

# Knowledge and Attitudes of Parents regarding child dental care in an Indian Population

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## ABSTRACT

The aim of this study was to assess the attitudes and knowledge of parents regarding child dental care in children under the age of five years, living in Piparia, Waghodia taluka and adjoining areas. Parents of 200 children under the age of 5 years, who visited K.M Shah Dental College and Hospital, Vadodara for dental treatment of their children were selected. A self-administered questionnaire was used to collect details of parent attitudes and awareness on child dental care as in baby bottle use, tooth brushing, family elders disapproval of child sugar snacking, dental visits, development of cavities, need to restore primary teeth. 60% parents felt children eventually develop cavities and 50% felt cavities cannot be prevented. Control of child sugar intake was considered unwise by 81% and 65% felt primary teeth need not be treated, 62.5% parents suggested family elders disapproval of controlling child's eating habits. Child first dental visit by one year of age was supported by only 35% of parents and lack of awareness regarding cleaning of oral cavity since birth by 70% of parents, 50% monitored and helped the child while brushing and 30% knew brushing was to be done twice a day. Finally 25% of parents said 'yes' to regular dental visits. The attitudes of parents towards child dental care were found to be largely unfavorable and dental awareness and knowledge poor.

**Key words:** Child dental care, Parental attitudes, Parental knowledge

## INTRODUCTION

There has been a significant decline in prevalence of dental caries in children in most of the industrialized countries on account of a conscientious effort on their part to promote child oral health care.<sup>4,11</sup>

India is a developing country and although caries prevalence studies show a marked decrease in urban population of dental caries, in rural population caries prevalence remains high. This is quite understandable considering lower level of awareness regarding dental health in this population, owing to the lack of access to education and lack of implementation of oral health care programmes.

A young child's dental environment is complex as parental knowledge, attitudes and beliefs affect child oral health.<sup>6,7</sup> Parents are decision maker for their children. Sarnat et al<sup>17</sup> reported that at the age of 5-6 years the more positive the mother's attitude towards dental health the better is child's oral hygiene. Since parents are role models for their children the habits adopted during childhood when the child is totally dependent on the mother are powerful means of establishment of novel behaviour in children such as that of tooth brushing.<sup>3,5</sup>

Children from low income and disadvantaged families have been found to have high caries prevalence and poor oral health. Therefore it is important to examine the attitudes and also the knowledge of the parents, as these may effect their behaviour towards child oral health. This may also have implications for early dental visits aimed at prevention rather than restorative treatment.

Levels of attendance among parents reporting for treatment of children between 1 to 5 years in the Department of Pediatric Dentistry, K M Shah Dental College and Hospital, Piparia, Waghodia, were quite high as compared to parents of children among other age groups. It was therefore decided to conduct a study on parental attitudes and knowledge of children between one to five years of age.

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## SUBJECTS AND METHODS

### Study population and sampling method

The study area was Piparia village in Waghodia taluka and adjoining areas.

All parents of children aged between 1 to 5 years who reported for treatment in the Department of Pediatric Dentistry, K M Shah Dental College and Hospital, Piparia, Waghodia taluka, with the common complaint of tooth ache or unsightly teeth were invited to participate in this study. The study lasted for 16 weeks. Written consent was taken from the parents of children belonging to specific age group before initiating the study.

The parents were interviewed so as to complete a questionnaire, which was designed to collect data on attitudes towards child dental care and their knowledge about the same. The questionnaire was translated into local language for ease of understanding. All of the interviews were conducted in a relaxed setting. Information on parents attitudes and knowledge towards developments of dental caries and child oral health, was gathered by asking whether they agreed or disagreed with different statements.

A total of 200 parents participated in the interviews conducted. Initially study population consisted of 260 parents, later 60 parents backed out of the study. Hence they were not included in the study.

Parental attitudes were assessed by the following statements-

1. Most children eventually develop cavities.
2. Nothing substantial can be done to prevent cavities.
3. Primary teeth need not be restored.

Similarly other questions were asked to assess knowledge of child dental health care. Sample statements included:

1. Child's oral cavity should be cleaned since birth.
2. Child's first dental visit should be by one year of age.
3. Brushing should be done monitored and child should be helped during brushing.
4. Whether regular dental visits should be made.
5. Would you take your child to the dentist only when problem arises.
6. Continued use of nursing bottle at night.

## RESULTS

60% of parents interviewed were of the view that most children eventually develop cavities. On being questioned whether cavities can be prevented 50% said that nothing substantial

can be done to prevent them, while 50% felt cavities can be prevented. Similarly when asked whether child's sugar intake should be controlled, 81% parents thought that it was unwise. Also when enquired about restoration of primary teeth approximately 65% felt that they did not require treatment as they shed by themselves and are replaceable. However a new fact emerged when 62.5% of parents suggested that family elders disapproved of controlling child's eating habits.

The fact that child's first dental visit should be by one year of age was supported by only 35% of parents. Similarly 61% approved taking child to a dentist only when problems arose. Again 25% expressed the view that regular dental visits should be made so that dental disease can be prevented while approximately 37% felt control of intake of child's sugar snacking was advisable. Only 50% respondents felt that the child should be helped while brushing whereas 30% knew that brushing should be done twice a day. 72% of respondents continued to use nursing bottle at night to feed their children beyond the recommended one year of age.

## DISCUSSION

Studies conducted previously in Piparia and adjoining areas have reported a caries prevalence of 65% in children under 6 years of age which is quite high. Children belonging to both rural and urban communities visit the Pediatric Dentistry Department of K M Shah Dental College & Hospital. Several studies conducted previously have identified parental knowledge and attitude as one of the factors influencing dental health and disease in children.<sup>16</sup> This is because parents are the role models for their children and also decision-makers. Parental decisions are influenced by their attitudes which reflect on the oral health of the child.<sup>9</sup> Also maternal factors are of significant importance because young children are unable to care for themselves and are dependent on mothers for their daily care.<sup>13</sup>

In a previously reported study on oral health behaviour of school children and parents, the level of knowledge and attitude of parents towards child dental care was assessed and found to be negative.<sup>14,20</sup> Similar results were found in this study.

No previous study has highlighted the attitude and knowledge regarding child dental care of parents visiting K M Shah Dental College and Hospital for dental treatment of their children.

Majority of 260 parents expressed their interest in participating in the study which was encouraging.

Most parents felt that children eventually develop cavities. There appears to be an underlying fatalistic belief behind agreement on this statement. This also can be attributed to their indifference towards child dental care or observation of

other children in their locality. Families residing locally have low education level and have very little or no knowledge regarding the oral health. Sohn *et al* conducted a study on 'Caregivers' perception of child health status and found that 8 out of 10 caregivers had a fatalistic belief that children develop cavities.<sup>18</sup>

Surprisingly in this study despite the poor knowledge half of the parents interviewed were aware that cavities can be prevented while the other half felt that nothing substantial can be done to prevent them. Better attitudes and knowledge of low income parents residing in urban area who approach the hospital for dental treatment can be attributed to their being aware of the fact that cavities can be prevented.

However treatment need for primary teeth was not considered imperative by a large percentage of parents. Most of them felt that as primary teeth shed by themselves and are replaced by permanent teeth they need not be restored. Since many of them are belonging to village community subsisting on low income and more urgent problems to deal with like food, shelter, general health care, oral health of the child is neglected.

Control of child's sugar intake was not supported by 81% of the participants. They considered it inadvisable as they might not have recognized it as a means of preventing tooth decay. Moreover prescribing sweets as reward or gift is considered socially acceptable and is a part of present life style. Astrom and Kiwanuka<sup>1</sup> in their study in 2002 supported this finding. Also sugar snacking varies with availability. Unfortunately this deleterious habit pattern once established is difficult to break and persists even after a child becomes older.<sup>10,15,19</sup>

Extended family system is still embraced by Indian families despite recent figures suggesting nuclear family system. Family elders play a vital role in day to day decision making. Results of this study highlight complaints of parents that family elders largely disapprove of controlling child's eating habits. This requires that parents needs to be more confident in controlling sugar snacking of their children. According to Bandura perceived control can be increased through experience of personal mastery by choosing sugar free snacks for children.<sup>2</sup>

Cleansing of the oral cavity needs to be started at birth. Unfortunately merely one fourth of parents were aware of this fact. Also two thirds of them felt that dental visits were associated with dental problems. No child had previously visited a dentist as a precautionary measure. Similarly first dental visit at one year of age was considered as being too early a visit to dentist. This study indicates the need for optimum dental service utilization which is very low. This could be attributed to lack of need based oral health care programmes. Also instructions given to parents were within limited time in the dental office and usually associated with the particular dental problem in order to be able to manage

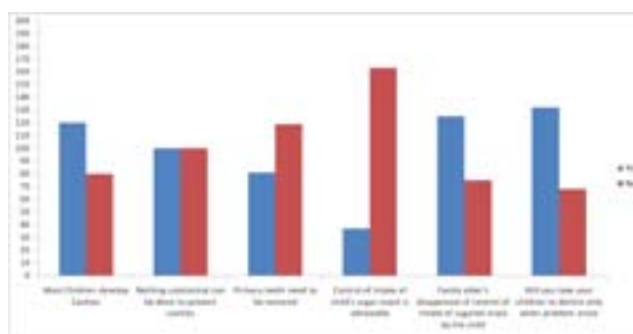


Table -1 Parental Attitudes

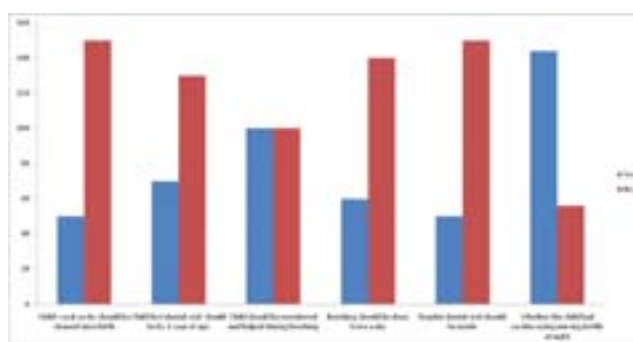


Table- 2 Parental Knowledge

daily patients. Regular dental visits of parents are very powerful in relation to development of regular oral hygiene habits in children. It was quite interesting to note that half of the parents interviewed insisted that a young child should be monitored and helped during brushing. According to Mohebbi *et al.*<sup>12</sup> the habit of tooth brushing is introduced by the parent especially the mother in pre-school children. Children under the age of five years are only partially able to brush their teeth and they should be assisted while brushing.

Parents in this study who did not assist or supervise the child cited various reasons like child knowing how to brush, large family size and also children wanting to perform brushing by themselves. Khadri *et al.*<sup>8</sup> observed that children who performed brushing by themselves were few, in most cases brushing was shared by mother and child. Nevertheless there is a need to emphasize assistance during brushing for a young child by a parent so that dental caries can be kept at bay.

Information on baby bottle use indicates that more than two thirds of parents continued use of nursing bottle at night while the child was asleep. This reflects parental ignorance regarding nursing bottle use and lack of adequate dental services utilization. Therefore, dietary advice for mothers of infants should be reinforced throughout child's early years. Dentists and other health professionals who come into contact with mothers should work together in order to provide necessary information so that preventive advice is clear and consistent.

There are certain limitations to this study. Dental knowledge, attitudes and oral hygiene habits may have been over reported to provide socially desirable answers and thus may not provide exact data. Also there are certain important determinants to child's oral health like parent's socioeconomic background, education level, monthly income. Since monthly income is considered to be a sensitive issue there were chances of people backing out of the study. Hence these factors were not evaluated in this study. Steps should be taken to remedy both poor knowledge and attitudes of parents towards child dental care if goals of the child dental care are to be realized.

## CONCLUSION

The attitudes of parents towards child dental care in this study were largely unfavorable and dental awareness and knowledge poor. There is an immediate need to cultivate and reinforce positive attitudes among parents and substantially raise their dental awareness through child dental health oriented programmes. Initiatives are required to promote early preventive visits of children by dentists and other health professionals, who come into contact with new mothers, if goals of child dental health are to be realized.

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