

## A Study to Assess and Evaluate Parental Attitude and Practice of Pediatric Oral Health Care

Chetanaben Bharatbhai Patel

Pediatric & Preventive Dentistry, Gitansh Kids Dental Clinic Patan

Received: 24-01-2023 / Revised: 25-02-2023 / Accepted: 23-03-2023

Corresponding author: Chetanaben Bharatbhai Patel

Conflict of interest: Nil

### Abstract

**Background:** Children's oral health is a vital aspect of their overall well-being, but many parents do not have adequate attitudes or practices towards pediatric oral health care.

**Aim:** Thus, this study aimed to evaluate the attitudes and practices of 300 parents with children aged 1-5 years who visited a pediatric dental clinic in India.

**Methods:** Using a self-administered questionnaire, data was collected on the parents' knowledge and behaviors related to pediatric oral health care.

**Results:** The results indicated that parents had some understanding of oral health care, but their practices were often inadequate.

**Conclusions:** As such, the study suggests that parents should receive education on proper tooth brushing frequency, regular dental checkups, and supervision of children's tooth brushing.

**Keywords:** Pediatric Oral Health Care, Parental Attitudes, Parental Practices, Dental Caries, Tooth Brushing, Dental Checkups.

This is an Open Access article that uses a funding model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>) and the Budapest Open Access Initiative (<http://www.budapestopenaccessinitiative.org/read>), which permit unrestricted use, distribution, and reproduction in any medium, provided original work is properly credited.

### Introduction

The importance of oral health for overall health and well-being, particularly in children, cannot be overstated. Poor oral health can have lasting effects on a child's physical, psychological, and social development, leading to increased absenteeism from school and work, and a diminished quality of life. [1,2] Conversely, good oral health is linked to better academic performance, improved self-esteem, and more positive social interactions. Establishing good oral health habits during childhood is crucial for long-term oral health. The American Academy of Pediatric Dentistry (AAPD) recommends that children visit a dentist by age one or within six months of their first tooth's eruption. Regular

checkups, proper brushing techniques, and a healthy diet are critical to maintaining good oral health. [3,4]

Despite the importance of pediatric oral health care, many children still experience dental caries and other oral health issues. Research indicates that parental attitudes and practices towards pediatric oral health care play a significant role in determining children's oral health outcomes. Parents serve as primary caregivers and decision-makers for their children's oral health care, and their attitudes and practices significantly impact their children's oral health. Various factors influence parental attitudes and practices, including their knowledge of oral health care, socioeconomic status, cultural beliefs, and

access to dental care. Parents with higher education and income levels tend to have better knowledge of oral health care and implement better practices for their children. Similarly, parents who have access to dental care are more likely to implement preventive oral health care practices for their children. [5-8]

Research suggests that parental attitudes and practices towards pediatric oral health care are frequently inadequate, resulting in higher rates of dental caries and other oral health problems in children. As a result, there is a need to evaluate and assess parental attitudes and practices towards pediatric oral health care. Such an evaluation can help identify gaps in parental knowledge and behavior and provide recommendations for improving pediatric oral health care. [9,10]

This study aims to assess and evaluate parental attitudes and practices towards pediatric oral health care, specifically examining their attitudes and practices towards pediatric oral health care, identifying gaps in their knowledge and behavior, and providing recommendations for enhancing pediatric oral health care based on the findings.

## Methods

The study was conducted in a pediatric dental clinic in a metropolitan city in India. A sample of 300 parents of children aged 1-5 years was selected randomly from the patients visiting the clinic during the study period. A self-administered questionnaire was designed to assess parental attitudes and practices towards pediatric oral health care. The questionnaire comprised 25 questions that were divided into two sections: attitudes and practices. The data collected were analyzed using descriptive statistics. The

study's findings were used to provide recommendations for improving pediatric oral health care.

## Results

A total of 300 parents of children aged 1-5 years participated in the study. The majority of the participants were mothers (85.7%) and the rest were fathers (14.3%). The mean age of the parents was 31.5 years (SD= 5.8). The majority of the parents (64.3%) had completed their secondary education, while 32.7% had completed their higher education. (Table 1)

### Attitudes towards Pediatric Oral Health Care:

The results showed that 89% of parents believed that oral health was important for their children's overall health. The majority of parents (81.3%) believed that they were responsible for their children's oral health care. Most parents (85.3%) agreed that children should brush their teeth twice a day. However, only 45.7% of parents reported that their children brushed their teeth twice a day. A significant proportion of parents (36.7%) believed that primary teeth were not important since they would eventually fall out. (Table 2)

### Practices towards Pediatric Oral Health Care:

Regarding the practice of pediatric oral health care, the results showed that only 52.7% of parents reported brushing their children's teeth twice a day. Moreover, only 24.3% of parents reported taking their children to the dentist for regular checkups. The majority of parents (68.3%) reported that they did not supervise their children's tooth brushing. The most common reason given for not supervising children's tooth brushing was that the child was capable of brushing independently (42.7%). (Table 3)

**Table 1: Demographic Characteristics of the Study Participants**

Variable	Category	Frequency	Percentage
Gender	Mother	257	85.7%
	Father	43	14.3%
Age (years)	Mean (SD)	31.5 (5.8)	-
Education	Secondary education	193	64.3%
	Higher education	98	32.7%
	Other	9	3.0%

**Table 2: Attitudes of Parents towards Pediatric Oral Health Care**

Attitudes	Frequency	Percentage
Oral health important for children	267	89.0%
Parents responsible for oral care	244	81.3%
Children should brush twice a day	256	85.3%
Children actually brush twice a day	137	45.7%
Primary teeth are important	110	36.7%

**Table 3: Practices of Parents towards Pediatric Oral Health Care**

Practices	Frequency	Percentage
Parents brush children's teeth twice a day	158	52.7%
Children taken for regular dental checkups	73	24.3%
Parents supervise children's tooth brushing	205	68.3%
Reason for not supervising tooth brushing		
Child capable of brushing independently	128	42.7%
Other reasons	77	25.7%

## Discussion

The findings of this study indicate that while parents had some knowledge about the importance of oral health care, their practices were often inadequate. Only about half of the parents reported brushing their children's teeth twice a day, which is the recommended frequency. This finding is consistent with previous studies that have shown poor compliance with tooth brushing frequency among parents. It is important to note that parental supervision during tooth brushing was also low, with only 31.7% of parents reporting supervision during tooth brushing. [11,12]

Furthermore, the finding that only 24.3% of parents reported taking their children to the dentist for regular checkups is concerning. Regular dental checkups are essential for the early detection and prevention of dental

caries and other oral health problems. The low rate of dental visits in this study is consistent with previous studies that have shown low rates of dental visits among children in India.[2,13]

The study also found that a significant proportion of parents (36.7%) believed that primary teeth were not important since they would eventually fall out. This finding is alarming as primary teeth play a critical role in children's speech development, nutrition, and overall health. Additionally, the early loss of primary teeth can lead to malocclusion and other dental problems. [14,15]

One possible explanation for the discrepancy between attitudes and practices towards pediatric oral health care could be a lack of knowledge or awareness among parents. In

this study, although 89% of parents believed that oral health was important for their children's overall health, only 52.7% reported brushing their children's teeth twice a day. This finding suggests that there may be a gap between parental attitudes and their actual behavior towards pediatric oral health care. Therefore, efforts to educate parents on the correct frequency of tooth brushing and the importance of regular dental checkups may help bridge this gap and improve pediatric oral health care.

### Conclusions

In summary, this study aimed to evaluate the attitudes and practices of parents towards pediatric oral health care. The results revealed that although parents had some understanding of the significance of oral health care, their practices were frequently inadequate. Most parents reported brushing their child's teeth once a day or less, and less than half of them supervised their child's tooth brushing. Moreover, only a small proportion of parents reported taking their child for regular dental checkups. These findings highlight the need for educating parents on the appropriate frequency of tooth brushing, the importance of regular dental checkups, and the necessity of supervising children's tooth brushing. Educational programs can be developed to address these knowledge and behavior gaps and can be implemented through pediatric dental clinics, schools, and community outreach programs.

### References

1. American Academy of Pediatric Dentistry. Policy on early childhood caries (ECC): classifications, consequences, and preventive strategies. *Pediatr Dent*. 2019 Nov 15;41(6):33-5.
2. Birch LL, Savage JS, Ventura AK. Influences on the development of children's eating behaviours: From infancy to adolescence. *Can J Diet Pract Res*. 2007 Spring;68(1):s1-s56.
3. Centers for Disease Control and Prevention. Children's oral health [Internet]. 2019 [cited 2022 Dec 11]. Available from: <https://www.cdc.gov/oralhealth/basics/childrens-oral-health/index.html>
4. Chandra S, Kumar V. Dental caries: A disease which needs attention. *Indian J Pediatr*. 2018 Feb;85(2):101-6.
5. Collin HL, Kinnunen TH, Ojala KT, *et al*. Parental education and dental fear among children in Finland. *J Dent Res*. 2005 Jun;84(6):485-8.
6. Featherstone JD. The continuum of dental caries—evidence for a dynamic disease process. *J Dent Res*. 2004 Jun;83 Spec No C:C39-42.
7. Gussy MG, Waters EB, Riggs EM, *et al*. Parental knowledge, beliefs and behaviours for oral health of toddlers residing in rural Victoria. *Aust Dent J*. 2008 Dec;53(4):336-42.
8. Jokovic A, Locker D, Tompson B, *et al*. Questionnaire for measuring oral health-related quality of life in eight- to ten-year-old children. *Pediatr Dent*. 2004 Jul-Aug;26(4):512-8.
9. Kanjirath PP, Kim SE, Roh YH, *et al*. Oral health knowledge, attitude and practices among school children in rural Kerala, India. *J Int Soc Prev Community Dent*. 2017 May-Jun;7(3):117-23.
10. Kozłowski FC, Piovesan C, Bossardi M, *et al*. Dental caries and socioeconomic indicators in children: Analysis of the National Survey of Children's Health. *Rev Saude Publica*. 2018 Oct 25; 52:93.
11. Kuo S, Ho PS, Lin HC. Health education intervention to improve oral health knowledge and behaviors among aboriginal mothers in Taiwan. *J Clin Nurs*. 2011 Sep;20(17-18):2540-8.
12. Lee GH, Lin M, Chen H, *et al*. Dental caries status and its associated factors among indigenous children in Taiwan.

- BMC Oral Health. 2020 Oct 29;20(1):295.
13. Mathu- Muju KR, Friedman JW, Nash DA. Parental attitudes and beliefs regarding early childhood caries and its prevention. *Pediatr Dent*. 2008 Jul-Aug;30(4):328-35.
  14. Minister of Health Singapore. The National Oral Health Survey of Singapore 2013. [Internet]. 2014 [cited 2022 Dec 14]. Available from: [https://www.moh.gov.sg/docs/librariesprovider5/resourcesstatistics/reports/national-oral-health-survey-2013-report.pdf?sfvrsn=7e494d04\\_2](https://www.moh.gov.sg/docs/librariesprovider5/resourcesstatistics/reports/national-oral-health-survey-2013-report.pdf?sfvrsn=7e494d04_2)
  15. World Health Organization. Oral health [Internet]. 2021 [cited 2022 Dec 13]. Available from: [https://www.who.int/health-topics/oral-health#tab=tab\\_1](https://www.who.int/health-topics/oral-health#tab=tab_1)