

Awareness Of Parents Of Time Of Eruption Of First Permanent Molar and Its Caries Prevalence In Children In South India-A Questionnaire Based Study

Research Article

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Abstract

Aim and Objective: Aim and objective of the study is to assess the knowledge of time of eruption of first permanent molar and its caries prevalence among parents visiting Saveetha Dental College and Hospital and creating awareness of first permanent molar eruption and its significance.

Materials and Method: A cross sectional, questionnaire was going to be designed and distributed to 100 parents visiting Saveetha Dental College and Hospital with their children. The questionnaire include the personal details of parents, name of the child and questions about the time of eruption of first permanent molar and clinically examining the children's permanent molar. Data was collected, statistically analysed and results obtained.

Results: Only 11% of parents aware of time of eruption of first permanent molar. 96% of parents aware of 1st permanent molar. 55% of parents aware of importance of first permanent molar.

Conclusion: Study concluded that parents have poor knowledge about the time of eruption of permanent 1st molar but they have good knowledge about the importance of permanent 1st molar. There is a need for education among parents regarding significance of 1st permanent molar and infant oral health care as a whole.

Keywords: 1st Permanent Molar; Dental Caries; Oral Hygiene; Extraction; Filling.

Introduction

Permanent first molars are first teeth that erupt posterior to deciduous teeth. First permanent molar is a cornerstone tooth in function, occlusion and support masticatory duty. Angle postulated that 1st permanent molar is most important tooth, which is first erupting teeth of permanent dentition [1]. Anatomical occlusal form as well as strong roots make PFMs the most important teeth in occlusion. These teeth also preserve the vertical dimension of the face. Due to painless eruption of permanent first molar without primary tooth loss, parents usually consider

these teeth as deciduous teeth [2]. Plaque accumulation in deep fissures especially in 1st two years after their eruption makes molar susceptible to caries [3, 4]. Eruption of 1st permanent molar tooth is done at the age that child is affected by caries predisposing factors such as high consumption of carbohydrates in between the meals, poor oral hygiene and parents lack of information about this tooth eruption. Dental caries is a multifactorial infectious disease that requires a host, nutrient culture and bacteria which produces acid. Bacterial plaque in the mouth feeds from the substrate such as fermented food and produce acid causing tooth decay [2, 5]. So 1st permanent molar can perform a good basis to assess the

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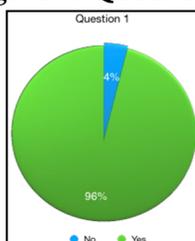
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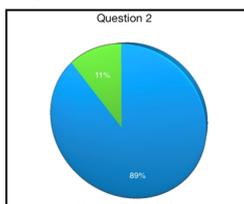
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Figure 1. Question 1.



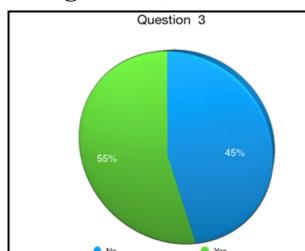
55% of parents aware of importance of 1st permanent molar.

Figure 2. Question 2.



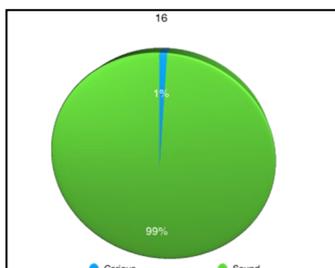
96% of parents aware of 1st permanent molar.

Figure 3. Question 3.



Clinical examination of 16 shows that 99% were sound and only 1% were carious.

Figure 4. 16.



Clinical examination of 26 shows that 97% were sound and 3% were carious.

oral health status of children, since it is vulnerable to dental caries than other teeth [6].

Aim of this study is to assess the knowledge of time of eruption of first permanent molar and its caries prevalence among parents visiting Saveetha Dental College and Hospital and creating awareness of first permanent molar eruption and its significance.

Materials and Methods

100 patients, aged between 6-17 years with their parents formed the study. Each of them had at least one first permanent molar erupted. They were examined in Department of Pediatric Dentistry in Saveetha Dental College and Hospital in December 2018. Parents were interviewed, 400 first permanent molars were clinically examined for the presence of dental caries, fillings, and history of extraction due to caries. Tooth was considered to be carious if it showed cavitation, colour change or catching or wedging

of explorer. The tooth was recorded unsound if it was carious, filled or has been previously extracted due to caries. Data was collected and statistically analysed.

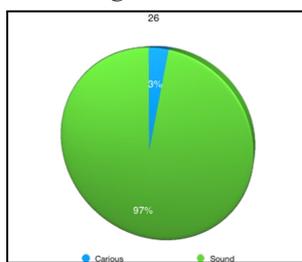
Results

Only 11% of parents aware of time of eruption of eruption of first permanent molar.

Discussion

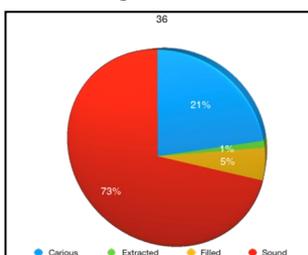
Providing preventive dental health care should begin early in child's life. Parental behaviour towards dental health of their children differs among the families due to cultural and ethnic background [7, 8]. First permanent molar are first permanent tooth to erupt and exhibit a greater control over the teeth that erupt later behind and in front of them as they are forced to position to already erupted and in occlusion functioning first molars. Moreo-

Figure 5. 26.



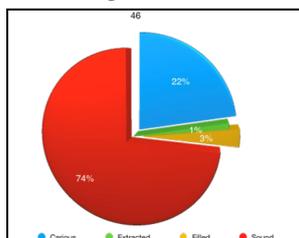
Clinical examination of 36 shows that 73% were sound, 21% were carious, 5% were filled and 1% were extracted.

Figure 6. 36.



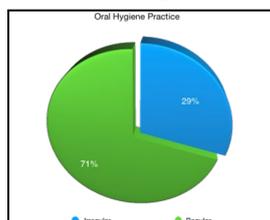
Clinical examination of 46 shows that 74% were sound, 22% were carious, 3% were filled, 1% were extracted.

Figure 7. 46.



Regular oral hygiene practice were 71% and irregular oral hygiene practice were 29%.

Figure 8. Oral Hygiene Practice.



ver, they bear the maximum occlusal load. They are positioned in oral cavity in such a way that they influence the vertical distance of maxilla and mandible, occlusal height and esthetic proportions [9]. Apart from this, since they have maximum root surface are they are considered to be best source of anchorage for moving the teeth. Above all the health of this tooth can form a good basis to assess the oral health status of these children, since this tooth is more vulnerable to caries than others because of its functional and morphological characteristics [10]. There was little knowledge about the time of eruption and importance of first permanent molar even among the educated parents (only 11% were aware). This result is close to what was reported by Luca et al where 20.93% answered correctly about the time of eruption of first permanent molar [5], Tagreed et al where 18% answered correctly about the time of eruption of first permanent molar [1]. This shows the need for real dental health education.

Although there was a high caries prevalence in 1st permanent molar (22% of 1st permanent molar were unsound). This was lower

than what was found by many other studies. It was 66.40% by Rafi Ahmed Togoo et al [11], and it ranged between 67.5% to 83.5% for the age range [9-12] in the study published by Khaled H.M. AL. Samadani et al [12]. Ravers et al [13] stated that there is a significant relationship between the level of parenting education and dental status of children and its along with our study. Akpabio et al [14] announced that educated mothers were more aware of oral hygiene issues. Vanobberge et al [15] stated that the risk of increased caries in children is significantly related to lowering of their parents job level. Cristina et al [7] reported that parents awareness was significantly related to their economic situation. Due Rue et al [16] state that living conditions had a significant relationship with oral hygiene behaviour. It seems that DMFT decreases when oral hygiene increases and this can be achieved by increasing knowledge. Kowshet [17] stated that dental health education on mothers can have a significant effect on preventing the development of caries in children.

The dentist bears responsibility in educating parents about the

eruption time of first permanent molar and its importance.

Conclusion

Study concluded that parents have poor knowledge about the time of eruption of permanent 1st molar but they have good knowledge about the importance of permanent 1st molar and their oral hygiene practices are also good.

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