

Evaluation of the Effectiveness of Video-based Intervention on the Knowledge of Infant Oral Health among New Mothers

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ABSTRACT

Background and objectives: Infant oral health is the foundation upon which preventive dental health education must be built to enhance the conditions for a disease-free oral cavity. Majority of the mothers are ignorant about their oral health and also about the fact that their oral health status affects that of their babies. Educational videotapes have proved to be effective in educating mothers on various child health issues. So the objectives of this study were to educate the mothers about the need for infant oral health care, compare the level of mother's knowledge on infant oral health before and after the video presentation and assess the effectiveness of the presentation.

Methodology: An interactive educational video presentation containing evidence-based information about infant oral health care and prevention was developed. This presentation was based upon information provided by the American Academy of Pediatric Dentistry (AAPD) on anticipatory guidance. It includes the persuasive message on maternal oral health during preconception and pregnancy and its implication on birth outcomes, vertical transmission of *Streptococcus mutans*, infant oral health, the risk for early childhood caries (ECC), and increased caries experience on permanent teeth if primary teeth are affected. Emergency care for infant oral trauma, consequences of traumatic injuries to the primary dentition from an aspect of possible damage to the developing tooth, dietary habits, and oral hygiene behaviors. It also emphasizes the timing of the first dental visit and the periodicity of dental screenings. The survey was designed to compare the effectiveness of instructional videotaped persuasive messages by using pre- and post-questionnaires. Two hundred mothers of infants below the age of 12 months were included in the study. They were asked to fill out the questionnaires before and after the presentation on the same visit.

Results: The results showed a highly significant improvement in knowledge ($p < 0.05$) as assessed by the proportion of correct responses following a single viewing of the AV-aid.

Conclusion: The knowledge of new mothers on infant oral health care was inadequate, and there was an improvement in their knowledge of infant oral health care after the instructional video presentation. An instructional video presentation is an effective tool for improving the oral health knowledge of new mothers.

Significance: By this study, we want to inculcate the habit of oral hygiene maintenance among the mothers, which indirectly affects the infant's oral health. Through this study, we educated the mothers regarding infant oral health care, which significantly improved their knowledge.

Keywords: Infant oral health care, Knowledge, Video presentation.

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INTRODUCTION

Infant oral health is the base on which preventive dental education and dental care must be built to boost the prospect of a lifetime free of avoidable oral diseases.¹

Mothers have an important role in bringing up infants. Very young children are reliant on their mothers to fulfill their basic needs, including maintenance of their oral hygiene. Untimely feeding bottle use patterns, such as persistent exposure to sugary liquids at night time, the adding of sweeteners to liquids, and deferred weaning, have been associated with ECC.²

Most mothers are unaware that their oral health affects their babies' oral health. The spread of *Streptococcus mutans* from mother to child is the chief contributory factor for ECC. This mode of transmission is called vertical transmission. Early acquisition of the microflora from mothers is a major risk factor for ECC.³ Enhanced knowledge of these factors and effective approaches for prevention will result in a reduction in disease complications and treatment costs.⁴

There are various approaches by which health care professionals can provide guidance and educate parents like verbal recommendations, information handouts, and the use of videotapes. Instructional videotapes are considered highly effective in enhancing mothers' knowledge of various child health issues.⁵ Programs to educate

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and promote preventive measures have been shown to increase knowledge and the ability to recall information related to health.⁶

Bearing in mind the mother's significant role in the welfare of very young children, it is crucial to reconnoiter their knowledge regarding oral health maintenance, as it affects the dental care infants receive at home. The aim of the present study was to assess the mother's knowledge of infant oral health care before and after the instructional video presentation. It also intended to educate the mothers about the need for infant oral health care through an instructional video presentation.

MATERIALS AND METHODS

The present study is a non-randomized interventional study ascertaining the level of knowledge of infant oral health among new mothers. The study included 200 new mothers with infants below the age of 12 months. Mothers with healthy offspring were included in the study. Mothers who were mentally incapacitated and mothers of special children were not considered in the study.

Written consent was obtained from all the participants participating in the study. The survey was designed to compare the effectiveness of instructional videotaped persuasive messages by using pre and post-questionnaires. The questionnaires were developed based on a Likert's scale to assess the level of mother's knowledge on infant oral health care and prevention. The questions for the questionnaire were prepared at a third-grade level of reading and comprehension. The questionnaires were distributed to the selected participants in person to collect the data. Content of the survey included/reflected the information we obtained from a review of literature, policy statements, guidelines, qualitative research, and expert opinion about dental care for pregnant women and anticipatory guidance.

Method of Collection of Sample

Participating mothers were asked to fill out a pre-presentation questionnaire. A 30-minute PowerPoint and video presentation was shown to them, followed by participation in a question and answer session. Following this, they were asked to complete a post-presentation questionnaire.

Video Presentation

An interactive educational video presentation containing evidence-based information about infant oral health care and prevention was developed. The film was titled "Mom it's up to you, your baby depends on you," which included the introduction, special effects, and musical backing to improve the presentation. The script was based upon information provided by AAPD on anticipatory guidance.

The 30-minute presentation covered in detail the infant oral health care and prevention strategies based on AAPD guidelines and a persuasive message on maternal oral health during preconception and pregnancy and its implication on birth outcomes. It also included information about the vertical transmission of *Streptococcus mutans*, the risk for ECC, and increased caries experience on permanent teeth if primary teeth are affected. Emergency care for infant oral trauma, consequences of traumatic injuries to the primary dentition from an aspect of possible damage to the developing tooth, dietary habits and oral hygiene behaviors, antibiotic resistance, and appropriate antibiotic use in infants were also included in the video presentation. It also emphasizes the timing of the first dental visit and the periodicity of dental

screenings. The deeply ingrained belief that baby teeth are going to fall out anyway was addressed. The presentation also covered the importance of the oral health status of parents or caregivers.

Pre-presentation Questionnaire

The 200 participants completed the pre-presentation questionnaire related to infant oral health first, which also contained the basic demographic information of the participants. Each questionnaire consisted of two parts. The first part consisted of general information such as name, age, gender of the child, parent education, occupation and family income. The second part consisted of 26 questions. The responses to 14 questions were rated as yes, no, and I don't know. The option "I don't know" was provided to assess lack of knowledge. Twelve questions were structured in multiple-choice format for simplicity and consistency.

Participants viewed a 30-minute video presentation followed by an interactive session and then completed the post-presentation questionnaire.

Post-test Questionnaire

Post-test questionnaire contained 29 questions to evaluate the effectiveness of the presentation. Both questionnaires were completed during the same visit, and all participants were interviewed by a single investigator. The presentation was offered on different days and times to accommodate parent schedules. At the end of the program, the participants received a folder containing handouts on infant oral health information, an infant toothbrush, an adult toothbrush, and a toothpaste and a baby gift.

The questionnaire was adopted and modified from Lisa Alsada et al. 2005 to test the audience's knowledge before and after viewing the video presentation. Data obtained were subjected to statistical analysis.⁶

Method of Statistical Analysis

Differences in mean results before and after viewing the presentation were calculated for individual questions and for the questionnaire as a whole.

The following methods of statistical analysis were used in this study. The data collected was entered in Microsoft Excel, and statistical analyses were performed using the Statistical Package for the Social Sciences (SPSS ver 10.5) software.

The Normality of the data was accessed using the Shapiro-Wilk test.

- Univariate analyses of the dichotomous variables encoded was performed by means of the chi-square test with Yates correction if required.
- Student's *t*-test

The student's *t*-test was used to determine whether there was a statistical difference between groups in the parameters measured.

RESULTS

This study included 200 mothers of infants who fulfilled the inclusion and exclusion criteria and responded to pre and post-questionnaires consisting of 26 questions related to infant oral health. The questionnaire results were assessed separately and précised for the whole sample to understand the efficacy of the informative material presented in the 30 minutes long oral health instructional video.

The answers given before viewing the video exposed a deficit of knowledge about infant oral health, as demonstrated by the number of incorrect and "don't know" responses. It was found that 65.5% of mothers exhibited poor knowledge, around 34% exhibited fair knowledge, and 5% had good knowledge.

After viewing the instructional video, 4.5% of mothers exhibited poor knowledge, 13% exhibited fair knowledge, and 82.5% had good knowledge. Thus substantial enhancement in knowledge was attained as measured by the number of correct answers subsequent to the viewing of the video.

The study showed that there existed a dearth of knowledge and mistaken beliefs regarding infant oral health. It also revealed that there is a necessity for infant oral health education programs focused on the expectant parents and caregivers.

DISCUSSION

Mothers play a pivotal role as inculcators of healthy oral habits in their offspring. Thus, enhancing their awareness concerning infant oral health care is necessary to bring about an improvement in the existing scenario of oral health status in children. Due to ignorance regarding infant oral health care, the oral health of the younger generation of our society is compromised. Various mass media channels can be employed to edify the masses such as audiovisual (AV) aids, pamphlets, and computer-based information.

Recognizing the influence of the mother's behavior on their children's oral health, the present study was proposed to evaluate the efficiency of AV aid in educating primary caregivers about infant oral health care. At present, very limited studies have acknowledged the effectiveness of a generally applicable model for educating mothers about infant oral health care *via* anticipatory guidance. The purposes of our research were to generate and test an audiovisual aid for teaching and creating alertness about the oral health of infants and small children among their mothers. The main aim of this info was to avert dental diseases and to create community mindfulness about the significance of early intercession in this regard.

In our study, our educational video delivered a wide-ranging, self-directed, evidence-based methodology to promote infant oral health care. It was also unique as we used anticipatory guidance to draw the attention of new mothers to positive health behaviors and highlighted a broader approach to prevent the influence of negative behaviors.

The presentation was kept short, communicated in simple language, and covered all the relevant aspects of the oral health of infants and children. The presentation highlighted the importance of a healthy pregnancy and the negative effects of non-prescribed medicines, smoking, and alcoholic drinks consumed during pregnancy. The chronology and development of primary teeth were also emphasized.

During the study, the majority of mothers did not know that permanent tooth development begins at or just before birth. Professional guidance was given for the treatment of teething, a prime concern for many mothers. The role of sugars in the development of caries and preventive oral hygiene measures was explained. The oral hygiene practice demonstrations were given by cleaning the infant gum pads with gauze in lap to lap position.

In the video, the causes of ECC, their impediments, and the cost of treatment were explicitly depicted to enhance the influence and retention of the information. A small section of the video dealt with deleterious oral habits and dental trauma. An explanation of their

role in impeding normal growth and development, including the timing and necessity of intervention, was also highlighted.

The observations from the present study were explained under different headings.

Effect of Sociodemographic Factors on the Mother's Knowledge

In the present study, mothers from upper class or middle-class socioeconomic status and higher educational qualifications had a better knowledge as compared to lower class socioeconomic status and low educational qualifications. This was because the parent with a higher level of education was able to assess appropriate sources of information and understand them. The results obtained from this study were similar to the study done by Szatko et al. and Williams et al.^{7,8}

The results of this study showed a statistically significant difference between the pre and post-test scores, which meant that even though some of the respondents achieved a lower score on the pretest, on an average people performed better after the intervention. This result was similar to the findings in the study done by Rothe et al. and Alsada et al.^{1,6}

Mother's Knowledge Concerning Eruption Pattern of Primary Teeth

In our study, 50% of the mothers knew about the first baby tooth eruption prior to the presentation. This knowledge was enhanced ominously after the presentation. Many mothers could not remember when their child's first tooth erupted, in spite of it being a momentous milestone. These results relatively revealed the low alertness regarding the state of oral health of the children among their mothers or caregivers.⁹ This result was similar to the result of the studies done by Nagraj et al.² Dogra et al.¹⁰

Mother's Knowledge Concerning the Mode of Transmission of Oral Bacteria

Around 29.5% of mothers responded correctly to the question of whether bacteria were transmitted from the mother to the child, before viewing the video compared to 87.5% of correct answers after the presentation (Table 1). The progress was observed with regard to the awareness of amplified jeopardy of bacterial spread to the child by kissing & fomites. The results of previous studies by Suresh et al.¹¹ Sakai et al.¹² and Varghese et al.¹³ suggested that there was a lack of awareness midst mothers in regard to early vertical or horizontal bacterial transmission from the mother to child, is due to inefficient infant oral health care practices.

Mother's Knowledge Concerning Safety Measures

Acquaintance on the subject of the safety procedures to avert accidents and sports injuries was enhanced from 74.5% to 95%, and a safe home environment in prevention of oral trauma to the child was 73.5% to 86.5%, respectively (Table 1). Though the mothers had good knowledge about the prevention of injuries, preventive practices need to be reinforced by educational interventions and empowering mothers. The high alertness among mothers could be due to the significance that follows such accidents, similar to a study done by Arulogan et al.¹⁴

Mother's Knowledge Concerning the Time of Weaning

In the present study, 33.5% of mothers were aware of the right time for weaning which increased to 80.5% after the presentation (Table 1). According to Frazier JP et al.,¹⁵ parents had very little

Table 1: Key variables assessing the mother's knowledge on infant oral health

	Variables	Knowledge	N	Pre		Post		p value
				Incorrect answer	Correct answer	Incorrect answer	Correct answer	
a	Mode of transmission of bacteria	Tooth decay is caused by bacteria that are transmitted from mother to child by kissing or sharing feeding utensils.	200	134 (67.0%)	66 (33%)	26 (13%)	174 (87%)	<0.05
		Children are more likely to have decayed teeth if their mother has decayed teeth, as she transfers the germs to her baby's mouth.	200	141 (70.5%)	59 (29.5%)	25 (12.5%)	175 (87.5%)	<0.05
b	Safety measures/ Safe home environment to prevent accidents and sports injuries	Accidents and injuries to the mouth and teeth can be prevented by the proper use of car seats according to the child's weight, and proper sport safety protection.	200	51 (25.5%)	149 (74.5%)	10 (5.0%)	190 (95.5%)	0.000
		A safe home environment can be assured by the use of safety gates on stairs, safety locks, safety plugs.	200	53 (26.5%)	147 (73.5%)	27 (13.5%)	173 (86.5%)	0.001
c	Time of weaning	Right time for weaning.	200	133 (66.5%)	67 (33.5%)	39 (19.5%)	161 (80.5%)	0.001
d	Early childhood caries (ECC)	The main cause of early baby tooth decay is the night time or bedtime feeding using bottled milk, juice or breast milk.	200	120 (60%)	80 (40%)	15 (7.5%)	265 (66.3%)	0.000
		Prolonged breastfeeding can cause baby tooth decay.	200	196 (98.0%)	4 (2.0%)	91 (45.5%)	109 (54.5%)	0.000
e	Impact of oral habit	Impact of oral habit on development of dentition.	200	122 (61%)	78 (39%)	18 (9%)	182 (91%)	0.000
f	Fluoride preventive strategy	Fluoride in drinking water is the main source of fluoride intake during development of teeth.	200	149 (74.5%)	51 (25.5%)	22 (11%)	178 (89%)	<0.05
		Fluoride is important for preventing cavities in teeth.	200	120 (60.0%)	80 (40%)	10 (5.0%)	190 (95.0%)	0.000
		When should you start using toothpaste with fluoride for cleaning your child's teeth.	200	170 (85.5%)	30 (15%)	79 (39.5%)	121 (60.5%)	0.000
g	Home oral hygiene care	Timing of tooth brushing.	200	180 (90%)	20 (10%)	50 (25%)	150 (75%)	<0.05
		Frequency	200	89 (44.5%)	111 (55.5%)	23 (11.5%)	177 (88.5%)	0.000
		Duration	200	177 (88.5%)	23 (11.5%)	151 (75.5%)	49 (24.5%)	0.001
		Oral hygiene of infant	200	114 (57%)	86 (43%)	7 (3.5%)	193 (96.5%)	0.000
h	Role of diet	Regarding role of baby healthy diet in oral health.	200	86 (43%)	114 (57.0%)	2 (1.0%)	198 (99.0%)	0.000
i	Restoration of primary teeth.	Is it necessary to fix cavities in baby teeth?	200	163 (81.5%)	37 (18.5%)	62 (31.0%)	138 (69.0%)	0.000
j	Quantity of toothpaste	Swallowing of toothpaste can be harmful to a child's health.	200	134 (67.0%)	66 (33.0%)	26 (13.0%)	174 (87.0%)	0.000
		The amount of toothpaste for brushing child's teeth.	200	131 (65.5%)	69 (34.5%)	49 (24.5%)	151 (75.5%)	0.000

(Contd...)

Table 1: (Contd..)

Variables	Knowledge	N	Pre		Post		p value
			Incorrect answer	Correct answer	Incorrect answer	Correct answer	
6a	Mode of transmission of bacteria Tooth decay is caused by bacteria that are transmitted from mother to child by kissing or sharing feeding utensils.	200	134 (67.0%)	66 (33%)	26 (13%)	174 (87%)	<0.05
		200	141 (70.5%)	59 (29.5%)	25 (21.5%)	175 (87.5%)	<0.05
6b	Safety measures/ Safe home environment to prevent accidents and sports injuries Accidents and injuries to the mouth and teeth can be prevented by the proper use of car seats according to the child's weight, and proper sport safety protection. A safe home environment can be assured by the use of safety gates on stairs, safety locks, safety plugs.	200	51 (25.5%)	149 (74.5%)	10 (5.0%)	190 (95.5%)	0.000
		200	53 (26.5%)	147 (73.5%)	27 (13.5%)	173 (86.5%)	0.001
6c	Time of weaning Right time for weaning.	200	133 (66.5%)	67 (33.5%)	39 (19.5%)	161 (80.5%)	0.001
6d	Early childhood caries (ECC) The main cause of early baby tooth decay is the night time or bedtime feeding using bottled milk, juice or breast milk. Prolonged Breast feeding can cause baby tooth decay.	200	120 (60%)	80 (40%)	15 (7.5%)	265 (66.3%)	0.000
		200	196 (98.0%)	4 (2.0%)	91 (45.5%)	109 (54.5%)	.000
6e	Impact of oral habit Impact of oral habit on development of dentition.	200	122 (61%)	78 (39%)	18 (9%)	182 (91%)	0.000
6f	Fluoride preventive strategy Fluoride in drinking water is the main source of fluoride fluoride intake during development of teeth. Fluoride is important for preventing cavities in teeth. When should you start using toothpaste with fluoride for cleaning your child's teeth.	200	149 (74.5%)	51 (25.5%)	22 (11%)	178 (89%)	<0.05
		200	120 (60.0%)	80 (40%)	10 (5.0%)	190 (95.0%)	0.000
		200	170 (85.5%)	30 (15%)	79 (39.5%)	121 (60.5%)	0.000
6g	Home Oral hygiene care Timing of tooth brushing. Frequency Duration Oral hygiene of infant	200	180 (90%)	20 (10%)	50 (25%)	150 (75%)	<0.05
		200	89 (44.5%)	111 (55.5%)	23 (11.5%)	177 (88.5%)	0.000
		200	177 (88.5%)	23 (11.5%)	151 (75.5%)	49 (24.5%)	.001
		200	114 (57%)	86 (43%)	7 (3.5%)	193 (96.5%)	0.000
6h	Role of diet Regarding role of baby healthy diet in oral health.	200	86 (43%)	114 (57.0%)	2 (1.0%)	198 (99.0%)	0.000
6i	Restoration of primary teeth. Is it necessary to fix cavities in baby teeth	200	163 (81.5%)	37 (18.5%)	62 (31.0%)	138 (69.0%)	0.000
6j	Quantity of toothpaste Swallowing of toothpaste can be harmful to a chil's health. The amount of toothpaste for brushing child's teeth.	200	134 (67.0%)	66 (33.0%)	26 (13.0%)	174 (87.0%)	0.000
		200	131 (65.5%)	69 (34.5%)	49 (24.5%)	151 (75.5%)	0.000

knowledge regarding the present weaning commendations by the WHO and the medical issues related to late weaning practice. Further intervention and parental education like early counseling about healthy infant feeding habits will be needed to improve age appropriate weaning practice. The similar findings were reported by Shiv Prakash et al.¹⁶

Mother's Knowledge Concerning Fluoride as Preventive Strategy

Discernable enhancement was witnessed in the knowledge concerning fluoride availability in consumable water and its importance in the development of teeth (25 to 89%), on the usage of fluoridated toothpaste (about 15–60.5%), after the presentation. In the present study, mothers were not aware of the role of fluoride in the oral cavity. The results of our study were similar to the studies done by Shiv Prakash et al.,¹⁶ Suresh et al.¹¹ and in contrast to studies done by Kamolmatyakul and Saiong et al.¹⁷ who stated regarding good knowledge of the role of fluoride among mothers.

Mother's Knowledge Concerning Home Hygiene Care

In the present study, 10% of mothers had the opinion that cleaning of baby teeth should be started once the first tooth erupts, which was increased to 75% ($p = 0.0001$) after the presentation. This was in accordance with the study done by Suresh et al.¹¹ Bahuguna et al.,¹⁸ thus revealing the partial knowledge about the child's first dental visit. In the present study, 43% of mothers felt cleaning of the oral cavity needs to be done before the tooth erupts; post-presentation, 96.5% of mothers accepted the same. Differing from our results, 95% of mothers assumed that they must start cleaning their child's teeth soon after its eruption, as reported by Gussy et al.¹⁹

Mother's Knowledge Concerning the Restoration of Primary Teeth

The less number of correct responses in the pre-presentation questionnaire concerning the restoration of primary teeth was in agreement with the studies done by Blinkhorn AS et al.²⁰ and FA Hamilton et al.²¹ and in contrast to the study done by Thakre et al.²² This recommended a need for pediatricians and the primary health care workers, who interact with new mothers to play an active role in oral health enhancement and to explain the mothers about the necessity for their child to be examined by a dentist as stated by Suresh et al.¹¹

Mother's Knowledge Concerning the Role of Diet

After the video presentation, we saw a noteworthy upsurge (57–99%, $p < 0.001$) in mothers' knowledge concerning the unhealthy diet of infants. Majority of the mothers (67%) knew that foods containing sugars are a high-risk diet, and snacking between meals, can be harmful to teeth. This familiarity score was increased to 99% after the AV presentation. This result was in accordance with Suresh et al.¹¹ and Chan SC et al.⁹ Few mothers considered sugary junk food normal because perhaps it is easily available and liked by children.

Mother's Knowledge Concerning the Quantity of Toothpaste

After the presentation, the information on applying a suitable amount of toothpaste was witnessed to increase from 34.5–74.5%. This was similar to the study done by Thakre et al.²²

Doubt related to the correct toothpaste amount may be since, in the majority of the mass communication media, including TV,

posters, pamphlets, or billboards, the toothpaste layer covering the entire toothbrush head is shown. The amount of toothpaste required could be one of the ignored areas of health education messages, with more importance being given to the regularity of brushing and the technique, relatively to the quantity of toothpaste, and it is the universal trend to assume that more the toothpaste applied on a toothbrush, the more will be the cleaning efficiency according to a study done by Thakre et al.²²

Around 31.5% of mothers approved that swallowing toothpaste can upset the child's health, but after the presentation, 89.5% ($p < 0.05$) of mothers agreed to it, which was in contrast to the study done by Akapabio et al.²³

Mother's Knowledge Concerning the Regular Dental Visit

Most mothers (75.5%) believed that regular dental visits could avert problems in their child's teeth, which was similar to the results of the studies done by Chan et al.⁹ In the present study, scores (96.5%) improved considerably after the presentation.

Mother's Knowledge Concerning the First Dental Visit

AAPD endorses that first dental checkup for the child must be done within 6 months of the first primary tooth eruption and before the age of 12 months. Conventionally, the ideal age for the initial dental visit was supposed to be 3 years. The reasoning for this was children could be managed better as they grew up and the treatment would be more effective, but timely interpolations are desirable to instruct parents on oral hygiene, the anticipation of dental injuries, and ECC, henceforth at the 1st year of life, a dental visit is suggested.²⁴

In the present study, 17% of the mothers had an awareness of the commended time for the first dental visit; the score was considerably increased to 69.5% after the presentation. The results were similar to the study done by Thakib A et al.²⁵ Bahuguna et al.¹⁸ Meera et al.²⁶

The present study, done by using a pre/post-test design, established that mothers had inadequate knowledge about the association between maternal and infant oral health. The results of this study showed that the least awareness was seen in the role of breastfeeding (2%), restoration of primary teeth (37%), the timing of tooth brushing (10%), duration of tooth brushing (11.5%) and when to use fluoridated toothpaste (15%) too increased to 54%, 69%, 75%, 60.5%, 24.5%, respectively. This lack of improvement could also be the result of a deeply ingrained belief that they shed by themselves and are replaceable and also the fatalistic belief that children eventually develop cavities similar to Bahuguna et al.¹⁸

Mothers who received information on appropriate oral healthcare-acquired good oral hygiene habits for their babies. It is worth highlighting the significance of emphasizing healthy eating habits, as the devotion to changes is still a challenge, thus needing a broader intervention similar to Da Silva et al.²⁷ There is a need to enhance dental health education activities targeting parents of preschool age to start preventive strategies at an early age.

CONCLUSION

Within the limits of the present study, the following conclusions were drawn:

- The knowledge of new mothers on infant oral health care was inadequate.

- The improvement in the mothers' knowledge of infant oral health care after the instructional video presentation was statistically significant.
- An instructional video presentation is an effective tool for improving the oral health knowledge of new mothers.

Attitudes of mothers towards child dental care in this study were largely unfavorable, and dental awareness and knowledge were 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 programs. Initiatives are required to promote early preventive visits of children by dentists and other health professionals who come into contact with new mothers if the goals of child dental health are to be realized. AV-aid is an effective tool for improving the knowledge of mothers caring for their infants.

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