



Brazilian Pediatric Dentistry Behavior Control Model: Report of the Pioneers of the Specialty

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Abstract

Objective: To analyze the basis on which the behavioral approach model adopted by Brazilian Pediatric Dentistry throughout its history was built. **Material and Methods:** A semi-structured interview, applied to six pioneering professors in Brazilian Pediatric Dentistry, dealt with the model that followed the line of behavioral control and how this could be explained historically; on the differences between the Brazilian model and that of other schools, as well as a methodological analysis on the publications related to these models. Data were recorded and transcribed and then submitted to Bardin's qualitative content analysis. **Results:** Three categories emerged from the analysis: "Formulation of a Brazilian theoretical model"; "Behavioral approach in Brazil and in other countries"; and "Analysis of publications under different behavioral approach models". The reports point to the construction of a model based on the sharing of professional experiences, the knowledge acquired through the literature and the compilation of techniques from different fields of knowledge/activity through idiosyncrasies, one's own abilities, such as the ease to deal with children, and personal experiences - leading to a non-scientific result. Methodological limitations in studies in this field have been reported. Qualitative research on the subject is scarce and allows further knowledge of the pediatric dental practice at its interface with Psychology for a successful treatment of pediatric patients. **Conclusion:** The reports point to the possibilities and limitations of the formulation process of the behavioral approach model adopted by Brazilian pediatric dentistry throughout its history. The analyzed categories allowed a broad and deep overview of the historic and academic process of this important construction.

Keywords: Pediatric Dentistry; Behavioral Control; Qualitative Research; Psychology, Child.

Introduction

Historically, the teaching of Dentistry originated from within Medical Programs across all the continents and universities. In Brazil, the teaching of dentistry took a long time to be established and was directly influenced by the American school. The profession was regulated by the physician José Martins da Cruz Jobin, then director of the Medical School of Rio de Janeiro, and the programs were separated by decree on April 28, 1854, coming into effect on May 14, 1856. The first program was instituted in 1879. After the university reforms by the Ministry of Education (1961 and 1968), the teaching career could be fully developed [1,2].

With academic activities fully in motion and the implementation of University Departments, Pediatric Dentistry reinforced its importance in the university sphere with the founding of GRUPO, in São Paulo, in 1969, as a cultural and scientific civil society. Regular meetings between specialties intended to share experiences in teaching the specialty. Although the initial participants were professors from schools in São Paulo, the cities of Araçatuba, Piracicaba, Lins and Londrina hosted the first meetings of Orthodontics and Pediatric Dentistry professors [3].

Until 1950, the application of Psychobiology knowledge associated with Dentistry was almost non-existent. This knowledge is very important due to the intimate professional-patient interaction, the relationship with patients being worked through the personification of their fears and anguishes [4]. Pediatric dentists treat still developing beings, overcoming their safety barrier from the moment they come into contact with the mouth, a place of great emotional importance for the little patients, they should adjust dental care according to the child's behavioral traits and developmental stage, dialoguing with psychology in the pursuit of professional excellence and effective treatment [5,6].

Only in the 1980's, during the second half of the twentieth century, studies of the interface between Pediatric Dentistry and Psychology began in the national literature. The first national books on the specialty were published [5,7].

The publications on child development based on the studies by Gesell [8], and Gesell and Amatruda [9], in the mid-twentieth century were relevant for pediatric dentists. Gesell [8], in 1952, described the stages of child development from behavioral profile. In the search for a deeper understanding of the child's reality, the attempt to understand the different behavioral reactions resulting from the psychic development stage of the child is evidenced. This conception gave rise to the division by age groups, from birth to two years old, from two to four years old, from four to six years old, from six to ten years old, and pre-adolescents from ten to fifteen years old. Their characteristics should be observed clinically only, instead of being surveyed under the law [10].

The influence of family relationships on the personality of the little patient also appears as an object of research. Characteristics present in the infant's behavior can be detected that may interfere directly with dental care. Such characteristics can be identified as overprotection with indulgence, overprotection with domination and rejection [6].

The proper application of behavioral approach techniques to pediatric dentistry treatment is paramount for the professional to understand and choose the best resource for his patient. These comprise three different, yet not excluding, fields, namely: linguistics, physics, and pharmacology. The use of one or more of these resources for behavioral adaptation reflects the conception of the pediatric, dental and psychological dynamics employed in clinical care [11]. Aiming to produce conclusive care and to develop affinity and a bond with the pediatric patient, linguistic techniques are often used, always suited to the maturation level of the patient's language [12]. The positive reinforcement used to improve the patient's cooperative behavior is applied through voice control and praise [13]. Necessary to build the desired trust between the patient and the professional - as well as his staff -, the say-show-do technique is widely used [14]. It is applied through explanations about the procedures to be performed, always respecting the developmental level of the infant. Tactile and visual demonstrations are performed and then the procedure is completed [13,15].

Through non-verbal communication, the professional seeks to demonstrate by facial expressions and physical contacts suited to the little patient that the dental environment is safe, encouraging him. The use of this technique aims to facilitate a positive behavior and reinforce other linguistic approaches [16].

The physical approach can be used to limit the patient's movements, totally or partially, avoiding injuries and providing a safer procedure for both [12].

The pharmacological approach is necessary when the patient is unable to cooperate with treatment due to physical, mental, medical or immaturity limitations and the forms of containment have failed [13], and it should be associated with other behavioral approach techniques, rather than replace them. In this type of approach, conscious sedation, oxygen inhalation/nitrous oxide sedation and general anesthesia may be used. The American journal Pediatric Dentistry published a special issue about the American approach model. Several articles and authors have concluded that the current diversity of US culture has led society to a behavioral change, including the relationship between services and users. Currently, health services providers (insurance) are ubiquitous and, because of the protocol established by them, reimbursements of procedures are guaranteed only when drugs are used. Visits that have not been made (or completed) on account of non-collaborative conduct are not reimbursable [17].

There is no single or exactly right method to be adopted by professionals. These also depend on their ability to relate and identify the patient profile, which, throughout professional development, ends up being a constant pursuit of their own adaptation with the objective of developing their work didactics.

By renewing their knowledge due to the advances in the profession, dentists should make use of the resources provided by the so-called "evidence-based Dentistry". This paradigm presupposes a critical attitude, questioning and scientific knowledge. Often enough evidence has not yet been collected to support a particular conduct; however, the absence of the best level of evidence does not prevent certain practices from being implemented [18].

Analyzing the methodological aspects of the publications in the mentioned area, the research methods are observed to be hegemonically quantitative. It is necessary to develop studies using the qualitative approach in order to deepen the understanding of the topic in question [19].

The aim of this study was to analyze the basis on which the behavioral approach model adopted by Brazilian pediatric dentistry throughout its history was built.

Material and Methods

Study Design

This is a qualitative, exploratory and descriptive study with the participation of six Pediatric Dentistry professors with academic training in the area (Masters, Doctors and Professors) and an academic career in undergraduate, graduate and specialization studies in different regions of the country (South, Southeast and Midwest).

Data Collection

In a meeting of Pediatric Dentistry professors from different regions of Brazil, the professors who introduced the topic of behavioral control studies into the teaching of the subject (in undergraduate programs) and the specialty were contacted.

The participants, after signing a free and informed consent, answered an interview whose questions were about the development of Brazilian Pediatric Dentistry education. The testimonies of six professors who pioneered the teaching of dentistry in dental programs - historical sources of a teaching model - were interpreted to instruct the understanding of the whole process genesis.

They were specifically questioned whether it would be possible to assert that there was the adoption of a model that followed the line of behavioral control with a psychological basis, rather than pharmacological, and how this model could be historically explained. They were also asked about the influence and differences between the Brazilian model and other schools. As for publications, they were asked to comment on the reason for the small number of articles on this topic and, especially, to consider methodological research issues. Finally, they were questioned whether Brazilian Pediatric Dentistry takes exemption to a practice based on the use of behavioral control drugs.

The data were recorded, transcribed and subjected to qualitative content analysis according to Bardin [20]. The systematization of speeches was performed by two judges who classified the reports separately in each category; however, in case of disagreement, a third judge was used.

After reading, three categories were defined: "Formulation of a Brazilian theoretical model"; "Behavioral approach in Brazil and in other countries"; and "Analysis of publications under different behavioral approach models", whose results were discussed in light of the literature on the topic.

Ethical Aspects

The Ethics Committee evaluated the study and approved it under number CEP-ULBRA 2006-340H. Data collection procedures were carried out in compliance with the ethical procedures,

guidelines and standards set forth in Resolution 466/12 of the Brazilian National Health Council, which regulates research involving human beings.

Results and Discussion

In order to understand the basis for formulating the teaching model of the behavioral control approach to pediatric patients in Brazilian Dental Programs, specifically in Pediatric Dentistry courses, since their early inclusion in the national curricula, the results will be presented in the three previously described categories.

Construction of the Brazilian Theoretical Model

In this category, the answers regarding the construction of a model for the approach to the pediatric patient in Brazilian Dentistry schools will be presented. The interviewed pediatric dentists described this model as being behavioral, rather than pharmacological: *"(...) In my opinion, with absolute certainty our general line of conduct, clearly there is some deviation by some, but the vast majority is behavioral, it is the professional-child relationship through speech and psychological methods, some of them are now even considered so excessively invasive that perhaps they are not used anymore for the dentist's own protection, but it is also behavioral. "(C); "It works more from a behavioral perspective, and not pharmacological (...)" (E).*

One of the interviewees pointed out that, at first, professionals intuitively adopted techniques with satisfactory clinical outcomes. Based on this experience, results that corroborated the practice and were in line with the guidelines of pediatric dentistry education were published: *"So I see the construction of behavioral adaptation when we talk about linguistic approach much more because there was at first some formal knowledge, that knowledge, it was structured from the bottom up, some publications later did a kind of compilation of these techniques (...) one of the reasons I see for a greater concentration of experience in the linguistic approach occurring in Brazil is that you had to open a door to the knowledge called intuitive, in which you looked at a technique, applied that technique, and saw that it worked, and in the field of the techniques recommended by both the American Academy of Pediatric Dentistry and the Brazilian Association of Pediatric Dentistry you have techniques that are consecrated by use, by custom" (D).*

In this speech, the interviewee summarizes the behaviors related to behavioral approaches in the pediatric dentistry treatment based on the historical evidence produced during the last 20 years of the twentieth century (especially in Brazil) and on the compilation of evidence by the associations that represent the specialty. This discourse encompasses the period of the interviewee's professional activity, which was concomitant to the cycle of scientific publications on the topic in question and his speech is in line with the most recent period (beginning of the 21st century) by mentioning the Clinical Guidelines. These recommendations have already been given for some time in the United States [21] and Europe [22], and, in 2010, the Brazilian Association of Pediatric Dentistry published the Reference Manual for Clinical Procedures in Pediatric Dentistry [23].

In the same category, emphasizing the behavioral control approach perspective, we can see the development of a clinical care practice based on personal experiences and, consequently, on education, the dissemination of these practices: *"I've always enjoyed Psychology, I've done a lot of therapy, and when I got pregnant I read many books aimed at children ... within the psychology that I read, that I knew, within the American line, of the psychology books that I picked up and went over and picked up sentences that I saw for childrearing and applied to dentistry, which I thought would fit in (...)"* (B). Confirming the influence of empirical bases for building the teaching model adopted in Brazil, one of the professors said: *"It was not dental training that brought us knowledge. It was found in the international literature and in the clinical need (...)"* (E).

The interviewees reported attempting, by sharing professional experiences in congresses or even by questioning peers from other fields, such as pediatricians and pharmacologists, to outline pharmacological techniques that would make it possible to provide care for younger, noncooperative patients: *"The American school gave some information but didn't provide safety, they told you the dose but didn't say how to do it. So we relied on the help of a pharmacologist, we asked him to teach us everything about sedatives and hypnotics. We asked for the help from a pediatrician, how to administer, what dose would be required for invasive procedures. We got together this way. I think we ended up developing our own path"* (E). In this same sense: *"(...) from experimentation, from trial and error, trying to do and seeing what was good for you. From then on, many professional experiences were added and they were conveyed through lectures, classes and courses, and finally in the late eighties, more or less through the literature, through books in Brazil"* (C).

In very young pediatric patients and special patients, for whom physical or mental limitations often make dental care impossible, general anesthesia can be indicated with the purpose to provide more conclusive and effective care [24].

Regarding the use of drugs as an aid to behavioral control during pediatric dental care, the participation of empiricism to overcome challenges - and because there was no well-established information at the time - is also observed. The use of drugs to help with behavioral control started being mentioned in publications on the specialty when the focus shifted to the treatment of younger age groups. The observation of oral health complaints requiring treatment in very young patients and the expansion of the Pediatric Dentistry scope seem to have led to the possibility of pharmacological prescription being contemplated in order to assist clinical conducts in the specialty in Brazil. Clinical care for infants reveals a very difficult approach due to the complexity of behavioral management [25]. The control of pain and anxiety associated with fear requires special attention of the pediatric dentist, these being the main modulators of child behavior in the dental office. Especially in younger age groups, the ability of understanding does not allow effective collaboration yet [5].

The interviewees stated that personal aspects such as talent, intuition and ease in the interpersonal relationship with children were facilitators for a successful pediatric dental practice: *"(...) the behavioral part was very personal in relation to the activity, to the talent or not and to the handling*

ability of each one." (A); "(...) have to feel what the patient requires of us, each one needs us in a different way, we must develop a feeling to know what the patient wants, how we are going to condition this or that patient, there is no general rule" (B); "In everyday life, the individual abilities to relate to the patient have grown, techniques initially suggested in the literature are applied because they were captured by intuition, and we have something to say today to those who set out to study and want to know this subject "(D).

Appropriate knowledge about emotional reactions, such as anxiety, fear and pain, is essential for control, adherence and, consequently, a successful treatment. It is up to the pediatric dentist to show the patient the understanding of the events involving the approach, facilitating professional practice and the formation of a bond. Therefore, for pediatric dental treatment to be performed successfully, in addition to the important qualities attributed to the practitioner, knowledge of psychology is indispensable for its adequate applicability and for determining the type of approach to be used that suits the behavioral characteristics of the child [6].

It is worth mentioning that pediatric dentists deal with many psychological challenges. It is related to the non-cooperation of patients, complex family dynamics, questions related to orality and the gratifications or frustrations associated with it, breastfeeding, sucking habits, motherhood, sexuality, aggression and phobias, among other conflicts [26]. To build a good relationship between Pediatric Dentistry and the pediatric patient, as well as their relatives, can contribute to the reduction of conflicts associated with dental procedures. Thus, attention to the bond with the child and communication, in addition to merely technical aspects or behavior control, aim to favor emotional expression, without disregarding the complexity for the professional that serves this audience [19].

Behavioral Approach in Brazil and in Other Countries

In this category, the professors talked about the differences between the Brazilian school and other types of background, especially the American school: *"(...) in North America, due to a cultural issue, the behavior of a professional who caresses the head of a child, who touches, who holds is scowled, and professors even discourage it, and among us this is quite different, we hug and we know that there is a positive response, the child likes to receive affection and attention, and as far as I'm concerned, I've been successful with this behavior "(F); "(...) Here the mother wants to be together, holding hands, and that's much more difficult. There are clinics that work poorly, sometimes we treat children who have already been to eight different places and there's an abscess, and someone says penicillin had to be taken, another one says they won't treat the child, the third, that the device was wrong, the fourth, the mother didn't allow treatment because the guy had dirty fingers, and so on. And there in the USA, it's not that there is incompetence, but you have to be more careful, because the guy that does something stupid is sued and receives and gets a fine of 22,000 dollars and can't practice for six months, so he comes to a point when he doesn't even try to provide treatment "(A); "(...) people who went to the United States and came back told me that it was just general anesthesia, sedation, and pharmacological techniques. They had publications with models that we could adapt to ours, but actually they didn't use it and don't use it." (B); "I've never had any experience evaluating this type of behavior outside*

Brazil, but from what we hear about it, I would say that they are much less keen on trying to ease the professional relationship, if it starts to become a little hard, they take other measures " (C).

The interviewees stressed that in Brazil the management of the pediatric patient is primarily behavioral due to social characteristics. In the United States, despite having enough knowledge to do so, due to cultural issues and, consequently, to legal issues, the pharmacological approach ends up being the most indicated and safest way for the practitioner to act, and there is no interest in controlling the child emotionally; therefore, the technique is less adopted in management difficulties. In 2004, the Association representing American Pediatric Dentistry published an issue of their journal exclusively addressing this topic. The publication largely corroborates the statements of the interviewees, with articles on techniques, US cultural issues and legal aspects involved in the clinical approach to pediatric dentistry [17]. The journal has wide circulation and is highly regarded in the academic and scientific milieu.

When they mention the US model, they connect the topic to pediatric dental care in a hospital setting. The interviewees point out the difficulties for care under these conditions: "(...) *they have in the curriculum training in sedation by inhalation of oxygen, nitrous oxide, and this knowledge is very convenient for them because, as the insurance pays for the treatment of their patient, they often cannot afford to discard the planning of an appointment to simply apply the childcare technique, replanning, with the purpose to make the patient become more cooperative at the next visit.*" (D); "... *they are given a more solid, better biological basis (...) in the United States, we also know that training is the same to some degree, the physician is differentiated from the dentist later, so they get very at ease, we don't have this basis, we don't know it*" (F).

At the time the participating professors were trained and the initial curriculum of Pediatric Dentistry was established, the interface between this specialty and the activity in hospitals was rare. A historical alignment that converges to the current state of understanding of this important interrelationship can be seen in the transcripts of the interviewees. Hospital dentistry is a practice intended for the care of oral alterations that require procedures by multidisciplinary teams that are highly complex to the patient. Dentistry itself cannot be isolated from other professions; it should share its responsibility with other healthcare professionals, such as the physician [24]. Winnicott points out to this ethic of care in child treatments [27].

It is emphasized that pediatric patients manifest, through their behavior, emotions that are not capable of verbalizing, such as fear. This emotion can be expressed through crying, refusal to open the mouth, resistance and even vomiting, in order to avoid dental care, which can be understood as an invasive procedure also associated with pain, anxiety and stress. The same authors report that the onset of dental anxiety has been related to factors related to behavioral and personality aspects of patients [28].

Thus, odontopediatrics practices are marked by a complex of relational dynamics, before which the professional faces many psychological challenges [19]. For the authors, there is no single method to be followed by professionals. These also depend on their ability to relate and identify the patient profile, which, throughout professional development, ends up constituting a constant search for their own adaptation with the objective of forming their didactic work.

Analysis of Publications Under Different Behavioral Approach Models

In this category, the professors expressed their perceptions regarding the methodological designs of publications related to behavioral approach models.

They said that a more substantial foundation was needed regarding academic training, for qualitative designs, in view of methodological difficulties: *"(...) These analyses are qualitative, and we don't have a lot of training in qualitative research, maybe this is the reason. But nowadays there is a great concern with researching what can be published and this topic is not very palatable for publication." (E); "To create a methodology, it is necessary to classify children, it takes a standard for children like this or like that. We can deal with the situation, but we don't know how to classify children." (C); "Since it is a personal matter, it is almost untransferable. I care for a person in one way, you care for in another way, and both of us can be successful, and your approach, your management is different from mine" (A).*

Adapting a child's behavior is a broad topic and has been largely studied in Pediatric Dentistry. The topic was the object of a recent integrative review of the literature covering national articles published from 1980 to 2016. The results showed a large number of publications on behavioral management with a non-pharmacological approach (82.75%), and the cross-sectional observational design was the most prevalent, as well as an increase in publications in each decade. The articles portraying the techniques of the non-pharmacological approach prevail in the national literature, highlighting the role of interdisciplinarity between Pediatric Dentistry and Psychology in Brazil [19].

Since, in the early years, the teaching of the specialty in undergraduate programs coincided with publications on child development, there were few sources that would serve as clinical foundation. The specialty itself was instituted in the 1960's in Brazil with the creation of GRUPO - Brazilian Group of Orthodontics and Pediatric Dentistry Professors [3]. This supports the reports mentioning foundations other than "scientific evidence" as a paradigm for teaching and implementing an approach model.

In addition, the model of training in Dentistry has always been oriented to liberal practice. The professional practice has taken place mostly in the scope of private activities (dental offices), with a restricted number of professionals working in public health (health units with dental care) [29]. The prospective of pediatric dental care in the hospital setting - also related to the current topic "Hospital Dentistry" in the undergraduate curriculum of Dentistry Programs - was non-existent and is still poorly addressed, in some cases only at the graduate level of Pediatric Dentistry. Recently, Hospital Dentistry was legitimated in Brazil, and its scope has been established by the relevant regulatory bodies [30,31]. Nowadays, despite the awareness about the importance of dental care in the hospital setting and of public health policies stipulating the participation of the dentist at the three healthcare levels for the population, the presence of this professional in the hospital staff is still very restricted [32,33]. In view of this paradigm, the contents involving professional activity in the hospital setting are expected not to be included in the teaching plans of related courses in Dentistry Programs [24].

Despite technological advances in dentistry, anxiety and fear are still common in children and adults, constituting a significant barrier to dental care and interfering with regular oral health care [19]. Pediatric Dentistry, in addition to these issues, needs to consider the emotional maturity of the child, who often does not accept or collaborate with the proposed treatment. Therefore, it is fundamental knowledge about the child's psychological development for the appropriate behavior management [10].

It is considered that the concepts and techniques that support the clinical practice of Brazilian Pediatric Dentistry have their foundations in Psychology. Recently, it was demonstrated that the scientific production of the dental specialty strongly links these two professions, in order to promote the most appropriate approach to the clinical demands of a pediatric patient [19]. The authors highlight the contributions of Psychoanalysis to Pediatric Dentistry by pointing out that the establishment of a relationship of reliability and safety, from childhood, can result in adherence to the treatment and more satisfactory bond with the professional that attends to their needs in an appropriate way. In addition, the professional will have with each child the experience of a unique and complex relationship.

Conclusion

Based on the analysis of the interviews conducted with the professors who built the behavioral approach model that is predominantly used in Brazilian pediatric dentistry, it was possible to understand that several factors were considered in its development throughout the history of education related to this subject. The reports point to the construction of a model based on a progressively developed paradigm, the sharing of professional experiences, the knowledge acquired through the literature and the compilation of techniques from different fields of knowledge/activity through idiosyncrasies, one's own abilities, such as the ease to deal with children, and personal experiences - leading to a non-scientific result. They also point to methodological limitations in an analysis of the scientific production related to the subject. Qualitative studies on the subject are scarce in the literature, although they allow knowledge to be enhanced and can contribute to an understanding of the implications of the pediatric dentistry practice at its interface with psychology, for the successful treatment of pediatric patients.

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References

- [1] Pereira W. Uma história da Odontologia no Brasil. *História e Perspectivas* 2012; 25(47):147-73. [In Portuguese]

- [2] Rosenthal E. História da Odontologia no Brasil. Available from: http://www.soergs.com.br/index.php?cd=217&descricao=historia_da_odontologia_no_brasil. [Accessed on February 08, 2018]. [In Portuguese]
- [3] Grupo Brasileiro de Professores de Ortodontia e Odontopediatria. Histórico. Available from: <http://grupo.odo.br/2019/historico/>. [Accessed on January 26, 2018]. [In Portuguese]
- [4] Tollendal ME. Reflexões Psicobiológicas em Odontopediatria. São Paulo: Artes Médicas; 1985. 164p. [In Portuguese]
- [5] Toledo OA. Odontopediatria Fundamentos Para a Prática Clínica. São Paulo: Panamericana; 1986. 243p. [In Portuguese]
- [6] Guedes-Pinto AC, Corrêa MSNP, Giglio EM. Conduta Clínica e Psicologia em Odontologia Pediátrica. 3rd. ed. São Paulo: Santos; 1991. 231p. [In Portuguese]
- [7] Guedes-Pinto AC. Odontopediatria. São Paulo: Santos; 1988. 613p. [In Portuguese]
- [8] Gesell A. Infant Development: The Embryology of Early Human Behavior. New York: Harper and Row; 1952. 108p.
- [9] Gesell A, Amatruda CS. Developmental Diagnosis. 2nd. ed. New York: Harper and Row; 1965. 496p.
- [10] Klatchoian DA. Psicologia Odontopediátrica. São Paulo: Santos; 2002. 375p. [In Portuguese]
- [11] Noronha, JC. Técnicas Para Adaptação do Comportamento da Criança à Experiência Odontológica. In: Klatchoian DA. Psicologia Odontopediátrica. São Paulo: Santos; 2002. 375p. [In Portuguese]
- [12] Klatchoian DA, Noronha JC, Toledo OA. Adaptação Comportamental do Paciente Odontopediátrico. In: Massara MLA, Rédua PCB. Manual de Referências para Procedimentos Clínicos em Odontopediatria. São Paulo: Santos; 2010. p. 49-71. [In Portuguese]
- [13] American Academy of Pediatric Dentistry. Guideline on Behavior Guidance for the Pediatric Dental Patient. *Pediatr Dent* 2011; 33:161-73.
- [14] Pinkham J. Odontopediatria da Infância à Adolescência. 2nd. ed. São Paulo: Artes Médicas; 1996. 661p. [In Portuguese]
- [15] Seger L. Psicologia e Odontologia: Uma Abordagem Integradora. 4th. ed. São Paulo: Santos; 2009. 448p. [In Portuguese]
- [16] Kramer PF, Feldens CA. Traumatismos na Dentição Decídua. São Paulo: Santos; 2005. 336p. [In Portuguese]
- [17] American Academy of Pediatric Dentistry. Special issue: Proceedings of the conference on behavior management for the pediatric dental patient. *Pediatr Dent* 2004; 26(2):110-83.
- [18] Susin C, Rösing CK. Praticando odontologia baseada em evidência. Canoas: ULBRA; 1999. 181p. [In Portuguese]
- [19] Tovo MF, Faccin ES, Vivian AG. Psychology and pediatric dentistry: Interdisciplinarity contextualization in Brazil. *Aletheia* 2016; 49(2):76-88.
- [20] Bardin L. Análise de Conteúdo. 7th. ed. Lisboa: Edicon, 1977. 280p. [In Portuguese]
- [21] American Academy of Pediatric Dentistry. Guideline on Behavior Guidance for the Pediatric Dental Patient. Available from: http://www.aapd.org/assets/1/7/G_BehavGuide.pdf. [Accessed on October 06, 2017].
- [22] European Academy of Pediatric Dentistry. Policies and Guidelines. Available from: <https://www.eapd.eu/index.php/policies-and-guidelines>. [Accessed on December 02, 2017].
- [23] Massara MLA, Rédua PCB. Manual de Referências para Procedimentos Clínicos em Odontopediatria. São Paulo: Santos; 2010. 344p. [In Portuguese]
- [24] Aranega AM, Bassi APF, Ponzoni D, Wayama MT, Esteves JC, Garcia IJR. What is the importance of Hospital Dentistry? *Rev Bras Odontol* 2012; 69(1):90-3.
- [25] Dezan CC, Frossard WGT, Walter LRF, Castaneda LCR. O uso da sedação com hidrato de cloral na odontologia para bebês. *Rev Bras Odontol* 1994; 51(4):8-11. [In Portuguese]
- [26] Barreto RA, Barreto MAC, Corrêa MSNP. Psychoanalysis and pediatric dentistry: Communication practice. *Estud Psicanál* 2015; 44:83-90.
- [27] Winnicott DW. Influências de Grupo e a Criança Desajustada: O Aspecto Escolar. In: Winnicott DW. Privação e Delinquência. São Paulo: Martins Fontes; 2005. p. 215-226. [In Portuguese]
- [28] Cardoso CL, Loureiro SR. Children's behavioral problems and stress as a consequence of dental treatment anxiety. *Estud Psicol* 2005; 22(1):5-12. <https://doi.org/10.1590/S0103-166X2005000100002>
- [29] Garbin CAS, Saliba NA, Moimaz SAS, Santos TS. The role of universities in the training of health professionals. *Rev Abeno* 2006; 6(1):6-10.
- [30] Brazil. Ministry of Health. Ordinance no.1,032 dated May 05, 2010. Includes dental procedure in the Table of Procedures, Medications, Orthoses and Prostheses and Special Materials of the Unified Health System - SUS, for the care of people with special needs. Brasília, 2010. Available from: http://bvsms.saude.gov.br/bvs/saudelegis/gm/2010/prt1032_05_05_2010.html. [Accessed on July 06, 2016].
- [31] Conselho Federal de Odontologia. CFO Resolution-163/2015. Describes Hospital Dentistry and defines the activity of dentists who are licensed to practice it. Brasília, 2015. Available from: <http://cromg.org.br/wp-content/uploads/2015/12/Resolu%C3%A7%C3%A3o-CFO-163-15.pdf>. [Accessed on September 18, 2017].

- [32] Godoi APT, Francesco AR, Duarte A, Kemp APT, Silva-Lovato CH. Odontologia hospitalar no Brasil. Uma visão geral. Rev Odontol UNESP 2009; 38(2):105-9.
- [33] Rocha AL, Ferreira e Ferreira E. Hospital dentistry: The role of the dentist in multidisciplinary teams in tertiary care. Arq Odontol 2014; 50(4):154-60.