

Original Research

Maternal Education's Impact on Pacifier use and Frequency of Dental Visits

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ABSTRACT:

Background: The usage of pacifier beyond the age of 2 years could lead to significant jaw and dental malformation. Pacifier sucking was more common than thumb sucking and is related with a lower incidence of breastfeeding amongst the 12 month old. The present study was conducted to determine the impact of maternal education on pacifier use and dental visits. **Materials and methods:** The present prospective observational study was performed in the department of Pedodontics for a period of 9 months. The frequency of dental visit of the children were also taken note of. The questionnaires were distributed, and study was explained and queries were answered. Educational level was classified as low, medium, or high based according to the highest official degree obtained. The age at which the child stopped using pacifier was noted. All the data thus obtained was arranged in a tabulated form and analyzed using SPSS software. **Results:** The present study enrolled 100 mothers between the age of 26-39 years. There were still 8 subjects who discontinued at 24-35 months, 4 at 36-47 months, 2 at 48-59 months. There were 4 subjects who visited only once in year. Table 3 demonstrates the impact of maternal education on discontinuation of pacifier. Females with medium level education and low level education were the ones who made their children use pacifier till 48-59 months. **Conclusion:** Maternal education also has a great impact on the same. In our study, mothers with low education level allowed usage of pacifier for a higher age.

Key words: Dental, pacifier, questionnaires.

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INTRODUCTION

The usage of pacifiers in order to gratify the sucking instinct is a widely seen observation. Digits, toys or pacifiers could serve chiefly to satiate instinctive requirements, while pacifier usage at the age of 4 years or older is regarded an extended habit. The usage of pacifier beyond the age of 2 years could lead to significant jaw and dental malformation.^[1-3] Studies in the past have reported that the usage of pacifiers may be confused with "nipple confusion,". It is associated with certain drawbacks like early weaning, chances of otitis and infections, and dental issues. On the brighter side, pacifiers can also protect against the dreaded sudden infant death syndrome. Few mothers have recommended that pacifier use can improvise a child's tendency to breathe via mouth if there is obstruction in the nasal

airway. Also, it has been contended that sucking on a pacifier needs forward position of the tongue, that reduces the risk of oropharyngeal obstruction.^[4-6] According to Bueno et al. who evaluated the relation of breastfeeding duration, nasal airflow and pacifier use with occlusal disorders amongst children. He found a significant relation between the usage of pacifiers and occlusal anomalies.⁷ The present study was conducted to determine the impact of maternal education on pacifier use and dental visits

MATERIALS AND METHODS

The present prospective observational study was performed in the department of Pedodontics for a period of 9 months. The study enrolled mothers of children aged between 2-7 years visiting the department for routine dental treatment.

All the mothers were informed about the study and a written consent was obtained from them in their vernacular language. The study was approved by the institutional ethical board. All the females were given a pretested structured questionnaire that had questions pertaining to oral health habits, age and dental history, along with the frequency, duration and type of use of pacifier. The sociodemographic details of the mother, their educational level, age, gender were also considered. The frequency of dental visit of the children were also taken note of. The questionnaires were distributed, and study was explained and queries were answered. Educational level was classified as low, medium, or high based according to the highest official degree obtained. The age at which the child stopped using pacifier was noted. All the data thus obtained was arranged in a tabulated form and analyzed using SPSS software.

RESULTS

The present study enrolled 100 mothers between the age of 26-39 years. Table 1 shows the age of discontinuation of pacifier. There were 27 subjects who discontinued at 0-3 months of age, 32 at 4-6 months, 16 at 7-11 months, 10 at 12-23 months of age. There were still 8 subjects who discontinued at 24-35 months, 4 at 36-47 months, 2 at 48-59 months. There was only one child who discontinued at 72-83 months of age. Table 2 shows the frequency of dental visits. Majority subjects i.e. 81 visited dental clinic only when a dental issue arises. There were only 5 subjects who visited every 3 months. 10 amongst them visited every 6 months. There were 4 subjects who visited only once in year. Table 3 demonstrates the impact of maternal education on discontinuation of pacifier. Females with medium level education and low level education were the ones who made their children use pacifier till 48-59 months. There was 1 mother with high school education who allowed pacifier use till 72-83 months. Majority of mothers with graduation discontinued pacifier use at 0-3 months and 4-6 months.

Table 1: Age of discontinuation of pacifier

Age (Months)	Frequency
0-3	27
4-6	32
7-11	16
12-23	10
24-35	8
36-47	4
48-59	2
72-83	1

Table 2: Frequency of dental visits

Dental visits	Frequency
if there is dental problem	81
every 3 months	5
every 6 months	10
once in year	4

Table 3: Comparison of educational level of mother and pacifier withdrawal

Age (Months)	Low level	Medium level	High level
0-3	4	6	17
4-6	6	10	16
7-11	2	4	10
12-23	1	2	7
24-35	3	2	2
36-47	2	1	1
48-59	1	1	0
72-83	1	0	0

DISCUSSION

The study aimed to improve oral health amongst parents with poor education. Low Education of mother and rare dental visits Along with prolonged usage of pacifier worsens dental conditions. Frequent visits to dentist can significantly reduce the age of withdrawing pacifier amongst children whose mothers are not well educated. Pacifier sucking was more common than thumb sucking and is related with a lower incidence of breastfeeding amongst the 12-month-old. Family, social status do not seem to be associated with nonnutritive sucking habits.^[8] Children who do not visit the dentist for regular dental checkups have the tendency to use the pacifier for a longer time. Therefore, pacifier usage is also dependent on maternal education level and dental visits rather than educational level alone.^[9] According to a study, less educated mothers tend to give their children pacifiers for a longer age compared to well educated mothers.^[10] Past studies has stated that maternal education disturbs the usage of dental hygiene services and dental health.^[11] Another study showed a significant impact of the maternal education pacifier withdrawal. Also, the frequency of visits to dental Clinic were altered by the maternal education and age at which pacifier was withdrawn.^[12] The Results of current study were like the previous studies. In our study, there were 27 subjects who discontinued at 0-3 months of age, 32 at 4-6 months, 16 at 7-11 months, 10 at 12-23 months of age. There were still 8 subjects who discontinued at 24-35 months, 4 at 36-47 months, 2 at 48-59 months. There was only one child who discontinued at 72-83 months of age. Majority subjects i.e. 81 visited dental clinic only when a dental issue arises. There were only 5 subjects who visited every 3 months. 10 amongst them visited every 6 months. There were 4 subjects who visited only once in year. Very few studies conducted in the past regarded the association between maternal education level and use of pacifier. A study found that preschooler’s mothers are at risk as they had superficial information, attitudes, and behaviors regarding their child’s dental condition, even with regular visits to the pediatric dentist.^[13] Dental professionals should make them aware of the influence on patient’s knowledge and behavior by giving parents

reliable information on maintenance of good oral hygiene practices. It has been found that the advice by dental professionals is the most effective method for reducing pacifier use.^[14]

CONCLUSION

Pediatric dentists and mother's have a major impact on child's oral hygiene. Educated mothers are found to be more concerned about oral hygiene practices. Maternal education also has a great impact on the same. In our study, mothers with low education level allowed usage of pacifier for a higher age.

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