

# Knowledge and attitude toward oral health practice among the parents in Riyadh city

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## ABSTRACT

**Introduction:** Parents are directly responsible for the dental health of their offspring and can play an important role in preventing oral diseases in children. Parents and teachers are the significant persons that have a great influence on young people. **Aim:** To assess knowledge and attitude towards oral health practice among the parents. **Materials and Methods:** The study design was cross-sectional study involving 303 participants male and female from Saudi Arabia and another Arab nationality. Electronic Questionnaires were distributed through popular social media involving Twitter, Facebook and some direct and indirect messages through the email. **Result:** 85% of the parents agreed that primary teeth should receive the same care as the permanent teeth. Almost half of the participants reported that their children should start brushing in age less than one year. Majority of the participants (77%) had the right knowledge regarding the use of fluoride. The most common cleaning aid of the teeth is toothbrush. **Conclusion:** Majority of the parents in the study showed the right level of knowledge regarding use of fluoride; this was also reported in many other studies. A high percentage of this study and other studies show that the parents care for their childrens' primary teeth similar to the care they would show to their permanent teeth.

**Key words:** Attitude, children, knowledge, oral hygiene, parent


## INTRODUCTION

Parents are directly responsible for the dental health of their offspring and can play an important role in preventing oral diseases in children. They clean teeth of their children, teach them proper hygiene and dietary habits, organize professional dental care.<sup>[1]</sup> Dental floss and tooth brushing are the most commonly performed oral self-care behaviour.<sup>[2]</sup> The children tend to learn the good practice in oral hygiene

by observing the adults attitudes and actions and by listening to their words. Child education begins long time before the dentist meets him directly. The best place for the information is in the classroom, combining the good practices in their home. Parents, teachers and dentists are mainly responsible for oral health good practices. The children learn by observing, perceiving and in the same time learn by doing. The educational intervention supposes the existence of communication relation. The aim of this study was to assess knowledge and attitude towards an oral health practice among the parents.<sup>[3]</sup>

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Access this article online	
Quick Response Code:	Website: www.jiadsr.org
	DOI: 10.4103/2229-3019.192473

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How to cite this article: Almulhim B, Alamro B. Knowledge and attitude toward oral health practice among the parents in Riyadh city. J Indian Acad Dent Spec Res 2016;3:14-6.

## MATERIAL AND METHOD

The study design was cross-sectional study involving 303 Participants male and female from Saudi Arabia and another Arab nationality. An anonymous self-administered electronic questionnaire was distributed amongst different websites in the World Wide Web, which gathered many of Saudi and non Saudi community. Electronic Questionnaires were distributed through popular social media involving Twitter, Facebook and some direct and indirect messages through the email. The questionnaires were filled out by the parents and their response was registered through Google document spreadsheet.

The study was conducted during the months of April -May 2010.

Statistical analysis was done in SPSS Program version 16. The Chi-Square Test was used to make a comparison between male and female parents in respond to the study variables.

Study variables include: the parents' attitude towards their children with respect to dental visit, oral and dental health and aids. The care of parents towards their children during their primary teeth period compared with the parents' care for permanent teeth. The knowledge of the parents about the fluoride and the importance of it, the proper time for dental visits, teeth cleaning aids.

## RESULT

Total of 303 participants answered to an electronic questionnaire including 46.53% of male and 53.47% of female. The educational background of most of the parents who answered the questionnaire was: graduate (56.44%), primary school (20.79%), illiterate (13.53%), and postgraduate (9.24%).

When parents were asked about the first visit of their children to the dentist, 37.95% reported that it should be at the age of 6-12 months. 24.1% of the fathers reported the age as 6-12 months, while 17.17% of the mothers reported that their children visit the dentist only when they have a problem. A very small percentage (4.62%) of fathers also believed that their children should visit the dentist only in case of a problem. There is a high statistical significance between fathers and mothers ( $p < 0.001$ ). The majority of all educated levels showed a tendency to let their children visit the dentists at age of 6-12 month, while most of the illiterate parents (6.3%) prefer visiting the dentist only when their children have a problem, a statistically significant difference between all educational groups ( $p = 0.047$ ).

When parents were asked whether they think primary teeth need dental care same as permanent teeth, 85.15% of parents, 35.97% fathers and 49.17% mothers, answered

in YES, while the minority of mothers (4.25%) answered in NO, with highly statistical significance between fathers and mothers ( $p < 0.001$ ). On the other hand the majority of all educated levels showed that the primary teeth need dental care as much as permanent teeth, while most of the illiterate parents (0.95%) agreed that primary teeth do not need dental care as permanents, with a statistically significant difference between all educational groups ( $p = 0.024$ ).

When parents were asked about the age at which they start brushing their children's teeth, 44.55% of the samples believe that it should be less than one year. 25.41% of fathers believe the same, while 20.46% of mothers reported that it should be 1-2 years of age. A minority of fathers (1.65%) consider that it should be 5 years and above of age, with highly statistical significance between fathers and mothers ( $p = 0.006$ ). On the other hand, the majority of all educated levels considered to start brushing their children's teeth in less than one year, while majority of the illiterate parents (4.62%) prefer brushing to start at age 1-2 years and 3-4 years, with a statistically significant difference between all educational groups ( $p = 0.01$ ).

When parents were asked whether they think that the fluoride prevents tooth decay 77.23% of the participants, 38.94% fathers and 38.26% mothers, answered in YES, while the minority of fathers (7.55%) answered NO, with no statistical significance between fathers and mothers ( $p = 0.595$ ). In contrast the majority of all educated levels agreed that the fluoride prevents tooth decay, while most of the illiterate parents (5.61%) think that fluoride does not prevent tooth decay, with a statistically significant difference between all educational groups ( $p = 0.001$ ).

When parents were asked about the various fluoride sources, 63.66% of parents, 25.08% fathers and 38.61% mothers, reported that the water and toothpaste (both) are the main sources of fluoride. The minority of mothers (0.95%) said that the water is the main source of fluoride, with highly statistical significance between fathers and mothers ( $p < 0.001$ ). On the other hand the majority of all educated levels reported that the water and toothpaste (both) are main sources of fluoride, while majority of the illiterate parents (0.66%) said that the water is the main source of fluoride with a statistically significant difference between all educational groups ( $p = 0.039$ ).

With respect to the regular check up of the child to a dentist, 36.63% of the parents reported that it should be once a year. 24.09% of fathers said that it should be once a year, while 22.11% of mothers believed that it should be twice a year. A small percentage (9.2%) of fathers reported that they do not visit a dentist unless the child has a problem, with highly statistical significance between fathers and mothers ( $p < 0.001$ ). On the other hand the majority of all educated levels showed a tendency to let regular check up of a child

to the dentist once a year, while majority of the illiterate parents (4.62%) prefer not to visit a dentist unless the child has some problem, with a statistically significant difference between all educational groups ( $p=0.002$ ).

With respect to the type of oral hygiene used, 82.18% of parents, 33.66% fathers and 48.51% mothers said that toothbrush is the most common used oral hygiene. A very small percentage (0.95%) of mothers reported the dental floss, with highly statistical significance between fathers and mothers ( $p<0.001$ ). On the other hand the majority of all educated levels reported that the toothbrush is common used, while most of the illiterate parents (0.66%) said they do not use it, with a statistically significant difference between all educational groups ( $p=0.006$ ).

When parents were asked about the type of toothbrush used, 65.35% of the samples, 27.35% fathers and 37.35% mothers, reported that soft type is the most common used, while the minority of mothers (0.66%) answered that the most common used is hard one, with highly statistical significance between fathers and mothers ( $p<0.008$ ). The majority of all educated levels reported that the most used toothbrush is the soft type, while most of the illiterate parents (0.66%) do not use the toothbrush at all, with no statistically significant difference between all educational groups ( $p=0.319$ ).

## DISCUSSION

In this study, 38% of the parents, reported that six months or at least twelve months are the first dental visit of their children, while the others studies carried out in Riyadh, reported that 62% of the respondent must visit a dentist every six month.<sup>[1]</sup> On the other hand, the study in Poland reported that the last dental appointment was during last six months.<sup>[5]</sup> So, both the studies under discussion agreed that six months are the most probable dates for children dental visit.

With respect to parent's attitude towards the importance shown in the care of primary teeth as permanent teeth, a significantly high percentage of the parents (85%) agreed that primary teeth need care same as the permanent teeth. This result was similar to another study (87%), which disagreed that deciduous teeth do not require care because they will eventually fall out.<sup>[5]</sup>

The parents in the study had shown the probable knowledge regarding the use of fluoride. 77% of the parents knew that fluoride material prevents tooth decay. This study was similar to other studies carried out in London and Riyadh (85% and 91.6%, respectively).<sup>[4-6]</sup>

In response to the knowledge of parents toward various fluoride resources, 63% of samples answered that both water

and toothpaste are the various sources of fluoride, while 8% reported that the only way of fluoride is water and 28% reported toothpaste only. The majority respondent (70%) in other study reported that toothpaste is the main resource of fluoride and a minority (15%) of them reported that water is the source of fluoride.<sup>[4]</sup>

More than one third (37%) of the parents often take their children for regular dental check up, while less than one third (28%) go for the dentist only when there is pain. In another study, more of the respondents (89%) go for regular dental check up,<sup>[5]</sup> whereas in other study (24%), pain is the main reason for their children dental visit.<sup>[4]</sup>

The types of oral hygiene aids that are used by parents are: Toothbrush (82%), Miswak (4%), Dental floss (3%), in sequence order. 10% of the parents do not use any of the mentioned oral hygiene aids. Consequently, other study carried out in Jeddah city, revealed that 84% of samples use Toothbrush, 40% use Miswak and 20% use Dental floss respectively.<sup>[7]</sup> While the study in Riyadh revealed that 51.1% use toothbrush and 1% use Miswak as the tooth cleaning aids.<sup>[4]</sup>

## CONCLUSION

Majority of the parents in the study showed the right level of knowledge regarding use of fluoride; this was reported in many other studies also. In the study, the most common type of toothbrush used is the soft type. A high percentage of this study and other studies show that the parents care about their children's primary teeth same as permanent teeth. The most popular ways of oral hygiene aids reported in this study and other studies are Toothbrush, Miswak and Dental floss.

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