

# Awareness of Mothers Regarding Oral Health of their Children in Kashmir, India

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## ABSTRACT

**Introduction :** Mothers are the primary and important source of care for the children. Mothers should have a sound knowledge of importance of primary teeth. Hence the study was planned to assess the mothers' awareness and knowledge towards the primary teeth in Srinagar city, India.

**Material and Methods:** A questionnaire based study was conducted in district hospitals of Srinagar, Kashmir. Women having children below 12 years of age and willing to participate, were included in the study. A self-administered questionnaire, written both in English and local language (urdu) was personally distributed to the mothers who had visited the district hospital for their own ailments.

**Results:** 32.6% of the mothers (163) viewed primary teeth as very important and majority 67.4% were unaware of such importance. Regarding oral hygiene maintenance, 405 (81.0%) of mothers preferred tooth brush and tooth paste to clean their child's teeth. For Frequency of brushing, majority of mothers 289(57.8%) reported that only once they ask their children to brush their teeth. Only 24% of mothers agreed that primary teeth caries can affect child's permanent teeth. 39.2% (196) of mothers agreed dental problem also to be important as other health problems, remaining 60.8% (304) considered dental problem less important than other health problems.

**Conclusion:** Educating mothers on child dental care will promote lifelong good oral hygiene habits and will bring down the prevalence of oral diseases considerably.

**Keywords:** Importance of primary teeth, oral health knowledge, mothers

caries prevalence.<sup>8</sup>

India being the developing nation, there is limited documented research on parental awareness, especially among mothers, regarding primary teeth. Hence, the aim of this study was to assess the mothers' awareness and knowledge towards the primary teeth in Srinagar city, India.

## MATERIAL AND METHODS

A questionnaire based study was conducted in district hospitals of Srinagar, Kashmir after taking the ethical approval from the local authorities. Female middle-aged patients were enquired about the age of their children and all the women having children below 12 years of age, willing to participate and gave informed consent, were included in the study. The study was planned and carried out for a period of three months; with an average of 5 to 10 patients per day; making a convenient sample of 500 patients. A self administered questionnaire, written both in English and local language (urdu) was personally distributed to the mothers who had visited the district hospital for their own ailments. Questionnaire containing 10 questions was pre-tested to ensure its validity. 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 deciduous dentition indicating different risks for dental disease among their children. The duly filled questionnaire was collected from the participants on the same day after 15 to 20 minutes. To check the reliability and internal consistency of the questionnaire Cronbach's alpha was used and it was found satisfactory.

## STATISTICAL ANALYSIS

Data was entered in Microsoft Excel 2007 software and analyzed. Descriptive statistics like percentage, mean, and SD (standard deviation) were computed for data presentation.

## RESULTS

Importance of milk teeth as perceived by mothers shows that only 32.6% of the mothers (163) viewed primary teeth as very important and majority 67.4% were unaware of such importance. 67.2% of mothers had taken their children to a

## INTRODUCTION

Examining the Unique Roles of the Mother and the Father, research has shown mothers spend more time in everyday caregiving activities with their children and are most often the primary source of physical comfort and safety for the child.<sup>1,2</sup> A study by Moallemi et al showed that mother's oral health knowledge and attitudes are positively related to their children's sound dentition.<sup>3</sup>

There is a common misconception among parents that milk teeth of their children will exfoliate and do not require good care as they fall off with time.<sup>4</sup> However, problems in milk teeth can distress the child leading to inability to chew or speak properly, pain and swelling.<sup>5</sup>

Oredugba F et al found inadequate knowledge of preventive oral health care on assessing mother's oral health knowledge towards their children.<sup>6</sup> Without basic knowledge of caries risk factors, importance of deciduous dentition and oral maintenance, employing disease preventive measures is difficult.<sup>7</sup> In an Attempt to promote oral health care in children there has been a significant decrease in the prevalence of dental caries in most of the industrialized countries. However, children from disadvantaged families have been found to have high

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dentist and majority of the participants (55.2%) take them to family dentist for toothache. In relation to parent’s awareness about the timing of the first dental visit, none of the participants were aware of this most important primary pediatric dental health care (Table-1).

Regarding oral hygiene maintenance, 405 (81.0%) of mothers preferred tooth brush and tooth paste to clean their child’s teeth. For Frequency of brushing, majority of mothers 289(57.8%) reported that only once they ask their children to brush their teeth (Table-2).

Only 24% of mothers agreed that primary teeth caries can affect child’s permanent teeth (Table-3). 39.2% (196) of mothers agreed dental problem also to be important as other health problems, remaining 60.8% (304) considered dental problem less important than other health problems Result also showed that awareness among mothers regarding the transmissibility of carious disease was inadequate. Majority of them 477 (95.4%) had no knowledge regarding it. When questioned for the awareness about the difference between a pediatric dentist and general dentist, 95.2% of parents were not aware of a pediatric dentist (Table-1).

Questionnaire also provided information regarding the lack of knowledge (97.6%) and awareness, associated with fluoride as a protective factor (table-1).55.2% of mothers visit general dentist in case of toothache in their child (Table-4).

**DISCUSSION**

Providing preventive dental health care should begin early in child’s life. Parental belief and behavior towards dental health of their children differs among families due to cultural and ethnic background.<sup>9,10</sup> Among 500 mothers included in this study only 163 (32.6%) viewed primary teeth important and 337 (67.4%) considered primary teeth unimportant. When questioned 67.4% of mothers told that primary teeth are temporary teeth and they

will fall and replaced by new set of teeth. The reason for poor knowledge of primary teeth might be due to beliefs or cultural based opinions.<sup>11,12</sup> This reflects an increasing demand to initiate dental awareness programs in this city. In a study conducted by Schroth RJ et al, authors found parents who believed primary teeth are important had children with significantly less decay.<sup>13</sup>

According to our study, 67.2% of children had not visited any dentist till now. Similar results were detailed by Abduljalil HS and Abuaffan AH in which (67.1%) children had never visited a dentist before. Reasons for lack of visit could be apprehension, high costs, accessibility. Study done by Moulaet al<sup>14</sup> and Chan et al<sup>15</sup> suggested that earlier a child visits to dentist, the greater would be the likelihood of being caries-free.

In our study majority (81.0%) of mothers used tooth brush and tooth paste for cleaning their children’s teeth and for frequency of brushing, 57.8% of mothers reported that only once a day before breakfast they ask their children to brush their teeth. These mothers reported that because they themselves have been encouraged to brush their teeth atleast once a day by their own parents, and hence establish once daily tooth brushing routines. Similar study shows that 91.1% of mothers ask their children to brush their teeth once a day.<sup>5</sup> Mothers’ own oral self-care behaviour has a clear positive influence on their children’s tooth-brushing behaviour and on their dental health.<sup>16</sup>

According to AAPD, the first dental visit should be with the eruption of the first primary tooth and no later than twelve months of age.<sup>17</sup> The most alarming aspect of our study was that none of the participants were aware about the child’s first dental visit. The reason might be the result of inappropriate efforts taken by dental professionals for the positive reinforcement of primary teeth and their treatment. The results of the present study differed from the findings by various studies, where majority were aware of the correct age for the first dental visit.<sup>18,19</sup> The future quality of child oral health is reflected by the age at which

Q No	Questions	Yes	No
1	Are you aware of the importance of milk teeth in your child’s life?	163 (32.6%)	337(67.4%)
2	Have you ever taken your child to a dentist?	164 (32.8%)	336 (67.2%)
3	Are you aware about child’s first dental visit at 6months/ at least 12 months of age?		500 (100%)
4	Is dental problem less important than other health problems?	304 (60.8%)	196 (39.2%)
5	Do you know caries is a transmissible disease?	23 (4.6%)	477 (95.4%)
6	Do you know fluorides prevent tooth decay?	12 (2.4 %)	488 (97.6%)
7	Do you know the difference between a pediatric dentist and a general dentist?	24 (4.8%)	476 (95.2%)

**Table-1:** Responses to the questions given by mothers

Frequency of tooth brushing?		
Once (frequency/percent)	Twice (freq/percent)	Do nothing (freq/percent)
289(57.8%)	131(26.2%)	80(16%)

**Table-2:** Frequency of toothbrushing

Do decayed milk teeth affect child’s permanent teeth?		
Yes (freq/percent)	No (freq/percent)	Don’t know ( freq/percent)
120(24%)	101(20.2%)	279(55.8%)

**Table-3:** Knowledge about primary teeth

What do you do if your child has a tooth ache?		
Give painkiller at home (freq/percent)	Take child to family dentist (freq/percent)	Take child to a pediatric dentist (freq/percent)
200 (40%)	276 (55.2%)	24(4.8%)

**Table-4:** First place of contact when pain occurs

a child visits the dentist for the first time.<sup>20</sup>

The observation of present study showed weakness in the knowledge of the effect of carious deciduous teeth on the permanent teeth (24%), mothers tend to neglect the care for primary teeth as they will be replaced. Our result is unlike other studies in which majority of participants agreed that problems in primary teeth can affect child's permanent teeth.<sup>21,22</sup>

Majority of the mothers (60.8%) considered dental problem less important than other health problems and only 39.2% disagreed. Oral health knowledge, attitude and behavior of parents can shape oral health behavior of their children.<sup>23</sup>

Since caries is a transmissible infectious disease, children of mothers with high levels of mutans streptococci, are at greater risk. Low level of awareness (4.6%) was observed in mothers about the fact that sharing of utensils can spread *S. mutans* which can cause caries in children, Sakai et al also reported the same observation.<sup>24</sup> In the present study, mother's knowledge regarding fluoride was found to be inadequate. The majority of mothers (97.6%) did not know that fluoride was helpful in preventing tooth decay, however only 2.4% (12) % agreed that fluoride prevented tooth decay. The same disappointing result was reported in many studies.<sup>25,26</sup>

When mothers were asked what do they do when pain occurs in their child, 55.2% parents stated that, they prefer general dentist. 40% mothers do self treatment by giving painkillers at home. Only 4.8% expressed that, pediatric dentists are trained to assess the oral cavity of young children.

On enquiring about the knowledge regarding the difference between a pediatric dentist and a general dentist, only (4.8%) were aware, whereas majority 95.2% of mothers did not know the difference. This shows the lack of knowledge about the value of pediatric dentist and his duties was evident. The reason for poor knowledge regarding pediatric dentist shows lack of community health awareness program and thereby in the mothers. Hence, awareness programmes should be developed for parents especially mothers to encourage them to seek preventive primary teeth health care.

Moreover, mother age had no significant correlation with either dental health knowledge or practices. Similarly, a study by Abiola AA also showed weak correlation between maternal age and maternal dental health knowledge.<sup>27</sup>

## CONCLUSION

The study concludes with the finding that there is a lack of knowledge in majority of mothers of Srinagar city, India regarding the importance of primary teeth. Hence, there is a need to carry out more of awareness programs in the city. Mothers need to be educated and trained about importance of first dental visit as well as value of a pediatric dentist for their children. When it comes to the health of child's primary teeth, there is no better time than now to start practicing excellent oral hygiene. 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.

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