

# KNOWLEDGE, ATTITUDE AND PRACTICE ON ORAL HEALTH AMONG MOTHERS OF KINDERGARTEN CHILDREN

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## Abstract

Oral health is integral part of general health. Improper practice of oral hygiene is a major risk factor for oral diseases. Mothers are considered to be the most accountable in educating the children about proper oral hygiene. This study was aimed to assess the knowledge, attitude and practice of mothers of kindergarten children regarding the oral health of their children. Total of 220 mothers of kindergarten children were selected by using convenience sampling technique from the selected schools at Chennai, Tamil Nādu, India. A structured knowledge, attitude and practices questionnaire was used to collect the data. Analysis and interpretation of the data was done according to the objectives of the study using descriptive and inferential statistics. The present study revealed that 80.4% of mothers of kindergarten children had adequate knowledge, 81% had favorable attitude and 54% had average level of practices regarding the oral health for their children.

**Conclusion:** There was a significant lack of oral hygiene practices in the kindergarten children and hence it is obligatory to educate the mothers about good oral hygiene related practices to be followed on their children.

**Keywords:** Oral health, knowledge, Attitude, Practice, Kindergarten, Children.

## INTRODUCTION

Oral health is the state of the mouth, teeth and orofacial structures that enables individuals to perform essential functions such as eating, breathing and speaking etc. Oral health varies over the life course from early life to old age. An improper practice of oral hygiene is a major risk factor for oral diseases. Children are more dependent on their parents and caretakers for maintenance of their oral health. Oral hygiene practices established during early pre-school days have a profound impact on the child's development. Parents play a vital role in both preventive and treatment regime for oral problems in their children. The awareness among mothers of very young children is important in reducing the risk of early childhood caries and other dental problems. It has been found that young children's oral health maintenance and outcomes are influenced by their parent's knowledge and beliefs of mothers. Mothers have the responsibility of teaching good oral habits and routines, along with healthy dietary habits and hygiene techniques during early years of life, because a strong foundation of dental norms is important for the future dental health of the children. Research has shown that mother's awareness about dental health and diseases associated with poor dental health has a positive effect on the dental and overall dental health of their kids and practices related to dental health. Hence, this study aimed to assess the knowledge, attitude and practice on oral health among mothers of kindergarten (3 -5 years old) children.

## MATERIALS AND METHODS

The study was approved by the Institutional Review Board (IRB/22-10/B06). An ethical clearance was obtained from the International Ethical Committee (SBDCH-IEC/23-04/40). A descriptive research design was used to assess the knowledge, attitude and practices of mothers of kindergarten children regarding the oral health of their children in schools at Chennai, Tamil Nadu, India. A total of 220 mothers who had children in the age group

between 3 to 5 years and who were willing to participate were selected by using convenience sampling technique. The instrument for data collection consisted of four sections which includes demographic variables and a self-structured knowledge, attitude and practice questionnaire.

Data were collected by self-administered method. Analysis and interpretation of the data was done according to the objectives of the study using descriptive and inferential statistics. Mothers of kindergarten children were selected in accordance using convenience sampling technique.

## RESULT

Table 1 reveals the frequency and percentage distribution of sample characteristics. 80.4% of the mother had high level of knowledge (fig 1), about 43.9 % of mothers gained the knowledge of oral hygiene from school and 28.1 % from their family members and friends. 80.1% of mothers were aware about that the toothpaste contains fluorine but only 68.6% of them know fluoridated toothpaste is good for oral hygiene. 92.4 % of mothers understood the importance of a regular dental check-up. 86.6% of mothers were aware that eating snacks like candies and cookies that are sticky will cause dental decay.

Majority of the mothers of kindergarten children (81%) had favorable attitude (fig 2). 82.7% of mothers understood it was necessary to clean children's mouth after every meal and about 88.3% of mothers think that the learning of child's teeth should be guided by mother. Only half of the mothers (54%) had average level of practices (fig 3 ).Among them, 46.4% of mothers asked their child to brush their teeth twice in a day. 46.4% insisted to brush in a circular motion but the remaining insisted to brush in other ways (side wards, up and down, particular). Only 16.8% of mothers changed their children's tooth brush at 2 - 3 months once and 7.3% changed when the bristle frays out. Only 36.4% of mothers have taken their children once in every 6 months to dental check-up.

## DISCUSSION:

Oral health is integral part of general health. The findings of this study provide valuable insights into the knowledge, attitudes, and practices related to oral hygiene among mothers of kindergarten children. The results indicate a relatively high level of knowledge among the participants, with 80.4% of mothers demonstrating a high level of understanding. However, there are notable gaps in specific areas, such as awareness of the benefits of fluoridated toothpaste and the importance of regular dental check-ups which suggests the need for targeted educational interventions.

It is encouraging to note that a significant proportion of mothers acquired their knowledge of oral hygiene from formal education settings such as schools indicating the potential impact of early childhood education programs on maternal knowledge. However, the reliance on family members and friends highlights the importance of promoting accurate and evidence-based information within social networks to ensure consistent messaging regarding oral health practices.

Despite the high awareness of fluoride content in toothpaste (80.1%), there appears to be a gap in understanding its specific benefits for oral hygiene, as evidenced by the lower percentage (68.6%) of mothers who recognize the importance of fluoridated toothpaste. This discrepancy underscores the need for targeted education campaigns to bridge this knowledge gap and emphasize the role of fluoride in preventing dental decay and promoting oral health.

The overwhelming majority of mothers (92.4%) understand the importance of regular dental check-ups, indicating a positive attitude towards preventive dental care. Similarly, a high level of awareness regarding the detrimental effects of sticky snacks on dental health (86.6%) suggests recognition of the importance of dietary habits in maintaining oral hygiene.

Despite the favorable attitudes observed among the majority of mothers (81%), there is room for improvement in oral hygiene practices. Only half of the mothers (54%) reported average levels of practices, with notable gaps in tooth brushing frequency and technique. The relatively low proportion of mothers adhering to recommended practices, such as changing toothbrushes every 2-3 months and attending biannual dental check-ups, highlights the need for targeted interventions to promote consistent and effective oral hygiene behaviors.

## CONCLUSION

Mothers of kindergarten children demonstrated a strong understanding and positive attitude towards their children's oral health ; however , their oral health practices were not sufficiently implemented. Therefore, it is

essential to provide education to mothers on effective oral hygiene practices to ensure they are properly applied to their children.

## REFERENCES

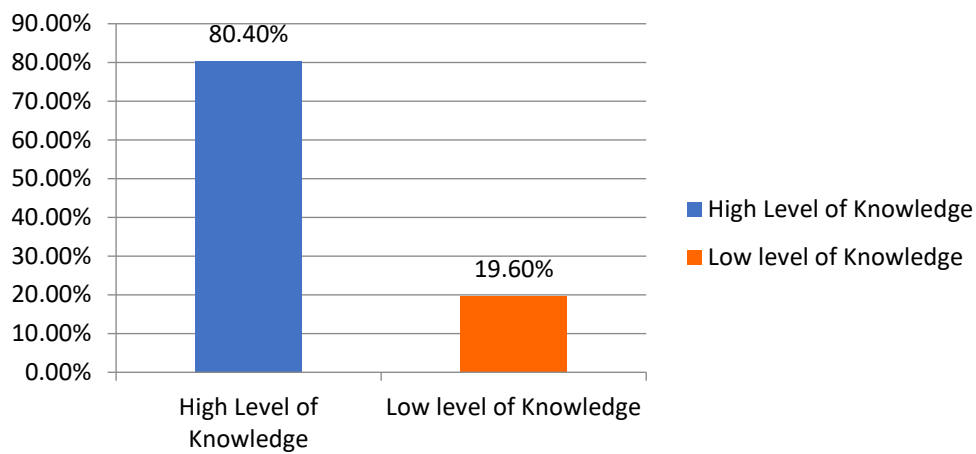
1. Mohandass et al.(2021). Knowledge and practices of rural mothers on oral hygiene for children. Indian Journal of Continuing Nursing Education, 22(1), 39-43.
2. Morodov et al. (2017). Knowledge and oral health attitudes among parents of children. <https://publications.smu.lt/object/elaba:21802108/2182108.pdf>.
3. Rajanna et al. (2019). Oral hygiene knowledge and practices among mothers of 3-to 6 year old preschool children. Indian Association of Public Health Dentistry, 17(1), 76-79.
4. Sharma et al. (2022). Parental knowledge, attitude and practices regarding oral health of their children in Nuh district of Haryana, India. Indian Journal of Dental Sciences, 14(2), 89-93.
5. Suresh BS, Ravishankar TL, Chaitra TR, Mohapatra AK, Gupta V. Mother's knowledge about pre-school child's oral health. J Indian Soc Pedod Prev Dent. 2010 Oct-Dec;28(4):282-7. doi: 10.4103/0970-4388.76159. PMID: 21273717.

Table –1: Frequency and Percentage distribution of the Demographic variables of kindergarten children and mothers of kindergarten children

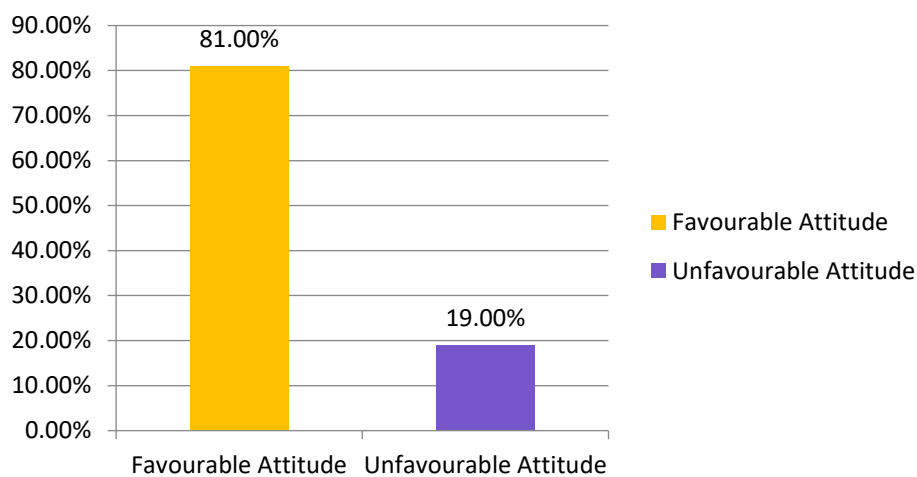
N =220

Demographic variables		No.	%
Age (In years)	3	70	31.8
	4	68	30.9
	5	82	37.3
Educational status of the child	Pre KG	62	28.2
	LKG	87	39.5
	UKG	71	32.3
Educational status of the mother of the child	Illiterate	74	33.6
	Higher Secondary	101	45.9
	Graduate	45	20.5
Religion	Hindu	175	79.5
	Christian	20	9.1
	Muslim	25	11.4
Residence	Rural	89	40.5
	Semi urban	54	24.5
	Urban	77	35.0
Source of information regarding oral health	Family members	82	37.3
	Friends	60	27.3
	Health personnel	51	23.2
	Mass media	24	10.9
	From School	3	1.3

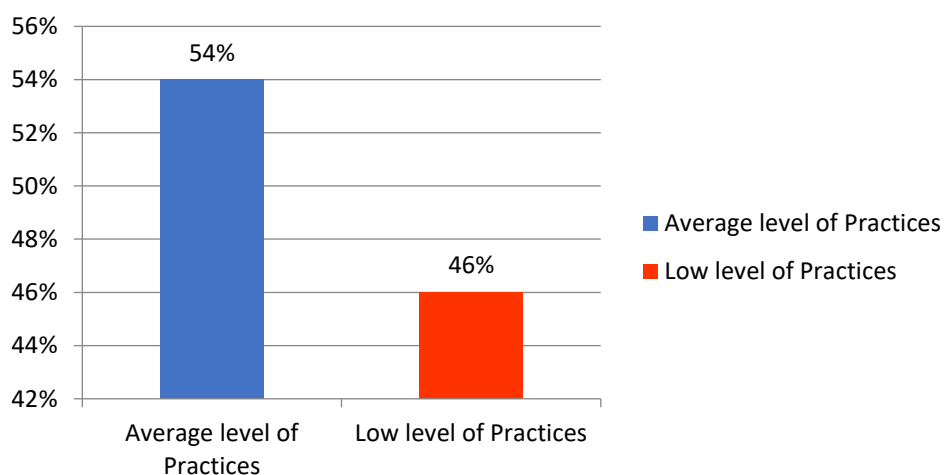
**Fig-1: Level of Knowledge**



**Fig-2: Level of Attitude**



**Fig-3: Level of Practices**



**ORAL HEALTH QUESTIONNAIRE**  
**(Answer All the Questions)**

**Section A: Demographic Data**

1. Email-----
2. Name of the child
3. Parent's name
4. School Name
5. Age of Kindergarten Child
  - a. 3 Years
  - b. 4 Years
  - c. 5 Years
6. Educational status of the child
  - a. Pre KG
  - b. LKG
  - c. UKG
  - d. Any Other
7. Educational status of the mother of child
  - a. Illiterate
  - b. Higher secondary school
  - c. Graduate
8. Religion
  - a. Hindu
  - b. Muslim
  - c. Christian
  - d. Any other
9. Residence
  - a. Rural
  - b. Semi urban
  - c. Urban
10. Source of information regarding oral health
  - a. Family member
  - b. Friends
  - c. Health personnel
  - d. Mass media
  - e. Any other -----

**Section-B: Knowledge of mothers about their child's oral health**

11. Do you know that some toothpaste contains fluoride?
  - a. Yes
  - b. No
12. Do you know that using fluoridated tooth paste is good for your children's teeth?
  - a. Yes
  - b. No
13. Do you think that consumption of snacks like candies and cookies that stick to teeth will cause dental decay?
  - a. Yes

b. No

14. Do you think that is it necessary to go for dental check-up?

a. Yes

b. No

### **SECTION C: Attitude of mothers about their children's oral health**

15. Do you think that it is necessary to clean the child's teeth after every meal?

a. Yes

b. No

16. Do you think that cleaning of the child's teeth should be guided by mother?

a. Yes

b. No

17. Do you think that is it necessary to take your child for regular dental visits?

a. Yes

b. No

### **SECTION - D: Practice of mothers about their children's oral health**

18. Which of the following aids do you use to clean your child's teeth?

a. Finger

b. Tooth brush

c. Twig

d. Any other

19. What material do you use to clean your child's teeth?

a. Tooth paste

b. Tooth powder

c. Tooth brush + paste

d. Any other

20. How do you use tooth brush and fluoridated toothpaste for tooth brushing?

a. Once a day

b. Twice in a day

c. Sometimes a week

d. Never

21. Which motion do you use to brush your child's teeth?

a. Up- Down

b. Side ways

c. Circular motion

d. Not Particular

22. Do you ask your child to rinse his mouth after each meal?

a. Yes

b. No

c. Never

23. When do you change your child's tooth brush?

a. Once in 15 days

b. Once in a month

c. Every 2-3 months

d. Once the bristle frays out

24. When do you take your child to visit the dentist?

a. Once every 6 months

b. Once in a year

c. Only when there is a pain

d. Never