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Classification of Motivation for Orthodontic Treatment: A Review Article

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ABSTRACT

Today more than ever, functional and aesthetic changes during the growth, which have been proven to influence the patient's quality of life for better, remain an essential reason for conducting orthodontic treatment. Understanding the psychological characteristics and motivations of each patient is fundamental and a part of empathy. But these factors must be controlled because they can affect patient's satisfaction and cooperation. Therefore, there is a need for clinicians to improve the patient experience of treatment delivery and increase the potential for a successful treatment outcome. The aim of the present study is to present a classification of motivation for orthodontic treatment. In fact, the classification proposal is based on more than 10 years of own research on orthodontic treatment motivation and awareness.

Keywords:

Orthodontic treatment, Oral health, Motivational strategy, Doctor of Dental Medicine (DDM)

Introduction

A Motivational Strategy When Starting Orthodontic Treatment

Orthodontic treatment is long and drawn out and it is quite possible that one of the three parties will lose motivation. And the three parties are child as a patient, parents and orthodontist.

The child's first orthodontic examination should be carried out no later than 7 years of age. Every parent wants to do the best for their child, and according to the common understanding, good oral health means healthy teeth and a beautiful smile. According to a number of behavioral studies, social factors for increased motivation prevail over those related to functional insufficiency. This is the assessment given by parents in previous sociological surveys. In modern society, parents are aware that their child becomes much more attractive with well-arranged teeth, and a beautiful smile gives them a chance for a better quality of life. It has been confirmed in the scientific literature that the more important positive results for the patient have a time stamp through professional realization and the choice of a life partner. But the parents do not have the competence to realize the harm that each dento-jaw deformity has both in terms of oral health and the condition of the TMS, and therefore they accept the social aspects and aesthetics as essential. Motivation for orthodontic treatment among child patients is related to their response during treatment. Parents have also been found to influence motivation. The present study investigates the different aspects of motivation for orthodontic treatment among patients, their parents/guardians and dentist/orthodontist [1-3].

The American Association of Orthodontics (AAO) recommends that the first examination by a dentist should take place after the first year of the child. In this period, the temporary teeth are sprouting and if complications are possible, the parents will be informed in a timely manner. However, very often deviations in the child's teeth or jaws are first noticed in the family.

The AAO recommends that every child's first orthodontic examination be performed no later than 7 years of age.

According to Amy Morgan, no one can make another person do something they don't want to do.

Motivation is a process that must come from within; the best reason for a child to cooperate is when he thinks about what the benefit is to him. In cases where it is external and depends on the parents, they must be able to make him feel particularly important and ask himself the question "Why exactly me?". But really, the big role of every parent is to foster a culture that encourages, encourages and supports not only the motivation but also the thought of positive oral health.

One of the essential recommendations of oral health researchers is to do this through the personal example set by parents [4-6].

The word "want" is the key to motivation.

On the other hand, "Leadership is the ability to get someone to do something you want done because they want to do it" according to D. Eisenhower. Well known is Maslow's hierarchy of motivational strategy, which has five levels. Each level is independent, but also necessary for the existence of the others. The following approaches were used in the study of Gardner's motivational strategies:

- Music
- Visualization
- Verbal
- Logical
- Physical
- Personal
- Interpersonal
- Natural
- Existential

The basis of the motivational strategy in the present study is "educate and motivate".

The motivational strategy also depends on the ability to encourage the positive features of the child's inner world and which will give him the opportunity for an external manifestation of his abilities. The child understands the love

of the orthodontist to change his lifestyle for the better, and the work of treating sometimes "difficult" children with a lot of patience is a real challenge.

Dissatisfaction with the appearance, the need for orthodontic treatment, parental concern and the influence of classmates who are being treated are significant factors in the child's motivation. Understanding and managing these factors allows for the correct and better treatment, targeting the priorities in the work of the Doctor of Dental Medicine (DDM) and the orthodontist. This question concerns the LDM, who conducts prevention or treatment of minor cases in orthodontics, as well as the possibility for the child to empathize and support the work on his treatment [4-7].

A Motivational Strategy to Improve Communication Between Patient and Orthodontist

Effective communication is a key process in healthcare delivery. This establishes informed consent as paramount for the patient.

After the initial consultation, leaflets (brochures) are an invaluable source of information for the patient. A huge problem is that the terminology used in the leaflets is incomprehensible to 60% of parents. In order to obtain communication, rather than a one-sided message to the patient, it is necessary to "translate" the medical language into something more accessible to the parents and the child.

Treatment should be based on benefit-risk analysis; with risk to be minimized and manageable. This is possible when patients are engaged in treatment. In this flexible manner, the boundaries of the educational process are drawn during the treatment. Because orthodontic treatment is a complex program in which functional and aesthetic solutions are achieved according to the orthodontist's competencies. But it is also an art, because the foundations of the educational and educational process are laid, during which the patient acquires knowledge and skills that help him monitor his own daily hygiene and be responsible for his own health.

There are various motivational strategies to improve communication between the child and the orthodontist. This crisis in treatment does not occur initially, but about a year after starting treatment. In some more severe cases, continuing treatment already started by other colleagues requires even more patience. And this is because everyone is responsible not only for the vision of their own practice, but also for the image of the dental profession in society. Swapping one orthodontist for another is actually a loss of trust, miscommunication and greed. Greed for patients is actually greed for money. This is one of the worst vices of modern medicine. Shown photographs of finished treatment in similar cases always have a positive effect.

Initial cast models and photographs shown improve confidence because the patient can see the difference for themselves. Engaging parents in frank discussion will result in full disclosure of the problem. Comparing current and last year's photo is important to improve communication.

According to data from the literature, the opinion of a grandmother or grandfather (a person we do not see in practice, but whom they respect and love immensely) is extremely important. Patients are happy when the orthodontist encourages them – with treatment progress that is visible; with adequate personal oral hygiene, etc. [8-10].

From the very beginning, patients must be aware that there can be no compromise in orthodontic treatment: On a personal level, the patient must take into account the quality, consistency and harmfulness of the food he consumes, and in another aspect, adequate oral hygiene must be priority.

Classification of Motivation for Orthodontic Treatment

Motivation and cooperation before, during and after orthodontic treatment is particularly important as it affects the satisfaction of the three parties' communication. Cooperation means control by the dentist/orthodontist and the parents of the patient's oral hygiene and diet. Diet in orthodontic treatment means limiting simple sugars and food consistency. Its hardness is important, because if it is too soft, it is sticky and most often carbohydrate. An increased risk of treatment-related white spots and carious lesions has been reported with such feeding. If the food is very hard, such as nuts, chips or fried corn, this will also be a reason for restriction and prohibition of use. Cooperation and cooperation over time means control of wearing the retention appliances [11-14].

The child's motivation before orthodontic treatment sometimes remains incomprehensible to the dentist/orthodontist. It is comparable to the too strong desire for something that is unknown until that moment. The comparison is with striving for a cake, the problem is that it is unfamiliar (incomparable) as a taste sensation. In this particular situation, there are two age groups with different motivations for initiating treatment. One is about the 12-year-olds who say, “I waaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaant!” and the meaning is emulation, since other kids in the class have braces. Their expectations are to be fashionable, current in school. The other is the group of 16-year-olds who realize they have prom in two years and miss the train. Their expectations are probably mainly aesthetical.

On a personal level, I think back to my overwhelming desire at the age of 4 to learn to play violin. To this day, my parents mostly listen to classical music, and that determined my desire at that time. The reality is different. Still, I love my violin.

Based on the importance for the patient, the following classification for motivation in orthodontic treatment was derived:

Classification of Motivation in Orthodontic Treatment

1. Motivation of child (patient):

1.1. Before initiation of treatment.

1.2. During treatment:

1.2.1. Descending.

1.2.2. Ascending.

1.2.3. In a different time range:

a) In the first month – awareness.

b) 1 year after initiation of treatment.

c) In treatment much longer than expected.

1.2.4. According to the severity of the case:

a) If tooth extractions are necessary.

b) If orthognathic surgery is necessary.

c) In treatment with extraoral devices.

1.3. After orthodontic treatment:

1.3.1. Descending.

1.3.2. Uniform.

2. Parents' motivation for orthodontic treatment of their child:

2.1. Descending - lack of control, time, financial security.

2.2. Ascending – empathetic and responsible.

2.3. The obsessive mother.

3. Motivation of the dentist/orthodontist:

3.1. High (responsibility, professional competence, financial dependence).

3.2. Low or descending - in the absence of cooperation on the part of the child and parents.

With the descending motivation of the orthodontist, his responsibility towards the specific case grows, since no matter how informed the child and the parents are, their knowledge is not real. Informed consent is not sufficient to evaluate the negative consequences that may occur as a result of irregular visits to the orthodontist.

3.3. Poor health management - admitting more patients than can actually be served.

The situation can be considered in two aspects:

3.3.1. The health insurance system (resp. the State, the responsible institutions) does not provide a sufficient number of specialists and the treatment is carried out on the basis of a monopoly on the market, both on the number of patients and on pricing. The principle is, "The more, the more" - Winnie the Pooh, incompatible unlike the literary character with the modern ethical requirements of good medical practice.

3.3.2. Greed as the main negative characteristic of the LDM/orthodontist's personality is the reason for admission and treatment of more patients than can actually be served.

4. Stockholm syndrome - when the child suffers from the end of treatment and wants the braces put back in the mouth. The feeling is that "I have no teeth", patients share.

5. Insufficient motivation to initiate treatment:

5.1. Insufficient financial security of orthodontic treatment – it is too expensive, the costs are not covered by the National Health Insurance Fund.

5.2. Treatment-related discomfort (combined surgical-orthodontic treatment).

Conclusion

Thus, the presented classification for motivation in orthodontic treatment will support the work of both students in the last years of study in dental medicine and the work of already prominent orthodontic clinicians. It is an extremely powerful means of support during treatment as it enables the orthodontist to adapt to the possible risks and changing motivation of the patient. These new understanding of motivation during and after orthodontic treatment can protect and enhance physician-patient relationships.

References

1. O'Connor PJ. Patients' perceptions before, during, and after orthodontic treatment. *J Clin Orthod*. 2000;34(10):591–592.

2. Albino JE, Lawrence SD, Lopes CE, et al. Cooperation of adolescents in orthodontic treatment. *J Behav Med.* 1991;14(1):53–70.

3. Samsonyanová L, Broukal Z. A systematic review of individual motivational factors in orthodontic treatment: Facial attractiveness as the main motivational factor in orthodontic treatment. *Int J Dent.* 2014;2014:938274.

4. Sergl HG, Klages U, Zentner A. Functional and social discomfort during orthodontic treatment – Effects on compliance and prediction of patients' adaptation by personality variables. *Eur J Orthod.* 2000;22(3):307–315.

5. Bos A, Hoogstraten J, Prahl-Andersen B. Towards a comprehensive model for the study of compliance in orthodontics. *Eur J Orthod.* 2005;27(3):296–301.

6. Shaw WC, Rees G, Dawe M, et al. The influence of dentofacial appearance on the social attractiveness of young adults. *Am J Orthod.* 1985;87(1):21–26.

7. Health and Social Care Information Centre. NHS Dental Statistics for England: 2016–17.

8. Javidi H, Vettore M, Benson PE. Does orthodontic treatment before the age of 18 years improve oral health-related quality of life? A systematic review and meta-analysis. *Am J Orthod Dentofacial Orthop.* 2017;151(4): 644–655.

9. Lewit DW, Virolainen K. Conformity and independence in adolescents' motivation for orthodontic treatment. *Child Dev.* 1968;39(4):1188-1200.

10. Prado L, Previato K, Delgado RZR, et al. Adolescents' perception of malocclusion, their motivations, and expectations concerning the orthodontic treatment. Is it all about attractiveness? A qualitative study. *Am J Orthod Dentofacial Orthop.* 2022;161(4):e345-e352.

11. Pabari S, Moles D, Cunningham S. Assessment of motivation and psychological characteristics of adult orthodontic patients. *Am J Orthod Dentofacial Orthop.*2011;140(6):e263-e272.

12. Hardwick LJ, Sayers MS, Newton TJ. Patient's expectations of lingual orthodontic treatment: a qualitative study. *J Ortho.* 2017;44(1):21-27.

13. Giddon D. Orthodontic applications of psychological and perceptual studies of facial esthetics. *Semin Orthod.* 1995;1(2):82-93.

14. Zachrisson B. Global trends and paradigm shifts in clinical orthodontics. *World J Orthod.* 2005;6(Suppl):3-7.