



## Teaching and Learning Regarding the Dentist-Pediatric Patient Relationship: A Qualitative Study

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### Abstract

**Objective:** To investigate the perceptions of dental students on the learning process regarding the dentist-pediatric patient relationship. **Material and Methods:** A qualitative study with an exploratory approach was conducted involving semi-structured interviews with sixteen dental undergraduate students randomly selected from the thirty-two students in the last semester of the dentistry course. The transcribed interviews were submitted to content analysis. **Results:** The sample was composed of nine female (56.3%) and seven male (43.7%) students (median age: 23 years). The factors perceived as most influential with regard to learning the dentist-pediatric patient relationship were observations of professors, other dentists or colleagues and the regular practice of dental procedures. While half of the participants considered lectures on the subject satisfactory, the other half reported a need for more instruction on how to deal with specific clinical situations. Most of the participants would like to have learned more about the dentist-pediatric patient relationship. **Conclusion:** The majority of students recognized that the teaching and learning process regarding the dentist-pediatric patient relationship is not easy. They reported having little counseling on the how to develop this relationship. The students suggested that the dentist-patient relationship should be addressed more during the course through the inclusion of lectures or classes on this issue as well as the demonstration of specific clinical situations.

**Keywords:** Education, Dental; Dental Care for Children; Pediatric Dentistry.

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## Introduction

The dentist-patient relationship mediated by communication (from the Latin *communicationem* meaning "to impart, to share") is considered a personal bond of unique importance, as it serves as the basis of the technical, humanistic and ethical dimensions of clinical practice [1-3].

Studies have shown that patient satisfaction with dental care is correlated to interpersonal relations with the dentist [4-8]. A good student-patient relationship is also based upon respect and dialogue [7-9]. Dental students are expected to learn to value interpersonal relationships so that they can adequately communicate with the patient and offer advice regarding oral health in an ethical, attentive and affectionate way [10]. These studies underscore the importance of patient-centered care, valuing the personal history of each patient rather than merely the condition being treated.

The management of a child's behavior is an important part of pediatric dental practice and is directly related to dentist-patient relationship [11]. Children and adolescents vary in competence, temperament, personality, intellectual capacity and maturity. They also differ greatly with regard to life experiences, family situations and cultural backgrounds. All these aspects affect a child's or adolescent's ability to tolerate dental examinations and treatment [12]. Some children are able to cope well with potentially stressful situations, such as a visit to the dentist. Other children, however, are more vulnerable to fears and impulses and hence more prone to react with emotional or behavioral symptoms. Thus, a good dentist-patient relationship based on communication is essential for the dentist to establish a relationship of harmony with patients and their families, thereby minimizing fear, anxiety and stress in the pediatric dental office [13,14].

In an analysis of the literature, no specific study was found on the perceptions of dental students regarding the dentist-pediatric patient relationship beyond investigations addressing the importance of communication skills with patients and observing that there is a lack of emphasis on teaching communication skills in dental schools [1-4,7,8,10]. Since the 1970's, studies have recognized the value of the teaching communication skills to dental students by dental practitioners working in the field [14]. However, guidelines involving communication skills in the dental curriculum were only formally published in the United Kingdom in 1990 [15] and in the United States in 1993 [16].

Despite the recognition of the importance of training communication skills in the dental curriculum, studies have shown that few courses focus specifically on interpersonal communication [4,17]. One study evaluated the experiences of students at a dental school in Ireland and found that communication barriers can hinder effective care, concluding that treatment can be compromised if the student and patient do not share a common language [18].

Pediatric dental care poses specific challenges. Children do not choose to go to the dentist and dental procedures are often a source of fear, anxiety and insecurity. Factors contributing to a child's reaction to the dental setting include the child's age and cognitive level, personality/temperament characteristics, anxiety and fear, reaction to strangers, previous dental

experiences and the influence of the mother's dental anxiety [19,20]. These factors can be overcome by effective communication that alleviates the patient's fear and anxiety and builds a trusting relationship with the child, promoting a positive attitude towards dental care and oral health [21].

Few studies on dental education have focused on students' perceptions of their education and learning environment and fewer still have employed a qualitative approach. Thus, as part of continuing efforts to evaluate and improve the educational experience in pediatric dentistry, explanatory investigations are needed to evaluate the clinical component of the curriculum as seen from the student's viewpoint [22].

Considering the importance of the dentist-pediatric patient relationship and the need to assess how it is taught and learned at dental schools, the aim of the present study was to investigate the perceptions of dental students on the learning process regarding the dentist-pediatric patient relationship during their academic education.

## Material and Methods

### Study Design

A qualitative study with an exploratory approach was conducted. The setting was the Dentistry Course of the Federal University of Santa Catarina, Florianópolis, Brazil.

### Sample

The sample was composed of sixteen students randomly selected from a class of 32 students in last semester of the undergraduate course. At the time of data collection, the students were enrolled in *Discipline of Pediatric Dentistry II*, in which they practiced comprehensive dental care on pediatric patients throughout the semester.

The qualitative method is the most appropriate when one wants to know and understand phenomena, perceptions, feelings and values. In quantitative research, there is concern regarding the extent of the sample for generalization. This does not apply to qualitative research, in which the aim is to broaden the understanding of a phenomenon by social actors for further elucidation, making it possible to hypothesize on the reality studied and even on theories based on data.

### Pilot Study

A pilot study was conducted using three randomly selected subjects to test the understanding of the data collection instrument. The results of this pilot study demonstrated that no changes to the proposed methods were needed.

### Data Collection

Data were collected by a researcher through semi-structured interviews during the third quarter of 2009 and were recorded and transcribed. The interviews were guided by the following questions:

- In what ways have you learned about the dentist-pediatric patient relationship?
- What do you consider important to your relationship with pediatric patients?
- How do you feel when providing dental care to children?
- What suggestions would you give to help improve learning on the subject of the dentist-pediatric patient relationship?

### Data Analysis

The transcribed interviews were submitted to content analysis [23]. The interviews were transcribed, split into units (words, phrases or sentences) and united in groups with similar content (codes), which were used to create categories (groups of codes that share a commonality and are mutually exclusive). These categories are shown in **bold** type in the results section. The emergent themes were those that linked the latent meaning together and are shown *italics* in the results section. A quantitative approach was used to describe the frequency distribution with no intention to carry out comparisons.

### Ethical Aspects

This study received approval from the Research Ethics Committee of the Federal University of Santa Catarina (Certificate Number 112/09). The volunteers received clarifications regarding the objectives of the study and those who agreed to participate signed a statement of informed consent.

### Results

Among the 16 students who participated in this study, nine were female (56.3%) and seven were male (43.7%). The median age of the subjects was 23 years (range: 22 to 30 years).

#### *Learning Process Regarding Dentist-Pediatric Patient Relationship*

**The influence of positive and negative models** was the most important aspect to learning the dynamics of the dentist-pediatric patient relationship. The majority of the participants mentioned the *positive models* of faculty members, other dentists during extra-curricular internships and even colleagues, who, in some cases, were members of their own family or fellow students:

Sometimes it's through someone else's example...For example, my father is a dentist, and [...] and I see the way he jokes and plays with children... we learn as time goes on more or less the way to talk [...].

[...] I did an internship where I got to see how the dentist approached the patients and I learned a lot.

[...] sometimes even with my colleagues, when I see one of them use an attitude with their patients that actually works, it's cool, and I try to replicate it.

One of the students mentioned having learned through observation “that it doesn't work to be kind all the time... you have to fight, assert yourself, so that the child listens to you more...if he or she is behaving badly”.

Conversely, the observation of *negative models* was reported by some participants as a source of learning:

[...] there were examples from professors, both good and bad ones... I once saw a professor talking to a child's mother, right in front of the child, about how poor her oral health was. There were a lot of people present and I didn't like it... I think, some things must be said in private; otherwise they can be somewhat humiliating [...].

**The contradiction between what is taught in theory and what is practiced** was also pointed out.

[...] during theoretical lectures, when explaining clinical procedures, teachers often explain how to communicate, how to calm the patient down during the procedure... However, there are some things they teach in class that they do not practice in the clinic [...] For example, during my first anesthesia procedure on a child, I was taking too much time and the teacher came and told me that I should do it quicker. So, I did and the child caused a big scandal. I almost died of a heart attack!

**Learning from practice** was considered important as well. Nine interviewees said that learning “comes with practice”, “as you deal more with the patients” and that “it is only through practice that you gain experience”.

**Familiarity with children**, experienced by living with children or interacting with them in other contexts, was also mentioned:

[...] I like children a lot. I have little cousins and I get along well with them ... I like to play with them, which has helped.

[...] I have a younger brother, so you know how it is... I'm the annoying older sister who's always picking on him and making him do things. You enjoy it, but there are times that you fight, times that you spoil them... And it is the same with the patients in the clinic.

**The need for lectures with more “tips”** was also pointed out. While one half of the participants considered lectures on this issue satisfactory, the other half reported a need for more instruction on how to approach specific clinical situations.

There should be more lectures that provide tips on how to approach the patient [...] when he or she is shy, sad, or crying in despair, using real examples [...].

The lectures were good, ...but there were a lot of things that we didn't concentrate on... We need to have more examples of the various situations that we may encounter in the clinic...

For the participants, **books and articles are not helpful to their learning** in this regard.

**Personal characteristics** that influence the subjects' learning of the dentist-pediatric patient relationship were also cited. One of which was one's **inherent personality and communication**

**skills:** “It depends on the person, on the way we relate to others and our ability to understand one another, whether we are more or less friendly”. Another example was one's **empathy towards children:** “[...] you have to like children”.

#### *Perceptions on How to Communicate with Children During Treatment*

Regarding the aspects considered important when communicating with the patient, some participants reported the need to act differently depending on the maturity/age or behavior of the child. The need **to be patient and kind** and make agreements with the child in a manner that conveys confidence was cited:

You have to be four times more patient than you think you need to be... A good relationship with a child depends a lot on patience [...].

First, talk a lot with the child, get his attention, gain his trust...then you can start the procedure. It is important to make agreements, things like telling the child, “if you are in pain during the procedure, lift your arm and I'll stop.” And if he does, you really must stop. Never deceive the child, because he's not stupid!

I think we have to treat the patient almost like an adult; we have to talk extensively with him, ask questions, learn how the child feels, to convey trust ...because confidence is key [...].

**Assuming a playful approach** with playful speech and jokes was reported:

I like to talk in a playful way, I tell them I'm the uncle that's here to take care of their teeth, remove the “decay bugs” and clean their teeth... I try to explain everything, teach them how to take care of their teeth, but always in a playful way, one that utilizes the child's imagination.

Some interviewees considered the occasional need to **adopt a more assertive attitude:**

[...] sometimes you have to be more rigid, more firm with your voice and actions... I thought it would be easier to deal with it, but it isn't... But you cannot be very angry; you have to be flexible to get what you want from the child.

A **good relationship with the child's parents or guardians** was also pointed out as an important element of dental care for the child:

During the first appointment, I introduce myself to the mother, take into account that she is not a dentist and try to explain the treatment to her and motivate her to look after her child's oral health. After all, she is the guardian.

From the very beginning, you have to talk with the parents about the importance of treatment. The mother is the key. If she is not interested, she ends up not bringing her child in and not being supportive for the entire treatment.

#### *Difficulties Felt During Child Dental Care*

Reflecting on the provision of dental care to a pediatric patient, some participants reported having great difficulty due to a **lack of empathy** towards children.

I'm having a lot of trouble. I don't empathize much with children, so I'm always afraid... I hope I'll get over this with time!

For other participants, the difficulty was due to **insecurities** stemming from insufficient contact with children:

I don't feel very confident... I'm getting better, but I used to feel very insecure... I don't have any contact with children outside of here. It's hard to just develop a skill like that under these circumstances.

#### *Expectations with Regard to Learning the Dentist-Pediatric Patient Relationship*

The majority of the participants would like to have learned more about the dentist-pediatric patient relationship. Suggestions to improve the teaching of the dentist-pediatric patient relationship included the incorporation of **specific classes in pediatric dentistry**; a **module or discipline that involves psychology** to help students better manage the reactions of “child and adult patients with different profiles”; **teaching while performing clinical practice**; an **additional semester of clinical practice** in pediatric dentistry; more **opportunities to observe teachers during clinical practice** to allow students to “see how they [...] interact and communicate with the patient in specific situations”. The participants also said that, as dental students are “beginners” and the treatment of children is more time-consuming, **the number of patients treated per period should be reduced** to allow them to connect further with each patient and his or her guardian.

#### **Discussion**

This study identified two main ways of learning about the dentist-pediatric patient relationship considered important by the participants: role models (what to do and what not to do) and clinical practice.

The role of the instructor and the relationship between instructor and student has been identified as an important dimension in clinical learning [18,22]. This includes the instructor as a role model, the value of continuous feedback, the benefit of a high level of interactivity, personal qualities, the importance of the instructor's rapport, organization and enthusiasm, the appropriate level of supervision and communication [18,24-26].

The role of the professor and the importance of a good student-teacher relationship to the learning of the dentist-patient relationship in healthcare are well established [27]. Students prefer instructors who provide an adequate level of supervision, allowing them to work in an independent manner while also being available to offer suggestions and demonstrate how to deal with a patient, when necessary, as students may not know how to act when treating a child [18,28].



Educators must also place more emphasis on observation, demonstrating specific situations involving pediatric patients and training students through experiences in regular clinical practice. Studies have shown that practice in a clinic enables students to perceive their personal progression and raises their self-confidence [4,6,18,29]. In pediatric dentistry, the experiences of dental students may help dental educators better prepare graduates to treat children [24]. Child psychology and behavioral management for pediatric patients should be taught before students enter the clinic so that they can effectively manage patients. In the present study, while some students considered lectures on this issue effective, others exhibited considerable interest in learning more on how to communicate with pediatric patients, especially during their practical classes.

To provide dental care to a child, it is essential for students to take the child's stage of development into account, as children undergo constant changes in their ability to understand and react to stimuli. To understand a child's level of understanding, one must know his or her capacity to adapt to diverse situations.

In the evaluation of dental students' experiences in pediatric dentistry, the continuum of learning was identified as part of the learning process. Students saw themselves progressing and gaining confidence through their clinical experiences. Even patients with challenging behavior were viewed as a chance for a positive learning experience [18].

The students also acknowledged the need to use a playful approach and to be honest when interacting with children to facilitate the bond between the dentist and patient. The bond with the patient's parent or guardian (typically the mother) was also pointed out. As parental anxiety can have a direct impact on the child's level of anxiety, it is the responsibility of the healthcare professional to orient the guardian regarding the procedures to be performed and what will be required of the child [11,20,30]. The dentist-patient-guardian relationship must be based on cooperation and mutual respect, such that a personal bond is formed and adherence to treatment and proper dental hygiene is assured.

This study also reveals that some students experience discomfort and insecurity related to the treatment of children, underscoring the need for educators to place greater emphasis on the development of dentist-pediatric patient communication skills. Specific lectures on this issue, together with gradual, hands-on training of such skills, will serve to help students interact better with children during treatment. Additionally, the student must have confidence in both his/her professor and his/herself so that when negative behavior is encountered, the student might recognize it as an opportunity to learn and not as source of distress and insecurity [18].

Qualified instructors are recommended, preferably including experts in the social sciences and psychology in addition to dentistry. Students consider a multidisciplinary approach to be enriching to the overall course. In this study, however, although the students were accompanied in the clinic by a specialist in psychology, they did not mention the presence of the psychologist as significant to their learning of the dentist-patient relationship, which lends support to the notion that the attitudes of dentistry students are impacted little by inter-professional education [31].



Many strategies can be used to teach communication skills. Some important principles are the use of a skills-based approach in relevant scenarios, videotaping methods with opportunities for reflection, simulated patients and the provision of regular feedback [4,32-34].

Universities must educate professionals who are not only qualified in the traditional sense (competent in the performance of dental procedures), but also, and perhaps more importantly, qualified in their ability to establish a healthy, cordial and mutually respectful relationship with young patients.

As in a previous study [22], the participants' responses in the present investigation provided rich, in-depth insights into their reflections and understanding of effective and ineffective approaches to supervision as it influenced their learning in the clinical and research settings.

These results present an opportunity that should not be overlooked, as students are interested in the subject and motivated to learn. Given the need for a holistic approach to pediatric care, the university setting is propitious to improving communication skills in the field of pediatric dentistry field so that dentists may start their practices feeling competent and able to deal with pediatric patients.

The present results cannot be generalized to every undergraduate pediatric program, but the ideas and themes may stimulate reflection in faculty members and students alike. For faculty members, the cyclical process of reflection is immediately recognizable, as it involves getting in touch with what students are experiencing, understanding situations and trying to change them for the better.

The limitations of this study are related to the research method used, which does not allow the generalization of the data, but this is not the objective in qualitative research. The purpose of this method is to know the study phenomenon in a continuous and deep manner.

## Conclusions

The majority of students recognized that the teaching and learning of the dentist-pediatric patient relationship is not easy. They reported having little counseling regarding the how to develop this relationship. The students suggested that the dentist-patient relationship should be further addressed in the course through the inclusion of lectures or classes on the topic as well as the demonstration of specific clinical situations. The students suggested more training of communication skills applicable to the practice of pediatric dentistry and opportunities for reflection and feedback from professors and/or dentists throughout the course to promote the learning on the dentist-patient relationship.

Throughout this study, it was apparent that the vast majority of the students are striving to improve their dentist-pediatric patient relationships. They seek to enhance their learning primarily through the observation of superiors and the regular practice of dental procedures.

More than half of the students reported feeling insecure during the dental treatment of children and recognize the importance of learning how to interact with young patients properly.

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