

Parents' Awareness and Knowledge about the Timing of Children's First Dental Visit and Reasons for the Visit in Madinah, Saudi Arabia

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Abstract

Background: One very important thing in a child's life is maintaining very good oral health from a young age. Preventive dental care for children is the fundamental aspect of dentistry because early visits to dental clinic are essential due to the significant relationship between caries in primary teeth and caries incidence in permanent teeth. Thus, this study aimed to assess parents' knowledge and awareness about the timings and reasons for the first dental visit of their children in Al Madinah, Saudi Arabia. The significance of this study is increasing the awareness and the importance of the first dental visit and its effects on children's oral health.

Methodology: This was a cross-sectional descriptive observational study, which measured the level of knowledge and awareness among parents of children reporting for their first dental visit in the Al Madinah region, Saudi Arabia. The researchers prepared a validated electronic questionnaire form and interviewed parents in hospital waiting areas or public areas such as malls and parks. The study included 276 participants.

Result: This study reported that only 11.3% of the respondents believed that the first dental visit for a child should be at the age of one year old. This study highlighted some gaps in parental education concerning pediatric dental care, regarding appropriate age, reasons for dental visits and the role of pediatric dentists. This research indicates the demographic characteristics of parents (low income, less educated, certain occupations, older parents) who require more education regarding dental care for their children.

Conclusion: It can be concluded that most parents had a lack of knowledge regarding the importance of children's oral health care, and most of them were not aware of the timing of the first dental visit. Hence, there is a need to educate health care professionals on infant oral health care by conducting health education programs to promote good oral health.

Keywords: Dentist Visit; Pediatric Dental; First Dental Visit; Oral Health; Knowledge and Awareness

Introduction

Maintaining oral health from an early age is essential in child's life [1]. Neglecting the health of the primary teeth is a common problem worldwide, and it is mainly due to the unawareness of their importance in child's oral health [2]. Although they serve for a short period of time, it is very important to keep primary dentition healthy until it is replaced naturally by permanent dentition [2]. Additionally, the role of primary dentition includes maintaining the arch space, speech, mastication and guides the eruption of permanent teeth [3].

It is the parents' responsibility to take care of their children's teeth in combination with the dentist's advice. This is because the child lacks awareness of the importance of the teeth, knowledge of dental health care, and the ability to maintain optimal oral health [4]. The

main reason for early dental visits is to build relationships between the child and dental staff. In addition, parents can be informed about different preventive methods to maintain their children's oral health. It has been stated that pain and caries are the main reasons behind the first dental visit [5]. Therefore, visiting dental clinic at an early age can help in preventing dental caries and its complications. Preventive measures are discussed and explained to both patients and parents [1]. Thus, Meeting the child, building rapport and confidence should be the priorities of a pediatric dentist in the first visit. However, dental problems among Saudi children have a very high prevalence; thus, making the first dental visit as early as possible is even more important [1].

The American Academy of Paediatric Dentistry (AAPD) and American Dental Association (ADA) have advised to have children seen primarily once the first primary tooth erupts and not later than 12 months of age [6]. Educating parents about proper oral hygiene procedures and diet routines for their children within a comprehensive age-specific prevention programs is essential to maintain good oral health at an early age This prevention program includes fluoride application/supplements, the early detection of bad oral habits, the application of dental sealants, prevention of dental injuries, and the management of incipient caries if already developed [7].

It has been reported that delaying the first dental visit can result in increasing the prevalence of early childhood caries (ECC) among the population [6]. Converting the community prospective from therapeutic dental care to preventive educational dentistry depends on increasing awareness of the importance of the first dental visit [6]. Therefore, it is mandatory to evaluate the most common causes for the first dental visit to educate the community about its importance for children's oral health [6,8].

Purpose of the Study

The purpose of this study was to assess parents' knowledge about the timings and reasons for the first dental visit of their children in Al Madinah, Saudi Arabia.

Materials and Methods

This was a cross-sectional descriptive observational study which measured the level of knowledge and awareness among parents of children reporting for their first dental visit in the Al Madinah region, Saudi Arabia, in the period between May 2021 and July 2021. The study was submitted for ethical review to the Research Ethics Committee of Taibah University, Al-Madinah (TUCDREC). Consent was obtained from the parents before the interviews. The sample was recruited by asking parents in hospital waiting rooms and other public areas such as malls, parks, etc. Those who met the study criteria kindly participated. All the parents (mother or father)/guardians willing to participate in the study and whose children were visiting the dentist for the first time were included in the study. While Parents/guardians whose children suffered from any mental/physical disability were excluded from the study.

A total of 269 or more surveys were needed to have a confidence level of 95%, where the real value was within $\pm 1\%$ of the measured/surveyed value. A structured face-to-face interview was conducted to collect information from the parents. Data were collected by using an Arabic translated version of a validated questionnaire [2]. A close-ended questionnaire consisting of a cover letter inviting the parents to participate in the study. The first seven demographic questions included the parents' age group, relationship to the child, nationality, marital status, education level, work type, etc. The other four questions were used to test the parents' awareness about the timing and reasons of the first dental visit, why a child should be seen by a dentist, frequency of routine check-up visits, guardian's expectation from a pediatric dentist and barriers preventing them from taking a child to the dental clinic.

Data were collected, coded, and analyzed using the Statistical Package for Social Sciences (SPSS) software, version The data were checked for normality using Kolmogorov-Smirnov statistics, and appropriate statistical tests were used. Descriptive statistics were per-

formed using frequencies and percentages, because all the variables were categorical. Chi-squared or Fisher's exact (for small frequencies) statistical tests were performed to test for associations and/or differences between categorical variables with p -values < 0.05 being reported as statistically significant.

Results

Demographic characteristics

The study included 276 participants. Table 1 summarizes their demographic characteristics. Half of them were aged between 31 and 40 years, whereas 20.6% were over 40 years old. The majority were mothers (78.2%) and 81.9% were Saudi nationals. Regarding the current marital status, 93.5% were married. More than half of the participants (53.6%) held a bachelor's degree. Half of them were housewives, whereas 14.1% worked in the health care field. The income of more than one-third of them (38.8%) was high.

Demographic Variable	Frequency	Percentage
Age in years		
< 20	25	(9.1%)
21 - 30	56	(20.3%)
31 - 40	138	(50%)
> 40	57	(20.6%)
Relation to the child		
Mother	216	(78.2%)
Father	49	(17.8%)
Others	11	(4%)
Nationality		
Saudi	226	(81.9%)
Non-Saudi	50	(18.1%)
Marital status		
Married	258	(93.5%)
Divorced	13	(4.7%)
Widowed	5	(1.8%)
Educational level		
Incomplete high school	22	(8.0%)
High school	55	(19.9%)
Diploma	7	(2.5%)
Bachelor's degree	148	(53.6%)
Postgraduate degree	42	(15.2%)
Others	2	(0.7%)
Occupation		
Housewife	138	(50.0%)
Teacher	33	(12.0%)

Administrative	34	(12.3%)
Business	18	(6.5%)
Health care	39	(14.1%)
Others	14	(5.1%)
Monthly income (SAR)		
Low (< 5000)	82	(29.7%)
Moderate (5000 - 10,000)	87	(31.5%)
High (> 10,000)	107	(38.8%)

Table 1: Demographic characteristics of the participants.

Participants' awareness and attitude

As shown in table 2, 34.9% of the participants believed that the ideal age for the first dental visit for a child was 2 - 4 years old, whereas 30.9% of them believed that this was when the child developed a dental problem. Regarding the reasons for taking the child to the dentist, the most frequently reported were dental decay (55.4%), check-ups (47.5%) and dental pain (41.3%).

Question	Frequency	Percentage
The ideal age for the first dental visit for a child should be: (n = 275)		
1 year old	31	(11.30%)
2 - 4 years old	96	(34.90%)
5 - 7 years old	63	(22.90%)
When the child develops a dental problem	85	(30.90%)
What are the reasons for taking the child to the dentist?		
Only in an emergency	37	(13.40%)
Check-up	131	(47.50%)
Dental decay	153	(55.40%)
Pain	114	(41.30%)
Abscess	51	(18.50%)
Trauma	49	(17.80%)
Orthodontic consultation	37	(13.40%)
Other	7	(2.50%)

Table 2: Parents' awareness and attitudes about the child's first dental visit and dental care.

Parents expectations from the dentist

Regarding the tasks predicted by parents, the most frequent was the treatment of pathology only (80.1%), followed by oral hygiene instructions (72.1%), as shown in figure 1.

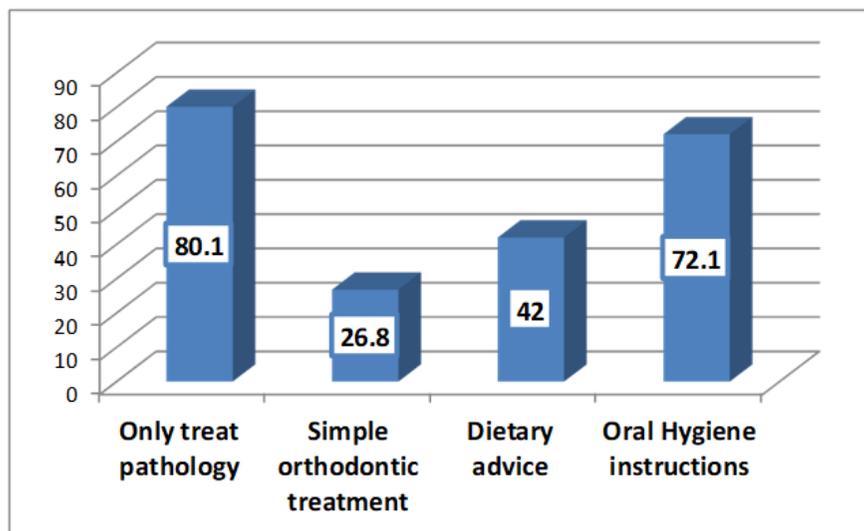


Figure 1: Tasks of a pediatric dentist: parents' opinion.

Barriers preventing participants from taking their children to the dentist

As shown in table 3, barriers that prevented people from taking their children to the dentist were reported by 51.8% of the participants. The main observed barriers were a lack of appointments (23.9%), non-cooperation of children with the dentist (22.8%), absence of a child's complaint (22.1%) and being busy (22.1%).

Question	Frequency	Percentage
There are no obstacles. I can take my child to the dentist	133	(48.2%)
I am very busy. I do not have time	61	(22.1%)
Primary teeth are not as important as permanent teeth	34	(12.3%)
Lack of transportation	54	(19.6%)
Lack of appointments	66	(23.9%)
My child will be uncooperative with the dentist	63	(22.8%)
My child is not complaining about oral disease	61	(22.1%)
There is no need to take them to the dentist	36	(13.0%)
I am afraid of dentists	19	(6.9%)

Table 3: The main barriers preventing participants from taking their children to the dentist.

Discussion

Preventive dental care for children is the fundamental aspect of dentistry because early visits to the dentist are essential due to the significant relationship between the incidence of caries in primary teeth and caries in permanent teeth [1,4]. Therefore, improving com-

munity awareness about the importance and proper time of the first dental visit should change the community perspective from therapeutic dental care to preventive educational dentistry, which will probably affect children's oral health in the future [4]. Hence, this study aimed to assess parents' knowledge about the timings and reasons for their children's first dental visit.

A fairly large (n = 276) sample of parents in the Al Madinah region of Saudi Arabia, whose children were visiting the dentist for the first time, participated in this study. Unsurprisingly, our findings agree with a considerable number of other studies which employed a representative sample reflecting typical parent/primary child caregivers (mothers in 31 - 40 age group, Saudi nationality, married, bachelor's degree, and housewives with high/moderate monthly income) [9].

Only 11.3% of the respondents believed that the first dental visit for a child should be at the age of one year old. Previous studies among Saudi parents have reported similar results about timings of the first dental visit [1,4,9-11]. According to Rehab., *et al.*'s study, very few parents knew that the child's first dental visit should be at the age of one year or before, which is a recommendation by the American Academy of Pediatric Dentistry (AAPD) and American Dental Association (ADA) [8]. The AAPD recommendations are that, ideally, infants' oral health should begin with prenatal oral health counselling for parents, followed by assessing the oral health risk at 6 months of age, then the dental risk for all infants by 12 months of age. After the initial visit, the AAPD also recommends regular visits to the dentist, based on the child's oral health. Some factors were noticed regarding selecting the correct age for the child's first dental visit among participants; the results of this study showed that the parent's education levels play a significant role in selecting the correct age for the first dental visit.

Participants with a postgraduate education level were more likely to provide a correct response compared to less well-educated participants. This result came in parallel with a previous study conducted by Al-Shalan., *et al.* which showed that mothers with a high level of education were more aware of the timing of the first consultation [4]. As well as an occupation in health care being associated with a significantly higher proportion of selecting one year of age for the first dental visit compared to all other occupations, teachers were especially low, which was a surprising result.

Few studies concluded that the most common reasons for the first dental visit were pain, dental caries, regular check-ups, and other dental emergencies [5,6,11,12]. This study shows that 55.4% of responses visited dental clinic as a result of dental caries, followed by regular check-ups (47.5%). The results of this study correlated with a previous study conducted by Sanguida., *et al.* who reported that decayed teeth among children were the predominant reason for seeking dental care. In contrast, previous studies have mentioned that check-up and orientation/prevention are the main reason to see dentists [5,10,13].

Furthermore, the present study reported that a lack of parents' knowledge and awareness about the reason for a child's dental visit was associated with important factors. For instance, lower monthly income affects the parents' decision to visit the dentist for their children: a lower monthly income or the cost of the dental visit are reasons for the higher likelihood of selecting pain as the reason for taking the child to the dentist (56.1% for low income, 37.9% for moderate income and 32.7% for high income).

The present study showed that parents believe that pediatric dentists only treat pathology and provide oral hygiene instructions. As a result, parents may not be aware of the importance of health prevention methods and the available regular check-up modalities and their effectiveness. Therefore, it is the responsibility of pediatric dentists to educate parents about their role in improving the oral health and dental care of their children [2]. This study reported that about half of respondents (48.2%) indicated no obstacles in taking the child to the dentist. These outcomes are in line with other studies which also reported that about half of participants did not face any barrier preventing them from taking their children to the dentist [2]. However, the remaining participants mentioned some remarkable barriers. The most common barrier that played a significant role in preventing parents from taking their children to the dentists were the unavailability

of dental appointments (23.9%). Moreover, the availability of dental appointments refers to the lack of appointments available at a time convenient for parents, or pediatric dentists may be too busy and have limited time slots (long wait time). The other barrier identified was that other parents felt that the children would not be able to cooperate with the dentist (22.8%) because they were anxious or could not overcome their fear of the dental chair. Not surprisingly, some parents mentioned that no complaints from the child regarding oral diseases (22.1%) were another reason to not visit the dentist. In fact, more research is needed to further understand some of the barriers mentioned by the participants.

Conclusion

It can be concluded that most of the parents studied presented a lack of knowledge regarding the importance of children's oral health care, and the majority of them were not aware of the timing of the first dental visit. This research highlights some gaps in parental education concerning pediatric dental care regarding the child's appropriate age and reasons for dental visits and its main associated factors, as well as the role of the pediatric dentist. Hence, there is a need to educate health care professionals on infant oral health care by conducting health education programs to promote good oral health.

Conflict of Interest

The authors declare no conflict of interest.

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