

Article

Parents' Involvement in Children's Dental Services Utilization

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Abstract: (1) Background: Parents play an important role in children's oral health by contributing to the development of proper oral hygiene and eating behaviors as well as offering the child access to dental services. The aim of this study was the evaluation of parents' involvement in their child's visits to the dental office. (2) Methods: The cross-sectional study was conducted in 2020 in Romania on a sample of 105 parents using an online self-administered questionnaire. (3) Results: Only 9.52% of parents brought their children to the dental office for their first visit in their 1st year of life; 51.53% of children visit the dentist at least once a year but for only 42.86% of children, the reason of their last visit was a regular dental check-up. (4) Conclusions: parents underestimate the role of dental service utilization for their children; the first visit to the dental office for most children is at an older age than optimal, the frequency of dental visits is less than recommended, and they are treatment-oriented.

Keywords: children's oral health; dental service utilization; parents' oral health

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Introduction

Early onset of dental caries among children has a major impact on their quality of life since usually, dental pain is present on the one hand, and there is an impairment in their cognitive and social development on the other hand [1–3]. Early Childhood Caries (ECC) is defined as the presence of at least one decayed (cavitated or non-cavitated carious lesion), missing or filled (due to dental caries) surface on the temporary dentition of children in the first 6 years of life, and affects millions of children worldwide [4]. In 2019, the International Association of Pediatric Dentistry published the Declaration of Bangkok, an international consensus regarding the proper prevention and management of ECC, in which the major role that parents and caregivers play in children's oral health was highlighted. In the first years of a child's life, exposure to risk factors for caries should be kept to a minimum with a great contribution from the parents, who should be involved in promoting healthy habits for the child [4]. Additionally, not only should children's oral hygiene

and eating habits be developed and supported by the parents as key actions for dental caries prevention, but also regular dental check-ups should be considered starting from under 1 year of life [4,5]. Thus, dental professionals are able to perform a caries risk assessment, apply preventive treatments, and when needed, provide minimally invasive curative treatment, in addition to offering patient-centered recommendations for parents and creating a comfortable and safe environment for children in the dental office [4,6].

The aim of this study was to assess parents' attitudes and habits regarding their children's visits to the dental office.

Materials and Methods

The cross-sectional study was conducted by the Oral Health and Community Dentistry Department from the Faculty of Dentistry, "Carol Davila" University of Medicine and Pharmacy, Bucharest, and took place in Romania, between January and June 2020, on a sample represented by 105 parents. The assessment was performed using an online self-administered questionnaire, using Google Forms (Google Inc.) as a survey tool, which was sent via a link to be completed by the participants and the results were processed using Google Spreadsheet (Google Inc.) as the data analysis software. The inclusion criteria taken into consideration were that the participants be the parent most involved in their child's oral health care and that the age of the child (to whom the parents referred to in their answers) be at least 9 months. All the subjects enrolled gave their full agreement for participation in the study, under informed consent. The participants had a mean age of 38.38 ± 5.41 years and were represented mostly by mothers (93.23%), while their children had a mean age of 9.06 ± 4.38 years, of which 59.04% were girls.

Results

Among the studied group, less than 10% of parents brought their child to the dental office for their first dental visit under the age of 1 year, as recommended, and among all the age subgroups of the children referred to in the study, the subgroup most frequently mentioned by the parents for their child's first dental visit was 4–5 years. A percentage of 10.48 of children who had never been to the dental office was observed and whose mean age was 4.45 ± 3.07 years but varied between 1 and 10 years (Table 1).

Regarding the frequency of visits to the dental office, half of the parents declared that their children went at least once a year. However, 35.24% of children were seen by the dentist only when they had symptoms and they perceived the need for dental treatment (Table 1). Moreover, 19.05% of parents declared that their child's last dental visit was scheduled because of an emergency or dental pain (Table 1).

When asked about the approach they agree with, when it comes to carious lesions on the temporary dentition of their children, 87.71% of parents declared they followed their dentist's recommendation for treatment, while 7.62% refused any curative treatment for temporary teeth to address the dental caries (Table 1).

Regarding parents' attention offered to their child's oral status through at-home assessment of the oral cavity, 87.71% of parents declared they often checked their child's mouth and when they did it, their main focus was either on the presence of dental caries (87.51%) or the presence of plaque accumulation (81.90%) (Table 2).

Table 1. Habits related to children's dental visits.

	Frequency (%)	N
Children age at their first visit at the dental office		
1 year and under	9.52%	10
1–3 years	15.23%	16
4–5 years	32.38%	34
6 years	12.38%	13
>6 years	2.0%	21
Never ¹	10.48%	11
Frequency of dental visits among children		
>2 times/year ²	32.38%	34
2 times/year	8.57%	9
Once a year	10.48%	11
Once every few years	2.86%	3
Rarely, only in need	35.24%	37
Never	10.48%	11
Reason of the last dental visits among children		
Regular check-up	42.86%	45
Treatment	29.52%	31
Pain/emergency	19.05%	20
Don't know	8.57%	9
Parents' attitude towards child's temporary teeth with carious lesions		
Treatment accordingly to the dentist recommendation	87.71%	90
No treatment	7.62%	8
Extraction	0.92%	1
Don't know	5.71%	6

¹ mean age of children in this subgroup: 4.45 ± 3.07 years; ² of which only 44.12% ($N = 15$) went for check-up, 47.06% ($N = 16$) for treatment, and 8.82% ($N = 3$) for dental emergencies.

Table 2. Parents' habits regarding at-home assessment of their child's oral cavity.

	Frequency %	N
Frequency of parent's at-home assessment of their child's oral cavity		
Often	87.71%	90
Only when the child reports a symptom	7.62%	8
Never	0.92%	1
Don't know	5.71%	6
Signs looked up by parents during at-home assessment of their child's oral cavity		
Carious lesions	85.71%	90
Dental plaque	81.90%	86
Teeth position	58.10%	61
Teeth mobility	46.67%	49
Eruption of teeth	44.76%	47
Gingival inflammation	42.86%	45

Discussion

In the present study, for data analysis, the children to whom the parents referred in their answers were divided into subgroups using, as a dependent variable, the child's age when the results regarding their first dental visits were taken into consideration. The subgroups were set in this way because: 1 year and under is the age recommended by the international consensus for the first dental check-up for children and for suitable preventive guidance for parents provided by a dental health care professional; in addition, at the age of 3 years as well as 5 years, it is recommended for children to be surveyed for Early Childhood Caries in order to establish both their preventive and curative needs; the age of 6 years is important since that is the age when the first permanent teeth start their eruption [4]. Among the sample in the present study, unfortunately, 20% of children were brought to the dental office by their parents later than 6 years of age, and more worrying is the percentage of children who never visited the dental office (10.48%) who were not too young for a dental check-up, as would have been the most favorable scenario, but between 1- and 10-years-old. A recent study on a Polish children population, published in 2018 in *the European Journal of Pediatric Dentistry*, showed that only 0.63% of children had their first dental visit under the age of 1 year, much lower compared to the child population in our study; on the other hand, the percentage of Polish children who went to the dental office for the first time at the age of 7 or older was as low as 7.8%, while the percentage met among the Romanian children in the present study was significantly higher [7].

When it comes to the frequency of children's dental visits, even if 51.53% of parents declared that their child visits the dental office at least once a year, at a more detailed analysis of the data, the results show that among the children who went to the dental office more than 2 times/year, only 44.15% went for a regular preventive check-up, while 47.06% went for recurrent treatment appointments because of a dental disease, and 8.82% even for repeated dental pain or emergencies. Not to be neglected is that among the entire group of parents, 8.57% could not remember precisely what the reason for their child's last dental visit was, which could be interpreted as a lack of concern related to their oral health care.

Regarding parents' attitudes toward the therapeutic approach for carious lesions on the temporary teeth of their children, the high percent of parents declaring they agreed with the dentist's curative recommendation should not overshadow the percentage of 14.29% of parents who either prefer no treatment or even extraction, or who are ignorant in this regard. This subgroup of parents should be taken into consideration for oral health promotion programs and guidance since they are decision agents for their child's oral health. In addition, the fact that almost 15% of parents check their child's oral cavity only when symptoms are mentioned by the child, or irregularly, is another reason worth taking into consideration for raising awareness among parents regarding the role they play in the prevention and early detection of oral diseases in their child. Moreover, when they perform an at-home assessment of their child's mouth, more parents tend to focus on the presence of an already formed caries lesion than the presence of dental plaque, which is a performance parameter of oral hygiene and the main risk factor for dental caries. According to a study conducted in a Brazilian population, parents judge their children's oral health as poor only when dental caries are present and accompanied by toothache, while dental caries without pain or toothache without dental caries were not associated with a poor oral health status in the parents' opinion; thus, children's dental treatment tends to be underestimated by parents [8]. On the other hand, in the present study, gingival inflammation, as another form of oral disease, is neglected compared to dental caries, since only half of the parents take this aspect into consideration when they assess their child's oral cavity.

Conclusions

In the present study, parents underestimate the role of dental service utilization for their children. The first visit to the dental office for most of the children was at an older age than optimum, and afterward, the frequency of dental visits was less than recommended and were treatment-oriented.

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