

Connecting smiles: experience report in an autistic child care unit

Maíra Barroso Silva Lemos*; Gabrielle Andrade Arruda*; Herisson Savio Carias Barros*; Joana Ferreira Lima dos Anjos*; Nathalya Nogueira de Vasconcelos*; Ingrid Cordeiro Monte**; Paulo Leonardo Ponte Marques***

* Graduating in Dentistry, University of Fortaleza

** Master in Dentistry, University of Fortaleza

*** Professor, Dentistry Course, University of Fortaleza

Received: 12/16/2020. Approved: 07/12/2022.

ABSTRACT

Autism Spectrum Disorder encompasses a set of biological changes that impact child development. Since attention to the oral health of these children plays an essential role in improving their quality of life, academic training gains importance. This article aimed to report the experience and development of skills of dental students from a private university during college activities molded in a non-governmental institution that works with autistic patients in Ceará. The interns from the last semester of the Dentistry course developed activities during the second semester of 2020 with a group of 22 participants. The experience expanded in the following phases: space recognition, conditioning for bonding, identification of oral needs, and intervention activities with brushing, aromatherapy, and atraumatic restorative treatment. The internship proved the challenge for the attitudinal competencies and skills evolution, sedimented with patience, empathy, and a relationship of trust.

Descriptors: Oral Health. Autism Spectrum Disorder. Public health. Education, Dental.

1 INTRODUCTION

Autism Spectrum Disorder (ASD) or Autism encompasses a set of developmental disorders with biological causes and characteristics focused on learning difficulties, communication and social interaction, stereotyped and repetitive behaviors, restricted interests, and sensory changes¹.

It mainly affects male patients up to three years old; on the other hand, girls tend to be more seriously impacted and with a higher cognitive impairment². The etiology of ASD is heterogeneous, being considered unknown³,

multifactorial⁴, and associated with genetic and neurobiological factors⁵. This disorder ranks third in the world ranking among disorders of developmental disorders. The estimate is that, throughout the world, one in every 160 children has this type of disorder⁶. In Brazil, data are still limited, but the estimation indicates that 2 million people are autistic⁷.

Oral health is essential and indispensable for quality of life. The dental surgeon (DC) has a vital role in oral health assessment. That reinforces the idea that these assessments influence general health care, as several

manifestations in the oral cavity can result from systemic conditions, and several systemic diseases can also be related to buccal alterations. Given the epidemiology of oral diseases, sugar intake control and bacterial plaque are relevant actions to maintain a stable oral condition⁸, minimizing the appearance of changes that can impact a patient's general health condition.

In patients with ASD, it is common to find high levels of bacterial plaque, explained by their difficulties in performing oral hygiene without help, as they constantly present changes in motor coordination and little cooperation to perform tasks. Another factor to be considered is that, upon obtaining the diagnosis that the child has autism, the family receives guidance regarding the disease and the therapies that exist but is not always oriented to carry out dental follow-up⁹.

That contributes to many children arriving at the office with oral problems already installed, including caries, periodontal disease, malocclusions, and bruxism. Several factors favor the appearance of these problems, such as a diet rich in sweet foods, offered in an attempt to please the child or as a reward for a task accomplished; soft food, prolonged use of the bottle, and the use of medications that, in the long term, can compromise oral health¹⁰.

Dental care for autistic patients is challenging for parents and professionals. Difficulty in approaching, repetitive and limited behavior, and refusal to respond to commands are some challenges encountered¹¹. The delay in looking for the health service can generate even more resistance from the patient towards dental care since most parents take a long time to find a qualified professional to care for their children¹⁰.

The contact between patients with ASD and the dental environment must start in early

childhood, so there will be an adaptation to the service performed and the dental office environment. That enables the formation of a bond with the professional. Equitably, dental students should have contact with these patients during their training so that they can, together with their instructors, seek the best way to manage them and thus acquire confidence and the ability to care for their patients when they become professionals¹².

The National Curriculum Guidelines for Dentistry courses point to the mandatory curricular internship in an actual work environment, with the development of activities that enable social, human, and scientific formation, as well as prepare the student for professional work in society¹³. However, performing an internship aimed at children with ASD is not routine in academic training. With the growth of institutions that work for that group, it is essential to develop skills that allow students to mobilize knowledge about the dimensions of biological diversity. Also, they would be qualified to acquire skills for handling dental treatment and using technologies and communication that can intervene in a humanized way to improve these patients' health conditions.

In Education, competence emerged as an alternative to capacity, ability, aptitude, potential, knowledge, or *savoir-faire*¹⁴. That requires knowledge integration and mobilization, processes, and predispositions that, when incorporated into each other, will allow the subject to do, think, and appreciate¹⁵.

Since the term competence is admittedly polysemic, in this report, we chose to use the concept of Perrenoud¹⁶, where competence translates into the ability to act effectively in a given situation, supported by knowledge, but not limited to it.

In this scenario, this study aimed to report

the experience and development of skills of dental students from a private university during academic activities developed in a non-governmental institution that works with autistic patients in Ceará.

2 EXPERIENCE REPORT

This article consists of an experience report produced at the Autistic Child Assistance Unit – Conecta of the Instituto da Primeira Infância – IPREDE. Implemented in Fortaleza/CE in 1986, it became a reference center for early childhood care and is also a place to produce, teach and disseminate the subject to the community for clarifying actions of dissemination, production, and promotion of technical-scientific knowledge for all spheres of life¹⁷.

Along with the SUS, in 2020, the Conecta unit monitored 117 patients, with health care involving the areas of Neuropediatrics, Child Psychiatry, Occupational Therapy, Speech Therapy, Psychology, Social Work, Nursing, Music Therapy, Integration Sensory, and Pedagogy¹⁷.

Since 2016, IPREDE has renewed the agreement regularly to be one of the internship fields to carry out the activities of the module called Extramural Internship, which is a mandatory curricular internship of the Dentistry course at the University of Fortaleza. The workload is 8 hours per week, counting 144 hours, offered in the last year of college with classes of a maximum of 6 students.

At the end of this internship, the student will have developed competencies in favor of mobilizing knowledge, skills, and attitudes related to the following aspects: health care (developing actions to promote, recover and maintain health, promote the humanization of care and an interprofessional act); decision-making (applying methodologies to improve

the integral quality of health and choosing appropriate behaviors to the needs of the target audience); communication (interacting with empathy and respect for knowledge through accessible language); and leadership (exercising proactivity and building collaborative relationships).

For the 2020 semester, a class of 5 students headed to the Conecta unit. A professor from the Public Health area supervised the students. This professor was responsible for the university and the institution's coordinators' connection, in the alignment of the agreement of the students' operation and evaluation, based on the competencies and resolution of the needs of the public watched.

This report has four stages: the first corresponds to the recognition of the space with an observation of the local structure; the second corresponds to the conditioning stage to create a bond with the participants; the third refers to the identification of needs; the last one aims to describe the interventions carried out.

Recognition of the space

Before the activities began in the internship field, the students and the professor aligned on the knowledge of the general characteristics expected for the specific group. The professor shared a specific theoretical framework^{9,18,19} on dental care for people with ASD, which included aspects of behavior, signs of difficulty in interaction, more common oral alterations, and carefulness in dental care. The students read the material and then discussed the topic to share the theoretical learning.

Students were evaluated for participation and interaction to exchange information since the activity aimed to mobilize knowledge to facilitate the approach and resolution of

possible needs of the specific group. The movement lasted three hours and was carried out virtually via Google Meet.

After the discussion, the interns built a script with questions directed to Conecta's coordination. The students requested these questions to understand better the institution and target audience. The contact of those responsible, activities they offer, professionals who work, opening hours, physical structure and equipment used, number of children assisted, profile, and the existence of a report or some type of record of the oral health condition were part of the questioning.

On the first day, the institution was recognized, which consisted of identifying the environments, possible partners, and target audience. The nurse responsible for the unit led the interns' visit, answering the script's questions, explaining the institution's operating rules, and presenting the spaces. The physical structure comprises medical and nursing offices, a music room, a sensory garden, a vegetable garden, an adapted house, shops for social training, therapeutic kitchen, in addition to expansion with the construction of six new rooms (virtual reality, psychomotricity, robotics, art therapy, sports, and yoga).

Relevant changes in communication characterize ASD, with damage to the development of social relationships, knowledge repertoire, and the individual's behavior that result in significant adaptive barriers^{20,21}. The American Psychiatric Association has described that the main characteristics of an individual with ASD are: problems with social and emotional interaction, which may come along with lack of eye contact, difficulty in communicating and understanding what was said, whether verbal or non-verbal, problems with shared attention and

sharing of emotions and interests, barriers with developing social relationships, and may even show a complete lack of interest in each other or age-appropriate social activities. Another characteristic of ASD is an exaggerated tactile sensitivity, justified by Sensory Processing Disorder, due to which individuals refuse physical contact and help when brushing²²⁻²⁵.

The oral health of autistic children is usually unsatisfactory due to the limitations inherent to the autistic individual or the person responsible for daily activities, which include oral hygiene and diet control. Another aggravating factor is the inaccessibility to specialized dental services. Therefore, poor oral hygiene, associated with a cariogenic diet, bruxism, and accessing dental care difficulty, can result in an unfavorable oral condition. Studies indicate that autistic patients have a high rate of plaque, dental caries lesions, periodontal changes, and malocclusion, making it necessary to use preventive and therapeutic techniques for the adequacy and promotion of oral health^{7,22,26,27}.

During the visit, it was said the main difficulty faced by parents and guardians of the children consisted in carrying out daily care with oral hygiene. In addition, bruxism was also pointed out as an aggravating factor present in a significant portion of the public and presented as an obstacle to overcome.

The students produced a journal to record the observations and support the activities planning. The diary, built by professors at the University of Fortaleza and delivered to the interns, contained printed pages, pre-formatted with spaces for writing in 4 parts: planned activities, activities developed, patients' schedule, and a simplified copy of the medical record to record individual data, odontogram and procedures performed.

From the recognition, the interns carried

out a brainstorming articulating prior knowledge with possible needs to guide the planning. This activity was driven collectively in the Conecta meeting room, with the participation of the five interns, the supervisor of the internship, and the nurse responsible for outpatient care. The learning objective was to build a plan for general and oral healthcare action development with the institution's target audience.

They used as a planning tool 5W2H28, consisting of questions in English (What; Where; Who; Why; When; How; How much). The answers guided the activities proposition, which they organized in an electronic spreadsheet shared with the professor, even allowing the monitoring activities not completed in previous semesters.

Having identified these issues, the accomplishment of conditioning before dental care emerged as a priority, aiming at creating a bond.

Conditioning for bonding

The performance of dental procedures, from the simplest ones, requires introductory knowledge of the autistic person's behavior and its history since autism shows a difference in the amplitude of its manifestations. Children with ASD have ritualistic behavior, so anything new can cause fear. Thus, the lack of knowledge of these characteristics is a barrier to performing dental treatment⁹.

Due to the difficulties in habit establishment, to effectively intervene in autistic children, it may be necessary to conduct several dental visits for the patient to get used to the environment and gradually build bonds and trust with the dental team²⁹.

Based on these difficulties, the first attitude taken regarding the conduct of the services carried out in the unit was to set that

the team working with this public would always be the same. This fact allowed the creation of a relationship of trust and affective bond, which was essential for continuity of care. Another measure was not to force the care and respect the limits of each child. In some cases, especially for moderate to severe autistics, the activities needed to be carried out outside the clinical environment.

Since it was the interns' initial contact with the patients, to facilitate the approach and behavior management during the service, the interns adopted techniques such as "tell, show, do," positive reinforcement, and changes in tone of voice²⁷. Based on the children's individuality, they had the autonomy to use them together or in an associated way in the same activity. The professor observed and recorded the attitudes.

Regarding the evaluation criteria, the interns demonstrated the development of attitudes toward good relationships and patient interaction. They also showed proactivity in taking action without the need for the intervention of the teaching supervisor. About the skill domain, they proved an adequate use of techniques for conditioning patients and communication.

Identification of needs

Before the needs assessment, the children had their teeth brushed beforehand. For examining the oral cavity, the children were taken individually to a doctor's office to identify their treatment needs. The students, in pairs, took the exam, in which one assumed the examiner role and the other the annotator.

Using a wooden spatula, gauze, and flashlight, the students sought the following diseases according to the respective criteria: dental caries (white spot, small, medium, and deep cavities, teeth indicated for extraction,

residual roots); periodontal diseases (spontaneous bleeding, visible gingival changes in color, appearance, and volume), soft tissue injuries (any type, color, and size in the oral cavity) and malocclusions (crossbite, open bite, deep bite, and dental crowding).

The protocol adopted in the Collective Oral Health module II – Epidemiology in Oral Health at the University of Fortaleza, was used. The trainees used all the PPE provided in the protocol, including an N95 mask, face shield, disposable lab coat, hat, and procedure gloves.

The students identified caries as the most clinically relevant condition in the form of generalized white spot lesions, with cavities varying from slight to extensive and even the need for extraction. Individuals on the autistic spectrum may have a higher prevalence of caries and periodontal disease resulting from diet and oral hygiene difficulties, common factors in patients with some type of disability¹⁸.

Additionally, the students highlighted tooth wear caused by bruxism as a challenge that a sizable section of the public faces. Other areas that needed study and improvement included vocabulary knowledge, social interaction, and communication abilities.

When the identification of needs was complete, the interns revealed an attitudinal development toward cooperation, ethics, and collaboration. As for the skill, the students showed the correct use of personal protective equipment (PPE), the proper techniques for oral examination to assess needs, team leadership, and well planning. The professor evaluated the interns through daily checklist completion and close supervision.

The interprofessional action established was the interaction between students and professionals in the service network, particularly the nursing staff, with dialogue for

advice on how to deal with the particular public, exchange of knowledge to identify problems, and referral to those who needed intervention. The leadership quality entailed assuming a position of proactive group leadership to encourage dedication, teamwork, and commitment³¹.

Intervention activities

The activities the students developed included: supervised brushing, aromatherapy, musicalization, topical fluoride application, and atraumatic restoration, per the profile identification.

Most autistic children showed an aversion to brushing, and their caregivers did not demonstrate, in most cases, the ability to overcome this difficulty, which would indicate possible neglect of daily oral hygiene. Given this context, the students decided to promote supervised hygiene and brushing instruction using playful strategies and the inclusion of those responsible.

Initially, they performed mouth-opening training with a count of ten to provide predictability for the child, reducing anxiety about the end of brushing. Then, they made the brushing process on a puppet, with the technique of counting to ten for each sextant and encouraging the child's participation. Finally, the child was directed to the bathroom and encouraged to brush based on what they had learned. A pair of interns developed all the activities in the presence of the person responsible for the child.

It was noticeable that the children were uncomfortable with the presence of a brush and toothpaste in their mouths as the main barrier when brushing. The sensory processing disorder can explain this slight repulsion. It is a term used to refer to difficulties in processing and using sensory information in

physiological, motor, affective, and attention response regulation that directly affects the organization of behavior and participation in activities of daily living^{32,33}.

The initial strategy was to guide brush selection and management to reduce discomfort during brushing. The desire to find a brush with a small head and soft or extra-soft bristles directed the students, knowing that people with ASD can have such severe sensory disorders that the brush size and the hardness of its bristles can cause enormous discomfort. That makes oral hygiene difficult. Given the target audience's profile, fluoride toothpaste without flavor and in an amount equivalent to a grain of rice was recommended, with the child spitting it out or the caregiver removing the excess at the end of brushing.

The students also observed the children's difficulty maintaining their mouths open long enough to finish brushing. Learning and introducing new habits into the routine of the child with ASD should occur pleasantly and playfully. Thus, the students highlighted the repetition of actions as a critical point, similarly, the record of all failed attempts and progress¹⁰.

Brushing is an essential element in the daily care routine for the autistic child to prevent the development of carious lesions that will result in intense pain. Painful sensations disorganize the individual with ASD socio-emotionally and can make them aggressive towards themselves or others, which interferes with their treatment.

The second group of activities was aromatherapy and musicalization in the bruxism treatment. This condition is the grinding or clenching of the teeth act and can happen during the day and or sleep. Its etiology is multifactorial, and research suggests its association with several factors: dental,

physiological, psychological, and neurological, among which autism³⁴.

Given this patient profile, the students identified that they could use aromatherapy techniques³² and musicalization³³ to control anxiety in cases of bruxism. This activity aimed at parents objectifying to present integrative and complementary practices likely to be introduced into the patient's routine. Thus, for aromatherapy, using essential oils in the form of sprinkling in the environment was recommended^{37,38}. For the musicalization, the students instructed parents on the significance of choosing relaxing music and sounds to set the daytime routine and or night for the child.

The use of complementary therapies has been highlighted worldwide with the stimulation of the World Health Organization. In Brazil, these practices adoption is provided for in the SUS through Ordinance No. 971, which encourages and regulates the performance of these therapies in public health facilities³⁹.

Generally, individuals with ASD react to sensory stimuli (visual, auditory, olfactory, and tactile), approaching the professional difficult. The noises generated by the equipment used to perform the treatment and the unpleasant taste of medications can trigger reactions of aversion, fear, or distrust²¹.

Based on the epidemiological profile, the interns proposed performing the atraumatic restorative treatment using the protocol by Navarro et al. (2015)⁴⁰. Thus, they used dentin cures to remove not remineralized carious tissue and to make a glass-ionomer cement-based restoration only in teeth with class I cavities. They identified teeth with other hollows and scheduled them for later treatment. This procedure was performed on a stretcher in the doctor's office and required extreme skill from the trainees for patient cooperation,

especially given their sensory limitations.

The interns also put a multimedia projector in the clinic that pointed at the room's ceiling. Their objective was to encourage patient collaboration. They used this equipment to transmit the preferred cartoons of each patient. This technical increase in care practice added to the cooperation of most participants.

Another need identified was to perform topical applications of fluoride gel in the white spot lesions treatment. In this activity, they also used the multimedia projector with children's videos facing the wall, causing the child to take the focus off the procedure and stay seated during the application.

At the end of this stage, the intern should have developed attitudinal aspects regarding: responsibility and commitment to developing the activities, mastery of the skill in using the correct technique for the fluoride and ART application, and security in complying with what they foresaw in the planning.

The interns' experience left deep reflections on academic training, especially regarding the performance of interventions in a group of patients who are usually not seen at the university clinic. This paper highlights the gain in autonomy to propose and carry out activities and the commitment to fulfill the planned care schedule even in the face of adversities resulting from the behavior of children with ASD.

As a result of this learning process, the research mentions the following aspects: the inclusion of Dentistry as a member of the interprofessional team in the institution, demonstrating the importance of oral health for the quality of life of the autistic person; the perspective of new possibilities for assistance outside the dental clinic environment; and empathy to build bonds of trust with the

participants and with the institution, which will indeed stimulate the path of new dentistry interns.

3 FINAL CONSIDERATIONS

The experience of the supervised curricular internship at the institution that helps patients with ASD was challenging and different from any other experience by the interns, as it materializes in a scenario of practices outside the environment of dental clinics and works with children with a complex socio-emotional profile. These aspects contributed to attitudinal competencies development and skills that go beyond technical interventions, demonstrating creativity and empathy in search of a relationship of trust to transform the reality of this group.

RESUMO

Conectando sorrisos: relato de experiência em unidade de assistência à criança autista

O Transtorno do Espectro Autista abrange um conjunto de alterações biológicas que repercutem no desenvolvimento infantil. Visto que a atenção à saúde bucal dessas crianças tem um papel essencial para melhoria da qualidade de vida, a formação acadêmica ganha importante relevância. Esse artigo teve por objetivo relatar a experiência e o desenvolvimento de competências de estudantes de Odontologia de uma universidade privada durante atividades acadêmicas desenvolvidas em uma instituição não governamental que atua com pacientes autistas no Ceará. Os estagiários do último ano do curso de Odontologia desenvolveram atividades durante o segundo semestre de 2020 com um grupo de 22 participantes. A experiência se desenvolveu nas seguintes fases: reconhecimento do espaço, condicionamento para construção de vínculo, identificação de necessidades bucais e atividades de intervenção com a realização de escovação,

aromaterapia e tratamento restaurador atraumático. O estágio mostrou-se desafiador para o desenvolvimento de competências atitudinais e habilidades sedimentadas com paciência, empatia e construção de uma relação de confiança.

Descritores: Saúde Bucal. Transtorno do Espectro Autista. Saúde Pública. Educação em Odontologia.

REFERENCES

1. Moreira FCL, Martorell LB, Guimarães MB, Dias AD, Consorte LCJ. Uso do TEACCH como coadjuvante ao atendimento odontológico em paciente com autismo. *Scient Investig Dent*. 2019;24(1):38-46.
2. Kessamiguiemon VGG, Oliveira KDC, Brum SC. TEA - Atendimento odontológico: relato de caso. *Rev Pró-UniverSUS*. 2017;8(2):67-71.
3. Gomes PT, Lima LH, Bueno MK, Araújo LA, Souza NM. Autism in Brazil: a systematic review of family challenges and coping strategies. *J Pediatr*. 2015; 91(2):111-21.
4. Lai MC, Lombardo MV, Baron-Cohen S. Autism. *Lancet*. 2014;383(9920):896-910.
5. Arberas C, Ruggieri V. Autismo: aspectos genéticos y biológicos. *Medicina (Buenos Aires)*. 2019;79(1):16-21.
6. World Health Organization (WHO). Autism spectrum disorders. 2021 [Cited Oct. 20, 2021]. Available from: <https://www.who.int/news-room/fact-sheets/detail/autism-spectrum-disorders>.
7. Brasil. Ministério da Saúde. Conselho Nacional de Saúde. Dia Mundial de Conscientização do Autismo. [Cited Oct. 20, 2021]. Available from: http://conselho.saude.gov.br/ultimas_noticias/2011/01_abr_autismo.html.
8. Siqueira RMP, Marinho ABAS, Santos MTBR, Cabral GMP. The health professionals' perception related to the importance of the dental surgeon in the Intensive Care Unit. *RGO, Rev Gaúch Odontol*. 2020;68:e20200015.
9. Amaral LD, Portilho JAC, Mendes SCT. Estratégias de acolhimento e condicionamento do paciente autista na Saúde Bucal Coletiva. *Tempus actas*. 2011; 5(3):105-14.
10. Sant'Anna LFC; Barbosa, CCN; Brum, SC. Atenção à saúde bucal do paciente autista. *Revi Pró-UniverSUS*. 2017;8(1):67-74.
11. Fonseca ALA, Alazzis LA, Fonseca FLA, Botazzo C. Análise qualitativa das percepções de cirurgiões-dentistas envolvidos nos atendimentos de pacientes com necessidades especiais de serviços públicos municipais. *J Human Growth Develop*. 2010;20(2):208-16.
12. Albuquerque CM, Gouvêa CVDD, Moraes RDCM, Barros RN, Couto CFD. Principais técnicas de controle de comportamento em Odontopediatria. *Arq Odontol*. 2016;46(2):110-5.
13. Brasil. Ministério da Educação/Conselho Nacional de Educação/Câmara de Educação Superior. Resolução nº. 3, de 21 de junho de 2021. Institui as Diretrizes Curriculares Nacionais do curso de graduação em Odontologia e dá outras providências.
14. Dias IS. Competências em Educação: conceito e significado pedagógico. *Psicol Esc Educ*. 2010;14(1): 73-78.
15. Roldão M. De que falamos quando falamos de competências? *Noesis*. 2002; 61(1): 59-62.
16. Perrenoud, P. Construir as competencias desde la escuela. Ediciones Noreste, 2008. 125 p.
17. Instituto da Primeira Infância (IPREDE). Sobre nós. 2020. [Cited Nov. 26, 2020]. Available from: <http://www.iprede.org.br/>.
18. Brasil. Ministério da Saúde. Secretaria de Atenção Primária à Saúde. Guia de Atenção à Saúde Bucal da Pessoa com Deficiência / Ministério da Saúde, Secretaria de Atenção Especializada à Saúde Departamento de Atenção Especializada e Temática Secretaria de Atenção Primária à Saúde Departamento de Saúde da Família. Brasília: Ministério da Saúde, 2019.
19. Amaral COF, Malacrida VH, Videira FCH, Parizi AGS, Oliveira A, Straioto FG.

- Paciente autista: métodos e estratégias de condicionamento e adaptação para o atendimento odontológico. *Arch Oral Rese.* 2012; 8(2):143-51.
20. Araújo AC, Neto FL. A nova classificação Americana para os Transtornos Mentais: o DSM-5. *Rev Bras Ter Compoort Cogn.* 2014;16(1):67-82.
 21. Menezes SA, Zink AG, Miranda AF. Transtorno do Espectro Autista (TEA): abordagem e condicionamento para o atendimento odontológico - revisão de literatura. *Roplac.* 2014;4(2):8-12.
 22. Marega T, Aiello ALR. Autismo e tratamento odontológico: algumas considerações. *JBP Rev Ibero-Am Odontpediatr Odontol Bebê.* 2005;8(42):150-7.
 23. Jaber MA. Dental caries experience, oral health status and treatment needs of dental patients with autism. *J Applied Oral Sci.* 2011;19(3):212-7.
 24. Savioli C, Campos VF, Santos MTBR. Prevalência de cárie em pacientes autistas. *ROPE Rev Int Odonto-Psicol Odontol Pacientes Espec.* 2005;1(1):80-84.
 25. Friedlander AH. Autism: acknowledging the heritable aspects of illness as possible barriers to successfully marshaling family assistance. *Spec Care Dentist.* 2005; 25(4):177-8.
 26. Katz CRT, Vieira A, Menezes JMLP, Colares V. Abordagem psicológica do paciente autista durante o atendimento odontológico. *Odontologia Clin Cientif.* 2009;8(2):115-21.
 27. Campos CC, Frazão BB, Saddi GL, Morais LA, Ferreira MG, Setúbal PCO, et al. Manual prático para o atendimento odontológico dos pacientes com necessidades especiais. Universidade Federal de Goiás – Faculdade de Odontologia. 2009.
 28. Marques, SMF. Implantação de programa de acreditação de serviços de saúde: a qualidade como vantagem competitiva. Rio de Janeiro. Medbook, 2015. 208 p.
 29. Brasil. Ministério da Saúde. Secretaria de Atenção Primária à Saúde. Guia de Atenção à Saúde Bucal da Pessoa com Deficiência. Brasília: Ministério da Saúde. 2019. 120 p.
 30. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. A saúde bucal no Sistema Único de Saúde. Brasília: Ministério da Saúde. 2018. 350 p.
 31. Brasil. Ministério da Educação/Conselho Nacional de Educação/Câmara de Educação Superior. Resolução nº. 3, de 21 de junho de 2021. Institui as Diretrizes Curriculares Nacionais do curso de graduação em Odontologia e dá outras providências.
 32. Robles RP, Ballabriga CJ, Diéguez ED, Silva PC. Validating regulatory sensory processing disorders using the sensory profile and child behavior checklist. *J Child Fam Stud.* 2012; 21(6):906-16.
 33. Miler LJ, Nielsen DM, Schoen SA, Brett-Green BA. Perspectives on sensory processing disorder: a call for translational research. *Front Integr Neurosci.* 2009;3(22):1-12.
 34. Martín-Sanjuán C, Moreno MC, Maitena UE, Rios-de la Peña JM, Gracia-Quijada Y. Características orales y otras comorbilidades en el paciente con Trastorno del Espectro Autista. *Gaceta Dental.* 2014; 254:98-106.
 35. Gnatta JR, Dornellas EV, Silva MJP da. O uso da aromaterapia no alívio da ansiedade. *Acta Paul Enferm.* 2011; 24(2):257-63.
 36. Freire MH, Martelli J, Estanislau G, Parizzi MB. O desenvolvimento musical de crianças com Transtorno do Espectro do Autismo em Musicoterapia: revisão de literatura e relato de caso. *Orfeu.* 2018; 3(1):145-71.
 37. Almeida MCF, Chechetto F. O uso da aromaterapia no alívio da ansiedade. *Ver Cient Eletr Ciênc Aplic FAIT.* 2020;2:1-14.
 38. Souza VM. O uso de terapias complementares no cuidado à criança autista. *Rev Saúde Fís Ment.* 2019;6(2):69-88.
 39. Brasil. Ministério da Saúde. Portaria n.º 971, de 3 de maio de 2006. Aprova a Política Nacional de Práticas Integrativas e

Complementares (PNPIC) no Sistema Único de Saúde. Brasília: Diário Oficial da União. 2006.

40. Navarro MFDL, Leal SC, Molina GF, Villena RS. Tratamento Restaurador Atraumático: atualidades e perspectivas. Rev Assoc Paul Cir-Dent. 2015;69(3): 289-301.

Correspondence to:

Paulo Leonardo Ponte Marques
e-mail: paulomarques@unifor.br
Av. Washigton Soares, 1321
60811-905 Fortaleza/CE Brazil