

Evaluation of Parental Attitude and Practice on the Primary Teeth of their Children in Chennai: An Hospital Survey

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Abstract

Introduction: Teeth are critical to the growth and development of a child. This survey evaluated the parental attitude and practices on the primary teeth of their children. **Materials and Methods:** The present study was conducted on the parents who visited the Department of Pedodontics and Preventive Dentistry, Thai Moogambigai Dental College and Hospitals, Chennai, Tamil Nadu, India, during October and November 2015. A total of 106 parents with 2–12 years children who visited for dental treatment of their children were involved in the study with their consent. A structured questionnaire was used to collect data, and the collected data were computed and analyzed using IBM-SPSS 19. Descriptive statistics was used; frequency distribution including number and percentage was calculated and inferences drawn. **Results:** Majority of the participants were from low socioeconomic status. About 78.3% of them visited a dental office when their children experienced toothache/trauma, 33% felt regular dental check is not important, 20.8% said treating primary teeth was not necessary, 10.4% used baby toothpaste, 96.2% did not use mouthwash, majority of the children brushed with toothpaste/powder only once daily, and 69% had no idea whether toothpaste contains fluoride. They were unaware of the pediatric oral health-care information provision and had poor knowledge. **Conclusion:** It was concluded that the pediatric dental health-care attitude and practice among the parents needs to be revisited.

Key words: Parental attitude, pediatric oral health care, practice, primary teeth

INTRODUCTION

Teeth are critical to the growth and development of a child. According to functional matrix theory, growth and development are directly proportional to the functional unit of the organism; similarly, function of the teeth plays an important role in the growth and development of maxillofacial structures. As dental caries is the most common affliction of children, preserving them until their exact time of exfoliation is the need of the hour. Teeth, apart from their specific function of mastication, also have a principle function of phonation which aids in socialization of the child.

Studies reported that pediatric oral health in industrialized countries has improved considerably during the last few decades.^[1,2] With modernization, new concepts have evolved with respect to management of dental health. Parents who are in closest proximity in the well-being of the children are the first respondents on attitude and practice toward pediatric dentistry and child's dental care. In developing countries, more coordinated efforts are needed to install a positive attitude toward pediatric dentistry.^[3,4] India, a land of diversity, has

many religions, communities, culture, and socioeconomic strata. Chennai is a typical example for the same and is the target area in the present study. The primary goal of this study is to assess and evaluate parental attitude and practice of pediatric oral health care in Chennai.

MATERIALS AND METHODS

The present study was conducted on the patients who visited the Department of Pedodontics and Preventive Dentistry, Thai Moogambigai Dental College and Hospitals, Chennai, Tamil Nadu, India, during October and November 2015. A total of 106 parents with 2–12 years children, excluding special children who visited for dental treatment of their children were involved in the study with their consent. A structured questionnaire was formulated with 20 questions in English and

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Tamil with multiple choice answers, targeting the attitude and practice of parents toward pediatric oral health care. Depending on the literacy level of the parents, questionnaires in English and Tamil were given. In case of illiterate parents, a questionnaire was filled with the help of an attendant. Data were computed and analyzed using IBM-SPSS 19 (IBM, USA). Descriptive statistics were used; frequency distribution including number and percentage was calculated and inferences drawn.

RESULTS

Out of 106 participants surveyed, 55.7% were female and 44.3% were male. Most of them, 60.4% were 20–30 age group, 23.6% were 30–40 age group, and 16% were 40–50 age group. Concerning to their educational status, majority (52%) of them were below higher secondary level, whereas 33% were higher secondary levels, 9% were graduates and above, and 6% of them were illiterates. A majority of the parents, 64.2% had 2 and above children and 35.8% had only one child. Most of the participants were unemployed or daily wages and hence, reckoned as belonging to the low socioeconomic stratum. Results regarding the attitude and practice are given in Tables 1 and 2.

DISCUSSION

Attitude and practice of parents are important factors influencing the parental care to primary teeth of the children. In the present study, attitude of the participants revealed that most of them, 78.3%, visited a dental office when their children experienced toothache/trauma, 9.4% visited when their child had caries, whereas 6.6% visited when their child had an esthetic problem and 5.7% visited when their child had bad breath.

Although in the present study, 55.7% parents felt a regular visit to the dentist is important, whereas 33% felt regular dental check is not important and 11.3% had no idea about the regular dental checkup. Earlier studies revealed that earlier and regular dental care among children is uncommon in developing countries.^[5] It was contradicting to the American Academy of Pediatric Dentistry recommendations that ideally infants' oral health begins with prenatal oral health counseling for parents followed by oral health risk assessment by 6 months of age and establishment of the dental home for all infants by 12 months of age.^[6] It also, after the initial visit, recommends regular visits to the dentist, based on the child's oral health. Many studies found that these recommendations are not taken by the parents in the developing countries and the reasons behind may be a lack of importance of the primary teeth,^[7] socioeconomic,^[8-12] and educational status,^[10,13,14] besides cultural beliefs.

When questioned about treating the primary teeth, 71.7% said it is necessary to treat the primary teeth, whereas 20.8% said treating primary teeth was not necessary as they would shed down and also waste of money and 7.5% had no idea about the necessity for treating primary teeth. Another study found that a better dental health among the children was due

Table 1: Attitude of parents to care the primary teeth of their children

	Respondents	Percentage
Reason for the first visit to the dentist		
Bad breath, bleeding gums	6	5.7
Caries	10	9.4
Chronic pain/trauma	83	78.3
Aesthetics	7	6.6
Regular visits to the dentist are important		
Yes	59	55.7
No	35	33.0
Don't know	12	11.3
Treating primary tooth is necessary		
Yes	76	71.7
No	22	20.8
Don't know	8	7.5
Treatment undertaken taken		
Pulp therapy	36	34.0
Extraction	22	20.7
Filling	23	21.7
Scaling	15	14.2
Treatments other than above	10	9.4
Parents' preference for carious primary tooth of child		
Restore the tooth	9	8.5
Extract the tooth	13	12.3
Relieve the symptoms and monitor the tooth	23	21.7
Leave the treatment decision to the dentist	61	57.5
Reasons for not treating primary tooth		
Fear	6	5.7
High cost	16	15.1
Waste of money as primary teeth will shed down	84	79.2
Awareness of pediatric oral healthcare information provision		
Aware of pediatric oral healthcare information provision	-	-
Unaware of pediatric oral healthcare information provision	106	100
Knowledge of pediatric oral healthcare information provision		
Good knowledge	-	-
Very good knowledge	-	-
Poor knowledge	106	100
Prenatal oral health counseling/related programs attended		
Yes	-	-
No	106	100
Parents along with clinicians can play role in achieving the best oral health outcomes in children		
Yes	106	100
No	-	-

to the positive attitude of parents toward oral health of their children.^[15] Concerning to the treatment taken, 34% underwent pulp therapy, 21.7% underwent filling, 20.7% underwent

Table 2: Practice of parents to care the primary teeth of their children

	Respondents	Percentage
Oral hygiene methods used		
Baby toothpaste	11	10.4
Adult toothpaste	86	81.1
Dental floss	5	4.7
Mouthwash	4	3.8
Brushing intervals		
Only at morning	84	79.2
Both at morning and before bed	22	20.8
More than twice daily	-	-
Brushing technique followed		
Horizontal brushing	47	44.3
Vertical brushing	29	27.4
Circular brushing	30	28.3
Brushing duration (min)		
<2-3	30	28.3
2-3	41	38.7
>2-3	35	33.0
Using fluoridated toothpaste/powder		
Yes	33	31.0
No	-	-
Using toothpaste/powder but do not know about fluoridation	73	69.0
Role of parents on child oral hygiene		
Parents brush their child teeth with brush and paste	11	10.4
Parents supervise their child while toothbrushing	79	74.5
Parents advice but not watching	16	15.1
How to prevent caries		
Reducing snacks containing sugar prevents caries	72	68.0
Brushing twice daily prevents caries	10	9.4
Getting professional advice prevents caries	8	7.5
All the above	16	15.1
Awareness of reasons for dental diseases		
Aware of reasons for dental diseases	21	19.8
Unaware of reasons for dental diseases	85	80.2
Whom do parents visit in case of their child's dental problem		
Physician available nearby	81	76.4
Pediatrician	9	8.5
General dentist	11	10.4
Pedodontist	5	4.7
Does the dentist explain the treatment plan and procedure		
Yes	99	93.4
No	7	6.6

extraction, 14.2% underwent scaling, and 9.4% underwent other dental treatments for the primary teeth.

In case of treatment of primary teeth, 57.5% of them preferred to leave the treatment decisions to the dentist and 21.7% wanted to relieve the symptoms and monitor the tooth, whereas 12.3% wanted to extract the tooth and 8.5% wanted to restore the teeth. When questioned about reasons for not treating the primary teeth, 79.2% said it is a waste of time and money as primary teeth is temporary. Reasons for not treating the primary teeth was not surprising because people in the developing countries believe that soon after the shed down of the primary teeth the permanent teeth would erupt and spending to treat the primary teeth is a waste of money.^[3,4] For 15.1%, high cost of dental treatment factor and for 5.7%, fear factors prevented them treating the primary teeth of the children.

About 79.2% of children brushed their teeth only at morning and 20.8% of the children brushed twice daily. It was observed that 81.1% of children used adult toothpaste and 10.4% used baby toothpaste. About 96.2% did not use mouthwash and 3.8% used it. Around 95.3% did not use dental floss and 4.7% used it. Regarding brushing technique, 44.3% of children followed horizontal brushing, 28.3% followed circular brushing, and 27.4% followed vertical brushing. Around 38.7% took 2–3 min duration for brushing, 33% took more than 2–3 min, and 28.3% took <2–3 min. About 10.4% parents brush their child's teeth, whereas 74.5% parents supervised their child while brushing and about 15.1% parents advised but not supervised their child while brushing. Some studies outcomes are similar to the results of the present study,^[16-18] and these studies concluded that toothbrushing less than twice daily and sugars snacking between meals are key factors, developing caries in children.

More than half of the participants 69% had no idea whether toothpaste contains fluoride or not, despite 31% agreed using toothpaste containing fluoride. Many studies have confirmed that fluoride is an important and effective means of reducing caries^[19,20] and brushing twice daily is suggested.^[21] It is contradictory to other studies^[22,23] including the present survey as a meager percentage used floss and mouthwash. This indicates the need of effective awareness programs. Early childhood caries (ECC) is the most common chronic illness among children and adolescent. Management of ECC often requires education of both the parents and the child to improve their dental awareness and attitude toward dental health.^[24]

Pertaining to prevention of caries, 68% of children reported that reducing snacks containing sugar prevents caries, 9.4% agreed that brushing twice daily prevents, 7.5% accepted getting professional advice prevents caries, and 15.1% favored to all the above. Most of them were unaware of the reasons for dental diseases. Pertaining to caries prevention, majority of them agreed that reducing snacks containing sugar prevents caries; a few agreed that brushing twice daily and getting professional advice prevents, which is matching with previous studies.^[17,25-28] When questioned about the visit for their child oral health-care needs, 76.4% said they would visit a physician,

whereas 10.4% visit a general dentist, 8.5% visit pediatrician, and 4.7% would visit a pedodontist. The participants, 93.4%, who consulted the dentist for treatment agreed that the dentist explained them the importance of primary teeth, treatment plan, and procedure, whereas 6.6% said they were not explained properly. Parents and family members are considered the primary source for knowledge about child rearing and health habits for children, which undoubtedly has a long-term influence in determining a child's oral health status.^[29] This survey disclosed that majority of the participants were unaware of the need for consulting dentists/pedodontist for their children at the right time as most of them were illiterate rural women and socioeconomically weak. The outcome of many studies is same that of the present one and all these studies recommended effective awareness programs.^[17,25-29]

Earlier and regular dental care among children is uncommon in the developing countries.^[5] In this survey, majority of participants indicated that toothache or trauma of the child was reason for their first dental visit. None of the parents visited the dental office for prenatal oral health counseling and attended any programs. These outcomes are in line with other studies.^[30-33] Caries can be prevented in children if brought for care before or shortly after the eruption of the first tooth.^[34,35] The reasons that fail to recognize the ideal time of the first dental visit are apprehension, high cost, nonaccessibility of dentist,^[36] lack of awareness and motivation, inadequate knowledge, etc.

It was not surprising to note that no parents had prenatal oral health counseling nor attended a related program. It also showed that majority of the participants were unaware of the provision of the pediatric oral health-care information and possessed poor knowledge. However, all the participants agreed that the parents along with clinicians play a key role in achieving the best oral health outcome in their children as reported in the previous studies.^[37-39]

CONCLUSION

The result of the survey disclosed that the pediatric dental health care attitude and practice among the parents needs to be revisited. Therefore, by accelerating the efforts of pediatricians, pediatric dentists, and allied health-care professionals this can be achieved. Conducting programs in schools and media, publishing articles in regional languages, distributing handouts, bulletins, pamphlets, establishing kiosks in primary health centers, and celebrating an International Children's Dental Health Week, awarding best parents for maintaining good pediatric oral health may be considered for promoting effective preventive oral health care, oral hygiene habits, diet, early and regular dental office visit, accessibility, and affordability.

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Conflicts of interest

There are no conflicts of interest.

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