

Parents Awareness about the First Dental Visit and Behaviour Management

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ABSTRACT

Introduction: It is a well-accepted fact that regular dental checkups help to uncover the problems that can be easily managed at the early stages. An early dental visit can provide a perfect opportunity to the dentist to detect caries at early stages and save the primary teeth. In addition, this can be an ideal time for dentist to educate the parents about various aspects of preventive dentistry and provide well-timed anticipatory guidance.

Aim: To evaluate the awareness and attitude about the first dental visit and behaviour modification techniques for the children of Saudi parents.

Materials and Methods: A self-administered questionnaire consisting of 10 items were distributed to parents reporting at the Registration Appointments and Records Division of Taif University, College of Dentistry, Taif, Kingdom of Saudi Arabia. The questionnaire was prepared in both English and Arabic and the choice of language was made by the recipient (parent). The questionnaire response rate was 97.87%. The data analysis was performed using the Chi-square test with the help of SPSS software.

Results: Even though almost half of the parents believed the child's visit to the dentist should be as early as possible (49%) they believed the ideal age to visit should be at 3 years of age. The majority of parents (59%) appeared to be aware of the importance of the first dental visit and during this visit they expected the dentist to preferably focus on reducing the child's anxiety/fear. Regarding behaviour management, the majority of parents (7.1%) were reluctant to choose pharmacological methods, but were also willing to give the choice of the ideal method to the operating dentist.

Conclusion: The data indicated that parents were aware of the importance of the child's visit to the dentist; there was a relatively low level of knowledge about the timing of a child's first dental visit. Parents also appeared reluctant to choose the pharmacological method as a behaviour management tool, but the brighter side was they were also willing to leave the decision to the dentist. Hence, dental professionals have a good opportunity and also the responsibility to improve the knowledge and the attitude of the parents regarding child's dental care.

Keywords: Behaviour modification, Early dental visit, Primary teeth

INTRODUCTION

Primary teeth, unlike permanent teeth, have a shorter lifespan in the oral cavity. But during this shorter duration, these teeth serve certain extremely significant roles that can determine the structure, function, and aesthetics of the succeeding dentition. Primary teeth have an important role in the development of speech, mastication, maintaining the arch space, psychological factor and guiding the eruption of permanent teeth. Hence, it is important to retain them in healthy condition as long as the permanent teeth are ready to erupt in the oral cavity. Dental caries is the most common disease, affecting children. In a study at Kingdom of Saudi Arabia, it has been reported that the mean dmft for 6-year-old boys was 4.14 and for girls it was 3.43 [1]. In another study at Jeddah, KSA, it was concluded that the prevalence of Nursing bottle syndrome (NBS) was 20%, and 67% of them had the most severe form [2].

An early dental visit not only allows the dentist to detect caries and save the primary teeth, but it provides the dentist with an opportunity to educate the parents about appropriate feeding and oral hygiene practices in their child, to make the child familiar with the dental services and to shape his/her behaviour for the next visit, and also any abnormality in oro-facial tissues can be detected and managed at early stage. A very high prevalence of dental diseases among Saudi children makes it even more important [3-5].

There is a significant relationship between caries in primary teeth and caries incidence in the permanent teeth [6], it is important to attempt all possible preventive measures in the early stage of a child's life to decrease the caries incidence in the permanent teeth. An early dental visit can provide the best opportunity to do so in an effective manner.

Due to various anatomical and dietary habits, primary teeth are more prone to dental caries. Children at that age lack awareness about the importance of primary teeth and the necessary skills to maintain oral hygiene by themselves. Hence it is the parent's responsibility to take care of their child's teeth preferably under professional (dentist's) guidance. However numerous studies indicate that there is a lack of parents' awareness about the importance of the primary teeth, the early dental visit for their children and dental health knowledge [7,8]. Moreover, most of the parents report the barriers of not taking their children to the dental services as "my child will not be cooperative in the dental clinic" [9], so it becomes furthermore important to educate parents about behaviour management techniques employed by paediatric dentists, which can encourage them to bring their children for early dental visits.

The knowledge, attitude, and motivation of the parents towards oral health care can influence their child's oral health as well as dental attitude. Therefore, the purpose of the study was to evaluate the awareness and attitude about the first dental visit and behaviour modification techniques for the children of Saudi parents attending dental clinics in the College of Dentistry, Taif University, Taif, KSA.

MATERIALS AND METHODS

This cross-sectional study was conducted at the Faculty of Dentistry, Taif University Taif, Kingdom of Saudi Arabia between April and June 2018. Ethical approval was obtained from the College of Dentistry Research Center (CDRC). The study population consisted of the parents of the children attending paediatric dentistry clinics at Taif University. A Close-ended questionnaire, consisting of a cover page, personal data, and 10 questions were designed to be used in this

study. Four questions were used to test the parents' awareness about the first dental visit [Table/Fig-1].

Parents awareness about the first dental visit	Q1: A first dental visit should be at what age?
	Q2: It is important to visit the dentist as early as possible (even when no pain or problem)?
	Q3: Reasons for not visiting the dentist at an early age?
	Q4: If the chief complaint is treated there is no need to visit the dentist again?

[Table/Fig-1]: Questionnaire related to (awareness about) child's dental visit.

The other six questions to test the parents awareness about behaviour modifications [Table/Fig-2].

Parents awareness about behaviour modifications	Q1: Experience during 'First dental visit' has an important role in determining a child's future dental attitude?
	Q2: The best approach in bringing the child to dental visit is.
	Q3: Parents have an important role in developing a child's dental attitude?
	Q4: In the first dental visit (if no pain) what should the dentist do?
	Q5: If your child is uncooperative, what kind of behaviour management technique you expect the dentist to do?
	Q6: If you chose "Other techniques which do not involve the use of drugs", which of the following do you prefer?

[Table/Fig-2]: Questionnaire related to parent's awareness/preferences about behaviour management techniques.

The cover page included an invitation for the parents to participate in this study. In addition, each participant was informed in writing for the effectiveness of participation. Face validity of the questionnaire was done by a professor in the faculty of dentistry, who served as a subject expert. Validation of the questionnaire was done using the test retest method, by administering it to 26 subjects. Then, the questionnaires were collected and modified accordingly. To test the patient's opinion on the questionnaire, 26 copies of the questionnaire were distributed to the first attended patients in the Registration appointments and records division (RARD) in Taif University Taif, Kingdom of Saudi Arabia as a pilot test. The questionnaire was collected at the same visit and used to further modify the questionnaire to be ready for the proper study. Those individuals who participated in the pilot study were not considered for the main study to prevent any possible bias. Sample size was determined based on the results of the previous studies [9,10].

Three-hundred thirty copies of the questionnaires were distributed to the patients who attended at the Registration Appointments and Records Division of Taif University, College of Dentistry, Taif, Kingdom of Saudi Arabia, and they were requested to answer the questionnaire and return it to the receptionist during the same visit. The questionnaire was prepared in both English and Arabic and the choice of language was made by the recipient (parents) and there was an option to see a video explaining the different types of behaviour modification. Only 323 questionnaires out of 330 were returned, seven questionnaires were excluded which included questionnaires that were not fully completed or unreturned. Thus, only 323 participants were considered for data analysis.

STATISTICAL ANALYSIS

All the data gathered were coded and entered into SPSS, version 21.0, IBM. The data were checked for normality using Kolmogorov smirnov statistics and appropriate statistical tests were used. Categorical variables were counted and expressed as frequencies and percentages. Chi square test was used to determine the significance and the p-value <0.05 was considered as statistically significant.

RESULTS

Out of 330 questionnaires, 323 were returned. The questionnaire response rate was 97.87%. When asked regarding the timing of first dental visit most of the parents believed that it should be at three years of age (49.2%), more than half of the parents reported that they agree about the importance of visiting the dentist even when there is no pain or problem (77.7%), regarding the reasons for not visiting dentist at early age most of the parents believed that when there is no pain or problem, hence no need to visit dentist (41.4%) [Table/Fig-3].

Question	Response	N%
A first dental visit should be at what age?*	First year	62 (19.1)
	Third year	159 (49.2)
	First tooth to erupt	43 (13.3)
	Other (age duration other than the above mentioned age)	59 (18.2)
It is important to visit the dentist as early as possible (even when no pain or problem)?*	Agree	251 (77.7)
	Disagree	72 (22.2)
Reasons for not visiting the dentist at an early age.*	When there is no pain or problem, no need to visit	134 (41.4)
	Primary teeth will fall off, are not as important as permanent teeth	50 (15.4)
	The child will be uncooperative and will not accept the dental treatment	40 (12.3)
	All of the above	99 (30.6)

[Table/Fig-3]: Distribution of responses related to (awareness about) child's dental visit.

*Chi square test p-value: <0.001

Most of the parents were aware of the effect of the first dental visit on the future dental attitude (91.6%), also most of the parents had chosen to encourage the child to come to the dentist (92.2%), Parents are recognising their importance in developing the child dental attitude (95.97%) [Table/Fig-4].

Question	Response	N %
Experience during 'First dental visit' has an important role in determining a child's future dental attitude?*	Agree	296 (91.6)
	Disagree	27 (8.3)
The best approach in bringing the child to dental visit is:*	Force the child	5 (1.5)
	Encourage the child	298 (92.2)
	Not to tell the child	20 (6.1)
Parents have an important role in developing a child's dental attitude.*	Agree	310 (95.97)
	Disagree	13 (4.0)

[Table/Fig-4]: Distribution of responses to the questions signifying parent's role in child's dental health.

*Chi square test p-value: <0.001

Half of the parents reported that the dentist should focus on behaviour modification (58.8%), when we asked the parent if your child is uncooperative half of the parent showing trust in the dentist decision, but we noticed that few parents only preferring the pharmacological technique (7.1%), among the non-pharmacological techniques, majority of the parents preferred Tell Show Do technique (72.4%) over other techniques. Almost 2/3rd of the respondents appeared to understand that even after addressing the chief complaint it is important to visit the dentist regularly (72.1%) [Table/Fig-5].

DISCUSSION

American Academy of Paediatric Dentistry (AAPD) and American Dental Association (ADA) have recommended the first dental visit of the child at approximately the time of eruption of the first primary tooth or at the latest age of 12 months [11]. The early visit to the dentist is important due to the significant relationship between caries in primary teeth and caries incidence in the permanent teeth [6].

Question	Response	N %
In the first dental visit (if no pain) what should the dentist do?*	What the parents want	19 (5.8)
	Mainly focus on behaviour modification to reduce the child's fear and anxiety	190 (58.8)
	I do not visit the dentist if there is no pain	99 (30.6)
	Others (any other response other than the above responses)	15 (4.6)
If your child is uncooperative, what kind of behaviour management technique you expect the dentist to do?*	Pharmacological (use of drugs or medicine to make the child sleep)	23 (7.1)
	Other techniques which do not involve the use of drugs	117 (36.2)
	I leave the decision to the dentist	183 (56.65)
If you chose "Other techniques which do not involve the use of drugs", which of the following do you prefer?*	Voice control (raising the voice by the dentist to make the child stop crying/to cooperate)	7 (2.1)
	Hand over mouth exercise (Covering the mouth of the child forcefully, until the child stops crying and becomes cooperative)	2 (0.6)
	Use of physical restrains (holding/stabilising the child forcefully till the treatment is completed)	10 (3.09)
	Tell Show Do technique (explain about the procedure, show how the procedure is performed before starting the treatment procedure)	234 (72.4)
	I leave the decision to the dentist	70 (21.67)
If the chief complaint is treated there is no need to visit the dentist again.*	Correct	90 (27.86)
	Incorrect	233 (72.1)

[Table/Fig-5]: Distribution of responses linked to parent's awareness/preferences about behaviour management techniques.

*Chi square test p-value: <0.001

Most of the parents believed that the first dental visit should be at three years of age and when asked about the reason of not visiting the dentist at an early age, almost half of them responded that when there is no pain, there is no need to visit the dentist. Their response may be due to the lack of knowledge about the importance of visiting the dentist at an early age. The importance of early prevention has been supported by the fact that children who are infected after the age of 3 years had a significantly lower caries incidence than those who were infected earlier [12,13], or it might be due to the lack of the parent knowledge regarding the importance of the primary teeth.

Results showed that a low number of parents think the first dental visit should be as early as the first tooth erupt (19.2%). Likewise, in a study conducted by Wyne AH et al., it was revealed that approximately 75% of two to three-year-old children in Adelaide, Australia, did not visit the dentist [4]. This may indicate parents generally lack sufficient knowledge about the significance of the 1st dental visit. More than half of our respondents were of the opinion that, it is important to visit the dentist as early as possible (even when no pain or problem) (77.7%). In this study, 41.5% of parents reported that they are not visiting the dentist because there is no pain so that it's not mandatory to visit the dentist.

In paediatric dental practice, during the first dental visit, it is recommended to start the simple painless procedures first and then proceed to more invasive procedures. The reason is to gain a child's confidence and instill a positive dental attitude in the child. (Emergency dental treatment is an exception to this practice). It was encouraging to observe that, most of the parents were aware

that the first dental visit could determine the child's lifelong dental attitude. In a response to the question regarding the best approach to bring the child to a first dental visit, the majority of parents chose to encourage their children to visit the dental office (92.2%) whereas remaining were willing to force the child.

The result of this study also shows that the parents want the dentist to focus on behaviour modification during the first dental visit. The higher percentage of the parents preferring the non-pharmacological technique for the behaviour management of their uncooperative children (36.2%), and when we asked about various non-pharmacological techniques most of them prefer the Tell-show-do technique as in the previous study of Abushal MS et al., where they observed 77% of respondents chose tell show do technique over other options [14].

The majority of the parents (72.13%) were aware of the importance of regular dental follow-up visits after the chief complaint is addressed. This carries a very high significance as this indicates the parents understanding about early diagnosis and prevention.

LIMITATION

As the present study consisted of closed-ended questions, it may have a lower validity rate compared to other methods of survey/question types. Also, all the respondents are from the dental waiting room, there is a possibility of response bias. However, in the present study, efforts were made to overcome these limitations by providing a well-designed questionnaire and cover letter conveying the message regarding the importance of "honest responses".

The present study was conducted in a university dental clinic where parents could be easily approached to collect details of the dental service seeking patterns for their children. Berksonian bias is definitely one of the limitations of the present study.

The questionnaire was given by the third person to avoid any bias in the study, however, there is some limitation during collecting the data we didn't consider the socioeconomic status, educational level and the living area of the parents, so the sample is not a representative to the whole community. To avoid these drawbacks, the future studies are recommended.

CONCLUSION

To conclude, our study revealed certain encouraging factors like the majority of parents were aware of their role in developing a child's dental attitude, the significance of early dental visit and the importance of a child's experience during the first dental visit. Few noteworthy things also included parent's willingness to encourage the child to visit the dental office rather than forcing the child and parent's awareness about the importance of spending sufficient time by the dentist to alleviate the child's fear and anxiety.

In addition, our study also revealed the need to educate parents regarding ideal timing for the first dental visit and address parent's apprehension regarding pharmacological behaviour management modalities.

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