Research Article

Evaluation of parental attitude toward the first child's and subsequent child's oral health care – A questionnaire study

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ABSTRACT

Objective: The objective of this study was to evaluate the attitude of parents toward the first child's and subsequent children's oral health care. **Materials and Methods:** Two hundred questionnaires were distributed among parents who had at least two children. The collected data were analyzed using IBM SPSS statistics software 23.0 Version. To find the significant difference between the bivariate samples in the independent groups, the unpaired sample *t*-test was used. For the multivariate analysis, the one-way ANOVA with Tukey's *post hoc* test was used. **Results:** About 33% of the parents had school level of education. 37% of the parents had finished their under graduation. The remaining 30% had completed postgraduation level of education. The DMFT status of the first child was found to be more than the second child whose parents had finished school and under graduation level of education (82% and 64.3%, respectively). The DMFT status of the first child and subsequent child was almost similar whose parents had finished postgraduation level of education. The overall DMFT status of the first child was higher than the second child. **Conclusion:** Parents' knowledge, attitudes, and beliefs about oral health care play a key role in the dental health of their children.

KEY WORDS: Dental caries, Oral health, Parental attitude, Primary teeth

INTRODUCTION

There is a marked increase in the awareness regarding dental caries and its consequences among the urban population in India.[1] However, in the low socioeconomic groups, there is still a lack of awareness about oral health and its maintenance and the detrimental effects in failing to do so. The prevalence of dental caries is still high in the rural population due to lack of knowledge about dental care in parents due to their cultural beliefs, myths, and attitudes toward it.[2,3]

A young child's dental health and attitude is dependent on the parent's attitude since children look up to them as their role models.[4] Moreover, when it comes to taking care of two or more children in the rural population, parents face many problems such as feeding the family with a low income, meeting the basic necessities, and supporting the elderly in the house. Furthermore, the level of education of parents played a key role in the oral health of their children.

Parents with higher levels of education were more aware of dental caries and its consequences and had visited the dentist at least once for their child. Parents of poor education status did not have much awareness regarding the dental health, and many had not visited the dentist due to various reasons like taking care of urgent needs such as food, shelter, and clothing.

The eating habits of children were mostly not in control of parents and the elderly played a huge role in rewarding their grandchildren with sweets often.[5] Having two or more children resulted in lesser control of their brushing and dietary habits. However, with experience with the first child, parents showed earlier importance with the second child regarding oral health care.

More importantly, treatment need for primary teeth was not considered necessary 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.[6]

Access this article online

Website: jprsolutions.info | ISSN: 0975-7619

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Received on: 17-11-2018; Revised on: 19-12-2018; Accepted on: 26-01-2019

MATERIALS AND METHODS

Hundred parents having at least two children were included in this questionnaire study. The questionnaire was given in person to the parents who attended a dental college for the treatment of their children or private dental clinics. Informed consent was obtained from all the parents included in the study. The content was in English and was explained in vernacular to those who did not know the English language. The questionnaire included demographic data of both the children, the education of the parent, monthly family income, and their occupation. Parents were asked about the oral hygiene practices, dietary habits, and frequency of snacking of each child.

The DMFT status of each child was assessed and compared. This study mainly focused on parents' awareness on dental care and whether both the children were given equal importance regarding treatment needs.

Statistical Analysis

The collected data were analyzed with IBM SPSS statistics software 23.0 Version. To describe about the data, descriptive statistics, frequency analysis, and percentage analysis were used for categorical variables, and the mean and SD were used for continuous variables. To find the significant difference between the bivariate samples in the independent groups, the unpaired sample *t*-test was used. For the multivariate analysis, the one-way ANOVA with Tukey's *post hoc* test was used. In both the above statistical tools, $P = 0.05$ is considered as statistically significant level.

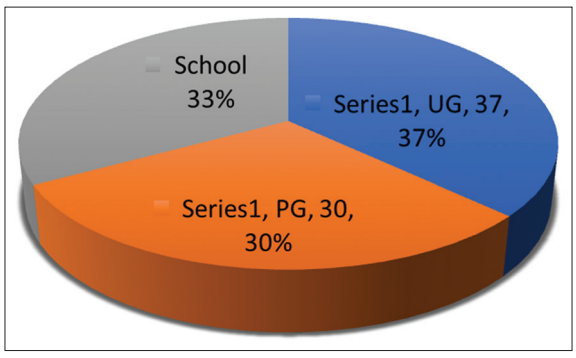

Figure 1: The distribution of the levels of education of the parent

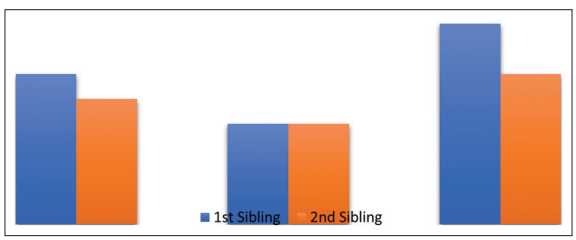

Figure 2: The relation of DMFT status of both children combined with the education of the parent

RESULTS

A total of 100 questionnaires were distributed and collected back for analysis.

Parents who had school level of education were 33%. Undergraduate parents were 37% of the population. Those who had completed postgraduation were 30% as shown in [Figure 1]. This had a direct influence on the DMFT status of their children (81%, 63%, and 32%, respectively) as shown in [Figure 2]. There was also a significant correlation between the monthly income of the family and the caries status of the children as shown in [Figure 3]. The DMFT status of the children was 30% more in lower-income groups compared to the middle- and high-income groups. The frequency of brushing was higher in the second child (67%) than the first child (52%) as shown in [Figure 4 and 5]. However, the frequency of snacking more than twice was higher in the second child (78%) than the first child (54%) as shown in [Figure 6 and 7]. This was attributed to the influence of the elderly in the family.

DISCUSSION

This study demonstrates the influence of parents on their children's oral health care and more specifically the importance given to the first child and the second child regarding the treatment needs. Emphasis has been laid on the influence; the education of parent and monthly family income have on the awareness of

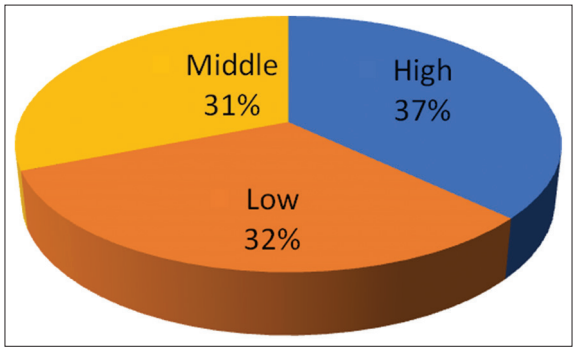

Figure 3: The distribution of the income of the parents

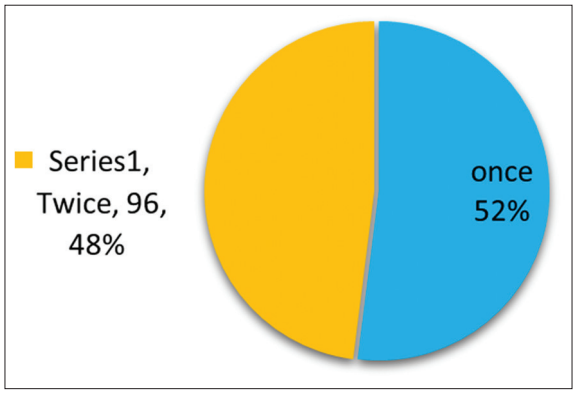

Figure 4: The frequency of toothbrushing in the first child

dental care of their children.[8] According to the results, all parents had finished school level of education. However, most parents were not aware of the importance of primary teeth or infant oral health care. More importantly, treatment need for primary teeth was not considered necessary 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.

Most of the low-income groups lived as large joint families, which made taking care of and paying attention to children's oral health difficult. And also, the frequency of snacking was found to be more in low-income and high-income groups.[4] High-income group families had a high frequency of providing sugar-containing food items to their children and were not aware of the consequences on their dental status. Many complained that the elderly of the families played a major role in indulging the children with sweets and caries inducing food. Parents did not have a control over this issue.

Most parents were not aware of the fact that cleansing of the oral cavity should be started at birth. They took their child to the dentist only on occasion of toothache and not as a precautionary measure. Most parents agreed that they did not have the time or the knowledge that their children needed regular dental checkups. Many parents did not whether their children brushed once or twice daily. Many agreed that their presence is needed to guide the children in brushing.

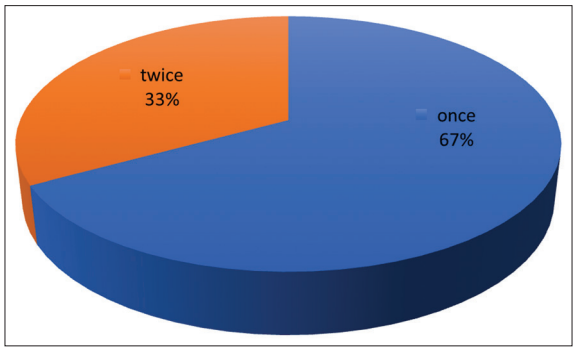

Figure 5: Frequency of toothbrushing of the second child

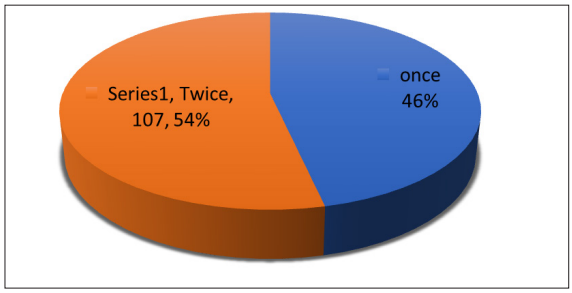

Figure 6: The frequency of snacking of the first child

The family plays a crucial role in promoting children's health and also in their ability to develop a healthy attitude and lifestyle. The mothers' attitude on oral health care plays the most significant role in the child in their growing years.[11] Since there is a deep-rooted bond and interaction between a mother and child, it plays the most important role as a source for the child's perception and acceptance of attitudes, behaviors, and values toward oral health care.[5,9]

Mothers' own oral health behavior and toothbrushing habits create a positive influence on their children's attitudes and perception toward toothbrushing and dental health.[10,12] More importantly, many parents were unable to identify the carious lesions and did not have the knowledge to visit the dentist during the early years of the child. Hence, this resulted in the dental treatment only after pain occurred and required invasive pulp therapy. This greatly influenced the second child's perception of the dentist. Even though the first visit to a dentist of the first child was delayed, it created awareness among parents to take the second child sooner. However, overall, the DMFT status of both children was almost similar since most parents reported that they were not aware nor did they have the time to visit the dentist. They approached the dentist only on occasion of pain reported by the child.

Many studies have indicated that high levels of the mother's knowledge and positive attitudes about their children's oral health, such as toothbrushing, diet. The

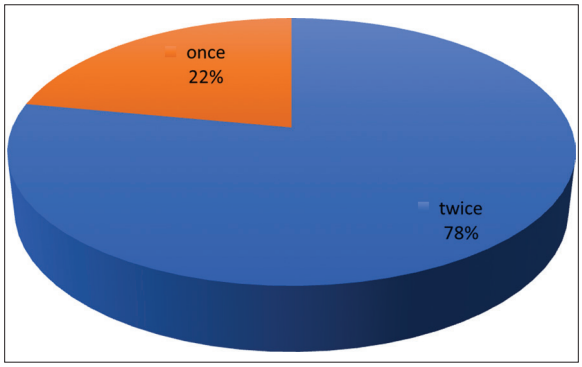

Figure 7: The frequency of snacking of the second child

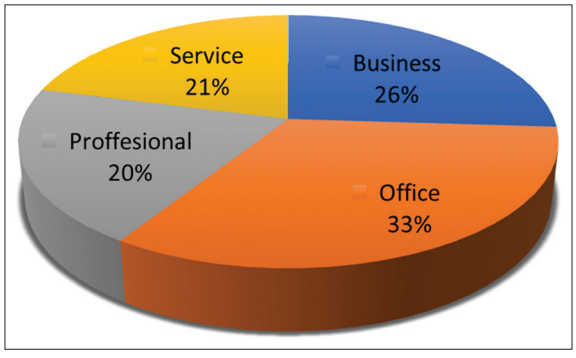

Figure 8: The distribution of the occupation of the parents

importance of the primary dentition was associated with higher socioeconomic groups and higher education level as shown in [Figure 8].[1,2]

It was found that many parents had positive attitudes toward dental caries management for their children. However, it reported that a significant portion of mothers did not know the importance of maintaining primary dentition properly.[13] Early childhood caries was not considered a serious condition by the parents since they assumed that the primary teeth would shed eventually. The neglect of oral health during childhood will result in consequences later on since caries is a continuous and cumulative process.[14] It has been mentioned that untreated dental caries in the primary teeth leads to an increased risk for the development of new carious lesions in permanent teeth, results in growth deficiency, and also poor development of social and intellectual skills.[3]

CONCLUSION

Educational measures regarding oral health care from the infant stage should be emphasized, especially among mothers of children at a higher risk of caries and among the 1st time mothers. Dentists should emphasize the importance of deciduous teeth and the consequences of not taking care of them. Regular dental checkups must be encouraged and this should instigate a positive attitude among both parents and children. Importance of infant oral health care, diet, and toothbrushing should be highlighted.

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Source of support: Nil; Conflict of interest: None Declared