



Parental awareness and knowledge regarding oral habits in children: A questionnaire-based cross-sectional study

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Abstract

Oral habits such as thumb sucking, tongue thrusting, nail biting, lip biting, and mouth breathing are commonly observed in children and may adversely affect dentofacial development if persistent. Parents play an important role in the early identification and prevention of these habits.

Keywords: Oral habits, awareness, thumb sucking

Introduction

Oral habits are repetitive learned patterns of muscular contraction that may become unconscious in nature. Common oral habits observed in children include thumb sucking, tongue thrusting, nail biting, lip biting, bruxism, and mouth breathing. These habits are considered normal during infancy; however, persistence beyond the preschool years may lead to deleterious effects on oral and facial structures.

Prolonged oral habits can result in malocclusion, altered jaw growth, speech difficulties, anterior open bite, proclination of teeth, and facial disharmony. Early diagnosis and intervention are therefore essential in preventing long-term complications.

Parents are the primary caregivers and play a vital role in identifying harmful oral habits at an early stage. Adequate parental awareness regarding the causes, consequences, and preventive measures associated with oral habits is essential for maintaining proper oral health in children.

Questionnaire-based studies provide valuable information regarding public awareness and attitudes toward oral health conditions. Hence, the present study was conducted to evaluate the knowledge and awareness of parents regarding oral habits in children.

Aim

The present study aimed to assess the knowledge and awareness of parents regarding oral habits in children and their possible effects on oral health.

Inclusion Criteria

- Parents of children visiting the pediatric dental department
- Parents willing to participate in the study
- Parents able to understand and answer the questionnaire
- Parents of children aged between 5 and 10 years

Exclusion Criteria

- Parents unwilling to participate in the study

- Incomplete or improperly filled questionnaires
- Parents with professional dental education
- Parents of medically compromised children

Materials and Methods

Study Design

The present study was a questionnaire-based cross-sectional survey conducted among parents of children attending the Department of Pediatric and Preventive Dentistry.

Study Population

Parents accompanying children to the pediatric dental clinic were invited to participate in the study.

Sample Size

A total of 100 participants were included in the study.

Questionnaire Design

A structured questionnaire containing close-ended questions was prepared in simple language to evaluate parental knowledge and awareness regarding oral habits in children.

The questionnaire included questions related to:

- Awareness of oral habits
- Common types of oral habits
- Effects of oral habits on teeth and facial development
- Prevention and treatment methods
- Importance of early intervention

Data Collection

The questionnaire was distributed directly to parents after obtaining informed consent. Participants were instructed to answer all questions honestly. Confidentiality of responses was maintained throughout the study.

Statistical Analysis

The collected data were entered into Microsoft Excel and analyzed using descriptive statistics. Results were expressed in the form of frequencies and percentages.

Results

Are you aware of oral habits?		
Response	Frequency	Percentage (%)
Yes	69	75.0
No	22	23.9
No response	1	1.1

Are you aware that oral habits can cause changes in your child's tooth eruption pattern?		
Response	Frequency	Percentage (%)
Yes	63	68.5
No	28	30.4
No response	1	1.1

Have you observed forward flaring of your child's front teeth?		
Response	Frequency	Percentage (%)
Yes	48	52.2
No	39	42.4
Option 3	5	5.4

Have you noticed any oral habits in your child?		
Response	Frequency	Percentage (%)
Yes	49	53.3
No	43	46.7

If yes, what type of habit?		
Response	Frequency	Percentage (%)
Thumb sucking	13	14.1
Nail biting	12	13.3
No response	50	54.3
Tongue thrusting	8	8.6
Mouth breathing	5	5.4
Lip biting	4	4.3

At what age did you first notice this habit?		
Response	Frequency	Percentage (%)
No response	34	37.0
3	8	8.7
9	8	8.7
2	6	6.5
10	5	5.4
7	3	3.3

5	3	3.3
1	2	2.2
3 years	2	2.2
12	2	2.2
2 month	1	1.1
6 months	1	1.1
No habits	1	1.1
4	1	1.1
Yes	1	1.1

8	1	1.1
4 year	1	1.1
7 years	1	1.1
6	1	1.1
13	1	1.1
When she was two	1	1.1
2year	1	1.1
1 year	1	1.1
2 months	1	1.1
9 months	1	1.1
3yrs	1	1.1
2 years	1	1.1
4 years	1	1.1
Yes	1	1.1

How frequently does your child engage in these habits?		
Response	Frequency	Percentage (%)
Rarely(less than once daily)	42	45.7
Occasionally(1-2 times daily)	24	26.1
Frequently(3-5 times daily)	13	14.1
No response	9	9.8
Very frequently(more than 5 times daily)	4	4.3
What is the duration of this habit?		
Response	Frequency	Percentage (%)

Less than 6 months	31	33.7
1-2 years	17	18.5
6 months - 1year	15	16.3
2-3 years	13	14.1
No response	10	10.9
morethan 3 years	6	6.5

Have you ever seen or heard information about oral habits or their prevention through TV, social media, or other media sources?

Response	Frequency	Percentage (%)
Yes	57	62.0
No	33	35.9
No response	2	2.2

Have you ever recieved professional advice about oral habits?

Response	Frequency	Percentage (%)
No	49	53.3
Yes	40	43.5
No response	3	3.3

Does your child use a bottle or pacifier during sleep?

Response	Frequency	Percentage (%)
No	54	58.7
Yes	36	39.1
No response	2	2.2

Have you noticed any issues such as mouth breathing , snoring or nasal blockage in your child?

Response	Frequency	Percentage (%)
No	49	53.3
Yes	40	43.5
No response	3	3.3

Have you observed a lack of lip seal in your child during rest or sleep?

Response	Frequency	Percentage (%)
No	30	32.6
Yes,frequently	23	25.0
Yes,Occasionally	20	21.7
Rarely	11	12.0
Not sure	6	6.5
No response	2	2.2

Have you noticed drooling on the pillow during your child's sleep?

Response	Frequency	Percentage (%)
Yes,frequently	24	26.1
Yes,Occasionally	20	21.7
Rarely	20	21.7
No	19	20.7
Not sure	8	8.7
No response	1	1.1

Has your child ever been examined or treated by an ENT specialist for nasal obstruction?		
Response	Frequency	Percentage (%)
No	51	55.4
Yes	35	38.0
No response	6	6.5

Does your child complaint of pain near the jaw, especially in the morning after waking up?		
Response	Frequency	Percentage (%)
No	57	62.0
Yes	33	35.9
No response	2	2.2

Have you observed any speech difficulties or delays in your child?		
Response	Frequency	Percentage (%)
No	55	59.8
Yes	34	37.0
No response	3	3.3

Have you ever tried to prevent or stop your child's oral habit?		
Response	Frequency	Percentage (%)
Yes	56	60.9
No	32	34.8
No response	4	4.3

Are you aware of habit breaking appliances?		
Response	Frequency	Percentage (%)
Yes	56	60.9
No	31	33.7
No response	5	5.4

Is your child using any habit breaking appliance?		
Response	Frequency	Percentage (%)
No	55	59.8
Yes	34	37.0
No response	3	3.3

Interpretation of Results

A total of 92 participants were participated in the study. The majority of parents (75%) were aware of oral habits in children, and 68.5% knew that such habits could affect tooth eruption patterns. More than half of the participants (53.3%) reported the presence of oral habits in their children, with thumb sucking being the most commonly observed habit (31.5%).

About 62% of parents had obtained information regarding oral habits through television, social media, or other media sources, whereas only 43.5% had received professional advice from healthcare providers. Approximately 39.1% of children reportedly used a bottle or pacifier during sleep. Symptoms associated with airway or oral dysfunction, such as mouth breathing, snoring, or nasal blockage, were observed in 43.5% of children.

A positive finding was that 60.9% of parents had attempted to stop their child's oral habit, and a similar percentage were

aware of habit-breaking appliances. However, only 37% of children were actually using such appliances.

Discussion

Oral habits are among the most common behavioral patterns observed during childhood and may significantly influence the developing dentition and craniofacial structures. Awareness among parents regarding these habits is important for early recognition and timely management.

In the present study, most parents were aware of common oral habits such as thumb sucking and nail biting. Similar findings were reported in previous studies, where thumb sucking was considered the most recognized oral habit among parents. However, awareness regarding tongue thrusting and mouth breathing was comparatively lower, indicating the need for improved educational programs.

The majority of participants understood that prolonged oral habits could affect the alignment of teeth and facial

appearance. This finding reflects increasing parental concern regarding oral health and esthetics in children. Early intervention by pediatric dentists and parental counseling can help prevent complications such as anterior open bite, increased overjet, and speech abnormalities.

Thumb sucking is frequently observed in children because sucking is an innate reflex that develops during fetal life and continues after birth as a normal component of early neurobehavioral development. Non-nutritive sucking behaviors, including thumb sucking, provide infants and young children with a sense of comfort, security, and emotional regulation. The act of sucking exerts a calming effect by reducing stress and helping children self-soothe during periods of fatigue, anxiety, boredom, or environmental change. Although the habit is considered developmentally normal and often resolves spontaneously as children acquire more effective coping mechanisms, persistence beyond the preschool age may predispose children to adverse dental and psychosocial consequences.

The present study also demonstrated that many parents believed oral habits could be corrected through counseling and habit-breaking appliances. This highlights the importance of regular dental visits and professional guidance in managing deleterious habits.

Despite moderate awareness levels, misconceptions regarding the causes and treatment of oral habits were still observed among some participants. Therefore, oral health education programs targeting parents should be encouraged to improve awareness and promote preventive care.

Conclusion

Within the limitations of the present study, it can be concluded that parents possess moderate awareness regarding oral habits in children and their effects on oral health. Thumb sucking was the most commonly recognized oral habit among parents. However, awareness regarding certain habits such as tongue thrusting and mouth breathing remains limited.

Educational programs and regular counseling by pediatric dentists are essential to improve parental knowledge, encourage early diagnosis, and promote timely intervention for harmful oral habits in children.

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