



Barriers and Facilitators to Oral Health of Children at Nicklaus Children's Hospital



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Objective

- To explore and understand the barriers and facilitators to oral health faced by parents with children with dental caries at Nicklaus Children's Hospital (NCH) Dental Clinic, Doral, FL.

Introduction

- Dental caries stands as the most prevalent chronic condition affecting children.¹
- Early childhood caries (ECC) exerts adverse effects on children's growth and development, manifesting in pain, feeding and speech difficulties, diminished quality of life, academic underperformance, and stunted weight gain.^{2,3}
- The etiology of dental caries encompasses a multifaceted interplay of biochemical, microbial, genetic, social, environmental, and health-influencing behavioral factors.⁴
- Preventive measures against childhood dental caries entail adopting key behaviors, including regular tooth brushing with fluoride toothpaste and dietary management.^{4,5,6}
- The prevalence of untreated dental decay among Head Start children aged 3-6 years in Florida stood at 24.0%.⁷
 - Children aged 5-6 years exhibited the highest rates of untreated decay and caries experience compared to their younger counterparts aged 3 and 4 years.⁷
- In this study, we delved into the barriers and facilitators encountered by some parents with healthy children at the Nicklaus Children's Hospital Dental Department.

METHODS

- A convenience sample of 52 parents/guardians whose children were served by NCH were included in the study.
- Inclusion: ASA I or II, age 2 to 6, at least one decayed tooth.
- The participants were randomly selected and parents who declined to take the survey were not included in the study.
- The survey's domain included questions about parent's/guardian's perception, demographics, facilitators and barriers to oral hygiene, and barriers to accessing care.

RESULTS

Demographic Category	N=52	Percent
Relationship		
Mother	39	75
Father + other	13	25
Ethnicity		
Hispanic	44	84.6
Non-Hispanic	8	15.4
Education		
Less than high school	6	11.5
High school	10	19.2
Some college	16	30.8
College Grad or higher	17	32.7
Chose not to respond	3	5.8
Race		
White	30	57.7
Other	22	42.3

Table 1. Demographic breakdown for all 52 participants

Facilitators and Barriers to Brushing Child's Teeth		
Facilitators	Number	Percent
The child behaves well during brushing	25	48.1
Parent has a set routine	22	42.3
Parent feels confident brushing child's teeth	10	19.2
Parent has help from another adult	7	13.5
Child likes toothpaste/toothbrush	19	36.5
Barriers		
Child refuses	24	46.2
Parent forgets or is too busy	15	28.8
Child dislikes the toothpaste/toothbrush	3	5.8
No help with brushing	1	1.9

Table 2. Parents reported facilitators and barriers to brushing their child's teeth, reported facilitators and barriers to child brushing their own teeth, reported caries causing agents, and barriers to access to dental appointments.

Facilitators and Barriers – Children Brushing on Their Own		
Facilitators	Number	Percent
Parent brushes child's teeth (doesn't let child brush on their own)	22	42.3
Child enjoys brushing their teeth	19	36.5
Child brushes well by themselves	8	15.3
Child remembers to brush on their own	9	17.3
Child likes the toothpaste/toothbrush	14	26.9
Barriers		
Child doesn't brush (parent has to do it for them)	25	48.1
Child doesn't remember	10	19.2
Child refuses	11	21.2
Child doesn't know how to	4	7.7
Child doesn't like the toothpaste	3	5.8

Factors contributing to child's caries		
Factor	Number	Percent
Child eats a lot of sweets at home	17	32.7
Child eats a lot of sweets when parent is not around	22	42.3
Child drinks a lot of juice	14	26.9
Child goes to sleep drinking milk	10	19.2
Brushing isn't done frequently	5	9.6
Absence of flossing	19	36.5
Barriers to getting a dental appointment		
Hard to schedule a dental appointment	18	34.6
Hard to find a dentist to see my child	3	5.8
Hard to find time	7	13.5
Financial or lack of insurance	1	1.9
Difficulty with finding transportation	4	7.7
Multiple children to care for	4	7.7
Other (none, live too far, work)	24	46.2

- 48.1% and 42.3% highlighted their child's positive behavior during brushing sessions and maintaining a consistent at-home hygiene routine as facilitators, respectively.
- 13.5% cited familial support as a facilitator.
- The most common hurdles reported were the child's refusal to cooperate (46.2%) and the parent's busy schedule or tendency to forget (28.8%).
- The perceived challenges faced by children in independently brushing their own teeth were predominantly attributed to their perceived lack of responsibility (48.1%), resulting in parents having to assume the task, and the child's outright refusal to brush (21.1%).
- 42.3% of parents believed that their direct involvement in brushing was beneficial for their child's oral health.
- The primary obstacle reported by parents was the difficulty in scheduling suitable appointment times (34.6%).

DISCUSSION

The main challenges faced by parents at NCH in maintaining their children's oral health at home are consistent. They often struggle with their child's negative behavior during brushing. Similar findings have been observed in studies from the Netherlands, highlighting parental struggles with children's noncompliance.⁵ Interestingly, many parents prefer to brush their child's teeth themselves rather than letting the child do it independently, indicating a perceived benefit in assuming control of brushing.

Regarding accessing dental care, financial constraints or lack of insurance coverage are only minor barriers for 1.9% of participants. The primary obstacle reported by a significant portion (34.6%) is scheduling dental appointments, indicating a notable challenge in accessing dental services at NCH Dental Clinic. This aligns with findings from a study conducted in Washington state in 2010, emphasizing difficulties in finding dentists, lengthy appointment wait times, and travel distance.⁸ This study aims to identify strategies to better support parents and improve access to oral healthcare for children at Nicklaus Children's Hospital Dental Clinic, with a focus on enhancing scheduling processes.

CONCLUSIONS

Based on the results of the survey:

- Parents/guardians are aware of the barriers to their child's oral healthcare. Parents place a lot of the responsibility for childhood caries on the behavior of the child.
- Financial and insurance issues are not a prominent barrier for the parents participating in the study at Nicklaus Children's Hospital Dental Clinic.
- The greatest barrier to bringing their child in for a dental appointment is the difficulty in scheduling an appointment at the NCH Dental Clinic.

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