well as inability to use a straw is only relevant in certain types of malocclusion like open bite and is not relevant with all other types of malocclusion. Self-esteem was found to be greatly influenced by malocclusion^{7,8}. The Self-esteem of an individual has been found to greatly improve with the correction of malocclusion by Orthodontic treatment⁸. Malocclusion and its treatment can affect both self-perception and what others perceive as attractiveness. In the present study, malocclusion has been found to affect the self-

perception of one's own attractiveness. A vast majority of participants in the study have had an occasion where they have felt embarrassed of their teeth and were worried of how other people would look at them. The malocclusion has also been found to affect the self-confidence levels. 84 participants have had instances where they have refrained from participating in any event because of their malocclusion. The treatment of malocclusion has been found to improve the self-perception and confidence^{9,10}. Treatment of dental malocclusion by Orthodontic treatment and skeletal malocclusion by Orthognathic surgery has been shown to have a positive impact on the individual's self-confidence and social life¹¹.

CONCLUSION

Facial appearance has a great impact on the self-confidence and social life of an individual. Malocclusion result in the individual not participating in an activity that he/she is good at or interested in. Correction of malocclusion at the earliest will effectively allow the individual to have more self-confidence to pursue his/her interest. It would help greatly to know the change that would take place at the end of Orthodontic treatment in these patients. Conducting another study at the end of treatment, in the same set of individuals

Conflict of Interest

There are no conflicts of interests with this study.

REFERENCES

1. L.Sischo and H.L.Broder. Oral Health-related Quality of Life-What, Why, How, and Future Implications. *J Dent Res*, 90(11): 1264–1270, (2011).
2. Jenny J., Cons N. C., Kohout F. J., Jacobsen J. R. Relationship between dental esthetics and attributions of self-confidence. *J Dent Res*, 69:204, (1990).
3. Monisha.P.Khatri , S.P.Saravana Dinesh . Assesment of awareness about malocclusion among patients – a questionnaire study. *Int J Pharm Bio Sci*, 5(2) : (B) 112 – 116, (2014).
4. Kerstin Behlfelt, Leip Ericsson, Lars Jacobson, Sten Linder–Aronson. The occurrence of plaque and gingivitis and its relationship to tooth alignment within the dental arches. *Journal of Clinical Periodontology*, 8(4): 329-337, (1981).
5. G.S.Griffiths, M. Addy. Effects malocclusion of teeth in the anterior segments on plaque accumulation. *Journal of Clinical Periodontology*, 8(8):481-490, (1981).
6. M.Addy, G.S.Griffiths, P.M.H.Dummer, A.Kingdon, R.Hicks, M.L.Hunter, R.G.Newcombe, W.C.Shaw. The association between tooth irregularity and plaque accumulation, gingivitis and caries in 11-12 year old children. *Eur J Orthod*, 10(1): 76-88, (1988).
7. Shoroog Agou, David Locker, David L. Streiner, Bryan Tompson. Impact of self-esteem on the oral health related quality of life of children with malocclusion. *Am J Orthod Dentofacial Orthop*, 134(4):484-489, (2008).
8. Leandro Silva Marques, Maria Leticia Ramos–Jorge, Saul Martins Paiva, Isabela Almeida Pordeus. Malocclusion: Esthetic impact and quality of life among Brazilian school children. *Am J Orthod Dentofacial Orthop*, 129(3):424-427, (2006).
9. Min Ho Jung. Evaluation of the effects of malocclusion and orthodontic treatment on self-esteem in an adolescent population. *Am J Orthod Dentofacial Orthop*, 138(2): 160-166, (2010).
10. M.Zhang, C. Mcgrath, U.Hagg. The impact of malocclusion and its treatment on quality of life; A literature review. *International Journal of Pediatric Dentistry*, 16(6): 381-387, (2006).
11. Gerzanic.L, Jagsch.R, Watzke IM. Psychological Implications of Orthognathic surgery in patients with skeletal class II, class III Malocclusion. *The International Journal of Adult Orthodontics and Orthognathic Surgery*, 17(2):75 -81, (2002).