

## ORIGINAL ARTICLE

### Mothers' knowledge and awareness of preschoolers' oral hygiene and the importance of their first dental visit in Riyadh, Saudi Arabia

Yasmine Tarek Ahmed<sup>1</sup>, Hour Alowa<sup>2</sup>, Yaqeen Alnemer<sup>3</sup>, Furat Alsultan<sup>4</sup>, Aseel Alshaib<sup>5</sup>, Masoma Alherz<sup>6</sup>

<sup>1</sup>Lecturer, Restorative Department, Riyadh Elm University, Riyadh, Kingdom of Saudi Arabia

<sup>2-6</sup>Intern, Riyadh Elm University, Riyadh, Kingdom of Saudi Arabia

#### ABSTRACT:

**Aim:** The aim of this study is to assess Saudi mothers' knowledge and awareness of preschoolers' oral hygiene and the importance of their first dental visit. **Materials and Methods:** A cross-sectional survey was conducted in Riyadh Elm University hospitals, Riyadh, Kingdom of Saudi Arabia. An online questionnaire was distributed to all mothers of children aged 6 months to 3 years. Data were analyzed using SPSS Version 23. Descriptive statistics were performed to present the overview of the findings. **Results:** A total of 639 participants responded to the survey. There was no statistically significant association between knowledge and awareness with demographic characteristics. Only 39.6% reported that the first dental visit for their child should be at 1 year. **Conclusions:** In conclusion, Saudi mothers in Riyadh city regardless of their educational level are in constant consciousness about children oral health situation and regarding the importance of primary teeth.

**Key words:** Mother, Knowledge, Awareness, Preschooler, Oral hygiene

Received: 8 November, 2019

Revised: 19 November, 2019

Accepted: 26 November, 2019

**Corresponding author:** Yasmine Tarek Ahmed, Lecturer, Restorative Department, Riyadh Elm University, Riyadh, Kingdom of Saudi Arabia

**This article may be cited as:** Ahmed YT, Alowa H, Alnemer Y, Alsultan F, Alshaib A, Alherz M. Mothers' knowledge and awareness of preschoolers' oral hygiene and the importance of their first dental visit in Riyadh, Saudi Arabia. *Int J Res Health Allied Sci* 2019; 5(6):56- 59.

#### INTRODUCTION

Mothers play a central role in giving children the information and encouragement needed for healthy lives.<sup>1</sup> Oral health is an integral component of general health that plays an essential role in the life of a child. Oral health needs to be maintained from early in life and mothers are the primary and important source of care for the children. Therefore, mothers should have a sound knowledge of importance of primary teeth and oral hygiene.<sup>2</sup> There is an association between oral health knowledge, age, and the education level of mothers, which are directly linked to the status of their children's oral health.<sup>3-4</sup>

First dental visit is a significant milestone in the child's life. Studies have suggested early dental visits for children should ideally be before completion of 12 months of age.<sup>5-6</sup> An early dental visit will help the

dentist provide anticipatory guidance, parent counseling, and diet counseling; and motivate parents towards prevention-oriented interventions. During this early dental visit, parents can be trained to perform active preventive measures which can help avoid severe lesions later in life.<sup>7</sup> The aim of this study is to assess Saudi mothers' knowledge and awareness of preschoolers' oral hygiene and the importance of their first dental visit.

#### MATERIALS AND METHODS

A cross-sectional survey was conducted in Riyadh Elm University (REU) hospitals, Riyadh, Kingdom of Saudi Arabia (KSA). An online questionnaire was distributed to all mothers of children aged 6 months to 3 years. Mothers of children older than 3 years and with special needs children were excluded. The data were entered

into the computer and analyzed using the SPSS computer software (Statistical Package for the Social Sciences, version 23.0, SPSS Inc., Chicago, IL, USA). Descriptive statistics were performed to present the overview of the findings.

**RESULTS**

A total of 639 Saudi mothers participated in this survey. Table 1 shows demographic characteristics of the participants. The majority of the participants think that prolonged breast feeding does not cause dental caries (88%) and prolonged bottle feeding causes dental caries (72.5%). Most of the participants were aware of the importance of milk teeth in their child's life (79.2%) and have taken their child to a dentist (72.8%). Just over

half (55.8%) do not believe that caries is a transmissible disease and 44.2% think caries is a transmissible disease (Table 2).

Most of the participants reported that putting baby to bed with a bottle in mouth is of no harm to teeth (86.1%), babies who do not use bottles cry more (67.1%), children should see a dentist only when they have a dental problem (75.1%), and frequently giving juice is of no harm to child's teeth (89.9%) (Table 3). Just under half (48.1%) the participants reported that children brush twice daily. The majority (94.6%) would take their child to pediatric dentist for toothache. Only 39.6% reported that the first dental visit for their child should be at 1 year.

**Table 1. Demographics**

		Frequency (n)	Percent (%)
Age of mother	Less than 20 years	12	1.9
	21-30 years	193	30.4
	31-40 years	237	37.3
	More than 40 years	193	30.4
Social status	Married	613	96.8
	Single	20	3.2
Educational level	Incomplete high school	28	4.4
	High school	165	25.9
	Bachelor degree	365	57.4
	Postgraduate degree	44	6.9
	Other	34	5.4
Occupation	Housewife	269	42.4
	Health care	96	15.1
	Business	25	3.9
	Teacher	123	19.4
	Engineer	11	1.7
	Administrative	42	6.6
	Other	68	10.7

**Table 2. Knowledge and awareness of the mothers**

		Frequency (n)	Percent (%)
Do you think prolonged breast feeding causes dental caries?	Yes	76	12.0
	No	559	88.0
Do you think prolonged bottle feeding causes dental caries?	Yes	458	72.5
	No	174	27.5
Are you aware of the importance of milk teeth in your child's life?	Yes	502	79.2
	No	132	20.8
Have you ever taken your child to a dentist?	Yes	463	72.8
	No	173	27.2
Do you think caries is a transmissible disease?	Yes	281	44.2
	No	355	55.8

**Table 3. Mothers knowledge towards dental awareness**

		<b>Frequency (n)</b>	<b>Percent (%)</b>
Frequent feeding with milk or formula is of no harm to baby's teeth	Agree	129	20.3
	Disagree	506	79.7
Letting baby breast-feed all night is of no harm to baby's	Agree	348	55.0
	Disagree	285	45.0
Putting baby to bed with a bottle in mouth is of no harm to teeth	Agree	88	13.9
	Disagree	546	86.1
Bottle feeding the child after 12 months of age is harmful for teeth	Agree	414	65.8
	Disagree	215	34.2
Breast feeding is important for the health of child's teeth	Agree	614	97.0
	Disagree	19	3.0
Babies who do not use bottles cry more	Agree	207	32.9
	Disagree	423	67.1
Children should see a dentist latest by first birthday	Agree	396	62.8
	Disagree	235	37.2
Children should see a dentist only when they have a dental problem	Agree	157	24.9
	Disagree	474	75.1
Problems with baby teeth will affect child's permanent teeth	Agree	496	78.6
	Disagree	135	21.4
Decayed teeth can have effect on child's general health	Agree	591	93.7
	Disagree	40	6.3
Babies need their mouths cleaned even before eruption of teeth	Agree	502	79.3
	Disagree	131	20.7
Using fluoridated toothpaste helps to prevent tooth decay	Agree	498	78.7
	Disagree	135	21.3
Mother's diet during pregnancy will affect baby's teeth	Agree	401	63.8
	Disagree	228	36.2
Frequently giving juice is of no harm to child's teeth	Agree	64	10.1
	Disagree	569	89.9

### Discussion

The oral health knowledge of the parents and or guardians establishes the oral health and related habits of the children during infancy and maintained throw out the preschool years.<sup>8</sup> Parents especially the mothers play an important role for their children. Providing preventive dental health care should begin early in child's life.<sup>9</sup> Parental belief and behavior towards dental health of their children differs among families due to cultural and ethnic background.<sup>2</sup> The present study showed no statistically significant association between knowledge and awareness with demographic characteristics.

Among 639 mothers included in this study, most of the mothers think that problems of baby teeth will affect child's permanent teeth. This finding is in contrast with a previous study which reported most of the mothers said that cavities in baby's teeth do not matter.<sup>3</sup> Majority of the mothers in the current study had knowledge about the dietary and feeding practices. Similar results were reported by previous studies.<sup>10-11</sup> Most of the mothers were aware of the importance of milk teeth in

their children life. On the contrary, respondents of a similar study in the past had partial knowledge on the importance of deciduous teeth.

### Conclusion

In conclusion, Saudi mothers in Riyadh city regardless of their educational level are in constant consciousness about children oral health situation and regarding the importance of primary teeth. Hence, it is good to carry out more of awareness programs in the city to raise more education about importance of first dental visit as well as value of a pediatric dentist for their children. Pediatric dental care ensures child's primary teeth stay healthy and free of decay and other dental diseases. Educating mothers on child dental care will promote lifelong good oral hygiene habits and will bring down the prevalence of oral diseases considerably.

### References

1. Shetty, R. M.; Deoghare, A.; Rath, S.; Sarda, R.; Tamrakar, A., Influence of mother's oral health care

- knowledge on oral health status of their preschool child. *Saudi Journal of Oral Sciences* 2016, 3 (1), 12.
2. Sultan, S.; Ain, T. S.; Gowhar, O., Awareness of mothers regarding oral health of their children in Kashmir, India. *Int J Contemp Med Res* 2016, 3, 2169-71.
  3. Suresh, B.; Ravishankar, T.; Chaitra, T.; Mohapatra, A.; Gupta, V., Mother's knowledge about pre-school child's oral health. *Journal of Indian Society of Pedodontics and Preventive Dentistry* 2010, 28 (4), 282.
  4. Abiola Adeniyi, A.; Eyiotope Ogunbodede, O.; Sonny Jeboda, O.; Morenike Folayan, O., Do maternal factors influence the dental health status of Nigerian pre-school children? *Int. J. Paediatr. Dent.* 2009, 19 (6), 448-454.
  5. Widmer, R., The first dental visit: an Australian perspective. *Int. J. Paediatr. Dent.* 2003, 13 (4), 270-270.
  6. Rayner, J., The first dental visit: a UK viewpoint. *Int. J. Paediatr. Dent.* 2003, 13 (4), 269-269.
  7. Meera, R.; Muthu, M.; Phanibabu, M.; Rathnaprabhu, V., First dental visit of a child. *Journal of Indian Society of Pedodontics and Preventive Dentistry* 2008, 26 (6), 68.
  8. Al-Oufi, A. A.; Omar, O. M., Oral Health Knowledge and Practices of Mothers toward Their Children's Oral Health in Al Madinah. *Journal of Advances in Medicine and Medical Research* 2016, 1-10.
  9. Dhull, K. S.; Dutta, B.; Devraj, I. M.; Samir, P., Knowledge, Attitude, and Practice of Mothers towards Infant Oral Healthcare. *International journal of clinical pediatric dentistry* 2018, 11 (5), 435.
  10. Lin, H.; Wong, M.; Wang, Z.; Lo, E., Oral health knowledge, attitudes, and practices of Chinese adults. *Journal of Dental Research* 2001, 80 (5), 1466-1470.
  11. Kumar, R. P.; John, J.; Saravanan, S.; Arumugham, I. M., Oral health knowledge, attitudes and practices of patients and their attendants visiting College of Dental Surgery, Saveetha University, Chennai. *Journal of Indian association of public health dentistry* 2009, 7 (13), 43.