

Knowledge, Attitude and Practices of Parents Regarding Primary Teeth Care of their Children in Kanpur city, India

Dr. Prateek Singh , Dr Karuna Sharma , Dr Arun Sharma ,Dr Charanjeet Singh , Dr Parkhi Bhatnagar , Dr Shashi Prabha Yadav , Dr Abhilasha Gupta

Rama Dental College Hospital and Research Centre, Rama University, Mandhana, Kanpur

E-mail: drprateek@ramauniversity.ac.in

Abstract

Background : To assess the knowledge, attitude and practices of parents of Kanpur city, India, regarding the care of primary teeth.

Materials & Method: 500 questionnaires containing about 20 questions written both in English and Hindi were prepared for data collection and were personally distributed to 500 parents of Kanpur city. Responses obtained were tabulated and the results of the questionnaire were expressed as frequency distribution and computed in percentages.

Results: Most of the parents were unaware of the importance of the primary teeth. Only 35% of parents had knowledge about primary teeth. When questioned about the importance of primary teeth, 62% of parents told that primary teeth are not important. For frequency of brushing, majority (82%) of parents reported that only once they ask their children to brush in a day. 89% parents stated that they would choose their own dentist.

Conclusion: We concluded in the present study that the knowledge of parents regarding the oral health of their children in Kanpur city is poor. Also it's been observed that the knowledge is not implemented, and the attitude of the parents toward good oral health practices needs to be improved more. As pediatric dentist, we can counsel and motivate parents to take appropriate care of their children's oral health.

Keywords: Primary, Dentition, Oral Health, Knowledge, attitudes, practice, Child care

Introduction

Teeth are one of the most valuable asset to human beings. We have two sets of teeth- Primary and Permanent. Primary teeth are very important to a child as it helps in mastication, speech, aesthetics and as a space maintainer for Permanent teeth. Any problem in milk teeth (Primary teeth) may cause pain, swelling and discomfort to the child thereby affecting his chewing ability and speech. Primary teeth must be looked after well so that children can have a happy childhood.

Parents are the ones who supervise the health and overall development of the child so they must have knowledge about the primary teeth in order to prevent early childhood caries in children which is very prevalent in India. There is no documented research on parental awareness of primary teeth in Kanpur, India. So the present study was undertaken to assess the knowledge, attitude and practices of parents of Kanpur city, India regarding the care of primary teeth.

Materials & Method

A cross-sectional study was conducted amongst 500 parents who reported to the outpatient Department of Pediatric and Preventive Dentistry at Rama Dental College, Hospital & Research Centre. Data was collected through a questionnaire consisting of 20 questions about the knowledge, attitude, and practice of parents toward the oral health of their school-going children. The study was approved by the Ethical Committee of the institution, and permission to conduct the study was granted by the Department of Pediatric and Preventive Dentistry

Inclusion criteria

1. Mothers of 3-5 year old preschool children who visited dental OPD of the department

Exclusion criteria

1. Uncooperative mothers
2. Mothers of physically and mentally compromised children

500 questionnaires containing about 20 questions written both in English and Hindi were prepared for data collection and were personally distributed to the parents of Kanpur. The responders were then asked to tick the most appropriate correct answer from the given list of answers, in order to assess their knowledge, attitude and practices regarding the primary teeth care. Responses obtained were tabulated and the results of the questionnaire were expressed as frequency distribution and computed in percentages.

Results

The responses obtained are tabulated in tables from 1 to 20

Table 1 Knowledge of primary teeth

Knowledge	Respondents	Percentage
Yes	175	35%
No	325	65%
Total	500	100%

Table 2 Importance of primary teeth

Important	Respondents	Percentage
Yes	190	38%
No	310	62%
Total	500	100%

Table 3 Frequency of brushing in primary teeth

Frequency	Respondents	Percentage
Only once	410	82%
Twice	90	18%
Total	500	100%

Table 4 Cause for decay

Cause	Respondents	Percentage
Lack of brushing	138	27.6%
Too much sweets	357	71.4%
Prolonged bottle feeding	5	1%
Total	500	100%

Table 5 Reasons for seeking Doctor

Reasons	Respondents	Percentage
Pain	345	69%
Decay	55	11%
Irregular placement of teeth	100	20%
Total	500	100%

Table 6 First time consultation when pain occurs

First time consultation	Respondents	Percentage
General Dentist	370	74%
Paediatrician	75	15%
Pedodontist	55	11%
Total	500	100%

Table 7 Awareness about Pediatric Dentist

Awareness	Respondents	Percentage
Yes	55	11%
No	445	89%
Total	500	100%

Table 8 Knowledge about types of treatment available

Type of treatment	Respondents	Percentage
Fluoride application	17	3.4%
Restoration /Filling	350	70%
Pit & Fissure sealants	4	.8%

Stainless steel crowns	124	24.8%
Space maintainers	5	1%
Total	500	100%

Table 9 Awareness that deleterious oral habits have an impact on permanent teeth

Awareness	Respondents	Percentage
Yes	190	38%
No	310	62%
Total	500	100%

Table 10 Knowledge about the role of fluorides in toothpastes

Knowledge	Respondents	Percentage
Yes	11	2.2%
No	8	1.6%
Don't know	481	96.2%
Total	500	100%

Table 11 Knowledge about how to prevent caries

Ways to prevent caries	Respondents	Percentage
Restricting sweets	215	43%
Toothbrushing	226	45.2%
Regular visit to dentist	10	2%
Don't know	49	9.8%
Total	500	100%

Table 12 Proportion of parents with an attitude related to their responsibility in prevention of dental caries in the child

Attitude of the parents related to their responsibility in prevention of caries	Respondents	Percentage
Yes	115	23%
No	385	77%
Total	500	100%

Table 13 Knowledge about the age of eruption of child's first primary teeth

Knowledge about age of eruption of child's first primary teeth	Respondents	Percentage
Soon after birth	40	8%

Around 6 months	228	45.6%
After 1 year	232	46.4%
Total	500	100%

Table 14 Knowledge about the age when the child's first tooth falls off

Knowledge about the age when the child's first tooth falls off	Respondents	Percentage
3-5 years	13	2.6%
5-7 years	407	81.4%
10-12 years	80	16%
Total	500	100%

Table 15 Do you monitor your child brushing

Monitor	Respondents	Percentage
Yes	278	55.6%
No	222	44.4%

Table 16 How many times do you brush your teeth

Frequency of brushing their own teeth	Respondents	Percentage
Once	445	89%
Twice	55	11%
Total	500	100%

Table 17 How often do you visit the dentist

Frequency of visit to the dentist	Respondents	Percentage
Only when there is episode of pain	394	78.8%
Once a year	101	20.2%
Never	5	1%
Total	500	100%

Table 18 How often do you take your child to the dentist

Frequency of visit of the child to the dentist	Respondents	Percentage
Once in 6 months	56	11.2%

Once in 1 year	66	13.2%
Only when child complains of pain	378	75.6%
Total	500	100%

Table 19 Knowledge about the child's first dental visit should be

Knowledge about the child's first dental visit	Respondents	Percentage
6-12 months	35	7%
3 years	10	2%
6 years	15	3%
Only after permanent teeth erupts	440	88%
Total	500	100%

Table 20 Do you think the diet you give your child plays a role in the occurrence of caries

Do you allow night time bottle feeding to the child	Respondents	Percentage
Yes	394	78.8%
No	106	21.2%
Total	500	100%

Discussion

Overall health and development of the child depends on taking proper care of primary teeth. Parents knowledge is very essential in taking good care of the child's teeth. Thus this study was undertaken to evaluate the knowledge of parents of Kanpur city about the primary teeth.

In this study 35% of Parents had knowledge about primary teeth. The remaining 65% of parents had no knowledge about primary teeth. Nagaveni et al reported only 4% of parents had knowledge about primary teeth in Davengeree.¹

When questioned about the importance of primary teeth, 62% of parents told that primary teeth are not important. Nagaveni et al reported that 82% of parents told that primary teeth are not important.¹ Parents explained that primary teeth are temporary and anyhow they will fall and will be replaced by new set of teeth. Casamassinmo P S and Ng MW have reported that some cultures place little value on primary teeth and that caries and early loss of primary dentition is an accepted occurrence.^{2,3} Riedy CA et al found that the low value attributed to baby teeth was a hindrance to developing productive programs.⁴ Lahti S M et al reported lack of importance of primary teeth, compared with general health.⁵ For frequency of brushing 82% of the parents reported that their children brush only once in a day. Even the parents themselves brush their teeth only once. So they advised the same to their children also. Nagaveni et al also reported that majority (91.1%) of parents responded that only once they ask their children to brush in a day.¹ The study also shows that 2.2% of the mothers had

knowledge about the role of fluorides in toothpastes. 96.2% of Parents did not know about the role of fluorides in toothpastes.

About 69% of parents reported that, when child complains of pain in primary teeth, they visit doctor, when asked about the reason for seeking treatment. The other 20% parents expressed that, they consult doctor when the permanent teeth are not erupted at expected time after exfoliation of primary teeth. And also when the permanent teeth erupted in wrong position due to retained primary teeth, they will see the doctor. This shows they worried more about the permanent teeth but not the primary teeth. Nagaveni et al reported that 80% of parents consulted doctor when the child complained of pain.¹

When parents were asked whom do they want to see when pain occurs, 74% of them told that they will consult general dentist. Only 11% stated that they would contact pediatric dentist. 15% stated they would contact paediatrician. Only 11% were aware about the Pediatric dentist. This shows the lack of knowledge about the role of Pediatric dentist and his duties. Many Parents did not know that Pediatric dentist is the right person to contact if any oral health problem arises. Nagaveni et al reported that when parents of Davangere were asked whom do they want to see when pain occurs, 90.6% parents stated that, they would choose their child's paediatricians.¹ In their study, Parents expressed that, paediatricians were trained to assess the oral cavity and if there were any oral health problems present, the paediatricians would refer them to an appropriate dental provider.¹ Paediatricians are considered to be in unique position to contribute to the dental health of their young patients because of the early age at which children are brought to them and because parents accept their suggestions readily. This highly recommends that the possible integration of a pediatric dentist with the paediatric set up is very essential.¹

For the question of awareness of different treatment available for primary teeth 70% of parents knew about filling or restoration procedure for decayed primary teeth. They had no idea about other treatments like pit & fissure sealants application, stainless steel crown, space maintainers etc. This is in accordance with study done by Nagaveni et al. He reported 67% of parents knew about filling only. Hence awareness about different treatment procedures should be made.¹

Awareness about oral habits and their consequences on oral structures was not seen in 62% of the parents. Our study is in accordance with the study of Nagaveni et al. They reported 86% of parents did not know about bad oral habits and their consequences.

43% of parents had this knowledge that restricting sweets in their children's diet will prevent caries. 45.2% of parents had this knowledge that regular toothbrushing will prevent caries. Parents were aware with the fact that primary teeth caries is preventable with proper diet and brushing. Similar findings were reported by Narayanan et al.⁶ The findings of our study were similar to those reported by Khanduri et al where 90% of the parents knew that sweet food causes tooth decay.⁷

Only 23% of Parents had this attitude that they are responsible for the prevention of caries. Rest 77% did not think themselves to be responsible for their children's oral health.

The first dental visit should occur shortly after the first tooth erupts and no later than the child's first birthday. The American Academy of Pediatric Dentistry (AAPD) recommends that "a child should visit the dentist within six months of eruption of the first primary tooth and no later than 12 months of age". However, results of the present study suggest that parents seem to have low awareness about the importance of child's first dental visit. Only 7% of parents knew about the time of the first dental visit of the child.

The results of practices of care of primary dentition revealed that a considerable number of parents (78.8%) allow night time bottle feeding for the child. The findings were in accordance with another study by Dhull et al where 53% mothers disagreed with the fact that night time bottle feeding can cause dental caries.⁸ According to AAPD guidelines "ad libitum breastfeeding should be avoided after the first primary tooth begins to erupt in oral cavity."⁹

Majority (78.8%) of the parents visited to the dentist only when there was an episode of pain. Almost similar frequency of visit of the child to the dentist was found (75.6%). This shows the practices of the Kanpur population towards oral health needs to be improved.

Limitation of the present study is that the socioeconomic status and their education level was not taken into consideration.

Conclusion

There is a lack of knowledge pertaining to primary teeth care of their children in majority of parents of the Kanpur city. Even the practices towards the oral health of children were not satisfactory and the attitude of the parents toward good oral health practices needs to be improved more. As pediatric dentist, we can counsel and motivate parents to take appropriate care of their children's oral health.

REFERENCES

1. Nagaveni NB, Radhika NB, Umashankar KV. Knowledge, attitude and practices of parents regarding primary teeth care of their children in Davangere city, India. *Pesquisa Brasileira em Odontopediatria e Clínica Integrada*. 2011;11(1):129-32.
2. Casamassinmo PS. Dental disease prevalence, prevention, and health promotion: the implications on pediatric oral health of a more diverse population. *Pediatr Dent* 2003; 25(1):16-8.
3. Ng MW. Multi cultural influences on child-rearing practices: implications for today's pediatric dentist. *Pediatr Dent* 2003; 25(1): 19-22.
4. Riedy CA, Weinstein P, Milgrom P. An ethnographic study for understanding children's oral health in a multi-cultural community. *Int Dent J* 2001; 51(4):305-12.

5. Lahti SM, Hausen HW, Vaskilampi T. The perceptions of users about barriers to the use of free systematic oral care among Finnish pre-school children – a qualitative study. *Acta Odontol Scand* 1999; 57(3):139-43.
6. Nikhita Narayanan. Knowledge and Awareness Regarding Primary Teeth and Their Importance among Parents in Chennai City. *J. Pharm. Sci. & Res.* 2017; 9(2): 212-214.
7. Khanduri N, Singhal N, Mitra M, Rohatgi S. Knowledge, Attitude, and Practices of Parents toward Their Children's Oral Health: A Questionnaire Survey in Bhairahawa (Nepal) *Int J PedodRehabil.* 2018;3(2):59-61.
8. Dhull KS, Dutta B, Devraj IM, Samir PV. Knowledge, Attitude, and Practice of Mothers towards Infant Oral Healthcare. *International Journal of Clinical Pediatric Dentistry.* 2018;11(5):435-439.
9. Policy on Early Childhood Caries (ECC): Classifications, Consequences, and Preventive Strategies. *American academy of pediatric dentistry. Reference manual v 32 / no 6 10 / 11 oral health policies* 41-44.

CORRESPONDING AUTHOR

DR KARUNA SHARMA

READER

DEPARTMENT OF PEDIATRIC AND PREVENTIVE DENTISTRY

Drkarunasharma999@gmail.com

9315991071