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Social Stigma Due To Malocclusion – Role of an Orthodontist

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Abstract
Malocclusion; irregularity of the teeth beyond the range of what is considered normal, is a dental problem faced by thousands of people across the globe that can be completely cured and treated. The prevalence of malocclusion and its orthodontic treatment have been well documented in literature. However, the core objective of this article is to understand the psychosocial impact and social stigma attached to malocclusion, how it affects our society and how orthodontists can help their patients in overcoming this stigma.
Keywords: *Malocclusion; social stigma; oral health; psycho-social health; orthodontic management.*

Introduction

Physical appearance plays a significant role in determining an individual's self-esteem in all epochs of life.[1,2] Body self-image can be considerably altered and undermined by general / dental abnormalities / malocclusion, affecting all aspects of life such as emotional and functional well-being, socialization and relationships in general.[3-10] Childhood, adolescence, adulthood all are greatly impacted by an individual's appearance and self-perception about the same.

Development of facial esthetics begins early in life with an attitude that "what is beautiful is good". Dental esthetics plays a vital role towards the same. Anterior malocclusions have a greater impact on overall facial appearance and individuals self perception. Malocclusion and altered dento-facial esthetics often compromise not only oro-dental functions but also a person's emotional development, self-esteem, self-confidence and social interactions. In this regard, malocclusion may be considered not only as a dental health problem but also linked to general quality of life.[1-5]

Magnitude of Problem

Millions of individuals worldwide are suffering from oro-dental problems in spite of most of them being preventable / treatable; malocclusion being one of them. Malocclusion is not a disease but a morphological variation which may sometimes be associated with pathological conditions. It is one

of the most prevalent dental problems, next only to dental caries and periodontal disease.

The prevalence of malocclusion varies from country to country and among different ages and sex group.[6-8] Large variation exists in the prevalence of orthodontic treatment need in different countries, ranging from 11% in Sweden to 75.5% in Saudi Arabia. Considerable variation in its prevalence has been reported across various states in India, ranging from 12 – 50%. Different studies have reported 12% prevalence of malocclusion in Himachal Pradesh, 20% in Shimla, 34% in Uttar Pradesh, 49.2% in Kerela, 50% in Punjab, 66% in Jaipur to name a few. So a definite ethnic and geographical variation exists.[10-15] However, the lack of single / standardized universal method for recording and grading malocclusion has made a comparison between studies difficult.[6-12]

It has also been noted that the frequency of very severe or handicapping malocclusion increases slightly with co-existent mental disability (13.5% to 15.4%). Despite the fact that 'ideal occlusion', is rarely found in nature; the prevalence and severity of malocclusion were found to be higher in mentally subnormal individuals and more severe in Down syndrome individuals. It is believed that a mentally subnormal child is sensitive and more vulnerable to stress due to inadequate concepts of another environment. This may result in emotional insecurity and force the child to diversify into deleterious oral habits, such as thumb sucking, tongue thrusting etc which further worsen the malocclusion.[13]

With more than half the population worldwide suffering from some or the other form of malocclusion; mild, moderate, severe or handicapping and its widely accepted personal / psycho-social impact, it is only prudent to assert the additional role of an orthodontist towards the management of the same.

Impact on Society

Dental malocclusion constitutes a very significant health problem worldwide, and so does its psychosocial impact. A general mindset exists, of "what is beautiful is good". The demand for orthodontic treatment is also increasing in most countries, including India.

Varying degrees of malocclusion have been shown to adversely affect 'Dental Self-confidence' or self perception about one's esthetics, as well as its 'Social Impact' i.e., the potential problems in social and personal situations due to subjective perception of an unfavorable dental appearance. Personal / psycho-social impact of malocclusion may range from mere self unhappiness with mild aberrations in the front teeth to more severe complications in life like: problems during match-making, limitations with job prospects to even certain extreme cases with suicidal thoughts due to more severe / handicapping malocclusion.[4,5,14]

At first glance, the disciplines of social psychology and clinical orthodontics seem to be as separate as any two disciplines one could find. As noted by Dr. Graber: "One is mental, the other is dental". One involves clinical treatment; the other is a social science. The clinician measures physical characteristics with direct precision in terms of millimeters and degrees; the psychologist measures less specific entities, such as verbal social actions and attitudes.

Yet there are areas of overlap which are both useful and necessary. Considering the impact that alterations in facial appearance can have on a patient's overall well-being in life, it is imperative that the practicing orthodontist has a sound understanding of the social and psychological underpinnings of facial attractiveness theory. The face is the most readily apparent feature and is said to be the most important physical characteristic in the development of self-image and self-esteem, as positive social interactions have been shown to result in better interpersonal relationships and greater self-confidence.

Orthodontists traditionally have considered oral health and function as the principal goals of treatment. However, there has been recently growing acceptance of aesthetics and its psychosocial impact as an important treatment consideration.

An American study demonstrates that differences were found in the body-image, self-concept and self-satisfaction between a prospective orthodontic patient sample, a treated group, and a general population sample not needing orthodontic correction. In a carefully structured investigation, Sergl and Stod found that minor variation in tooth positions could be a significant determinant of the overall aesthetic impression of a face.[15] The teeth also seem to be an important target for teasing and ridicule among school children, 7% of whom were teased about their teeth once per week or more in the study of Sergl and Stodt. Research with children indicates that physical appearance is important in biasing judgments of social acceptability, ability and personality, whether the judges are adults or other children.[15,16] Children themselves see peers who are physically attractive as more socially acceptable, and unattractive children are more likely to be the victims of bullying.[15-17]

It holds true that for an individual with any form of malocclusion, the self-esteem / self-confidence is generally inversely proportional to severity of problem. Greater the severity of malocclusion, lower the self-esteem and vice versa. The social stigma is also greater when associated with other physical / mental disabilities.

Discussion – Role of an Orthodontist

Professional assessment of the need for orthodontic treatment should consider whether the malocclusion has or will have adverse effects on the oral health and/or the social or psychological well-being of the individual. The motivation to seek orthodontic treatment appears to be strongly related to the individual's perceptions of the extent to which their dental / facial appearance deviates from socio-cultural norms. An individual's response to attractiveness is a type of psychosocial response to existing occlusal status and has a strong cultural bearing. The level of satisfaction with one's facial appearance may have important implications for their self- esteem.

Unacceptable dental appearance on account of deviant dental characteristics is a phenomenon that may affect many facets of social interaction including career advancement, peer group acceptance, and negative effect on self-concept.

Adverse psycho-social effect of dental appearance may sometimes be a deterrent affecting quality of life of an individual; even when OTN score (Orthodontic Treatment Need) is not so high.[14]

Knowledge about orthodontic patients' psychosocial or emotional reactions to malocclusion could be helpful in effective professional counseling and treatment of patients. Studies have shown significant improvement in self-esteem, confidence and overall performance after correction of malocclusion.

On certain occasions it may also be seen that even after correction of actual malocclusion, an individual's lost self-confidence may not improve to a considerable extent. In such cases, services of a counselor / psychologist may be needed. But not every patient can gain access to professional psychological assistance.

It is here that the extended role of an orthodontist comes into play. An orthodontist has a long duration of association with his / her patients. Routinely acknowledging and addressing the patient's psychosocial fears and troubles along with their dental problems can go a long way in improving confidence and self-esteem by the end of treatment.

Clinical studies have shown considerable negative effects of malocclusion, affecting the general quality of life of an individual. This should be addressed during the professional counseling and treatment of orthodontic patients in order to improve their self-esteem and social interactions. An orthodontist can play a pivotal role in helping

patients gradually and consistently overcome their fears and anxieties.

Psycho-Social Management of Malocclusion

The onus of establishing a better psycho-social environment for the society lies not only on clinicians but upon every human being. It is the duty of parents to take every possible step to instill confidence in their children. Children need to be educated by their parents / schools / institutions, to not be ashamed of their physical appearance, nor look down upon or make fun of others for the same. They need to develop the belief that attractiveness is not about external appearances but about internal beauty. Positive personality traits need to be recognized and promoted for every individual instead of brooding on negativity.

Lack of awareness and education is what negatively affects the number of individuals who seek professional orthodontic / psychological consultation and treatment. Financial constraints may also contribute towards failure in seeking professional help.

1. **Social Awareness**
   - Government and private doctors both should take responsibility of creating social awareness towards dentistry and malocclusion.
   - Dental checkup and awareness camps should be conducted routinely.
   - Society at large needs to be educated regarding prevalence of malocclusion and its management.
   - School dental check-up camps should be organized for screening of children needing orthodontic correction.
   - Use of electronic and print media for awareness can ensure mass approach.
2. **Patient education and Motivation**
   - Orthodontic awareness should be imparted to patients during routine dental visits.
   - Possible personal / dental and psycho-social impact of malocclusion on the child's future should be emphasized upon parents.
   - Promote routine orthodontic consultations starting at 6 – 7 years of age.
3. **Timely treatment**
   - Timely orthodontic correction ensures more confident adolescence and youth.
   - Interceptive treatment to prevent progression of severity of malocclusion.
   - Short-term fixed mechanotherapy (e.g., 2*4 appliance to correct maxillary incisor alignment) may sometimes be useful for improving a child's self belief, even though definitive treatment will have to wait for later.
4. **Counseling and Assurance**
   - In addition to actual orthodontic correction, patient and parent counseling is a must to reassure about the success and stability of treatment.

Conclusion

Malocclusion has been a human problem since ages, which has taken its toll in many ways. The inappropriate social stigma attached to and the stereotyped images of children with malocclusion influences their daily lives. Individual's oral health status affects their overall physical health, oral function, ability to communicate and ultimately, quality of life.

Being aware of orthodontic patients' psychosocial / emotional reactions to malocclusion could be extremely helpful in effective counseling and treatment of the patients. An orthodontist can and must play a pivotal role in helping patients overcome their fears and anxieties. A little extra time devoted towards discussion, understanding and counseling during routine orthodontic visits can go a long way for improving patient's self-confidence and self-belief.

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