

# Knowledge and Attitude of Parents Regarding Children's Primary Teeth & their Willingness for Treatment.

Janhvi Manohar\*

*1 Year, B.D.S, Saveetha Dental College, No. 162, PH Road, Chennai – 600077*

Geo Mani

*Senior Lecturer, Department of Pedodontics, Saveetha Dental College, No. 162, PH Road, Chennai – 600077*

---

## Abstract

### Aim:

To determine knowledge and attitude of parents' towards their children's primary teeth & willingness for their treatment

### Objective:

This study aims on assessing the awareness of parents about their children's primary teeth & encouraging them to treat diseases related to it as deciduous teeth are more prone to dental caries

### Background:

Oral hygiene of pre-school children play a very significant role in shaping up the dental health of the person as he/she grows into an adult. Children are prone to dental caries and thus the prevention of dental caries is important to avoid loss of primary teeth prematurely and decrease the risk of diseases in the future. Guardians or parents play a vital role in maintaining and teaching oral hygiene to their children. Oral hygiene knowledge and attitude of parents influence their children's oral health. Parents practicing proper hygiene methods would have children having better oral health. Thus, this study is designed to assess the parents' attitude about their children's deciduous teeth, their oral hygiene practices and their willingness to treat the diseases related to it by doing a survey among parents of pre-teen children in Saveetha Dental College

### Reason:

Oral well-being practices of parents has a direct effect on the oral health of their children. Hence this study we assess the parents' knowledge about the dental treatments and attitude about the same as children are more prone to oral diseases

**Keywords:** Parents, Knowledge, primary teeth, Oral hygiene, early-childhood caries

---

## INTRODUCTION

Oral health in children plays a vital role as it lays down the foundation for healthy permanent teeth. Maintenance of oral health should start before the first tooth erupts, and parents play a very important role in influencing their children's oral health. An intermediary mechanism that warrants greater empirical attention is parental influences. This oversight is interesting given the primacy of the parent in governing the child's proximate environment and the likelihood of the child endorsing adaptive or maladaptive health attitudes, beliefs and behaviours. [1] Mothers' oral health knowledge and attitude, in particular, influence oral health of their children at an early age. [2], [3], [4]

The parents with proper oral health knowledge and attitude are likely to positively influence their children's oral health. For example, if the parent brushes his/her teeth twice a day, their children will also be positively influenced to brush their teeth twice a day Children with poor oral habits are more prone to early-childhood caries and may furthermore develop associated problems such as local infections, oral pain that also manifests as difficulty in sleeping and eating, reduced growth, increased risk of caries and psychosocial problems in permanent dentition. Most parents tend to ignore their children's dental problems as the primary teeth will be replaced by permanent teeth and also because they are unaware of the causes of early childhood caries and their treatment. Parents and the guardians have low awareness about the preventive care and treatments available for the maintenance of their children's oral hygiene and thus, their health is compromised. Poor oral hygiene in early childhood is one

of the most serious and expensive health conditions, and it is the most ignored health condition too. [5] Infant oral health care is the foundation on which a lifetime of preventive education and dental care can be built up in order to help acquire optimal oral health into child and adulthood. [6] These conditions indicate the need for a more in-depth understanding of the health beliefs and practices of caregivers with respect to their children's oral health care. [7]

This study aims to assess the amount of knowledge that parents and caregivers have about their children's deciduous teeth and if they are willing to treat diseases related to it and to create awareness about the importance of deciduous teeth, oral diseases related to it and their treatments.

## MATERIALS AND METHODS

The study was conducted in the paediatric department in Saveetha Dental College, Poonamallee, Chennai, India. The sampling frame for this study comprised parents of children aged three months to 10 years. Approval to conduct this study was obtained from the University Board, and informed consent was taken from the participating parents. The subjects were administered with a structured questionnaire on their habits, attitudes, knowledge, and beliefs regarding their child's dental care. It was made sure that individuals gave their first natural response and attempted all the questions spontaneously. The Multiple-Choice Questionnaire developed, had 22 items and covered socio-demographic characteristics, oral hygiene practices of both the child and the parent, dietary practices, knowledge,

and significance of deciduous teeth and the causes of early childhood caries. Research shows that parents play an important role in the decision-making processes vis-à-vis oral health care for their children. [8]

Few of the questions were;

- Do you know at what age a child’s first primary tooth erupts?
- Do you know at what age a child’s first tooth falls off?
- How many times a day do you brush your teeth?
- How many times a day does your child brush his/her teeth?
- Do you monitor your child’s brushing?
- How often do you visit the dentist?
- When your child complains of toothache, what do you do?
- How often do you take your child to the dentist?
- How often have you given medications to suppress your child’s teeth related ache?
- According to you, what is the significance of primary teeth?
- Do you think infections in primary teeth can harm the yet to erupt permanent tooth?
- Are you aware that oral habits such as thumb sucking, mouth breathing, tongue thrusting etc. can harm the developing dentition?

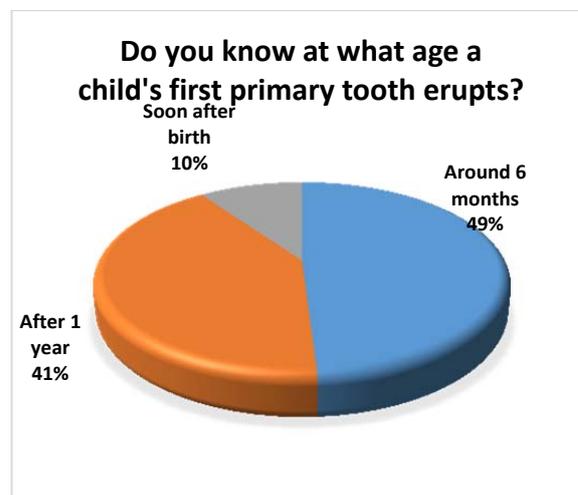
This cross-sectional study was conducted with 400 subjects and their answers were evaluated to create a circle graph (pie charts) which analysed the frequency of an answer and thus the attitude and knowledge of parents towards their child’s primary teeth.

**RESULTS**

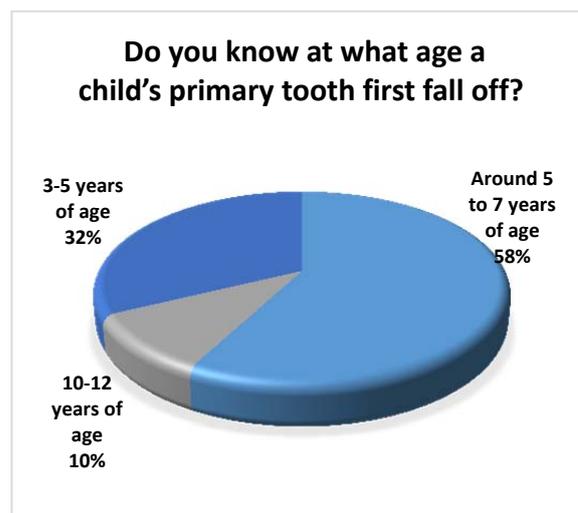
A total of 400 parents (both mothers and fathers) participated in this study. In order to secure authentic results, non-answered questions were excluded from the questionnaires. The number of children in a family ranged from one to three. The sampling group of parents involved 289 mothers (72.25%) and 111 fathers (27.75%) with a mother to father ratio of 2.6:1. The level of education of the parents ranged from illiterate (35%), upto 10<sup>th</sup>/12<sup>th</sup> (15%), under-graduation (40%) and post-graduation (10%). The monthly family income was below ₹20,000 among 20% subjects, between ₹20,000-₹50,000 among 60% subjects and above ₹50,000 among 20% subjects.

On knowledge and attitude towards their kids’ oral health, we found that only 49% of the parents know the correct period of their children’s teeth eruption in the oral cavity (Pie-chart 1) and a majority of 58% of the parents know the correct age at which a child’s primary tooth falls off (Pie-chart 2). In all, only 38% parents brushed twice a day and acknowledged that 42% of the children brushed twice a day (Pie-chart 3 and 4). In total, only 34% of all the subjects acknowledged that they actually monitor their child/children’s brushing (Pie-chart 5) and of all 92% were educated about their children’s teeth being more prone to

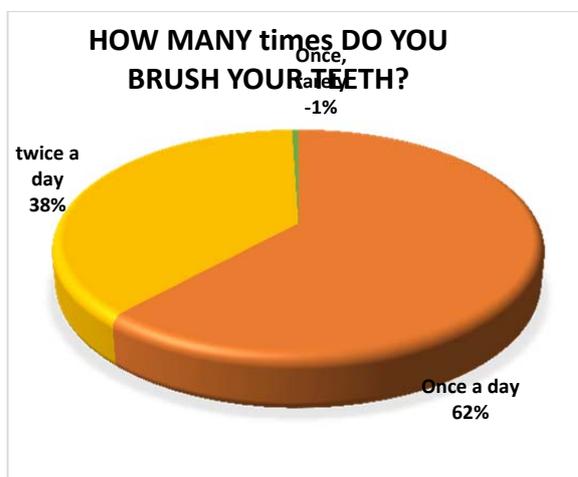
cavities (Pie-chart 6). The survey results show that about 33% of the parents visited the dentist only when there was an episode of pain and about 50% of the parents took their children to the dentist only when they complained of pain (Pie-charts 7 and 8).



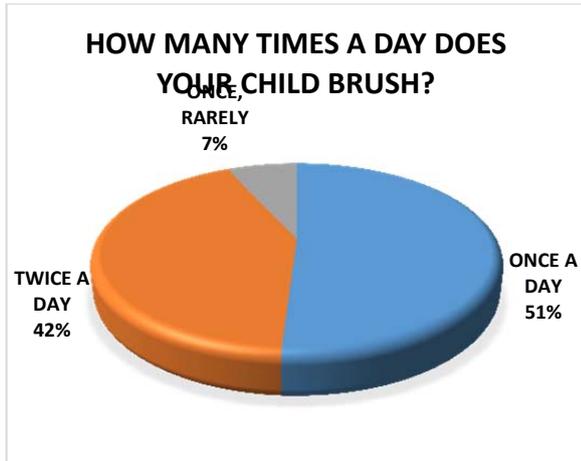
**PIE-CHART – 1**



**PIE-CHART – 2**



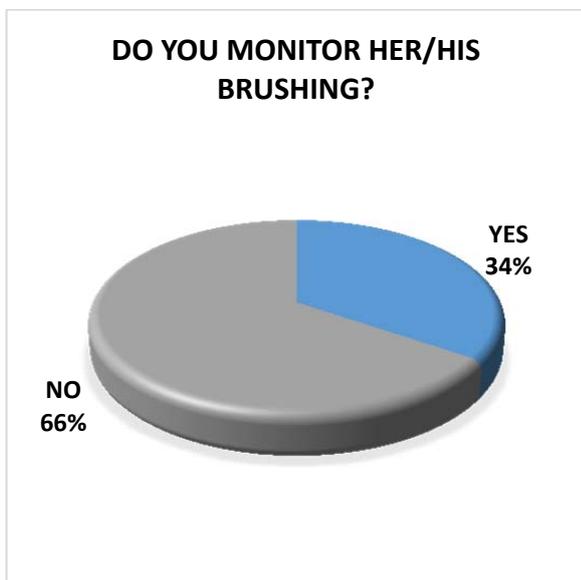
**PIE-CHART – 3**



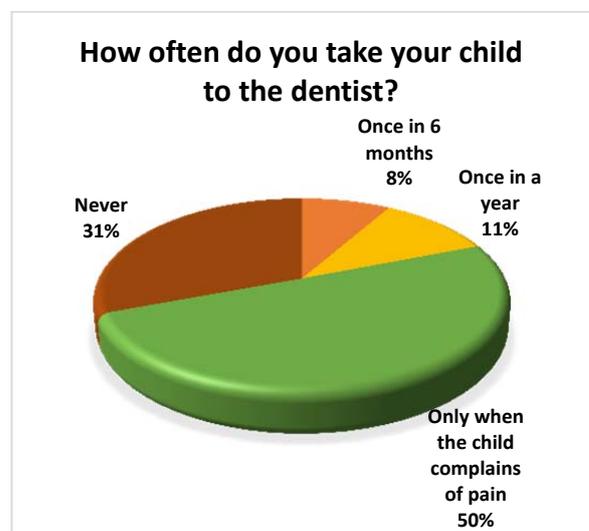
PIE-CHART – 4



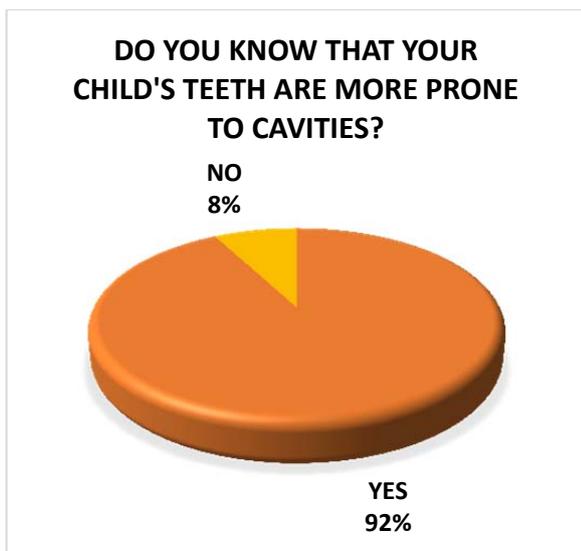
PIE-CHART – 7



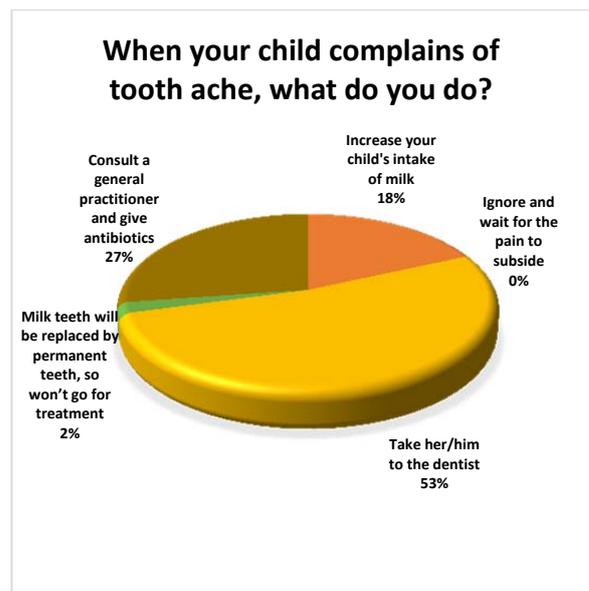
PIE-CHART – 5



PIE-CHART – 8



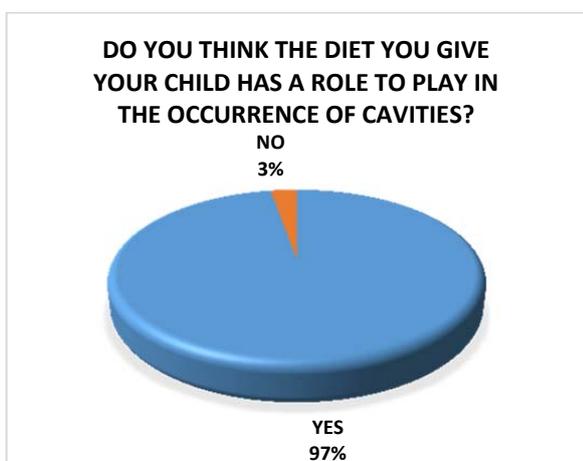
PIE-CHART – 6



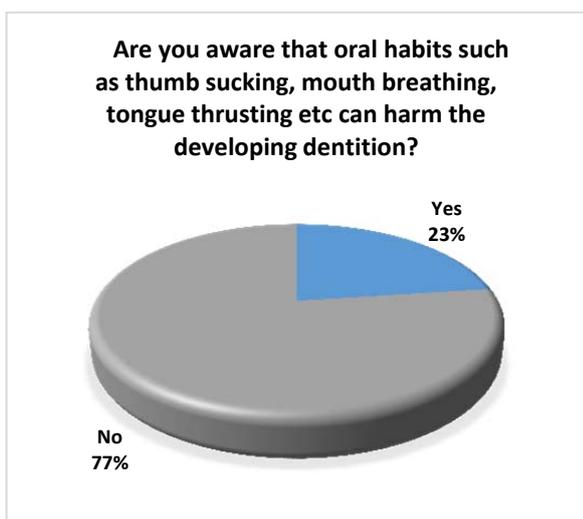
PIE-CHART – 9



PIE-CHART – 10



PIE-CHART – 11



PIE-CHART – 12

Among the subjects, when they were asked about what they would do when their child complains of tooth ache, 53% did the right thing by taking their child to the dentist, about 27% took the choice of consulting a general practitioner and 18% felt that they would increase their child's intake of milk (Pie-chart 9). Only about 10% of the parents knew the

right age at which their child should be taken to the dentist (Pie-chart 10). About 389 of the 400 (97%) agreed that the diet they give their child plays a role in their oral hygiene (Pie-chart 11) and only 23% of the subjects were educated about the fact that oral habits such as thumb sucking, mouth breathing, tongue thrusting etc., affect their child/children's developing dentition (Pie-chart 12).

### DISCUSSION

The rationale of this study is to improve and motivate the parents and children regarding their dental health and treatment needs. Children under the age of 5 years generally spend most of their time with parents and guardians, especially mothers, even when they attend preschools or nurseries. These early years involve "primary socialization" during which the earliest childhood routines and habits are acquired. [9] The parent's support and involvement in child's oral health are important in influencing the dental health of the child. [10] This study provides important new data to the evidence base related to knowledge of mothers toward oral hygiene of children aged 3 months – 10 years. The survey shows that the parents were relatively knowledgeable regarding their children's oral health.

The literacy level of the parents is considered important for assessing oral health status as it relates to the level of information about the importance of the oral health of children in the society. It is generally assumed that a well-educated person is generally more aware of the overall health. [11] The social status of a family plays an important role as it helps to analyse the resources they have access to. A majority of the parents did not have knowledge about the correct period of their child/children's teeth eruption in the oral cavity and this percentage of people matched with the results of the 2015 paper written by Abdulrahman Alshehri. [6] But, it was encouraging to know that the majority of the parents knew the right time when the child's first tooth falls off. This shows that parents became more aware of their children's oral health as the child grew up. The parents with proper oral health knowledge and attitude are likely to positively influence their children's oral health, this is apparent in the results which state that almost the similar percentage of children and parents brushed twice a day. The parents who brushed twice a day mostly had a child/children who brushed twice a day. A similar case is seen in the dental visits of parents and their children. The majority of parents were neither keen on spending money for their child's oral health and taking them to the dentist for a regular check-up nor going for regular dental visits themselves. More parents from high socio-economic status than the ones from low economic status take their children to the dentist at least once a year. This could be attributed to pressure on middle SES mothers to allocate financial resources to other matters. [2] Wyne (2003) in his study of Saudi early childhood caries children has reported that the mean age of first dental visit in these children was much higher than the recommended age for the first dental visit. [12] The present recommendations for first dental visit range from as soon as the first teeth erupt to one year of age. [13] Providing anticipatory guidance regarding dental

and oral development, fluoride status, non-nutritive sucking habits, teething, injury prevention, oral hygiene instruction, and the effects of diet on the dentition are also important components of the initial visit. [14] Almost 66% of the parents confessed that they do not monitor their child/children's brushing. Supervision of brushing was seen as important due to an understanding that the child lacked manual dexterity and brushing on their own would be somewhat ineffective. [7]

Only 2% of the subjects had a negative opinion on deciduous teeth in case of toothache which was encouraging to know. Parents do not know the value of the deciduous teeth as they think that it's going to shed and be replaced by new permanent teeth. They readily agree that they would give importance to permanent teeth than spend money on teeth that's eventually going to fall off. Another negative outcome was the 18% of parents who took the choice of increasing their child's intake of milk when they complained of a toothache. Milk, even though nutritive, contains sugars that can adhere to a child's teeth for long periods and when the child is already at risk of caries, it is advisable to visit the dentist than increase the intake of milk. Drinking milk at night, when the salivary flow is low, is worse. The milk does not get washed away by the saliva and, hence, stays in the mouth for a longer time. [15] Adair et al. [16] state, "children are more likely to be caries-free if their teeth are brushed twice daily with fluoride toothpaste, with parental involvement and in an environment where sugar is controlled".

Only 10% of the participants knew the right age for a child's first dental visit. This evidence clearly explains the increasing cases of early childhood caries in India. The majority of the parents were not aware of the oral habits such as thumb sucking, mouth breathing etc., causing harm to the developing dentition. After permanent teeth come in, sucking may cause problems with the proper growth of the mouth and alignment of the teeth. It can also cause changes in the roof of the mouth. [17] Providing anticipatory guidance regarding dental and oral development, fluoride status, non-nutritive sucking habits, teething, injury prevention, oral hygiene instruction, and the effects of diet on the dentition are also important components of the initial visit. [2]

This present study has gathered information on the oral health knowledge and attitude of parents regarding their child/children's deciduous teeth. Some of the answers were appropriate but it was evident that parents were still uneducated about some important facets of their child's oral health.

### CONCLUSION

Parents can play a very important role in promoting good oral habits, preventing oral diseases, thus, positively influencing their children. This is reason enough for them to be well educated about oral hygiene. Parents often tend to overlook their child's oral health when compared to their overall health. A parents' knowledge about their kids' oral health and its importance and methods to promote are poor and there is an awareness among the parents, but with

insufficient knowledge. [6] This study shows that the parents of high socioeconomic status have comparatively more knowledge about children's oral health than the parents of middle socio-economic status. The present study also emphasizes the need to initiate more dental awareness programs for parents and their children at the preschool setups to assess as well as to spread the oral health awareness in the Indian society. [11] Health professionals, who are the first to come into contact with expectant and new mothers, need to disseminate appropriate and accurate information about oral health care for infants, especially the use of nursing bottle at night, the value of tooth brushing and regular dental visits. [18]

### REFERENCES

- [1] Hooley M, Skouteris H, Boganin C, Satur J, Kilpatrick N., Parental influence and the development of dental caries in children aged 0-6 years: a systematic review of the literature. *J Dent.* 2012 Nov;40(11): pp. 873-85.
- [2] Ali M Al-Zahrani, Abdullah S Al-Mushayt, Meshari F Otaibi, Amjad H Wyne, Knowledge and attitude of Saudi mothers towards their preschool children's oral health, *Pak J Med Sci.* 2014 Jul-Aug; 30(4): pp. 720-724.
- [3] Rothnie JJ, Walsh CA, Wang MJ, Morgaine KC, Drummond BK. An exploratory study of pregnant women's knowledge of child oral health care in New Zealand. *N Z Dent J.* 2012;108(4): pp. 129-133.
- [4] Ashkanani F, Al-Sani M. Knowledge, attitude and practices of caregivers in relation to oral health of preschool children. *Med Princ Pract.* 2013;22(2): pp. 167-172.
- [5] Tinanoff N, Resine S. Update on early childhood caries since the surgeon General's report. *Acad Pediatr.* 2009;9: pp. 396-403.
- [6] Abdul Rahman Alshehri, V.S. Nasim. Infant oral health care knowledge and awareness among parents in Abha city of Aseer region, Saudi Arabia. *The Saudi Journal for Dental Research,* 2015; 6, pp. 98-101.
- [7] Rahul Naidu, June Nunn, Maarit Forde, Oral healthcare of preschool children in Trinidad: a qualitative study of parents and caregivers, *BMC Oral Health.* 2012; 12: 27.
- [8] Gross GJ, Howard M. Mother decision-making processes regarding health care for their children. *Public health Nurs* 2001;18(3): pp. 157-68.
- [9] Holm Ak. Caries in pre-school children: international trends, *J Dent* 1990; pp. 291-5
- [10] Paunio P, Rautava P, Sillanpää M, Kaleva O. Dental health habits of 3-year-old Finnish children. *Community Dent Oral Epidemiol* 1993;21: pp. 4-7
- [11] Bhavneet Kaur, Evaluation of oral health awareness in parents of preschool children *Indian J Dent Res,* 20(4), 2009, pp. 463-465
- [12] Wyne AH. Oral hygiene practices and first dental visit among early childhood caries children in Riyadh. *Pak Oral Dent J* 2003;23: pp.161-166.
- [13] American Academy of Pediatric Dentistry. Policy on early childhood caries (ECC): Classifications, consequences, and preventive strategies. Reference Manual 2012-2013. *Pediatr Dent* 2013;34: pp.50-52.
- [14] American Academy of Pediatric Dentistry. Guideline on Infant Oral Health Care. Reference Manual 2012 - 2013. *Pediatr Dent* 2013;34: pp.132-136.
- [15] Kids and Cavities, *The Straits Times, Mind Your Body - 31 January 2013 Issue*
- [16] Adair PM, Pine C, Burnside G, Nicoll AD, Gillet A, Anwar S, et al: Familial and cultural perceptions and beliefs of oral hygiene and dietary practices among ethnically and socio-economically diverse groups. *Comm Dent Health* 2004, 21 (Suppl); pp 102-111
- [17] Mouth Healthy, Thumb Sucking, American Dental Association, 2016
- [18] BS Suresh, TL Ravishankar, TR Chaitra, AK Mohapatra, V Gupta, Mother's knowledge about pre-school child's oral health, *Journal of Indian Society of Pedodontics and Preventive Dentistry,* Vol. 28, No. 4, October-December, 2010, pp. 282-287