

Self-perception of aesthetic dental treatment: an integrative review

Autopercepção do tratamento estético odontológico: uma revisão integrativa

Priscylla Dias Fonseca **FERREIRA**¹  0000-0003-0405-3495

Vanessa Araújo **CAVALCANTE**¹  0000-0002-5150-4060

Raony Mólím de Sousa **PEREIRA**¹  0000-0002-5709-3389

Giselle Maria Ferreira Lima **VERDE**¹  0000-0001-8636-286X

ABSTRACT

Objective: This study aimed to conduct a literature review on self-perception of oral aesthetics in individuals undergoing cosmetic dental treatment and its impact on quality of life. **Methods:** 834 articles were found, of these, 31 articles were selected and accessed from the scientific productions indexed in the PubMed, LILACS and SciELO electronic databases. To rescue the sample, the following descriptors were used in Portuguese: estética dentária, odontologia cosmética, autoimagem and autopercepção; and in English: dental esthetics, cosmetic dentistry, self-image and self-perception, from 2016 to 2021. **Results:** The articles highlighted the relationship between aesthetic self-perception and the need for treatment. It was found that the aesthetic and psychosocial self-perception had a positive impact, improving the self-esteem and quality of life of individuals after undergoing aesthetic dental treatments. **Conclusion:** The research considered that new studies should be carried out on this theme, and that dentists should seek more knowledge related to oral and general health conditions, as well as on the self-perception of oral aesthetics, in order to prepare them for the performance of interventions and planning of curative actions.

Indexing terms: Dental esthetics. Quality of life. Self-image.

RESUMO

Objetivo: Este estudo teve como objetivo realizar um levantamento bibliográfico na literatura sobre a autopercepção da estética bucal em indivíduos submetidos a tratamentos estéticos dentários e o seu impacto sobre a qualidade de vida. **Métodos:** Foram encontrados 834 artigos, destes, 31 artigos foram selecionados e acessados a partir das produções científicas indexadas nas bases eletrônicas da PubMed, LILACS e SciELO. Para o resgate da amostra utilizaram-se os seguintes descritores em português: estética dentária, odontologia cosmética, autoimagem e autopercepção; e em inglês: esthetics dental, cosmetic dentistry, self image e self-perception, entre os anos de 2016 a 2021. **Resultados:** Os artigos evidenciaram a relação entre a autopercepção estética e a necessidade de tratamento. Verificou-se que a autopercepção estética e psicossocial teve impacto positivo, melhorando a autoestima e qualidade de vida dos indivíduos após serem submetidos à tratamentos estéticos odontológicos. **Conclusão:** A pesquisa considerou que novos

▼▼▼▼▼

¹ Centro Universitário UNINOVAFAPÍ - Afya, Faculdade de Odontologia. Rua Vitorino Orthiges Fernandes, 6123, Uruguai, 64073-503, Teresina, PI, Brasil. Correspondence to: PDF FERREIRA. E-mail: <priscylladff@gmail.com>.

▼▼▼▼▼

How to cite this article

Ferreira PDF, Cavalcante VA, Pereira RMS, Verde GMFL. Self-perception of aesthetic dental treatment: an integrative review. RGO, Rev Gaúch Odontol. 2023;71:e20230018. <http://dx.doi.org/10.1590/1981-86372023001820210120>



estudos devem ser realizados nesta temática, e que cirurgião-dentista deve buscar mais conhecimentos relacionados às condições de saúde oral e geral, bem como, sobre a autopercepção da estética bucal, a fim, de prepará-los para a realização de intervenções e planejamento de ações curativas.

Termos de indexação: *Estética dentária. Qualidade de vida. Autoimagem.*

INTRODUCTION

Self-perception health refers to the way the individual understands their health status, actions and beliefs, based on their subjective experiences, and mediated by aspects of their physical, mental and functional health [1]. The insight into physical and emotional components can directly influence the individual's behavior in relation to health care [2,3].

Subjective indicators of dental health and aesthetics are very important tools to assess the individual's functional and psychological aspects. Thus, it can be said that the issue of aesthetics is directly related to the quality of life, being an essential component in the individual's social life [4].

Oral disorders, such as tooth decay, periodontal disease, missing teeth, and other oral problems related to lack of hygiene and inadequate dental treatment, have a negative impact on the quality of life of individuals [1,5]. This impact is largely associated with their psychological and emotional state, with the individual's personal and cultural principles and values, in addition to the issue of discomfort and physical discomfort [4,6].

The interest in dental esthetics has grown a lot in recent years, as esthetic dental treatments, in addition to providing adequate oral health, also increase the patient's psychological well-being through changes in body image in several aspects: cognitive, perceptive, emotional and behavioral [7].

Since aesthetic procedures have become common and a priority in most dental appointments, it is necessary for the dentist to understand the patient's perception of dental esthetics, in order to perform a more satisfactory esthetic dental treatment, restoring the smile and the patient's self-esteem. Therefore, the objective of this work is to carry out a literature review on the self-perception of oral aesthetics in individuals undergoing cosmetic dental treatments and its impact on quality of life. We also tried to identify the factors that influence the self-perception of aesthetic treatment and the importance attributed to their oral aesthetics, in addition to highlighting some subjective aspects related to the perception of dental appearance and expectations of patients who received aesthetic dental treatment.

METHODS

An integrative literature review of an exploratory nature was carried out, from July 2020 to April 2021, based on the scientific productions indexed in the PubMed, LILACS and SciELO electronic databases. The search was limited to the period from 2016 to 2021, so that a more relevant, consistent and updated search could be carried out. 834 articles were found, of these, 31 articles were selected after careful analysis and filtering.

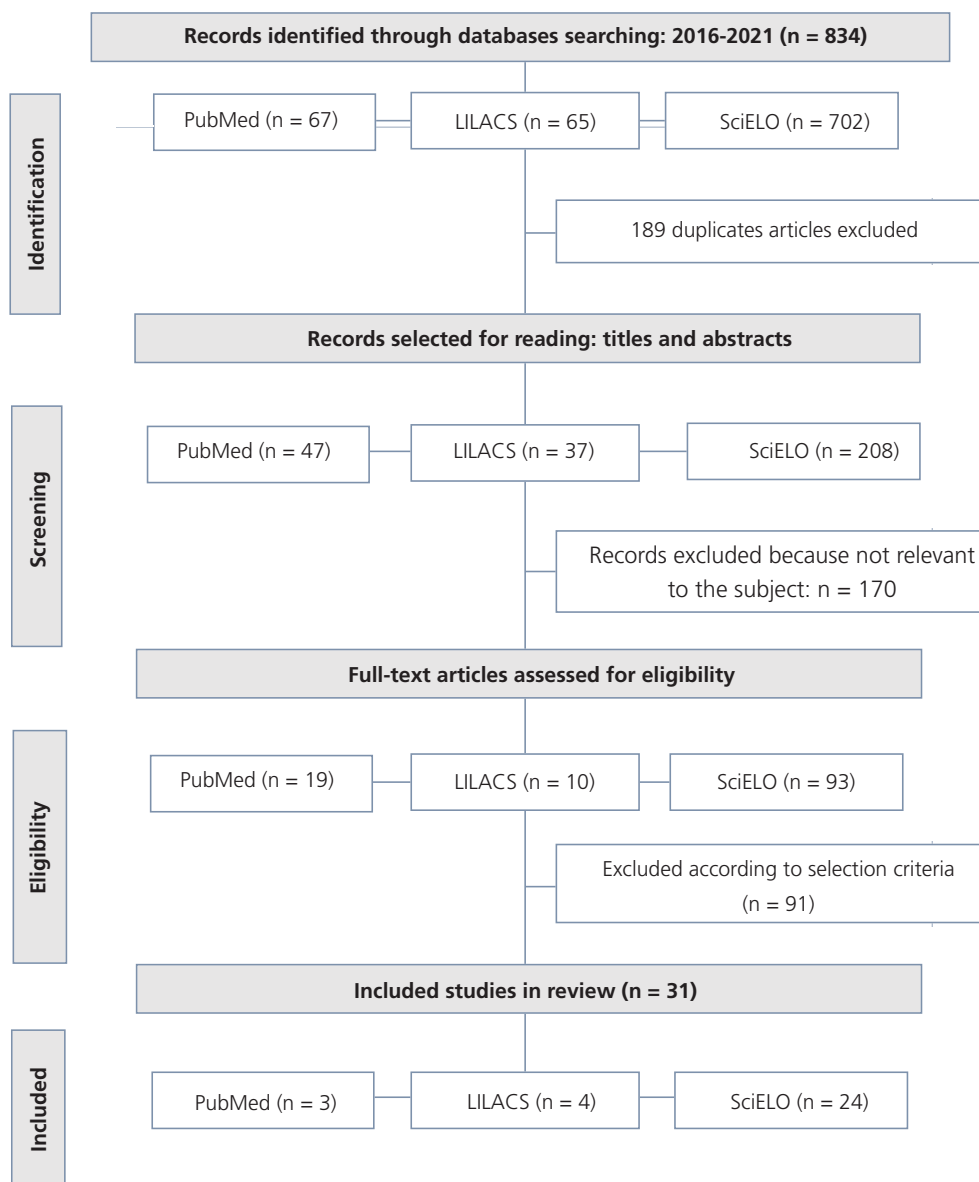
As inclusion criteria, the most relevant articles were adopted, in terms of information design, with the theme related to self-perception of dental esthetics; with patients of all ages, who have undergone cosmetic dental treatments; availability of the texts in the full version and in Portuguese, English and Spanish, and clarity in the methodological details used. Duplicate articles that did not show clinical relevance on the topic addressed were excluded from the sample; studies of theses, dissertations and/or monographs.

Studies were identified based on their titles and/or abstracts, recording the articles found in the databases, according to the descriptors. The search strategy for articles in the aforementioned databases used the following descriptors referenced in the *Descritores em Ciências da Saúde (DeCS)*, for the LILACS and SciELO databases, they are: *estética dentária*, *odontologia cosmética*, *autoimagem* and *autopercepção*; for the PubMed database, the following descriptors were used: *dental esthetics*; *cosmetic dentistry*, *self-concept* and *self-perception*, where the Boolean operators "AND" and "OR" were used to combine the terms.

The research elaboration process comprised the following steps: (1) identification of the theme; (2) literature search strategy; (3) data collection; (4) analysis of included studies; (5) presentation of results and (6) discussion of results. From the results found, the articles were read in their entirety by the researchers independently, in order to verify if they fit the selection principles related to the chosen topic. Furthermore, the publications were analyzed according to a quantitative and qualitative approach.

RESULTS

The 31 selected articles were characterized according to the author, year of publication, journal of publication, design and results found. The succinct and central characteristics of the articles included in this review were presented in table 1. The search and selection process of the identified productions were presented in figure 1.



PubMed: U.S. National Library of Medicine; LILACS: Latin American and Caribbean Literature in Health Sciences; SciELO: Scientific Electronic Library Online; n: sample number.

Figure 1. Flow of the selection process of articles for integrative review.

Table 1. Characteristics of included studies.

Author/Year	Databases	Study Design	Results
Alves et al. [8]	Interfaces: Saúde Humanas e Tecnologia	Literature review	A good integrated planning, with the correct indication, enables a more conservative approach to the tooth structure, presenting itself as an excellent solution for aesthetic and functional changes of the smile.
Corrêa et al. [2]	Physis	A clinical case report	There was great appreciation of the use dental prosthesis for the possibility of oral rehabilitation.
Martin et al. [5]	Braz Dent J.	Exploratory study	Patients looking for tooth bleaching treatment seem to have common personality characteristics.
Mesquita & Vasques [9]	Rev Bahiana Odontol	Literature review	It is unquestionable the importance of knowledge by the professional, about the material and the technique, to obtain a satisfactory result.
Ramírez et al. [10]	Rev Clínica Periodoncia, Implantol y Rehabil Oral	In vitro study	The aesthetic perception of edentulous patients rehabilitated with complete dentures and the opinion of a panel of aesthetic experts were positive.
Probst et al. [11]	Cad Saude Colet	A cross-sectional study	The patients who reported having lost their teeth due to fear of undergoing treatment or access difficulties were the ones who suffered most from tooth loss.
Rezende & Fajardo [7]	Arch Health Invest	Literature review	Beauty provides advantage from birth to adulthood for social; professional; and affective relationships.
Sallénave et al. [12]	Ceramica	Systematic literature review	The mechanical and biological similarity among the materials suggests that ceramic abutments are a good treatment option for implantsupported restorations.
Santos et al. [3]	Semina cienc biol saude	Integrative literature review	The oral esthetics is a transforming agent, highly trained to promote improvements in self-esteem, as well as meet the functional needs, such as chewing, speech and swallowing, providing, in this way, welfare to the individual.
Santos et al., [13]	Rev Ciência Plur	A cross-sectional study	There was association between self-reported rating of oral health with chewing, appearance of teeth and gums and treatment need.
Almeida et al. [14]	Rev Odontol UNESP	In vitro study	Differences in composite composition affect the color stability of the composites; and coffee changes the color of both; the roughness was not altered.
Costa et al. [6]	Adolesc Saúde	Integrative literature review	Adolescents do perceive malocclusion which impacts their emotional well-being, and orthodontic treatment does improve self-esteem and satisfaction with appearance.
Rebouças et al. [15]	Cienc Saude Colet	A cross-sectional study	Prevalence of severe/very severe malocclusions was 17.5%. The groups that lower household income and greater number of front and back teeth loss due to caries increased the odds for severe/very severe malocclusion.
Santos et al. [16]	Am J Orthod Dentofac Orthop.	A cross-sectional study	In the model, self-perception and self-esteem were statistically significant in relation to the perceived need for treatment.
Zavanelli et al. [17]	Rgo - Rev Gaúcha Odontol	A cross-sectional study	67.5% of patients were dissatisfied with the appearance of their teeth, and dissatisfaction with the color was the most important factor (66.8%).
Araújo et al. [18]	Rev Odontol UNESP	A cross-sectional study	Cone beam computerized tomography is a viable tool for the maxillofacial region because it allowed the measurement of several parameters of soft and hard tissue of the buccal cavity.
Bersezio et al. [19]	Qual Life Res.	Randomized clinical study	A both gels were highly effective in the technical walking bleach applications of non-vital teeth; the color achieved was stable 3-month post-treatment.
Bersezio et al. [20]	Bmc Oral Health	Clinical trial	The whitening procedure was effective. the factors for the one-month results were also all statistically significant, except the social impact factor.
Cavalcanti et al. [21]	Rev Odontol UNESP	A cross-sectional study	The aesthetic perceptions among the professionals are similar, and they observe more subtle changes in the aesthetics of the smile than the laypersons observe.
Durigon et al. [22]	Rev Odontol UNESP	A cross-sectional study	Gingival displays between 0 and 2 mm were considered aesthetically pleasing. The patients considered +2 mm of gingival display the most harmonious smile.

Table 1. Characteristics of included studies.

2 of 2

Author/Year	Databases	Study Design	Results
Gadonski et al. [23]	Rev Odontol UNESP	In vitro study	It was seen that both resins presented color change when exposed to coffee, however the Z350 resin presented a greater variation compared to Bulk Fill resin.
Moreira et al. [24]	Rgo - Rev Gaúcha Odontol	Cross-sectional epidemiological study	The clinical conditions showed that only 19.8% of the subjects were completely edentulous. Regarding self-perception of oral conditions, 34.9% considered it a regular perception.
Ribeiro et al. [25]	ID on line Rev Psicol	A cross-sectional study	The results indicate that the elderly, even with low self-perception, classify oral health as satisfactory.
Soto et al. [4]	RFO UPF	A cross-sectional study	The proportion of subjects who perceived the need for orthodontic treatment increased with the recommendation from the dentist.
Albuquerque et al. [1]	Divers J	A cross-sectional study	Was observed that the students had a good perception, the variables related to the impact of oral conditions on the quality of life of these students were positive.
Martins et al. [26]	Rgo - Rev Gaúcha Odontol	A clinical case report	A fifteen-day follow-up was performed, the occlusal adjustment was refined, and the patient reported complete satisfaction with the aesthetic and functional rehabilitation.
Bordin et al. [27]	Ciênc Saúde Colet	A cross-sectional study	The negative oral health condition was related to difficulty feeding, negative evaluation of the last dental appointment, negative self-perception of general health condition, upper dental loss, and reason for the last dental appointment.
Estay et al. [28]	Bmc Oral Health	Randomized clinical trial	The effect of 37.5% hydrogen peroxide gel was significantly better than that of 6% hydrogen peroxide gel in terms of color rebound after 1 year of follow-up.
Neto et al. [29]	Rev Cubana Estomatol	Integrative literature review	The techniques used to carry out digital smile planning make the procedures more predictable and improve the visualization and understanding in each stage.
Rodrigues et al. [30]	Brazilian J Dev	A cross-sectional study	The prevalence of oral impact was high (73.4%), 49.1% presented malocclusion and 25.0% had a highly desirable orthodontic treatment need.
Silva et al. [31]	Rev Odontol Arac	Integrative literature review	From the analysis it was made explicit that the performance of a conscious procedure of all stages, with knowledge of the technique and indication is necessary for success.

DISCUSSION

The aesthetic self-perception of the totally edentulous patient has a positive impact on the quality of life after rehabilitation with a complete denture. This is because the elderly usually attribute a greater negative impact on self-perception of oral health, especially with regard to the masticatory function [10]. However, other authors added that inadequate or poorly fitted prostheses are considered determinants of negative self-perception of the oral health condition, which may impact the quality of life of individuals. This is because they can cause damage to soft and hard tissues of the oral cavity, compromising people's general health by loss of masticatory efficiency, and impairing the nutritional quality of the diet [2].

The impact of edentulism on people's lives should not be underestimated, as many patients may have difficulty dealing with it, even if they accept their dentures well, due to feelings related to this oral condition, such as a feeling of incompleteness and shame [11].

In some aspects, it can be said that there is a relationship between self-perception and the quality of life of individuals, as oral disorders can cause discomfort, physical and psychological discomfort and emotional decline in individuals [1]. An alternative to increase patient's self-esteem and well-being can be the use of tooth whiteners. This is because, studies reported that people who were dissatisfied with the color of their teeth, after bleaching, improved their aesthetic self-perception and psychosocial impact [20].

Oral disorders such as malocclusions can lead the patient to dissatisfaction with their appearance, which can impact their emotional well-being, decreasing their quality of life and self-esteem. The authors reported that it is very important to analyze all these aspects in the diagnosis of orthodontic treatments for malocclusion resolution, as the greater the degree of severity of the malocclusion, the greater the negative self-perception [6].

Studies have reported that some people do not realize the need for orthodontic treatment until they receive a dentist's recommendation [4]. Analyzing the results of the studies, the authors agreed that it is necessary to understand how individuals perceive their treatment needs and the impact of their day-to-day activities, because in this way, it is possible to establish priorities in orthodontic treatment [4,30].

Health conditions and oral self-perception can be influenced by sociodemographic, socioeconomic factors and the individual's level of education. This is because such factors are associated with the degree of knowledge of healthy lifestyle habits and the need for dental care. In addition, when the individual is not aware of proper oral hygiene habits, this can contribute to the emergence of dental changes, and when the smile is compromised, the consequence is loss of self-esteem and damage to physical, mental and emotional health [15].

In general, most patients would like a moderate change in tooth color as they are not satisfied with the appearance of their esthetics [5]. Some authors reported that about 85% of study participants would like to have tooth whitening, since 67.5% of the patients were dissatisfied with their dental appearance and 66.8% were dissatisfied with the color of their teeth [13]. There is also a negative analysis of self-perception of oral and general health, as patients have reported experiencing a lot of difficulty in eating, due to tooth loss, negatively influencing the self-esteem of these individuals [27].

The issue of tooth loss interferes a lot in patients' self-esteem. In a cross-sectional epidemiological study, 106 individuals aged 50 years and over were asked about their oral health, where it was found that 19.8% of the participants were totally edentulous and 37.7% wore full upper or lower dentures or both. For the authors, the use of prostheses significantly improved the quality of life of the individuals who participated in the study, as it favored socialization, from the collective environment, to self-esteem and health care [24].

Aesthetic standards have a great influence in Dentistry, and for this reason, the demand for direct restorative composites and the development of new materials that seek not only to restore anatomy and function, but also dental esthetics has increased [14,23]. In addition, the aesthetic perception of the smile can be influenced by the amount of gingival exposure, as these dentogingival characteristics can alter the harmony and balance of the patients' smile, thus decreasing self-esteem [21,22].

Aesthetic treatment is a transforming agent, as it promotes the improvement of self-esteem, chewing, speaking and swallowing functions, and the individual's well-being. Aesthetic dentistry goes beyond restorative techniques, as in addition to meeting functional needs, it also gives the patient back satisfaction and self-esteem, allowing them to enjoy the best form of social communication: the smile [3,13,16]. Other authors add that aesthetic procedures in dentistry restore shape and function to oral structures, harmonizing the smile and providing patients with emotional comfort [7].

Procedures such as tooth whitening can have a positive psychosocial effect after treatment, improving self-esteem and social interaction [28]. This procedure is one of the most sought after procedures in dental offices, however, care must be taken because, when not done correctly and/or properly indicated, some cases of hypersensitivity, roughness and dental morphological changes can happen [31].

In a study, 58 patients aged between 18 and 76 years were analyzed. After undergoing treatment with at-home bleaching, with only one month of treatment with 10% carbamide peroxide, patients reported improvement in quality of life and psychological aspects. and aesthetic perception [19].

There are several dental procedures that promote aesthetic rehabilitation such as prostheses, implants, laminated veneers and resins, for example. When it comes to the rehabilitation of edentulous patients, the dentist needs to restore dental stability, comfort, health, well-being and aesthetics to the patient. In addition, there are several factors that can influence treatment results, compromising aesthetic rehabilitation. For this reason, imaging resources are essential for the diagnosis and elaboration of an adequate treatment plan, being essential for rehabilitation success [18,25].

In addition to a good treatment plan, ceramic veneers can be alternatives for conservative treatments and smile anatomization, in patients with tooth agenesis, for example, as they allow the re-creation of tooth color, restoring tooth shape and structure, reestablishing not only the patient's smile, but also their self-esteem [26].

Due to the great aesthetic demand in dentistry, many techniques and materials have emerged to try to meet the need to search for naturalness and similarity with dental elements. Thus, ceramic abutments were introduced, which, according to some authors, are considered an excellent alternative for treatment with dental implants [12].

In dental clinics, there is a great demand for procedures that seek to restore functionality and especially dental aesthetics. For this reason, the number of researches and technical improvement in dentistry has increased a lot, including the use of resources such as the pre-visualization of the treatment and its aesthetic planning through diagnostic waxing and mock-up. Through this technique, it is possible to show and discuss with the patient the final result and possible limitations before their rehabilitation. It is very important that there is a good relationship between the dentist and the prosthetic, as well as a detailed description of the changes you want to make in the tooth structure and gingival tissue, if necessary [9,29].

Another indispensable resource that has evolved a lot is digital planning. Due to advances in information technology, digital photography and image processing, this feature provides a broad view of the diagnosis, in addition to improving communication between the patient and the entire professional team, facilitating understanding and making the patient have a more active participation in the planning, making the treatment more predictable [29].

The combination of a good diagnosis, integrated planning, and therapeutic procedures contribute to a multidisciplinary rehabilitation, allowing the restoration of a smile and solving the different problems found in clinical cases. For this reason, it is of fundamental importance that the dentist knows well, the material and the technique he will use, in order to achieve a satisfactory result [8,9].

CONCLUSION

When oral esthetics is compromised, the individual's psychological and social side can be harmed, since the face is always exposed, thus, self-confidence and self-perception are negatively affected. Given the above, the need for dental treatment and the search for patients, awakens the dentist to seek more knowledge related to general and oral health conditions, as well as on the self-perception of oral aesthetics, making it necessary to build new studies, in order to prepare them for interventions and planning of curative actions.

Collaborators

PDF Ferreira, participation in the methodological construction, collection, analysis and interpretation of data and final review of the article. VA Cavalcante, participation in data collection and analysis and final review of the article. RMS Pereira, participation in the idealization and coordination of the research and final review of the article. GMFL Verde, participation in the writing of the article in English and final review of the article.

REFERENCES

1. Albuquerque RMSL, Cavalcanti LRO, Sena MSNB, Omena ARAS, Santos RGA, Panjwani CMBRG. Autopercepção, hábitos e impacto da saúde bucal na qualidade de vida dos estudantes de um Instituto Federal do Nordeste. *Divers J.* 2019

- Mai;4(2):600-611. <http://dx.doi.org/10.17648/diversitas-journal-v4i2.765>
2. Corrêa HW, Bitencourt FV, Nogueira AV, Toassi RFC. Saúde bucal em usuários da atenção primária: análise qualitativa da autopercepção relacionada ao uso e necessidade de prótese dentária. *Physis*. 2016 Jun;26(2):503-524. <http://dx.doi.org/10.1590/S0103-73312016000200009>
 3. Santos BC, Dantas LF, Silva SC, Lima LHA, Agra DM, Fernandes DC. Odontologia estética e qualidade de vida: Revisão integrativa. *Semin Cienc Biol Saude*. 2016 Nov;3(3):91-100.
 4. Soto KLZP, Ely HC, Mallmann FH, Abegg C. Necessidade de tratamento ortodôntico em adolescentes do Rio Grande do Sul: relação entre autopercepção e necessidade clínica. *RFO UPF*. 2018;23(2):186-172. <http://dx.doi.org/10.5335/rfo.v23i2.8345>
 5. Martin J, Rivas V, Vildósola P, Moncada L, Junior OBO, Saad JRC, et al. Personality style in patients looking for tooth bleaching and its correlation with treatment satisfaction. *Braz Dent J*. 2016 Feb;27(1):60-65. <http://dx.doi.org/10.1590/0103-6440201600127>
 6. Costa AC, Rodrigues FS, Heimer MV. A autopercepção da estética dental e seu impacto na vida do adolescente. *Adolesc Saúde*. 2017 Out;14(4):157-166.
 7. Rezende MCRA, Fajardo RS. Abordagem estética na Odontologia. *Arch Heal Investig*. 2016 Mar;5(1):50-55. <http://dx.doi.org/10.21270/archi.v5i1.1298>
 8. Ramirez CO, Fuentealba CM, Nunez CV, Munoz ZL, Daza NS. Percepción estética del paciente desdentado comparada con la opinión de expertos. *Rev Clínica Periodoncia, Implantol y Rehabil Oral*. 2016 Abr;9(1):54-58. <https://doi.org/10.1016/j.piro.2015.11.001>
 9. Probst LF, Ambrosano GMB, Cortellazzi KL, Guerra LM, Dasilva MR, Tomar S, et al. Fatores associados aos sentimentos decorrentes da perda dentária total e às expectativas de reposição protética em adultos e idosos. *Cad Saúde Coletiva*. 2016 Set;24(3):347-354. [10.1590/1414-462X201600030244](https://doi.org/10.1590/1414-462X201600030244)
 10. Bersezio C, Martin J, Herrera A, Loguercio A, Fernandez E. The effects of at-home whitening on patients' oral health, psychology, and aesthetic perception. *BMC Oral Health*. 2018 Dez;18(208):1-10. <https://doi.org/10.1186/s12903-018-0668-2>
 11. Rodrigues FS, Silva SSS, Silva AC, Lyra MCA, Silveira MAC, Roseblatt A. Oral health-related quality of life and its association with malocclusion and self-perception of dental aesthetics in adolescents. *Brazilian J Dev*. 2020 Nov;6(11):84172-84185. <https://doi.org/10.34117/bjdv6n10-742>
 12. Rebouças AG, Zanin L, Ambrosano GMB, Flório FM. Fatores individuais associados à má oclusão em adolescentes. *Ciênc Saúde Colet*. 2017 Nov;22(11):3723-3732. <https://doi.org/10.1590/1413-812320172211.04972016>
 13. Zavanelli AC, Sonogo MV, Zavanelli RA, Mazaro JVQ, Antenucci RMF. Perception and expectation. What do patients really want from the dental treatment? *RGO, Rev Gaúcha Odontol*. 2017 Set;65(3):243-248. <http://dx.doi.org/10.1590/1981-863720170002000093257>
 14. Bordin D, Fadel CB, Moimaz SAS, Santos CB, Garbin CAS, Saliba NA. Characterization of the self-perception of oral health in the Brazilian adult population. *Ciênc Saúde Colet*. 2020 Set;25(9):3647-3656. <https://doi.org/10.1590/1413-81232020259.29612018>
 15. Moreira GE, Silva LF, Oliveira MR, Maia LSR, Fernandes LA, Lima DC. Dental self-perception and clinical dental description of participants in the Open University programme for elderly people. *RGO, Rev Gaúcha Odontol*. 2018 Dez;66(4):297-304. <https://doi.org/10.1590/1981-863720180004000023482>
 16. Almeida L, Santin DC, Maran BM, Naufel FS, Schmitt VL. Avaliação do manchamento e da rugosidade superficial de materiais restauradores diretos após diferentes sistemas de polimento: estudo in vitro. *Rev Odontol UNESP*. 2019;48:1-10. <https://doi.org/10.1590/1807-2577.09618>
 17. Moreira AP, Feiber M, Almeida L, Naufel FS, Schmitt VL. Avaliação do efeito cromático em resinas compostas nanoparticuladas submetidas a solução café. *Rev Odontol UNESP*. 2018 jun;47(3):137-142. <https://doi.org/10.1590/1807-2577.04318>
 18. Cavalcanti SM, Valentim FB, Guerra SMG, Rosetti EP. Aesthetic perception of gingival smiles. *Rev Odontol UNESP*. 2018 Feb;47(1):45-50. <http://dx.doi.org/10.1590/1807-2577.08017>
 19. Durigon M, Alessi BP, Neves M, Trentin MS. Perception of dentists, dental students, and patients on dentogingival aesthetics. *Rev Odontol UNESP*. 2018 Mar;47(2):92-97. <http://dx.doi.org/10.1590/1807-2577.08917>
 20. Santos LM, Noro LRA, Roncalli AG, Teixeira AKM. Autopercepção sobre saúde bucal e sua relação com utilização de serviços e prevalência de dor de dente. *Rev Ciência Plur*. 2016;2(2):14-27. <https://doi.org/10.21680/2446-7286.2016v2n2ID9470>
 21. Santos PR, Maneghim MC, Ambrosano GMB, Filho MV, Vedovello SAS. Influence of quality of life, self-perception, and self-esteem on orthodontic treatment need. *Am J Orthod Dentofac Orthop*. 2017 Jan;151(1):143-147. <https://doi.org/10.1016/j.ajodo.2016.06.028>
 22. Estay J, Angel P, Bersezio C, Tonetto M, Jorquera G, Pena M, et al. The change of teeth color, whiteness variations and its psychosocial and self-perception effects when using low vs. high concentration bleaching gels: a one-year follow-up. *BMC Oral Health*. 2020 Sep;20(255):1-9. <https://doi.org/10.1186/s12903-020-01244-x>
 23. Silva MAF, Torres LMM, Souza DMB, Lima DAD, Cavalcanti RA, Ramos ATPR. Benefícios e malefícios durante o procedimento de clareamento dental: revisão integrativa. *Rev Odontol Arac*. 2021 Abr; 42(1):38-43.
 24. Bersezio C, Martin J, Mayer C, Rivera O, Estay J, Vernal R, et al. Quality of life and stability of tooth color change at three months after dental bleaching. *Qual Life Res*. 2018 Ago;27(12):3199-3207. <https://doi.org/10.1007/s11136-018-1972-7>
 25. Araújo LNM, Mendes DLV, Santos MT, Carvalho RD, Dantas EM, Calderon PS, et al. Caracterização tomográfica das áreas edêntulas previamente à reabilitação com implantes unitários. *Rev Odontol UNESP*. 2018 Ago;47(4):210-216. <https://doi.org/10.1590/1807-2577.06518>

26. Ribeiro MGA, Sant'Ana LLP, Souza LTR, Prado JP. Uso de prótese e autopercepção de saúde bucal entre idosos. ID on line Rev Psicol. 2018;12(42):1203-1214. <https://doi.org/10.14295/online.v12i42.1409>
27. Martins JD, Lima CM, Miranda JS, Leite FPP, Tanaka R, Miyashita E. Digital smile designing, pressing and stratifying ceramic lithium disilicate veneers to rehabilitate dental agenesis: a clinical report. RGO, Rev Gaúcha Odontol. 2019;67:1-8. <http://dx.doi.org/10.1590/1981-86372019000433620>
28. Sallenave RF, Vicari CB, Borba M. Pilares cerâmicos na implantodontia: revisão de literatura. Cerâmica. 2016;62(363):305-308. <http://dx.doi.org/10.1590/0366-69132016623632026>
29. Alves NV, Santana TAT, Landim AVF, Tavares GR. Reabilitação estética e funcional do sorriso: revisão de literatura. Rev Interfaces: Saúde Humanas e Tecnol. 2016;3(9):25-30. <https://doi.org/10.16891/2317-434X.402>
30. Mesquita VT, Vasques EL. Manejo clínico multidisciplinar da reabilitação estética utilizando cerâmicas puras: revisão de literatura. Rev Bahiana Odontol. 2016;7(2):172-179. <https://doi.org/10.17267/2238-2720revbahianaodonto.v7i2.874>
31. Neto DRH, Campos DS, Freitas RHB, Batista AUD. Planejamento Digital do Sorriso. Rev Cubana Estomatol. 2020;57(3):1-20.

Received on: 20/10/2021

Approved on: 25/11/2022

Assistant editor: Luciana Butini Oliveira