1st Dental Visit: An Ounce of Prevention Is Worth a Pound of Cure

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**ABSTRACT**

Introduction: At the age of 1st year, the 1st dental visit to the pediatric dentist should arise. A regular 1st dental visit of a child to the clinic is a principal role of the children’s well-being which serves the level of the preventive side of dental care which child will earn so it will help in the upcoming oral health of the child. This study was conducted to recognize average age of the 1st dental visit of the children and their treatment needs.

Aim: To evaluate 1st Dental Visit of children according to their treatment needs reported to the institute between 1/04/2016 to 31/3/2017.

Methodology: This retrospective study was done by using the case documents of 900 children in K.M. Shah Dental College and Hospital, Vadodara, Gujarat. The age groups of the children were categorized into five categories; 0-3 years, 4-6 years, 7-9 years, 10-12 years and 13-14 years with 15 chief-complains (Regular dental checkup, Dental caries, Dental pain/sensitivity, Discoloration of teeth, Deposits/bad breath, Ulcers, Malocclusion, Unerupted, missing or extra tooth, Oral habit, Trauma, Orientation to prevention, Cleft lip and palate, Mobile teeth, Soft tissue lesions and Natal/Neonatal teeth). Assessment of the age group and the most common chief complaint at the 1st dental visit was done.

Results: Maximum number of the children visited to the department were among 7-9 years of age (37.6%). The most common chief-complain was pain (34.9%) followed by dental caries (31.2%).

Conclusion: The apprehension regarding the 1st dental visit and prevention approach is less among this population.

**INTRODUCTION**

Globally it is advocated that the 1st visit to the pediatric dentist should be within the 1st year of life [1]. The American Academy of Pediatric Dentistry (AAPD) recommend that “a child should visit the dentist within 6 months of eruption of the first primary tooth and no later than 12 months of age whereas American Academy of Pediatrics recommends oral health risk assessment by 6 months of age and establishment of Dental Home for all infants by 12 months [2].
Timely dental visit is important because in 6 month-old predentate infants, oral establishment of *Streptococcus mutans* occurs with their mothers as an origin of the infection [3]. Some authors suggest that the 1st dental visit of the child should ensue during 4th month pregnancy of the mother. Because mother’s oral health has influence over the oral health of the newborn [4].

Early childhood caries (ECC) is found to be most prevalent dental problem run in to the children. During timely dental visit, detection of the white spot lesions and parents’ education for preventive aspects can help to circumvent severe conditions in the future of their children’s life [5].

The aim of early dental visit is to commence preventive guidance and dental care to ensure supreme oral haleness into childhood. Dental visit at the age of 1st year assist to give an anticipatory guidance and setting up the dental home [6]. According to several studies, factors which will influence early dental management are socioeconomic status of the child, understanding and information concerning infant oral health among pediatricians and general dentists, parents’ approach to the early dental care and the health insurance coverage [5].

This study was organized to know the average age of the 1st dental visit of the children and to identify the common causes for pursuing dental care at the 1st dental visit in Vadodara city, Gujarat.

**MATERIALS AND METHODOLOGY**

This retrospective study was conducted at the Department of paedodentics and preventive Dentistry, K.M. Shah Dental College and Hospital, Vadodara, Gujarat. A list of case documents were taken from the O.P.D. of the department of Paedodontics and Preventive Dentistry.

Sample: Average 900 case documents were randomly selected from 1/04/2016 to 31/3/2017.

Ethical approval: Ethical approval was taken from the Institutional Ethics Committee SVIEC/ON/DENT/SRP/17094.

**Selection Criteria**

**Inclusion criteria:** Case documents of the 1st dental visit of children from the department of Paedodontics and Preventive Dentistry between 1/04/2016 to 31/3/2017 were taken.

**Exclusion criteria:**

1. Case documents of children who had come for the follow-up.
2. Case documents of the children who already visited to the other institute or private dental clinics.
3. Case documents of the children who had come through camp.
4. Case documents of children that did not show the age of the patient or any inadequate details regarding the reason for the 1st dental visit.

The distribution of the sample was done according to children’s age, gender and their reasons for the 1st dental visit to the institute and noted in a data sheet. The children were graded into five groups based on the age: 0-3 years (group I), 4-6 years (group II), 7-9 years (group III), 10-12 years (group IV) and 13-14 years (group V).

The reasons for their 1st visit were categorized into following categories.

1. Routine dental check up
2. Dental caries
3. Dental pain/sensitivity
4. Discoloration of teeth
5. Deposits/bad breath
6. Ulcers
7. Malocclusion
8. Missing, Unerupted or extra tooth
9. Oral habits
10. Trauma
11. Orientation to prevention
12. Cleft lip and palate
13. Mobile teeth,
14. Soft tissue lesions

The average age group and the most common complaint at the 1st dental visit was analyzed.

RESULTS

Among 900 children, who visited the department for the first time, 530 (58.9%) were male and 370 (41.1 %) were female (Table 1).

Most of the children who visited the department were age of 7-9 years (37.6%, n=338) followed by children of age 4-6 years (28.6%, n=245) (Table 2).

The most common reason for visiting the department was dental pain (34.9%, n=314) followed by dental caries (31.2%, n=281). Very few children were appeared for Orientation to prevention (1.2%, n=11) (Table 3 and Figures 1-3).

### Table 1. Male-female distribution.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Female</td>
<td>370</td>
<td>41.1</td>
</tr>
<tr>
<td>Valid Male</td>
<td>530</td>
<td>58.9</td>
</tr>
<tr>
<td>Total</td>
<td>900</td>
<td>100</td>
</tr>
</tbody>
</table>

### Table 2. Age of 1st dental visit.

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;3 years</td>
<td>42</td>
<td>4.7</td>
</tr>
<tr>
<td>4-6 years</td>
<td>257</td>
<td>28.6</td>
</tr>
<tr>
<td>7-9 years</td>
<td>338</td>
<td>37.6</td>
</tr>
<tr>
<td>10-12 years</td>
<td>182</td>
<td>20.2</td>
</tr>
<tr>
<td>13-14 years</td>
<td>81</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>900</td>
<td>100</td>
</tr>
</tbody>
</table>

### Table 3. Reasons for 1st dental visit.

<table>
<thead>
<tr>
<th>Chief Complaints</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Cleft lip and palate</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Dental caries</td>
<td>281</td>
<td>31.2</td>
</tr>
<tr>
<td>Deposites</td>
<td>12</td>
<td>1.3</td>
</tr>
<tr>
<td>Discoloration of teeth</td>
<td>31</td>
<td>3.4</td>
</tr>
<tr>
<td>Irregular- teeth</td>
<td>111</td>
<td>12.3</td>
</tr>
<tr>
<td>Mobile teeth</td>
<td>26</td>
<td>2.9</td>
</tr>
<tr>
<td>Condition</td>
<td>Count</td>
<td>Percentage</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>Natal tooth/neonatal tooth</td>
<td>3</td>
<td>0.3</td>
</tr>
<tr>
<td>Oral-habits</td>
<td>4</td>
<td>0.4</td>
</tr>
<tr>
<td>Orientation to prevention</td>
<td>11</td>
<td>1.2</td>
</tr>
<tr>
<td>Pain</td>
<td>314</td>
<td>34.9</td>
</tr>
<tr>
<td>Routine dental check-up</td>
<td>31</td>
<td>3.4</td>
</tr>
<tr>
<td>Soft-tissue lesion</td>
<td>7</td>
<td>0.8</td>
</tr>
<tr>
<td>Trauma</td>
<td>40</td>
<td>4.4</td>
</tr>
<tr>
<td>Ulcer</td>
<td>5</td>
<td>0.6</td>
</tr>
<tr>
<td>Missing, Unerupted or Extra tooth</td>
<td>15</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>900</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Figure 1.** Male-female distribution.

**Figure 2.** Age of 1st dental visit.
According to present study, the more number of children were approached for 1st dental visit at 6-9 years of age and the usual reason was pain followed by dental caries and various other reasons as well.

In developing nations, most of the parents bring their children to the dentist for corrective not for the preventive treatment as they are not getting any assistance in finance by the government whereas in developing countries expenses are borne by the government for dental treatment [7]. Another reason for dental neglect seems due to lack of awareness among the people regarding early dental visits in Indian subcontinent.

Though it has been reported that dental caries is the most common disease in the children, the dental neglect is very high. According to American Guidelines, the 1st dental visit should be within 6 months of eruption of 1st tooth; So child should come for an early dental visit, it will help in detecting the white spot lesions and by taking active preventive actions we can decrease severe lesions later in life [2].

In the developed countries, it is suggested that parents register their children with a dentist once their 1st tooth erupts at 6 months [8]. It is published that great number of children residing in Australia visit the dental clinic at around age of 5, when they started too appeared at preschool. The large majority of children at the age of 5 and above nursed in private practice by general dentists or in the public dental services [9].

We can do careful examination of the oral health status as soon as one year of age in very young children. One reason is to recognize the children with plaque accumulation, because it has been shown to increase occurrence of caries in young children.

The timely dental visit facilitate for interceptive treatment aiming at arresting the continuation of carious lesions. Preventive aims incorporate enhancement of the oral health status of the child, modification of inappropriate habits of diet and eating, upgrade information regarding the role of non-nutritive sucking habit in the development of malocclusions, exceed wisdom of the probability for traumatic dental injuries and also where, when and how to detect emergency care [10].

Considering other studies, carried by Meera et al. [5] which estimated the age of 1st dental visit to be more than 6 years, Ghimire [11] found it to be in 7 to 11 years age group. In the study of Yahya ma Draid et al. revealed less awareness level respecting the graveness of the 1st dental visit among Jordanian population, with mean age of the children was more than 5 years of age. The general reason for pursuing dental treatment on the 1st dental visit was pain and dental caries [12]. John et al. showed 7 years as the average age of the 1st dental visit of children at Tiruvalla, Kerala and the dental caries was usual cause for consultation [6].

Slayton et al. described that children of the age between birth to 3 years 2% of the parents took their children for dental visit by 1 year of age [13]. According to Ghimire et al. 7% of children visited the dental clinic were less than 3 years of age [11]. Among this children, very less number of children arrived for regular dental check-up and orientation to prevention. In our study only 4.7% of children who reported were less than 3 years.

Although school oral health programs and dental home is running in the institute and anticipatory guidance is provided, the perception regarding the 1st dental visit of the children and prevention approach does not reach to the parents of this region. So, we should find the other alternative measures to improve the knowledge regarding the 1st dental visit of children.
Oral-health is a mandatory part of the overall general infant health. A child interacts with individuals play a principal role in the overall health and growth of the child along with the child’s family members, dentists, paediatricians and other health professionals. They can work in collaboration in the direction of a common goal for raising the child’s oral health and in succession of general health. However, the study conducted by Nammalwar et al. \cite{14} found that the pediatrician and physicians were aware with respect to the value of primary dentition, but did not refer the pediatric patients to the dentist.

Advertisement in media and creating awareness among the family physicians and pediatricians regarding oral health education and promoting referral of children to the dentist will assuredly help in increasing the early visit of a child to dentist, so it will help to circulate preventive care as. ‘An ounce of prevention is worth a pound of cure’.

CONCLUSION

The necessary education regarding the 1st dental visit is very low, as stated by the present study, so, it is evident that parents are more towards interception preferably than prevention of diseases. This can be prevented by undertaking the following measures:

- Developing the understanding regarding the early visit of the children to the dentists with the help of newspapers, radio, televisions and posters.
- Creating awareness among Gynecologist, Pediatricians and family physicians regarding referral of expecting mothers and infants to the dentist for prevention of the oral disorders.

REFERENCES