



Emotional states of Angolan patients with dentomaxillofacial anomalies

Estados emocionales de pacientes angolanos con anomalías dentomaxilofaciales

Yosvany Herrero Solano¹ , Pedro Luis Sánchez Sagué²  .

¹Meditex-Alvalade Dental Clinic. Luanda. Angola.

²Faculty of Medical Sciences of Bayamo. Granma University of Medical Sciences. Granma. Cuba.


Citation:
Herrero Solano Y,
Sánchez Sagué PL.
Emotional states of
Angolan patients with
dentomaxillofacial
anomalies. Revodosdic
[Internet]. 2022 [cited:
access date];5(3): e348
[approx. 6 p.].




Mail to:


Yosvany Herrero Solano,
yhsolano@infomed.sld.cu

Proofreader editor:

Lic. Mercedes 
Bellos Mariño
Universidad de Ciencias
Médicas de Granma.

Reviewed by:

José Carlos 
Alvarez Hernández
Facultad de Ciencias
Médicas de Morón.

Annalie Elizabeth 
Frías Pérez
Universidad de Ciencias
Médicas de Granma.

Keywords:

Emociones;
Autoestima;
Anomalías
dentomaxilofaciales.

Palabras clave:

Emotions;
Self-esteem;
Dentomaxillofacial
anomalies.

ABSTRACT

Introduction: Dentomaxillofacial anomalies include alterations in growth, development and physiology of the anatomical components that make up the stomatognathic system, their prevention could be the solution to reduce the presence of this entity that causes so many functional, aesthetic and psychological discomforts in children, adolescents and young people. **Objective:** to identify the emotional states of Angolan patients with dentomaxillofacial anomalies. **Methods:** an observational, descriptive, cross-sectional study was carried out in 35 patients with dentomaxillofacial anomalies, treated at the orthodontic clinic of the Meditex-Alvalade Dental Clinic, in Luanda, Angola, between August 2021 and February 2022. Tests were applied to evaluate the emotional experience and self-esteem, as psychological states that may be affected in patients with dentomaxillofacial anomalies. Descriptive statistics measures were used for the summary of the information, which were number and percent. **Results:** the patients presented more than one emotion, the most significant were sadness with moderate (51,42 %) and intense levels (31,42 %), anguish with intense levels (40,00 %), rejection (25,71 %) at a moderate level and restlessness (25,71 %) and distrust (25,71 %) with a low level of experiential intensity; 45,71 % of the patients showed a medium level of self-esteem, followed by 34,28 % with a low level. **Conclusions:** Angolan patients with dentomaxillofacial anomalies experience emotions such as sadness, anguish, rejection, restlessness and distrust and medium and low levels of self-esteem.

RESUMEN

Introducción: Las anomalías dentomaxilofaciales comprenden las alteraciones del crecimiento, desarrollo y fisiologismo de los componentes anatómicos que conforman el sistema estomatognático, su prevención podría ser la solución para disminuir la presencia de esta entidad que tantas molestias funcionales, estéticas y psicológicas provoca en niños, adolescentes y jóvenes. **Objetivo:** identificar los estados emocionales de pacientes angolanos con anomalías dentomaxilofaciales. **Métodos:** se realizó un estudio observacional, descriptivo, transversal en 35 pacientes con anomalías dentomaxilofaciales, atendidos en la consulta de ortodoncia de la Clínica Dentaria Meditex-Alvalade, en Luanda, Angola, entre agosto de 2021 y febrero de 2022. Se aplicaron test para evaluar la experiencia emocional y la autoestima, como estados psicológicos que pueden estar afectados en pacientes con anomalías dentomaxilofaciales. Para el resumen de la información se utilizaron medidas de estadística descriptiva, las cuales fueron número y porcentaje. **Resultados:** los pacientes presentaron más de una emoción, las más significativa fueron la tristeza con niveles moderados (51,42 %) e intensos (31,42 %), la angustia con niveles intensos (40,00 %), el rechazo (25,71 %) en nivel moderado y la inquietud (25,71 %) y desconfianza (25,71 %) con un escaso nivel de intensidad vivencial; el 45,71 % de los pacientes mostraron un nivel medio de autoestima, seguido del 34,28 % con nivel bajo. **Conclusiones:** los pacientes angolanos con anomalías dentomaxilofaciales experimentan emociones como la tristeza, angustia, rechazo, inquietud y desconfianza y niveles medios y bajo de autoestima.

Received: 2022/03/22

Accepted: 2022/05/16

Online: 2022/07/19



INTRODUCTION

Dentomaxillofacial anomalies (DMFA) include alterations in the growth, development and physiology of the anatomical components that make up the stomatognathic system. They are considered an epidemiological problem of significant importance, which has a profound impact on individuals and society in terms of discomfort, social and functional limitations, since the perception that individuals have of their physical appearance influences the assessment, they make of their appearance quality of life related to oral health ⁽¹⁾.

The DMFA occupy the third place within the affections of the orofacial complex and the incidence, far from being limited, increases progressively, as well as its severity ⁽¹⁾.

The appearance of DMFA from an early age determines the need for preventive and interceptive treatments, the variations are possibly attributed to differences between: ethnic groups, number of subjects included, ages examined and diagnostic criteria ⁽²⁾. It is estimated that between 20 and 30 million children in Latin America suffer from some type of dentomaxillofacial anomaly ⁽³⁾.

In orthodontics, as in other stomatological specialties, the different entities are divided according to their degree of complexity in order to adequately treat those who present them. In this sense and fundamentally focused on the promotion, prevention and early detection of dental, facial and muscular irregularities, the dentomaxillofacial anomalies that are included in a first level are those that, due to their lower level of difficulty, can be resolved by said professionals ⁽³⁾.

DMFA are of multifactorial etiology, because they present one or more causal agents combined with each other. Knowing the risk factors that produce or provoke the anomaly serves to predict its prognosis and avoid its installation ⁽¹⁾.

The prevention of DMFA could be the solution to reduce the presence of this entity that causes so many functional, aesthetic and psychological discomforts in children, adolescents and young people ⁽¹⁾.

In today's society, beauty determines many aspects of life, for which a beautiful smile is much more than

just part of our physical appearance, therefore, various universities around the world have demonstrated with their studies the importance of the smile in personal, social and even professional relationships ⁽⁴⁾.

Many adolescents who need orthodontic treatment can create barriers and complexes that become an impediment to face the challenges of their growth, as well as creating a negative image of themselves, which affects interpersonal relationships with their peers ⁽⁴⁾.

Facial attractiveness plays a key role in the social interaction of the human being today. The man seeks to be accepted within the social environment in which he develops and this is often based on principles of beauty, which include, among others, a pleasant appearance and facial harmony. On many occasions, the beauty of the face can be affected when there are problems of malocclusions and deformations ⁽⁵⁾.

It is inevitable to relate the dental patient and primarily the orthodontic patient with the psychological aspect, where a dental malposition or an evident malocclusion can affect his self-esteem. Since facial expression gives us an impression of the individual related to her emotions, many authors define personality as a derivation of facial expression ⁽⁵⁾.

The objective of this study was to identify the emotional states of Angolan patients with dentomaxillofacial anomalies.

METHODS

An observational, descriptive, cross-sectional study was carried out with 35 Angolan patients with dentomaxillofacial anomalies aged between 15 and 37 years, treated at the orthodontic clinic of the Meditex-Alvalade Dental Clinic, in Luanda, Angola, between August 2021 and February 2022.

Inclusion criteria: patients with informed consent and dentomaxillofacial anomalies of dental, skeletal, soft tissue and occlusion origin. Exclusion criteria: patients who do not want the psychological tests to be applied. Once the inclusion and exclusion criteria were applied, the 35 patients were part of the study.

To determine the emotional state of the patients, emotional experience and self-esteem were studied.



Emotional experience was determined using the Experiential Self-Report Instrument ⁽⁶⁾ and to determine the level of self-esteem, the Self-Esteem Inventory developed by Coopersmith ⁽⁷⁾ was applied. The results were analyzed by psychologists with experience in psychometrics, from the Psychiatric Hospital of Luanda.

The integrity of the data obtained in the study was preserved in accordance with the ethical principles for medical research in humans established in the Declaration of Helsinki. The study was approved by the Board of Directors of the Meditex Clinic, to which the Dental Clinic where the research was carried out

belongs.

For the processing of the information, a database was created in Microsoft Excel 2007. Descriptive statistics measures were used for the summary of the information, which were number and percent.

RESULTS

Table 1 summarizes the emotional experience, where it turned out that the patients presented more than one emotion, the most significant being sadness with moderate (51,42 %) and intense (31,42 %) levels and anguish with intense levels (40,42 %).

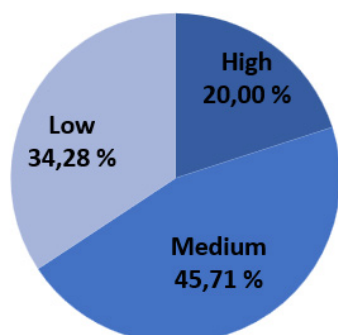
Table 1. Emotional experience in Angolan patients with dentomaxillofacial anomalies.

Emotional experiences	Limited		Moderate		Intense	
	Nº	%	Nº	%	Nº	%
Anguish	1	2,85	3	8,57	14	40,00
Suffering	2	5,71	1	2,85	0	0
Unsafety	0	0	5	14,28	0	0
Contempt	0	0	3	8,57	5	14,28
Dejection	3	8,57	8	22,85	0	0
Anger	0	0	3	8,57	0	0
Rejection	0	0	9	25,71	7	20,00
Sadness	0	0	18	51,42	11	31,42
Apathy	6	17,14	3	8,57	0	0
Restlessness	9	25,71	0	0	0	0
Irritability	2	5,71	0	0	0	0
Fear	8	22,85	3	8,57	6	17,14
Distrust	10	28,57	0	0	0	0

Source of information: Experiential Self-Report Instrument.

Graph 1 shows that 45,71 % of the patients with dentomaxillofacial anomalies presented a medium level of self-esteem, followed by 34,28 % with a low level.

Graph 1 Level of self-esteem in Angolan patients with dentomaxillofacial anomalies.



DISCUSSION

Dentofacial anomalies are defined by the American Society of Maxillofacial Surgeons as abnormalities in dental and facial growth that affect both children and adults and have psychosocial repercussions in affected patients ⁽⁸⁾.

Patient dissatisfaction with their dental appearance not only includes concepts such as missing teeth, position and color of the teeth, but also the psychosocial impact and quality of life related to oral health has become very important ⁽⁹⁾.

Physical appearance plays a key role in the development of personality, as well as in the social interaction between individuals. Facial attractiveness is strongly

related to being socially extroverted and having self-confidence ⁽⁹⁾.

Angolan patients with dentomaxillofacial anomalies presented more than one emotion, the most significant being sadness with moderate and intense levels, anguish with intense levels, rejection with a moderate level and restlessness and distrust with a low level of experiential intensity.

Physical characteristics and aesthetic patterns are remarkably significant in society, and these patterns are observed both in childhood and in adolescence, periods in which they are more intense, since insertion and acceptance in the social group acquire a central role ⁽¹⁰⁾.

Taibah and Al-Hummayani ⁽¹¹⁾ mention that several factors related to malocclusion, such as anterior crowding, midline misalignment and facial asymmetry, have strong effects on the perception of facial aesthetics, influencing the development of children and adolescents and, in turn, influences social acceptance and self-perception. Kaur et al. ⁽¹²⁾ state that social psychology is affected by physical appearances, self-concept and social acceptance of individuals.

The self-perception of facial aesthetics is operationally defined as the subjective assessment or judgment that an individual makes about the attractiveness of her own face. The factors that determine this self-perception of beauty are multiple. In addition to individual factors such as personality and self-esteem, the sociocultural and historical context, fashion, trends, and in particular, the mass media play a crucial role in establishing facial stereotypes and standardizing the general criteria about what a face is attractive ⁽¹³⁾.

Most of the patients with dentomaxillofacial anomalies in this study presented a medium level of self-esteem. According to psychologists, the term self-esteem can have three different definitions: (I) the golden concept of self-esteem, which refers to the feelings one has about oneself, (II) the individual's evaluation of one's abilities, and (III) the momentary feelings of an individual about himself ⁽¹⁴⁾.

Taibah and Al-Hummayani ⁽¹¹⁾ mention that 17,1 % of

men and 31 % of women showed low levels of self-esteem, and that cases with multiple malocclusions showed significantly lower self-esteem compared to those with multiple malocclusions a single category.

Naseri et al. ⁽¹⁴⁾ reports that a beautiful smile is the second most important facial component after the eyes that draws attention when evaluating facial attractiveness, and shows a correlation between occlusal anomalies and self-esteem among their results.

Global self-esteem refers to the feeling and assessment of oneself as a person. The concept of self-esteem refers to a person's feeling of self-worth. Higher self-esteem is associated with better dental health practice ⁽¹⁵⁾.

Gómez et al. ⁽¹⁶⁾ state that the greater the severity of malocclusions, the lower the self-esteem of individuals. In the study by Preciado ⁽¹⁷⁾ 48,1 % of the patients with malocclusion presented self-esteem at a medium level.

Orthodontic treatment aims to correct the malocclusion, which can lead to improvements in masticatory function and dental aesthetics. Orthodontic treatment may also provide more overall benefits in terms of improved psychological and social well-being ⁽¹⁸⁾.

The individual's health along with other influencing factors play a vital role in building the self-esteem dimension. Oral health, being an integral part of general health, can also influence the level of self-esteem.

Physical appearance and attractiveness have imperative roles in interpersonal communication and interaction, therefore, malocclusion can have a negative effect on social relationships and this, in turn, will affect the self-image and self-esteem of people with malocclusion.

Faced with this scenario, it is important to measure and evaluate dental aesthetics based on the patient's perception in an objective way, through instruments that allow it to be quantified and understood. Before carrying out a dental treatment that will affect dental aesthetics, the dentist must be clear about the aesthetic self-perception of the patient, the expectations of the treatment and the transcendence in the entire

biopsychosocial sphere of the patient.

CONCLUSIONS

Angolan patients with dentomaxillofacial anomalies experience emotions such as sadness, anguish, rejection, restlessness and distrust and medium and low levels of self-esteem.

CONFLICT OF INTEREST STATEMENT

This manuscript has not been published in whole or in part, nor is it being evaluated by another journal.

STATEMENT OF FUNDING SOURCES

No funding was received for the development of this work.

AUTHOR'S CONTRIBUTION

YHS: conceptualization, data curation, formal analysis, research, methodology, project management, supervision, resources, validation, visualization, writing the original draft, writing, revising and editing. **PLSS:** data curation, formal analysis, research, visualization, writing the original draft.

BIBLIOGRAPHIC REFERENCES

1. Hidalgo Torres Y, Pérez Rojas Y. Anomalías dentomaxilofaciales en niños de tres a cinco años de edad. Rev Electrón Zoilo [Internet]. 2019 [citado 05 Sep 2022];44(4):[aprox. 5 p.]. Disponible en: http://revzoilomarinello.sld.cu/index.php/zmv/article/download/1832/pdf_603
2. Barrero Castillo TC, Viltres Pedraza GR, Arcia Cruz L, Collejo Rosabal Y, Estrada Viltres LC. Factores hipotéticamente influyentes en la aparición del micrognatismo transversal en escolares. MULTIMED [Internet]. 2021 [citado 05 Sep 2022];25(6):[aprox. 16 p.]. Disponible en: <http://www.revmultimed.sld.cu/index.php/mtm/article/download/1996/2312>
3. González Espangler L, Mena García G, Sarmientos Martínez Y, Durán Vázquez WE, Romero García L. Anomalías dentomaxilofaciales de la atención primaria de salud en escolares de 6-12 años. MULTIMED [Internet]. 2018 [citado 05 Sep 2022];22(1):[aprox. 14 p.]. Disponible en: <http://www.revmultimed.sld.cu/index.php/mtm/article/download/775/1103>
4. Ramírez Aro L. Necesidad de tratamiento de ortodoncia según el índice de estética dental y nivel de autoestima, en adolescentes de tercer año del nivel secundario de la I. E. Mariscal. Cáceres, Tacna-2019 [Internet]. Tacna. Perú: Universidad Nacional Jorge Basadre Grohmann; 2021 [citado 05 Sep 2022]. Disponible en: http://www.repositorio.unjbg.edu.pe/bitstream/handle/UNJBG/4211/1902_2021_ramirez_aro_l_facso_dontologia.pdf?sequence=1&isAllowed=y
5. Parra Madrigal M, Negrete Soltelo JC, Almanza Ávila V, Carreón Garcidueñas MG, Nieto Aguilar R. Autoestima del paciente ortodóntico. Rev Mex Med Forense [Internet]. 2019 [citado 05 Sep 2022];4(Supl. 2):26-8 Disponible en: <https://revmedforense.uv.mx/index.php/RevINMEFO/article/download/2685/4600>
6. López Angulo LM. Estados emocionales. En: Compendio de instrumentos de evaluación psicológica. La Habana: Ciencias Médicas; 2010. p. 241-86.
7. González Llana FM. Instrumentos para el estudio de la personalidad. En: Instrumento de evaluación psicológica. La Habana: Ciencias Médicas; 2007. p. 87-162.
8. Morales Navarro D, Dago Farah S. Manejo integral estético de una anomalía dentofacial. Rev Cubana Estomatol [Internet]. 2020 [citado 05 Sep 2022];57(1):[aprox. 12 p.]. Disponible en: <http://www.revestomatologia.sld.cu/index.php/est/article/download/2898/1727>
9. Arrais Campos L, Andrade Costa M, Sampaio Bonafé FS, Marôco J, Alvares Duarte Bonini Campos J. Psychosocial impact of dental aesthetics on dental patients. Int Dent J [Internet]. 2020 [cotadp 05 Sep 2022];70(5):321-7. Disponible en: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9379174/pdf/main.pdf>



10. Tristão SK, Magno MB, Braga Pintor AV, Christovam IF, Ferreira DM, Cople Maia L, et al. Is there a relationship between malocclusion and bullying? A systematic review. *Prog Orthod* [Internet]. 2020 [citado 05 Sep 2022];21(1):[aprox. 13 p.]. Disponible en: <https://progressinorthodontics.springeropen.com/track/pdf/10.1186/s40510-020-00323-7.pdf>
11. Taibah SM, AlHummayani FM. Effect of malocclusion on the self-esteem of adolescents. *J Orthodont Sci* [Internet]. 2017 [citado 05 Sep 2022];6(4):123-8. Disponible en: https://www.jorthodsci.org/temp/JOrthodontSci64123-6432826_175208.pdf
12. Kaur P, Singh S, Mathur A, Makkar DK, Aggarwal VP, Aggarwal VP, et al. Impact of Dental Disorders and its Influence on Self Esteem Levels among Adolescents. *JCDR* [Internet]. 2017 [citado 05 Sep 2022];11(4):5-8. Disponible en: [https://jcdr.net/articles/PDF/9515/23362_CE\(RA1\)_F\(T\)_PF1\(PrG_RK\)_PFA\(P\).pdf](https://jcdr.net/articles/PDF/9515/23362_CE(RA1)_F(T)_PF1(PrG_RK)_PFA(P).pdf)
13. Bersezio C, Zambrano G, Chaple Gil AM, Estay J, Fernández E. Evaluación de la autopercepción de estética dental en pacientes tratados con dos modalidades distintas de blanqueamiento dental. *Rev Cubana Estomatol* [Internet]. 2020 [citado 05 Sep 2022];57(2):[aprox. 13 p.]. Disponible en: <http://www.revestomatologia.sld.cu/index.php/est/article/download/2229/1751>
14. Naseri N, Baherimoghadam T, Kavianirad F, Haem M, Nikmehr S. Associations between malocclusion and self-esteem among Persian adolescent population. *J Orthodont Sci* [Internet]. 2020 [citado 05 Sep 2022];9(1):6-12. Disponible en: https://www.jorthodsci.org/temp/JOrthodontSci916-6534164_180901.pdf
15. Mandava P, Singaraju GS, Obili S, Nettam V, Vatturu S, et al. Impact of self-esteem on the relationship between orthodontic treatment and the oral health-related quality of life in patients after orthodontic treatment - a systematic review. *Med Pharm Rep* [Internet]. 2021 [citado 05 Sep 2022];94(2):158-69. Disponible en: <https://medpharmareports.com/index.php/mpr/article/download/1843/2738>
16. Gómez Martínez EL, San Martín López AL, García Vásquez MJ, García Rocha A, Mendoza García LV, San Martín López A. Impacto psicosocial de la estética dental en alumnos con maloclusiones del Telebachillerato Coxquihui, Veracruz. *Rev Mex Med Forense* [Internet]. 2019 [citado 05 Sep 2022];4(Supl.1):54-7. Disponible en: <https://revmedforense.uv.mx/index.php/RevINMEFO/article/download/2635/4552>
17. Preciado M. Relación entre tipo de maloclusión, patrón facial y autoestima en sujetos de 14 a 17 años de edad de un colegio en Trujillo. Perú. 2013. *Rev. Simiykita* [Internet]. 2015 [citado 05 Sep 2022];1(2):64-71. Disponible en: <http://revistas.upagu.edu.pe/index.php/pr/article/download/458/387>
18. Vulugundam S, Abreu LG, Bernabé E. Is orthodontic treatment associated with changes in self-esteem during adolescence? A longitudinal study. *J Orthod* [Internet]. 2021 [citado 05 Sep 2022];48(4):352-9. Disponible en: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8652369/pdf/10.1177_14653125211006113.pdf

