

# INFANT ORAL HEALTH AWARENESS AND KNOWLEGE AMONG PREGNANT WOMEN AND MOTHERS - A QUESTIONNAIRE STUDY

Shabana Bowsiya<sup>1</sup>, Dr. Naveen Kumar<sup>2</sup>

<sup>1</sup>BDS 2nd year, <sup>2</sup>Senior Lecturer  
Saveetha Dental College,  
Saveetha University, Chennai.

**Abstract:** The aim of the study is to assess the knowledge and awareness about infant oral health among pregnant women and mothers. In this study, a sum of 400 women, belonging different socio-economic status were selected of which 200 were housewives and 200 were employed mothers. A self-administered questionnaire was given comprising of questions related to proper feeding habits, correct age of eruption of first tooth, nocturnal bottle feeding. In this study, optimum feeding practice was seen only among 25% of the housewives and 15% of the working mothers. The use of finger to cleanse the oral cavity was prevalent among 66% of the housewives and 35% of the employed mothers. Only 33% of the housewives and 50% of the employed mothers had correct knowledge on the age of eruption of first tooth in the oral cavity. 65% of the housewives and 26% of the employed women felt that dental problems are of less importance than other health problems. Only 31% of the housewives and 31% of the employed mothers were aware that dental caries is a transmissible disease. Hence, there is a significant lack of awareness among both the groups. There is an increased need of awareness among both the groups.

**Keywords:** Infant, early childhood caries, nocturnal bottle feeding

## Introduction

Dental caries is a preventable disease. It can be reversed and potentially stopped with proper feeding habits in children. Very young children are dependent on their mothers to attend their oral hygiene and to feed them. The health status of mothers and children are closely linked (1). Studies have shown that parents believe milk teeth of their children will exfoliate and do not require any care (2). Problems in milk teeth can distress children and cause difficulty in eating and speech. Early childhood caries is one of the commonest type of caries among infants and toddlers caused by *Staphylococcus mutans*. It initially presents as a smooth-surface carious lesion and eventually spreads to the occlusal surface of the teeth. The decay rapidly spreads to other primary teeth and eventually results in destruction of permanent dentition (3). Using phenotyping and genotyping methods studies have strongly suggested that mother is the major primary source of infection for children. Establishment of *S.mutans* in the oral cavity due to improper feeding practices by mothers increase the risk for the development of early childhood caries in infants and toddlers (4). It is important for the mother to have adequate knowledge about the right oral health practices which will be imbibed by the infants.

## Materials and methods:

A sum of 400 women was selected of which 200 were housewives and 200 were employed. A self-administered questionnaire comprising of 12 questions was distributed. The first part of the questionnaire included demographic information regarding mother's age and level of education. The second part had questions related to the awareness of mothers regarding infant feeding practice, correct age of eruption of first teeth and first dental visit.

## Result:

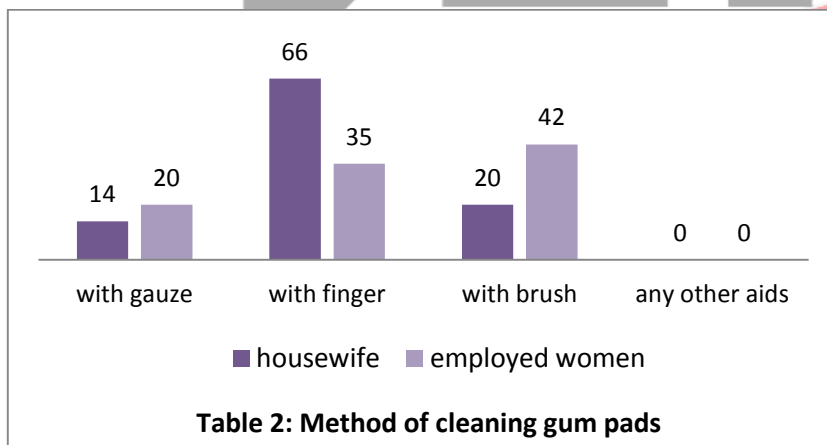
The data obtained was from subjects belonging to various socioeconomic status. The data was analyzed using descriptive statistics. Most of the mothers belonged to moderate-income and nuclear families (Table 1).

	Housewife (%)	Employed(%)
<b>Age</b>		
<b>16-20 years</b>	10	11
<b>21-25 years</b>	18	33
<b>26-30 years</b>	29	28
<b>Above 30 years</b>	43	28
<b>Number of children</b>		

<b>Primigravidae</b>	14	12
<b>One child</b>	39	58
<b>More than 2</b>	47	30
<b>Level of education</b>		
<b>Illiterate</b>	12	5
<b>Middle and secondary education</b>	48	45
<b>Senior secondary, graduate and above</b>	40	50
<b>Annual income</b>		
<b>Less than 1 lac per annum</b>	25	10
<b>1-2 lac per annum</b>	33	35
<b>2-4 lac per annum</b>	30	33
<b>More the 4 lac per annum</b>	12	22
<b>Family size</b>		
<b>Joint family</b>	38	27
<b>Nuclear family</b>	62	73

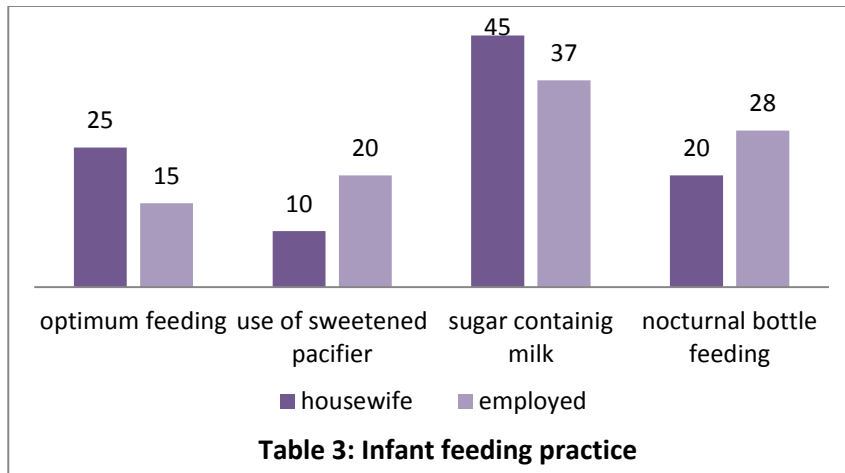
#### Oral cleansing methods

About 66% of housewives and 35% of the employed women believed that the gum pads of the children should be cleaned with finger. Cleaning of the gums with brush was practiced by 20% of housewives and 42% of the employed women. Use of gauze was supported least by both the groups (table 2).



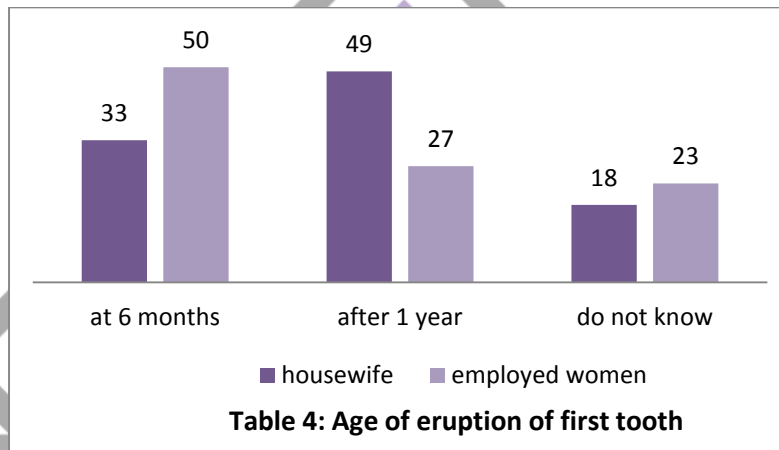
#### Feeding practices

Optimum feeding (according to infant guidelines) of 8 to 10 times/day was seen followed by 25% of housewives and 15% of the employed women. Majority of the housewives and the employed mothers fed their children with sugar containing milk. About 20% of the housewives and 28% of the working mothers practiced nocturnal bottle feeding. Use of sweet pacifier was seen only among 10% of housewives and 20% of the employed women (table 3).



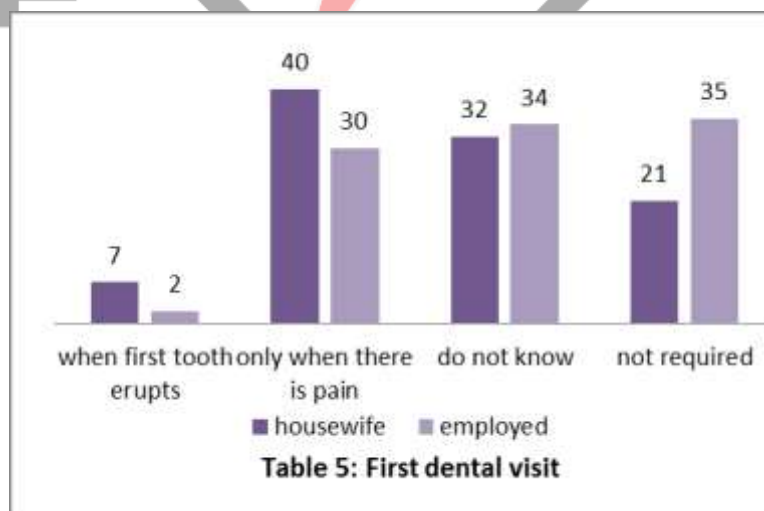
**Knowledge on eruption of teeth**

Working mothers (50%) had better knowledge on the correct age of eruption of first tooth compared to housewives (33%) (Table 4).

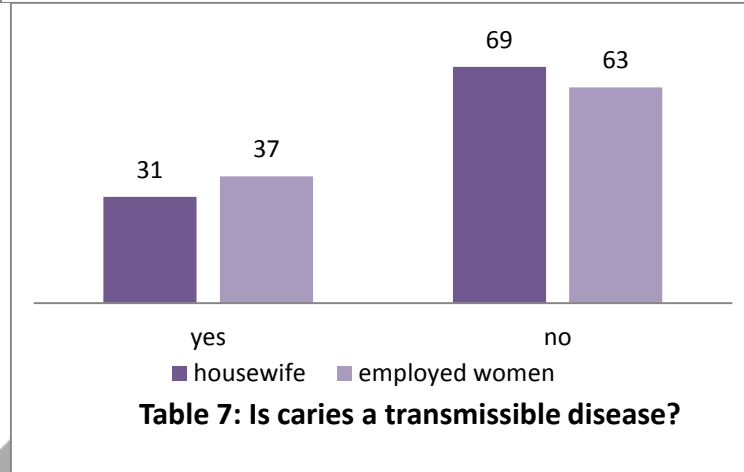
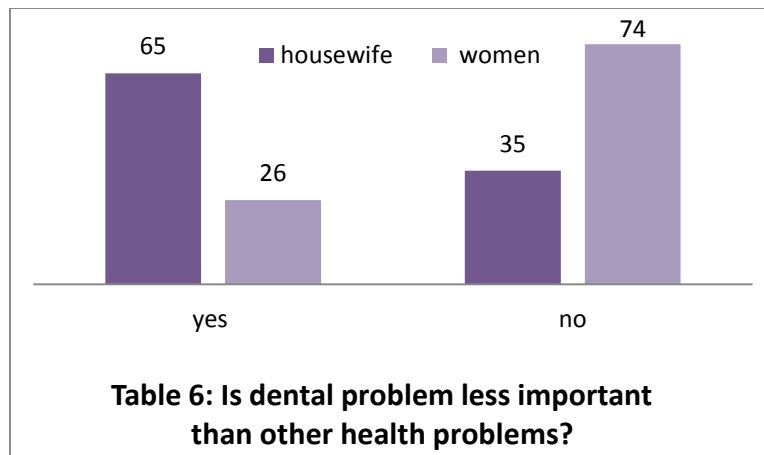


**First dental visit**

The knowledge about the first dental visit was poor among both the groups. About 40% of the housewives and 30% of the working mothers felt that dental visit is necessary only if there is pain. Only about 7% of the housewives and 2% of the working mothers reported that the first dental visit is when the first tooth erupts in the oral cavity (Table 5).



Most of the housewives (65%) felt that dental problems is of less importance when compared to other health problems while the employed mothers (74%) felt it is of equal importance (Table 8). Majority of both of groups did not know that dental caries is a transmissible disease (Table 7).



### Discussion

Breastfeeding is known to provide psychological benefits, immunity and nutritional benefits to the infant. It is recommended by the WHO that infants should be exclusively breast fed up to the 2 years of age (8). Bottle feeding is a major risk factor for the development of dental caries (table 3). There is a need to educate the mothers and emphasize the importance of proper feeding practices. In this study, nocturnal bottle feeding was seen among employed mothers. There was a low prevalence of sweetened pacifier. However, among the two groups use of sweet pacifier was prevalent among employed mothers (20%). Majority of the housewives considered that dental problems are of less importance compared to other health problems (table 6). Dental caries is highly transmissible infectious disease. Children of mothers with high levels of mutans streptococci are a greater risk. Child-rearing habits which facilitate saliva transfer from adults to the child, such as sharing of food and utensils and habits which involve close contact, such as breast feeding and sleeping beside the mother, were also significantly associated with colonization of streptococci mutans (5). In this study, significant lack of awareness was seen among the housewives (69%) and working mothers (53%) on caries being a transmissible disease.

### Conclusion

Early childhood caries is a serious dental problem among infants. The study concludes that there is a significance lack of knowledge and awareness among the mothers. Mothers need to be educated and trained about proper feeding habits and the importance of first dental visit. Awareness programs should be organised periodically in every locality. Bottle feeding is highly linked with early childhood caries (1). This can help educate the society in preventing caries in infants. Preventive dental care should begin early in child's life and this can be achieved only by educating the mothers. A study done by Moulana et al (6) and Chan et al (7) suggested that greater would be the chances of being caries-free, if the child visits the dentist at an earlier age. The quality of the child oral health highly depends on the age at which the first dental visit takes place (9). A mother's knowledge and efficacy plays a vital role in infant's life (10).

### References

- 1) Nagaraj, A., & Pareek, S. Infant Oral Health Knowledge and Awareness: Disparity among Pregnant Women and Mothers visiting a Government Health Care Organization. *International Journal of Clinical Pediatric Dentistry*, 2012, 5(3), 167–172.
- 2) Suresh BS, Ravishankar TL, Chaitra TR, Mohapatra AK, Gupta V. Mother's knowledge about pre-school child's oral health *Journal Of Indian Society Of Pedodontics And Preventive Dentistry*. 2010; 28:282-287.
- 3) Robert J. Berkowitz, DDS. Causes, Treatment and Prevention of Early Childhood Caries: A Microbiologic Perspective. *Journal of the Canadian Dental Association*. 2003, 69 ( 5), 304- 307b.
- 4) Berkowitz RJ. Mutans streptococci acquisition and transmission. *Peadiatr Dent* 2006;28:106-9
- 5) B.S. Talekar, R.G. Rozier, G.D. Slade, S.T. Ennett. Parental perceptions of their preschool-aged children's oral health. *J Am Dent Assoc*, 136 (2005), pp. 364–372

- 6) Moulana SA, Yashoda R, Puranik MP, Hiremath SS, Gaikwad R. Knowledge, attitude and practices towards primary dentition among the mothers of 3-5 year old preschool children in Bangalore city. *J Indian Assoc Public Health Dent.* 2012;19:83-92.
- 7) Chan SC, Tsai JS, King NM. Feeding and oral hygiene habits of preschool children in Hong Kong and their caregiver's dental knowledge and attitudes. *Int J Paediatr Dent.* 2002;12:322-31.
- 8) Moimaz SA (Department of Pediatric and Preventive Dentistry, Araçatuba School of Dentistry, São Paulo State University (UNESP), Brazil), Zina LG, Saliba NA, Saliba O. Association between breastfeeding practices and sucking habits: A cross-sectional study of children in their first year of life. *J Indian Soc Pedod Prevent Dent* 2008 Sep; 26(3):102-106.
- 9) Widmer R. The first dental visit: an Australian perspective. *Int J Paediatr Dent.* 2003; 13:270.
- 10) Finlayson, T.L., Siefert, K., Ismail, A.I., Delva, J., Sohn, W. Reliability and validity of brief measures of oral health-related knowledge, fatalism, and self-efficacy in mothers of African American children. *Pediatr Dent,* 2005; 27: 422-8.

