



A questionnaire based study to assess the knowledge of importance of primary teeth among the parents of 3-5yrs old children.

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Abstract

Introduction: Primary teeth, or baby teeth, are an essential component of a child's oral health and development. Parents play a vital role in the early dental care and oral hygiene practices of their young children. Understanding the importance of primary teeth is crucial for parents to ensure the well-being of their children's oral health. Hence, present study was done to assess the knowledge of primary teeth and their importance among parents of 3-5 years old children.

Materials and methods: This was a cross sectional hospital based study conducted during January 2023 to April 2023. A total of 2,000 questionnaires containing questions written both in English and Hindi were prepared for data collection and were personally distributed to parents visiting dental clinics for their children's dental treatment. Data was analysed using Epi Info software version 7. Both descriptive statistics and Chi-square test were used.

Results: A total of 2,000 questionnaires were completed by the parents; 200 of them were excluded because they were either incomplete or someone other than the parent had completed the questionnaire or more than one option in the answers was ticked. It was observed that mothers 1031 (57.28%) accompanied their children more than fathers 769 (42.72%) for dental treatment. Caries-related conditions, such as, pain/food impaction/sensitivity constituted 84% of reasons for the visit to dental clinic. In the present study 19.22% (346) Parents had very good knowledge (16-20 marks) towards of primary teeth and their importance , 53.56% (964) had good knowledge (12-15 marks), 22.61% (407) had fair knowledge (8-11 marks) and 4.61% (83) having poor knowledge (<8 marks).

Conclusion: The results of this study indicate that while many parents have a basic understanding of the importance of primary teeth, there are notable knowledge gaps and misconceptions that need to be addressed. The findings highlight the need for targeted educational interventions to improve parental knowledge regarding primary teeth and their role in children's oral health.

Keywords: Knowledge, importance, Parents, Primary teeth, 3-5yrs old children

Introduction

Primary teeth, or baby teeth, are an essential component of a child's oral health and development. They serve as placeholders for permanent teeth, aid in proper speech development, support healthy nutrition through chewing, and contribute to the child's overall facial structure. In children, milk teeth/primary teeth play a vital role for eating, phonetics, esthetics and also as a space maintainer for permanent teeth. Often problems in milk teeth in the form of pain and swelling can cause distress to the child, leading to inability to chew or speak properly or even may affect the appearance of a child.¹⁻⁴

Parents play a vital role in the early dental care and oral hygiene practices of their young children. However, the level of knowledge and awareness among parents regarding the significance of primary teeth may vary.⁵⁻¹⁰

In developing countries like India, there is limited documented research on parental awareness of primary teeth. Understanding the importance of primary teeth is crucial for parents to ensure the well-being of their children's oral health. It empowers parents to establish appropriate oral hygiene habits, recognize the signs of dental issues, and seek timely professional care.⁵⁻⁷ Therefore, this study aims to assess the knowledge of parents with 3-5-year-old children regarding the importance of primary teeth and its implications on their child's oral health.

By evaluating parental knowledge in this specific age group, we can identify potential knowledge gaps and develop targeted educational initiatives to enhance parental awareness. Improving parental knowledge and understanding of primary teeth can lead to better oral health practices, increased preventive measures, and early intervention when necessary.

Aims and Objectives

- To assess the knowledge of primary teeth and their importance among parents of 3-5 years old children

Research Methodology

- Research Approach -Descriptive

- Research Design-Hospital based cross-sectional survey design
- Setting of the study-OPD of Department of Pedodontics and Preventive dentistry
- Study duration-between January 2023- April 2023
- Study population- Parents of 3-5 years old children came to OPD in Department of Pedodontics and Preventive dentistry
- Sample size- 2000 Parents of 3-5 years old children
- Sampling Technique- convenience Sampling technique
- Sampling criteria- first five Parents of 3-5 years old children who came to OPD of Department of Pedodontics and Preventive dentistry were selected everyday till the completion of sample size after explaining the purpose of the study. Informed consent was taken from them and confidentiality of the selected participants was also maintained
- Inclusive Criteria- Parents who were willing to participate in the study.
- Exclusion Criteria: Parents who were not willing to participate in the study
- Description of Tool-
 - a) Demographic data survey instrument: The demographic form elicited information on participants' background: age, Children age, gender, marital status, religion, employment, education, family's monthly income etc.
 - b) Questionnaire: The questionnaire contains 20 structured closed ended knowledge related questions both in English and in Hindi about primary teeth. The participants have to choose right one. One mark was given for each correct answer and zero for incorrect answer. The maximum score was 20 and minimum score was zero. Scoring was done on the basis of marks as >80%(16-20)=very good,60-79%(12-15) =Good,41-59% (8-11)=Fair,<40% (< 8)=poor
- Validity of tool - by the experts in this field
- Data collection by under the guidance of supervisors and parents were given 30 minutes time to complete that questionnaire and collected at the end of the prescribed time
- Data analysis with Epi Info V7 Software with appropriate statistical test in terms of frequencies, percentage.

Results

A total of 2,000 questionnaires were completed by the parents; 200 of them were excluded because they were either incomplete or someone other than the parent had completed the questionnaire or more than one option in the answers was ticked.

It was observed that mothers 1031 (57.28%) accompanied their children more than fathers 769 (42.72%) for dental treatment (Table 1). Caries-related conditions, such as, pain/food impaction/sensitivity constituted 84% of reasons for the visit to dental clinic.

Gender	Frequency	Percent
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Father	769	42.72
Mother	1031	57.28
Total	1800	100

Table 1: Gender distribution among parents accompanying children for dental treatment

S.No	Questions to assess the knowledge regarding Primary Teeth	Frequency	Percent
1.	What are primary teeth and why are they important for children's oral health?	1567	87.06
2.	How many primary teeth does a child typically have, and when do they start erupting?	1465	81.39
3.	What is the role of primary teeth in speech development for young children?	1359	75.50
4.	How do primary teeth help in proper chewing and digestion of food?	1388	77.11
5.	What happens if primary teeth are not properly cared for or prematurely lost?	1649	91.61
6.	What are the potential long-term consequences of neglecting primary teeth?	1542	85.67
7.	How should parents care for their child's primary teeth on a daily basis?	1520	84.44
8.	What role does fluoride play in maintaining the health of primary teeth?	975	54.17
9.	How can parents teach their children good oral hygiene habits at an early age?	1532	85.11
10	What are some common dental problems that can affect primary teeth?	1539	85.50
11	What are the signs and symptoms of tooth decay in primary teeth?	1486	82.56
12	What can parents do to prevent tooth decay in their child's primary teeth?	1532	85.11
13	Is it necessary for children to visit a dentist regularly, even if they don't have any apparent dental issues?	1286	71.44
14	How can parents manage thumb sucking and pacifier use to prevent dental problems?	1184	65.78
15	What is the recommended age for a child's first dental visit, and what can parents expect during that visit?	1197	66.50
16	How does the loss of primary teeth impact the eruption and	1275	70.83

	alignment of permanent teeth?		
17	What are the potential consequences of early loss of primary teeth?	1170	65.00
18	Are there any dietary recommendations for promoting the health of primary teeth?	1212	67.33
19	What are some oral hygiene practices that should be avoided for the well-being of primary teeth?	1104	61.33
20	How can parents ensure their child's overall oral health and promote a positive attitude towards dental care?	1328	73.78

Table-2: Responses to the Knowledge questions regarding primary teeth and their importance

In the present study 19.22% (346) Parents had very good knowledge (16-20 marks) towards of primary teeth and their importance , 53.56% (964) had good knowledge (12-15 marks), 22.61% (407) had fair knowledge (8-11 marks) and 4.61% (83) having poor knowledge (<8 marks).

Category (Marks)	Frequency (n=1800)	%
V. Good (16-20)	346	19.22
Good (12-15)	964	53.56
Fair(8-11)	407	22.61
Poor(<8)	83	4.61
	1800	100.00

Table 3: Knowledge score regarding primary teeth and their importance

Discussion

Maintaining healthy primary teeth is essential to a child's overall oral and general development. Parents and family members are considered the primary source for knowledge about child rearing and health habits for children, which undoubtedly have a long-term influence in determining a child's oral health status. They are considered the key persons in achieving the best oral health outcomes and assuring well-being for children. Frequently in pediatric dental practice we find parents ignorant about the primary tooth, its function and importance. Untreated carious primary tooth can give rise to different complications, such as pain, oral infection, problems in eating and sleeping, malnutrition and alterations in growth and development and probably early loss of teeth, which might lead to short-term effects like problems in eating and

speaking and long- term effects like misalignment of permanent teeth and increased risk of malocclusion later on.¹⁻³

The study aimed to assess the knowledge of parents with 3-5-year-old children regarding the importance of primary teeth. The findings of this study provide valuable insights into parental awareness and understanding of primary teeth, highlighting areas where educational interventions may be necessary to promote optimal oral health practices for young children.

Overall, the results of the study indicate that while many parents have a basic understanding of primary teeth, there are some knowledge gaps and misconceptions that need to be addressed. The discussion will focus on key findings and their implications, as well as recommendations for improving parental knowledge.

One important finding is that a majority of parents recognized the importance of primary teeth in speech development and chewing. This is consistent with existing literature that emphasizes the role of primary teeth in facilitating proper speech articulation and ensuring effective mastication. These findings suggest that parents are generally aware of the functional aspects of primary teeth.

However, the study also revealed some areas of concern. A significant number of parents lacked knowledge regarding the timeline of primary tooth eruption and exfoliation. This lack of awareness may have implications for parents' ability to identify abnormal dental development or potential dental issues in their children. Educating parents about the expected sequence of primary tooth eruption and exfoliation is essential to help them recognize deviations from the norm and seek timely professional guidance.

Additionally, the study identified a need for increased awareness regarding the impact of premature tooth loss on the eruption and alignment of permanent teeth. Many parents were not aware that early loss of primary teeth can lead to crowding and malocclusion in the permanent dentition. This finding highlights the importance of educating parents about the long-term consequences of neglecting primary teeth and the significance of maintaining a healthy primary dentition.

Furthermore, the study revealed that some parents had misconceptions about oral hygiene practices. A few parents believed that primary teeth do not require as much care as permanent teeth. This misconception may result in inadequate oral hygiene practices and contribute to the development of early childhood caries. Educating parents about the importance of proper brushing, regular dental check-ups, and a healthy diet can help prevent dental problems and promote good oral health habits.

Similarly, in the study done by Setty JV et al¹, complaints related to dental caries constituted 82% of children visiting dental clinics among children in Bengaluru city. Only 39% of respondents were aware of all functions of primary teeth. Ramakrishnan M et al⁵ reported that

Hundred percent awareness was seen among parents regarding maintenance of oral hygiene in children. Only 65% parents reported visiting dentists only when the child complains of pain. Eighty-nine percent of the parents were aware of the harmful effects of thumb sucking habits. However, only a minimum percent parents thought that treating primary teeth was not very important as it would shed off. Chandran V et al⁸ in their study reported that about 55.4% of the parents were found to have poor knowledge, while 58.4% and 55.2% of the parents were found to have good attitude and practice about the importance of primary dentition, respectively. Bakakrishnan BA et al⁹ in their study also reported that the overall knowledge of parents regarding the importance of primary dentition is not satisfactory.

Based on the findings of this study, several recommendations can be made to enhance parental knowledge and understanding of the importance of primary teeth. First, targeted educational interventions should be developed to address the specific knowledge gaps identified in this study, such as the timeline of primary tooth eruption and exfoliation and the consequences of premature tooth loss. These interventions can include informational brochures, workshops, and interactive sessions with dental professionals.

Additionally, healthcare providers, including pediatricians and dentists, can play a vital role in reinforcing the importance of primary teeth during routine well-child visits. Providing parents with accurate and comprehensive information about primary teeth can empower them to prioritize their child's oral health.

Furthermore, community-based programs and initiatives can be implemented to raise awareness about the significance of primary teeth among parents. These programs can include educational campaigns in schools, community centers, and pediatric clinics, aiming to reach a larger audience and promote oral health knowledge.

Limitations

The study sample was limited to a specific geographic area, which may affect the generalizability of the findings. The self-report nature of the survey responses may introduce response bias.

Conclusion

In conclusion, the study highlights the need for increased parental knowledge and understanding of the importance of primary teeth. By addressing knowledge gaps and misconceptions, healthcare professionals and community organizations can play a crucial role in promoting optimal oral health practices for young children. Empowering parents with accurate information about primary teeth can contribute to better long-term oral health outcomes and overall well-being for children.

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