# Children's evening dental clinic: perceptions and satisfaction of caretakers

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#### ABSTRACT

With the start of care at the Children's Evening Dental Clinic in the Dental School of UFRGS, it became necessary to evaluate the perception of children's caretakers regarding the scheduling time, indicating aspects that might influence the patients' arrival for consultation, such as safety, mobility and access; the child behavior in the consultation and the day after care; educational level and family income; as well as the reason to search for evening dental care. A cross-sectional, observational and analytical study was conducted using a questionnaire. Responses were obtained from 58 caretakers, mostly patients' mothers (60.34%), living in the same city of the institution (56.90%), with complete high school education (37.93%), family income up to 2 minimum wages (41.38%) and using public transportation (58.62%) to go back and forth from the consultations. Pain and prevention were the main reasons for seeking care. Statistically significant associations were found between excellent or good response to the scheduling time and evaluating the quality of care as excellent or good (p=0.05); informing that the schedule was not tiring for the child (p=0.01); that the child did not delay to sleep after the consultation (p=0.02); and never missing consultations (p=0.02). The caretakers' perception was that the lack of safety and the jammed traffic characteristic of the time of onset of consultation were barriers faced for attendance. The caretakers were satisfied with the evening attendance and their perception was that this schedule did not affect the child behavior. Descriptors: Dental Care. Night Care. Children. Caregivers.

#### **1 INTRODUCTION**

In the scenery of changes promoted by the *Program of Support for Restructuring and Expansion Plans of Federal Universities* (Reuni)<sup>1</sup>, the Dental School at the Federal University of Rio Grande do Sul (FO-UFRGS) proposed the creation of the first evening graduation course in Dentistry in the state of Rio Grande do Sul. Offering applications for 30 students per year, the first group was initiated in the second semester of  $2010^2$ .

The children's dental clinic, which

performs educational, preventive and restorative procedures, performed by a pair of students, is offered only on the first semester of each year. It was first offered in 2016, extending the access to dental care for children aged 3 to 12 years, allowing the parents who work at daytime to take their children for evening consultations.

The treatment adherence and its success are directly related to the satisfaction of individuals<sup>3,4</sup>. Especially, the parental satisfaction with the assistance offered to their children influences their health, because, depending on the child's age, they are the mediators between professional and child, not only because they bring them to consultations, but also because they are the main persons responsible to perform the recommendations and indicated treatments<sup>5</sup>.

Therefore, this study evaluated the perception of children's caretakers concerning the scheduling time, indicating aspects that might influence their arrival to the consultation, such as safety, mobility and access; child behavior in relation to the consultation and on the following day; educational level and family income; and the reason to search for evening dental care.

# **2 METHOD**

This cross-sectional, observational and analytic study was approved by the Institutional Review Board (n. 1.945.533), following the guidelines of Resolution n. 466/2012. The target population was composed of caretakers (older than 18 years) of patients assisted at the children's evening dental clinic of FO-UFRGS in the years 2016 and 2017.

The caretakers were invited to participate in the study while waiting for the attendance. The research and its objectives were explained, occasional doubts were elucidated and the participants who agreed to participate signed an informed consent form.

A closed questionnaire containing 25 questions with data on the caretaker (gender, age, profession, educational level, marital status, city of residence and degree of kinship with the child), on the child (gender, family income and reason to search for care), means of transportation used to go back and forth from the consultations, caretaker's opinion about the attendance received by the child, about the scheduling time, access to the dental school, child behavior after consultations and reason for missing appointments was applied by two trained examiners. The internal consistency of the questionnaire was assessed by the Cronbach's alpha coefficient. Data were collected by two trained examiners.

The results were organized on a databank, the frequency of responses was calculated and the association between variables was evaluated by the Pearson chi-square test, at a significance level of 5%.

# **3 RESULTS**

Overall, 58 questionnaires were responded. The sample of caretakers presented predominance of females (n=43; 74.14%), married (n=30; 51.72%), aged 19 to 65 years. Only 3 (5.17%) of interviewees were not the main responsible for the child, 35 (60.34%) were mothers and 12 (20.69%) fathers. Among the interviewees, 33 (56.90%) lived in Porto Alegre and 24 (41.38%) at the metropolitan region of this city; 52 (89.65%) knew about the dental care in the school by indication and 6 (10.34%) by the press.

Data on the educational level of caretakers and family income are presented in Table 1; the perceptions and opinion of caretakers concerning the evening dental care of the child are recorded in Table 2. The chi-square test indicated statistically significant association between excellent or good response as to the scheduling time and evaluating the quality of care as excellent or good (p=0.05); informing that the scheduling time was not tiring for the child (p=0.01); that the child did not take longer to sleep after care (p=0.02); and never missing the consultations (p=0.02).

# **4 DISCUSSION**

This investigation revealed that the evening dental care of children at FO-UFRGS is very well accepted by the population, who now have an alternative that does not interfere with the child's schooltime nor the caretaker's working time. The results were very important to overcome the prejudice that there would be many operational difficulties in a children's dental clinic in an evening dental course.

In the present study, the assumption that fear concerning safety would represent the highest percentage of interviewees was confirmed. The lack of safety and mobility were the main difficulties reported by the patients' caretakers. It is known that Porto Alegre and metropolitan region have been facing increasing problems of urban violence and mobility, which not rarely affect and change the population routine, which is attempting to adapt and overcome them. Porto Alegre is among the 15 most violent cities of the world in the criminality ranking, with poor safety also during the day<sup>6</sup>.

As mentioned by Minayo (1994)<sup>7</sup>, violence is one of the everlasting problems of social theory and of political and relational practices of mankind". It is considered a public health problem in several countries, including urban violence as the aspect causing the sensation of fear and lack of safety of the population, combined to the lack of trust in the

public safety system and unbelief in state  $actions^8$ .

Among other difficulties to arrive to the dental school, the participants also reported a problem present in large cities, the traffic jam. The schedule of onset of care coincides with the time of peak traffic in the capital and metropolitan region. However, nearly one third of interviewees did not indicate any difficulty, regardless of using their own car or public transportation. The difficulties are present both in the public transportation and for mobility, with the increase in the number of vehicles and greater traffic jams, as described in the study of Schwarz (2014)<sup>9</sup>, evidencing deficiencies in city planning concerning the urban mobility and street safety in general.

Pain was referred as the main cause of search for care in nearly half of the sample, especially in the lower socioeconomic level. In this context, dental clinics of dental schools should present competencies to solve the oral health disorders of individuals<sup>5</sup>, especially of unfavorable socioeconomic conditions, with strong action in educational and preventive practices<sup>10,11</sup>.

According to Lucas *et al.*  $(2005)^{12}$ , the is considered socioeconomic status a determining risk factor, and the family income is an indirect factor for the susceptibility to dental caries, since they are associated with the educational level, value assigned to health, lifestyle and access to healthcare information. It is known that the utilization of dental services among socially unfavored families is lower, evidencing the need of social health policies to expand the access to dental services among lower socioeconomic levels<sup>13</sup>. The low family income is a relevant factor for the utilization of dental services, since there are social barriers for its utilization: the lack of financial resources and lack of knowledge and information on the importance of oral health maintenance<sup>14</sup>.

As mentioned by Cohen  $(1987)^{15}$ , there are barriers to dental care that involve the individual (low perception of need, anxiety and fear; costs and access difficulties), professional practice (inadequacy of human resources, unequal geographic distribution and insufficient sensitivity to the patients' needs) and the society (insufficient number of health promotion actions, improper facilities of services and reduced financial support to research). In the present study, the barriers were represented by access difficulties - traffic jam, difficulties to use the transportation – as well as financial difficulties. Other aspects concern the inflexible schedules as a barrier for the utilization of health services<sup>16</sup>. The evening pediatric dental care of FO-UFRGS may aid part of the population to overcome these barriers.

Forgetting or missing the schedule, impossibility of the caretaker to accompany the patient and financial difficulties appear as reasons for missing the consultations<sup>16</sup>, corroborating the present findings. The questionnaire did not address the weather, yet this appeared during the semesters influencing the attendance to consultations, especially cold and rainy weather.

According to Kanegane *et al.* (2003)<sup>17</sup>, childhood is a critical period for the occurrence of fear and anxiety. In the contexts of medical and health treatment, the fear and anxiety are part of the therapeutic routine, with dental fear as one of the most frequent and intensely experienced, especially because it usually involves invasive procedures<sup>18</sup>. According to the same authors<sup>17</sup>, the dental treatment is a source of stress and anxiety.

Variable	n	%
Educational level of caretaker		
Complete superior education	12	20.69
Incomplete superior education	6	10.34
Complete high school	22	37.93
Incomplete high school	7	12.07
Complete fundamental school	1	1.72
Incomplete fundamental school	10	17.20
Family income		
> 2 minimum wages	19	32.76
2 minimum wages	24	41.38
1 minimum wage	15	25.86

Table 1. Distribution of caretakers according to the educational level and family income

Table 2. Perceptions and opinion of caretakers in relation to the child's evening den	ital care
Variable	n

Variable	n	%
Did the child present difficulty to awaken in the morning after dental care?	_	
Yes	3	5.17
	55	94.83
Did the child have a bad night of sleep in the night of dental care?	4	6.00
Yes No	4 54	6.90 93.10
Did the child take longer to sleep in the night of dental care?	54	95.10
Yes	5	8.62
No	53	91.38
Do you consider the evening dental care was tiring for the child?		
Yes	7	12.07
No	51	87.93
How do you come for attendance?		
Public transportation	34	58.62
Private car	23	39.65
Other	1	1.72
Do you consider the access to the dental school	16	27.50
Excellent	16 33	27.59 56.90
Good Average	33 9	15.52
Do you consider the evening dental care	7	15.52
Excellent	24	41.38
Good	26	44.83
Average	4	6.90
Bad	3	5.17
Did not respond	1	1.72
Did the evening dental care interfere with the working time of the caretaker?		
Yes	42	72.41
No	16	27.59
Does the evening dental care interfere with the child's schooltime?	_	0.10
Yes	5	8.62
	53	91.38
<i>Do you have difficulty to arrive at the time of consultation?</i> None	18	31.03
Yes, lack of safety	18	32.76
Yes, traffic jam	13	22.41
Yes, overcrowded public transportation	5	8.62
Yes, others	3	5.17
Did you already miss at least one consultation?	U	0.11
Yes	8	13.79
Never	50	86.21
What is your opinion about the attendance?		
Excellent	45	77.59
Good	12	20.69
Average	1	1.72
Bad	0	0
Reason to search for attendance	25	12 10
Pain Prevention	25 25	43.10
Esthetics	25 5	43.10 8.62
Trauma	$\frac{3}{2}$	8.62 3.45
11441114	4	1.72

The dental interventions often cause negative reactions among children, related with anxiety and stress. Physiological stimuli such as pain and other psychological aspects involved in the treatment may represent potential threats to the welfare of children, who may manifest their fear with non-compliant behaviors – crying, not opening the mouth, vomiting – and attempt to escape from the dental care<sup>19</sup>. This study evaluated whether the evening dental care would be an additional factor, altering the child's sleep. The results demonstrated that, according to the perception of caretakers, there were no behavioral changes in sleep time.

Considering the aforementioned considerations, it should be reminded that in some cases the search for evening pediatric dental care at FO-UFRGS was accompanied by anxiety, pain and other behavioral problems, and the child and family were weakened by several situations, as reported in other studies<sup>11,14,15,18,20</sup>. Therefore, the approach to these individuals should always include a humanistic approach, receiving the families in their demands, attempting to deliver care considering the health promotion, as well as understanding all disorders that the evening care may cause<sup>11</sup>.

# **5 CONCLUSION**

According to the perception of caretakers responsible for the patients at the evening dental clinic of FO-UFRGS, the lack of safety and traffic jam were barriers faced for attending the consultations. The behavior of children at home was not affected by attending the evening dental care.

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# RESUMO

# Clínica odontológica infanto-juvenil no período noturno: percepções e satisfação dos acompanhantes

Com o início do atendimento na Clínica Odontológica Infanto-juvenil no período noturno na Faculdade de Odontologia da UFRGS, tornounecessário avaliar a percepção dos se acompanhantes/responsáveis pelas crianças quanto ao horário de atendimento, pontuando questões que poderiam influenciar na vinda dos pacientes para a consulta, tais como segurança, mobilidade e acesso; o padrão comportamental da criança em relação à consulta e no dia posterior ao atendimento; a escolaridade e renda familiar; assim como a razão da busca pelo atendimento odontológico noturno. Foi realizado estudo transversal, observacional e analítico, por meio de questionário. Foram obtidas respostas de 58 acompanhantes, na maioria dos casos a mãe do paciente (60,34%), residindo no mesmo município da instituição (56,90%), com ensino médio completo (37,93%), renda familiar de até 2 salários mínimos (41,38%) e usuários de transporte público (58,62%) para ir e voltar das consultas. Dor e prevenção foram os principais motivos da busca por atendimento. Foram verificadas associações estatisticamente significativas entre responder excelente ou bom para o horário de atendimento e avaliar a qualidade do atendimento como excelente ou boa (p=0,05); informar que o horário não é desgastante para a criança (p=0,01); que a criança não demora para dormir após a consulta (p=0,02); e nunca ter faltado a consultas (p=0,02). A percepção dos acompanhantes foi que a falta de segurança e o congestionamento do tráfego característico do horário de início da consulta foram barreiras enfrentadas para comparecimento. Os acompanhantes apresentaram-se satisfeitos como atendimento noturno e sua percepção foi de que este horário não afetou o padrão comportamental das crianças.

**Descritores:** Assistência Odontológica. Trabalho Noturno. Criança. Acompanhante.

# REFERENCES

- Brasil, Ministério da Educação. Reuni, Reestruturação e Expansão das Universidades Federais. 2007. [Cited 18 Aug. 2018]. Available at: <u>http://portal.mec.gov.br/sesu/arquivos/</u> <u>pdf/diretrizesreuni.pdf</u>.
- Souza JM, Corrêa HW, Ceriotti RFT. Expansão da educação superior no Brasil a partir do REUNI: O curso noturno de odontologia da Universidade Federal do Rio Grande do Sul. GUAL. 2014;7(1):63-78.
- 3. Douglass CW, Sheets CG. Patients' expectations for oral health care in the 21st century. JADA. 2000; 131(suppl.1):3-7.
- Alshahrani MA, Abdulrazak P. Patient Satisfaction Visiting the Dental Clinics, Faculty of Dentistry, Najran University. J Health Med Nursing. 2018; 46:123-8.
- Almeida TF; Azevedo TS; Wanderley FGC; Fonseca MF. Percepções de mães de pacientes sobre o atendimento odontológico na clínica de odontopediatria da Escola Bahiana de Medicina e Saúde Pública. RFO Passo Fundo. 2014;19(2):172-9.
- Porto Alegre está entre as 10 cidades mais violentas do mundo em ranking de criminalidade. Sul 21, Porto Alegre, 19 set. 2016. [Cited 04 Dec. 2017] Disponível em: <u>https://www.sul21.com.br/jornal/porto-alegreesta-entre-as-10-cidades-mais-violentas-domundo-em-ranking-de-criminalidade.</u>
- Minayo MCS. Social Violence from a Public Health Perspective. Cad Saúde Pública. 1994;10(suppl.1):07-18.
- Rosa EM, Souza L, Oliveira DM, Coelho BI. Violência urbana, insegurança e medo: da necessidade de estratégias coletivas. Psicol

Ciênc Prof. 2012;32(4):826-39.

- Schwarz FS. Análise espacial de acidentes de trânsito: discussão sobre a segurança viária em Porto Alegre (RS). Trabalho de Conclusão de curso [Bacharelado em Geografia] Porto Alegre: Universidade Federal do Rio Grande do Sul; 2014.
- Domingos PAS, Rossato EM, Bellini A. Levantamento do perfil social, demográfico e econômico de pacientes atendidos na clínica de odontologia do Centro Universitário de Araraquara. Rev UNIARA. 2014;17(1):37-50.
- Costa CHM, Forte FDS, Sampaio FC. Reasons for dental visit and social profile of the patients treated in a clinic for children. Rev Odontol UNESP. 2010;39(5):285-9.
- Lucas SD, Portela MC, Mendonça LL. Variação no nível de cárie dentária entre crianças de 5 a 12 anos em Minas Gerais, Brasil. Cad Saúde Pública. 2005;21(1):55-63
- Maia FBM, Sousa ET, Alves VF, Sampaio FC, Forte FDS. Perfil socioeconômico dos usuários e motivo de procura de uma clínica de ensino. Rev Cubana Estomatol. 2016;53(2):17-23.
- Massoni ACLT, Vasconcelos FMN, Katz CRT, Rosenblatt A. Utilização dos serviços odontológicos e necessidades de tratamento de crianças de 5 a 12 anos, na cidade de Recife, Pernambuco. Rev Odontol UNESP. 2009;38(2):73-8.
- 15. Cohen LK. Converting unmet need for care to effective demand. Int Dent J. 1987;37(2):114-6.
- Badri P, Saltaji H, Flores-Mir C, Amin M. Factors affecting children's adherence to regular dental attendance: a systematic review. J Am Dent Assoc. 2014;145(8):817-28.
- Kanegane K, Penha SS, Borsatti MA, Rocha RG. Ansiedade ao tratamento odontológico em atendimento de urgência. Rev Saúde Públ. 2003;37(6):786-92.
- 18. Possobon RF, Carrascoza KC, Moraes ABA,

Costa AL. O tratamento odontológico como gerador de ansiedade. Psicol Estud. 2007;12(3): 609-16.

- Cardoso CL, Loureiro SR. Problemas comportamentais e stress em crianças com ansiedade frente ao tratamento odontológico. Estud Psicol. (Campinas). 2005;22(1):5-12.
- 20. Albuquerque YE, Zuanon ACC, Pansani CA, Giro EMA, Lima FCBA, Pinto LAMS, et al. Perfil do atendimento odontológico no Serviço

de Urgência para crianças e adolescentes da Faculdade de Odontologia de Araraquara (FOAr) - UNESP. Rev Odontol UNESP. 2016;45(2):115-20.

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