

Perception of parents towards the importance of deciduous dentition and its preservation

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Abstract

Background: Parents knowledge on deciduous dentition is crucial in preservation and prevention of malocclusions in future.

Aim: Aim is to evaluate the knowledge of parents towards importance of deciduous dentition and its preservation.

Design: In this questionnaire study a 226 parents of children of age 3-6years were sent a preformed questionnaire to answer so as to evaluate their knowledge

on importance of deciduous dentition and its preservation.

The data was later statistically analyzed.

Results: All 14 questions from the questionnaire were answered by the participants and the percentage was taken for the same. These results were statistically analyzed. It was seen that most of them knew the importance of deciduous dentition but lack the knowledge of preserving them and the different treatment modalities available for the same.

Conclusion: Though parents were aware of the importance of the deciduous dentition, there was lack of

knowledge in the treatment modalities available and there was ignorance seen in regarding the preservation of deciduous dentition. Hence, there is a need to increase the positive attitude for deciduous dentition and its role played in day to day life of a child.

Keywords: deciduous dentition, parent's perception, importance of deciduous dentition.

Why is this paper important to Pediatric Dentistry?

1. This paper is focusing on the knowledge of parent on preservation of deciduous dentition.
2. Knowing the knowledge of parent on the same will help pediatric dentist a idea on educating the parents on particular subject.
3. Will help to do more public health talks to spread the awareness in required area.

Introduction

Primary dentition is one of the extremely important in a development of a child's physical, mental and emotional health. As this dentition helps children to maintain space for the permanent teeth and also guides them in eruption path, this dentition is important as they help in mastication, development of speech and Dentofacial orthogenesis.¹ The deciduous teeth erupts into the oral cavity as early as 6month of age and the last tooth to shed is by the age of 13 years. Hence, there is a need to preserve these teeth till all the permanent teeth replace their counterparts in the arch. The deciduous teeth not only help in maintaining space till the eruption of permanent teeth, they do have function in the oral cavity before they shed. Deciduous dentition help in maintaining general health of the children by helping them to masticate the fed food and these masticatory movements in turn helps in the orofacial developments. The force exerted by the muscles while mastication decides the growth and development of the orofacial structure. Hence, a child who loses the teeth early in age can pose

risk of malformation of Dentofacial structure, collapsed arch, in future crowding of permanent teeth which will lead to need of more intense treatment plans to correct.

In the deciduous dentition period the most common reason of losing tooth is to caries which is because of inadequate knowledge of parents, caregivers, guardians who knows little less about the importance of need and preservation of deciduous dentition. The early loss of a deciduous tooth that occurs, among other reasons, due to traumas, ectopic eruption, congenital disorders and deficiencies of the arc length causing reabsorption of deciduous teeth,² since the main etiological factor is the dental caries.³ Deciduous dentition plays an essential role in child's overall development. As they can go through emotional and psychological trauma when they loose teeth early and they have to present themselves with a gap when they smile or talk. At times like this they feel depressed and there are chances of loosing self-confidence. Parent's knowledge plays an important role in a child's general and dental health. Hence, aim is to evaluate the knowledge of parents towards importance of deciduous dentition and its preservation.

Material and Method

The study was conducted among parents of Sullia, Dakshin kannada, Karnataka, India. Prior approval was obtained by the Institutional Ethical Committee, KVG Dental College and hospital, Sullia, D.K. Parents of children 3 to 6years who reported to the Department of Pedodontics and Preventive Dentistry, KVG Dental College were invited to participate in the study. Voluntariness and strict confidentiality was assured; a Google form link for the pre-framed, pre-validated questionnaire in English was shared through e-group (whatsapp, email). Assistance was offered for those who desired help in understanding the questions.

The demographic details, such name, age, sex, and education of both parents were collected from the parents. The responders were then asked to indicate the most appropriate correct answer from the given list of options in order to assess the knowledge of parents on importance and preservation of deciduous dentition.

The questionnaire assessed the parental knowledge and awareness on deciduous dentition and its relation with general health of children, early loss of these teeth and psychological effect on children's mind, available treatment option for deciduous teeth.

Out of 347 targeted populations, 279 were selected for the study and questionnaire link was shared, in which 53 of them were excluded because they were incomplete.

Collected data was tabulated and subjected to statistical analysis using SPSS version 22.2. Frequency distribution which includes number and percentage was calculated. $P < 0.05$ was considered as statistically significant.

Result

Out of 226 participants 98 were male and 126 were female with a mean age being 4.3 and 5.4 respectively. In which 23.89% of male and 38.05% female was school going. Educational status of mothers of both male and female children was 34.95% and 45.57% had primary or secondary education and 8.40% and 10.17% were graduate or post graduates respectively, 31.08% and 39.3% of fathers had primary or secondary education and 8.84% and 16.37% were either graduates or post graduates respectively. (Table 1)

It was seen that 86.73% agreed that deciduous dentition has a role general health of children. 62.76% think that there was a psychological effect on children due to early loss of teeth. 53.54% agreed that caries in milk teeth will affect permanent teeth. 75.22% that it was not needed to replace or treat caries affect teeth since it would get replaced by permanent. Most of the parents did not know

when to start brushing the tooth of their infants. Though there was knowledge there was a lacking seen in parents on available treatment options and programmes available for the same. (Table 2)

Table 1: Socio-demographic status

Socio demography	Frequency (percentage)	
	Male	Female
Gender	98 (43.37%)	126 (56.63%)
Age (mean)	4.3	5.4
Schooling		
1. School going children	54 (23.89%)	86 (38.05%)
2. Non-school going children	44 (19.46%)	42 (18.5%)
Mother's education status		
1.Primary / secondary	79 (34.955%)	
2. Graduate/postgraduate	19 (8.40%)	103 (45.57%)
		23 (10.17%)
Father's education status		
1.Primary / secondary	68 (31.08%)	89 (39.3%)
2.Graduate/postgraduate	20 (8.84%)	37 (16.37%)

Table 2: Frequency distribution and p value using chi-square test

Question	frequency	Percentage	P value
1. Did you know milk teeth are important in the general health of a child?			
Yes	196	86.73	$P < 0.05$
No	30	13.27	
2. Do you think, there is a psychological effect on your child if he/she loses the milk teeth earlier?			
Yes	152	62.76	$P < 0.05$
No	74	32.74	
3. Do you think that cavities in milk teeth will affect the permanent teeth?			
Yes	121	53.54	$P >$

No	105	46.46	0.05
4. Do you know that there are 20 milk present in children?			
Yes	142	62.83	P <
No	84	37.17	0.05
5. Do you think milk teeth are important in development of speech?			
Yes	152	67.26	P <
No	74	32.74	0.05
6. What will you do to preserve the milk teeth of your child?			
a)Make them brush and maintain oral health	52	23.01	P <
b)Take your kids to routine dental check ups	19	8.41	0.05
c)Watch out for the food you feed them	16	7.08	
d)All of the above	139	61.50	
7. Do you think, it is important to care so much for the decayed milk teeth though they will be replaced by permanent teeth?			
Yes	170	75.22	P <
No	56	24.78	0.05
8. In your opinion, when should you start brushing your child's teeth to prevent it from decay n preserve it till the permanent teeth erupts?			
a)After 2year of age	52	23.01	P >
b)Soon after the first tooth erupts	70	30.97	0.05
c)After all the teeth are erupted	48	21.24	
	56	24.78	

d)After 1year of age			
9. Did you know about the treatments available to preserve the milk teeth?			
Yes	120	53.1	P >
No	106	46.9	0.05
10. Do you know there is a specialized dentist(pedodontist) to treat your child's teeth (kids dentist)			
Yes	167	73.89	P <
No	59	26.11	0.05
11. Are you aware of preventive programmes available for caries prevention and preservation of deciduous teeth.			
Yes	129	57.08	P <
No	97	42.92	0.05
12. Do you think, it is necessary to treat decayed milk teeth?			
Yes	166	73.45	P <
No	60	26.55	0.05
13. Did you know, primary teeth help in mastication?			
Yes	150	66.37	P <
No	76	33.63	0.05
14. The treatment available is only for permanent teeth, no separate treatment is available for milk teeth.			
True	82	36.28	P <
False	144	63.72	0.05

Discussion

The oral and general development of a child depends on the proper maintenance of primary teeth.⁴ Untreated primary teeth can also cause various complications such as pain, infections, alterations in growth and development, problems in eating and sleeping, and malnutrition.⁴⁻⁶ Early loss of teeth leads to short-term problems, such as speaking and eating difficulties, and long-term difficulties such as malalignment of permanent teeth and malocclusion.⁷

In our study, most of the parents were aware of the importance of deciduous dentition and also knew its effects on child's psychologically in case of early loss, speech defects due to early loss (67.26%). 46.9% did not know the available preventive measures for primary teeth. According to Mahesh et.al, there was lack of knowledge in parents on the available treatment options.⁸ Thakare et al.⁹ observed in their study that the majority of the parents were aware of the importance of primary teeth. Similarly, participants in our study felt that the primary dentition was important and also wanted to preserve until their exfoliation. This indicated that the parents followed a good oral health practices for their children. On contrary, Wong et al.¹⁰ observed the cultural belief among the Chinese parents that the primary teeth were not considered as important as the adult teeth. Parents who held a strong belief to this declined dental treatment for their children, and those parents who recognized its importance chose to bring their children for dental treatment.

Conclusion

From our study, it can be concluded that parents had a knowledge regarding the importance of deciduous dentition in children but were not aware of the various treatment modalities available for treatment. Not many parents found it necessary to replace missing teeth in the

primary dentition, and only a few percentages of parents knew about the speech development problems associated with early loss of primary teeth. An increase in the knowledge of parents can have a direct impact on the oral health of the child and hence should be encouraged. More importance on the maintenance of primary teeth and management of dental caries in children should be brought to the notice of public along with the treatment methods. However, an increase in knowledge will encourage parents to provide even better oral health to their children.

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