

MOTHER'S KNOWLEDGE OF THEIR CHILDREN'S ORAL HEALTH

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ABSTRACT

Evaluating parental knowledge and practice regarding oral hygiene, feeding habits, and risk factors related to caries is essential, as this projects the parents' outlook toward their children's oral health. **Aim:** The study aims to assess mothers' knowledge of children up to three years of age about oral health for their children. **Materials and methods:** The subjects of the study were 90 mothers. Mothers' knowledge was collected after completing a questionnaire including 12 questions about their children's oral health. **Results:** About 94% of the mothers did not visit a dentist to seek prevention or oral care for their child. 29% of mothers believe that long night feedings with a bottle can cause tooth decay. According to 62.22% of mothers, night breastfeeding and falling asleep at the breast is not a risk factor for caries development. Only 22.22% of all surveyed mothers have heard about early childhood caries. Most mothers (64.44%) do not know that the microorganisms that can cause caries can be transmitted from them to their children. **Conclusion:** Our survey showed that young mothers need more knowledge regarding their children's oral health. Mothers must be educated and understand their essential role as 'promoters' of good oral health and habits for their children.

KEYWORDS: mother's knowledge, child's oral health.

INTRODUCTION

Oral diseases are the most common non-communicable diseases that affect people throughout their lifetime, causing pain and discomfort ⁽¹⁾. Dental caries has a high prevalence, which varies from 50 to 80% across different countries ⁽²⁾. Dental knowledge and practices depend upon the mother's education and demographic inhabitation as research studies consider that mothers with higher education have a better knowledge of oral hygiene and how to modify their children's bad habits of oral health, like poor brushing habits, diet with high sugar intake, tooth decay, drink milk or sweet liquids at bedtime finally their social class and stressful life events ⁽³⁾.

The prevalence of oral diseases continues to increase in most countries due to increasing urbanization, inadequate exposure to fluoride, and poor access to primary oral health care services. Furthermore, behavioral risk factors such as an unhealthy diet high in free sugars or bad oral hygiene play a significant role in increasing the risk for oral diseases ⁽⁴⁾.

Children spend most of their time with their parents, specifically their mothers ⁽⁵⁾. Therefore, parents play a vital role in instilling good habits and values in their children. Oral health maintenance and outcome if parents influence a young child highly ⁽⁶⁾.

Parents, particularly mothers, are their children's primary and most essential caregivers. They play a crucial role in preventing and treating oral diseases in children. Evaluating parental knowledge, attitude, and practice regarding dental hygiene is crucial, as parents' outlook will ultimately reflect on their children's oral health. Studies have shown that mothers' knowledge of their children's oral cavities depends on their education level, interest, and access to necessary information ⁽⁷⁾.

Aim: The study aims to assess mothers' knowledge of children up to three years of age about oral health for their children through a survey method.

Materials and methods: The subjects of the study were 90 mothers of children up to 3 years of age who visited the dental office in order to have their child's first examination or for a consultation or a dental problem. Mothers' knowledge was collected after completing a questionnaire including 12 questions about their children's oral health:

- What do mothers know about the influence of risk/protective factors on caries development?
 - ✓ night feeding/falling asleep while eating;
 - ✓ long night breastfeeding and falling asleep at the breast;
 - ✓ whether mistakes in nutrition can lead to caries, according to mothers;
 - ✓ influence of the microelement fluoride;
- Do the mothers know the disease "Early Childhood Caries";
- What do they know about the risk of early transmission of cariogenic microorganisms from mother/parent to child/baby;
- What kind of oral hygiene do the mothers practice with their children;
- What are the habits of mothers for sweetening the baby's pacifier or water?

Data were analyzed using descriptive statistics.

Results:

The answers to question 1 of the questionnaires are summarized in Table 1.

Table 1 (Answers to question 1 of the questionnaire.)

Question Answer	Did you have prophylactic advice related to the oral health of your child during your pregnancy?		t-test
	n	% ± sp	
No (1)	82	91,11 ± 3,00	t _{1,2} =24,75, p<0,05, t _{1,3} =28,15, p<0,05, t _{1,4} =23,40,
Yes, from gynecologist (2)	3	3,33 ± 1,89	
Yes, from dentists (3)	1	1,11 ± 1,10	

Yes, from seminars (4)	4	4,44 ± 2,17	p<0,05, t _{2,3} =1,01, p>0,05, t _{2,4} =0,39, p>0,05, t _{3,4} =1,37, p>0,05
Yes, from general practitioner (5)	0	0	

The answers show that the medical teams around the pregnant woman do not guide or educate the pregnant woman about the oral care of her future child. Accordingly, 91.1% of the women did not receive advice on early oral care. The proportion of these mothers was significantly more significant than that of mothers who received advice from other medical professionals (p<0.05). Only 3.33% of mothers received recommendations and advice on oral prophylaxis of their future baby from a gynecologist, 1.11% from a dentist, and 4.44% of them received knowledge from seminars and lectures for pregnant women organized in schools for pregnant women. The results speak of a lack of awareness among medical professionals about when and how to start caring for the baby's oral health and, accordingly, do not refer pregnant and young mothers for dental consultation.

Table 2 provides information on responses to question 2 of the survey.

Table 2 (Answers to question 2 of the questionnaire.)

Question	Have you been to a dentist with your child?				t-test
Answer	No		Yes		
Childs's age	n	% ± sp	n	% ± sp	
До 1 г.	29	96,67 ± 3,28	1	3,33 ± 3,28	t=20,14, p<0,05
1.1 – 2 г.	28	93,33 ± 4,55	2	6,67 ± 4,55	t=13,46, p<0,05
2.1 – 3 г.	28	93,33 ± 4,55	2	6,67 ± 4,55	t=13,46, p<0,05
Общо	85	93,77 ± 4,12	5	5,55 ± 4,12	t=26,04, p<0,05

The relative share (about 94%) of mothers who did not visit a dentist and did not seek advice from him regarding oral care for the baby is also high. In all age groups, there was a statistically significantly more relative proportion of mothers who did not have a dental examination and consultation for their child compared to those mothers who sought advice from a dental practitioner (p>0.05). Only 5 (5.6%) of all 90 mothers visited a dentist during or after their pregnancy to learn more about their child's oral care (t=26.04, p<0.05).

The questionnaire included questions about mothers' knowledge of some risk factors' influence on caries' development. The mother's answers are plotted in Table 3.

Table 3 (Answers to questions 4, 5, 6, and 7 of the questionnaires.)

Question \ Answer	Yes (1)		No (2)		Don't know (3)		t-test
	n	% ± sp	n	% ± sp	n	% ± sp	
Do you think nocturnal bottle feeding can cause tooth decay?	26	28,89 ± 4,78	27	30,00 ± 4,83	37	41,11 ± 5,19	t _{1,2} =0,16, p>0,05 t _{1,3} =1,73, p>0,05 t _{2,3} =1,57, p>0,05
Do you think that long nights breastfeeding and sleeping on the breast can cause tooth decay?	17	18,89 ± 4,13	56	62,22 ± 5,11	17	18,89 ± 4,13	t _{1,2} =6,60, p<0,05 t _{2,3} =6,60, p<0,05
Do you think that mistakes in your child's nutrition can lead to the development of tooth decay?	72	80,00 ± 4,22	8	8,89 ± 3,00	10	11,11 ± 3,31	t _{1,2} =13,74, p<0,05 t _{1,3} =12,85, p<0,05 t _{2,3} =0,50, p>0,05
Do you think fluoride is good for teeth?	51	56,67 ± 5,22	6	6,67 ± 2,63	33	36,67 ± 5,08	t _{1,2} =8,55, p<0,05 t _{1,3} =2,74, p<0,05 t _{2,3} =5,24, p<0,05

According to the responses to question 3, about 29% of mothers believe that long night feedings with a bottle can cause tooth decay. No significant differences were found among the three answers (Yes, No, I do not know) to this question ($p>0.05$). The data are different when it comes to breastfeeding. According to 62.22% of mothers, night breastfeeding and falling asleep at the breast is not a risk factor for caries development. The difference compared to the number of mothers who know about the risk of long-term breastfeeding and those who admit that they do not know about this risk is reliably significant ($p<0.05$). Regarding whether feeding mistakes would lead to the development of caries, 80% of the mothers answered affirmatively, which is a statistically significant difference compared to mothers who answered negatively or did not know ($p<0.05$). From the answers to the question about the importance of the microelement fluoride, slightly more than half of the mothers (56.67%) think fluorine is good for the teeth. About 44% of them answered either negatively or did not know whether this was the case ($p<0.05$). The results of the questions show the need for the mothers/parents of young

children to receive up-to-date health information promptly regarding the nutrition of the young child. Knowledge of the benefits of fluoride prophylaxis also needs the support of professionals. We found the following results for the early childhood caries questions (Tables 4 and 5).

Table 4 (Answers to question 7 of the questionnaire)

Question	Do you know what Early childhood caries is?				t-test
Answer	No		Yes		
Child 's age	n	% ± sp	n	% ± sp	
0 - 1 (1)	23	76,67 ± 7,72	7	23,33 ± 7,72	t=4,88, p<0,05
1 - 2 (2)	27	90,00 ± 5,48	3	10,00 ± 5,48	t=10,33, p<0,05
2 - 3 (3)	20	66,67 ± 8,61	10	33,33 ± 8,61	t=5,55, p<0,05
Total	70	77,78 ± 4,38	20	22,22 ± 4,38	t=5,043, p=0,000
t-test	t _{1,2} =1,41, p>0,05, t _{1,3} =0,86, p>0,05, t _{2,3} =2,29, p<0,05		t _{1,2} =1,41, p>0,05, t _{1,3} =0,86, p>0,05, t _{2,3} =2,29, p<0,05		

Table 5 (Answers to question 8.)

Question	Do you know what are the risk factors for developing early childhood caries?					
Answers	Yes		No		Only part of them	
Child 's age	n	% ± sp	n	% ± sp	n	% ± sp
0 - 1 (1)	3	10,00 ± 5,48	23	76,67 ± 7,72	4	13,33 ± 6,21
1 - 2 (2)	3	10,00 ± 5,48	27	90,00 ± 5,48	0	0
2 - 3 (3)	5	16,67 ± 6,80	20	66,67 ± 8,61	5	16,67 ± 6,80
Total	11	12,22 ± 3,45	70	77,78 ± 4,38	9	10,00 ± 3,16
t-test	t _{1,3} =0,76, p>0,05 t _{2,3} =0,76, p>0,05		t _{1,2} =1,41, p>0,05, t _{1,3} =0,86, p>0,05, t _{2,3} =2,29, p<0,05		t _{1,3} =0,36, p>0,05	

From the answers to the above questions, it is clear that only 22.22% of all surveyed mothers have heard about early childhood caries. Half of them (12.2%) know the risk factors, and the other 10% are only partially aware. On both questions, 77.78% do not know the disease ECC and do not know the causes of this form of caries. Among the different age groups, statistically significant differences were found between the number of mothers who had not heard of early childhood caries in the second and third age groups (p<0.05). The most significant number of women familiar with early childhood caries is among the mothers of children from the third age group - over 2 years old, and the statistical

processing of the data shows a reliable difference compared to the mothers of children from 1 to 2 years old ($t=2.29$, $p<0.05$). The fact remains undisputed that the knowledge of mothers/parents is insufficient for the disease Early childhood caries.

Question 9 of the questionnaire tested the mothers' knowledge about the transmission of cariogenic microorganisms, and the answers are presented in Table 6.

Table 6 (Answers to question 9 of the questionnaire.)

Question	Do you know that caries-causing microorganisms can be transmitted from mother to child					
Answer	I know and comply with it		I know, but I do not care		I don't know	
Child 's age	n	% \pm sp	n	% \pm sp	n	% \pm sp
0 - 1 (1)	7	23,33 \pm 7,72	7	23,33 \pm 7,72	16	53,33 \pm 9,11
1 - 2 (2)	5	16,67 \pm 6,80	5	16,67 \pm 6,80	20	66,67 \pm 8,61
2 - 3 (3)	3	10,00 \pm 5,48	5	16,67 \pm 6,80	22	73,33 \pm 8,07
Total	15	16,67 \pm 3,93	17	18,89 \pm 4,13	58	64,44 \pm 5,05
t-test		t _{1,2} =0,65, p>0,05 t _{1,3} =1,41, p>0,05 t _{2,3} =0,76, p>0,05		t _{1,2} =0,65, p>0,05 t _{1,3} =0,65, p>0,05		t _{1,2} =1,06, p>0,05 t _{1,3} =1,64, p>0,05 t _{2,3} =0,56, p>0,05

Most mothers (64.44%) do not know that the microorganisms that can cause caries can be transmitted from them to their children. Although some mothers know the recommendations and rules to prevent early transmission of cariogenic microorganisms, they report that they do not follow them (18.9% of mothers from the research group). Twenty-three percent of mothers of children 0 to 1 year old are worried about passing the bacteria causing cavities to their child. For the next age group (from 1 to 2 years old), this percentage decreases to 16.7%, and for the oldest children it is the lowest - only 10. The results do not show statistically significant differences. However, as children grow older, a smaller percentage of mothers pay attention to the rules to protect against the transmission of cariogenic microorganisms. The results support the need for health education.

Mothers' knowledge of oral hygiene for young children is shown in Table 7.

Table 7 (Answers to question 10 of the questionnaire.)

Question	How often do you clean your child's teeth?						t-test
Answer	Regular (4)		Rarely (5)		I do not clean them (6)		
Child 's age	n	% \pm sp	n	% \pm sp	n	% \pm sp	

0 - 1 (1)	3	10,00 ± 5,48	3	10,00 ± 5,48	24	80,00 ± 7,30	t_{4,5}=2,18, p=0,033
1.1 - 2 (2)	21	70,00 ± 8,37	6	20,00 ± 7,30	3	10,00 ± 5,48	
2.1 - 3 (3)	25	83,33 ± 6,80	3	10,00 ± 5,48	2	6,67 ± 4,55	
Общо	49	54,44 ± 5,25	12	13,33 ± 3,58	29	32,22 ± 4,93	t_{4,6}=8,57, p=0,000
t-test		t_{1,2}=6,00, p<0,05 t_{1,3}=8,40, p<0,05 t_{2,3}=1,24, p>0,05		t_{1,2}=1,10, p>0,00 t_{2,3}=1,10, p>0,00		t_{1,2}=7,67, p<0,05 t_{1,3}=8,52, p<0,05 t_{2,3}=0,47, p>0,05	t_{5,6}=3,527, p=0,001

The relative share of mothers who say that they regularly clean the oral cavity of their baby/child is the largest (54.44%). The distribution by age groups shows statistically significant differences ($p<0.05$). Significantly more mothers of the second and third age groups perform regular oral hygiene of their children compared to mothers of children up to 1 year of age ($p<0.05$). By the time their children are one year old, about 90% of mothers rarely or never clean their children's oral cavities and teeth. This percentage drops sharply to 30% for the second age group – children from 1 to 2 years old and 16.7% for children over 2 years old. A large relative share of mothers underestimates the oral hygiene of their children.

Table 8 (Answers to questions 11 and 12 of the questionnaire.)

Question Answer	Yes		No		I do not know		t-test
	n	% ± sp	n	% ± sp	n	% ± sp	
In your opinion, should the pacifier be sweetened (with honey/sugar)?	8	8,89 ± 3,00	82	91,11 ± 3,00	0	0%	t=63,108 p=0,000
Do you add honey/sugar to your baby's water?	4	4,44 ± 2,17	81	90,00 ± 3,16	5	5,60 ± 5,56	t=60,034 p=0,000

No behavioral mistakes were found in the answers to the questions about sweetening the water or the pacifier of the young children ($p=0.000$). To both questions, mothers responded negatively in over 90% of cases, with these data having statistically significant differences compared to mothers who believed that the baby's pacifier and water should be sweetened ($p=0.000$).

DISCUSSION

Contemporary literature on children's oral health emphasizes the critical role of parents and caregivers in the health and prevention of oral diseases ^(8,9). Evidence and correlation exist between health literacy, parental knowledge, and early childhood health. In order to develop an effective health strategy for the youngest children, in-depth knowledge about the population's social, economic, and health needs is needed. An initial assessment of mothers' levels of knowledge, attitudes, and behaviors toward oral health can be the first step in identifying problems and mistakes made by mothers. Shinde et al. found that almost all mothers needed more knowledge and adequate practices regarding infant oral care ⁽¹⁰⁾.

Our data from the assessment of knowledge and attitudes of Bulgarian mothers about their children's oral health show that over 90% of mothers were not counseled regarding their children's oral health during their pregnancy. After analyzing the data, it can be seen that 8.8% of women received oral health advice during their pregnancy. The information about an early visit to the dentist must reach all pregnant women and mothers. Some authors believe that one of the main strategies used to prevent early childhood caries is training pregnant women, mothers/parents, and the medical team around them (obstetricians, gynecologists, pediatricians, general practitioners) in correct nutritional, oral hygiene, and behavioral habits in the rearing of infants and young children ⁽¹¹⁾.

Indirectly, we found that the entire medical team around the pregnant woman is unaware of the importance and need of referring the pregnant woman for an appointment with a dental doctor. Only 5.55% of the mothers studied consulted a dentist during their pregnancy, and 8.8% received oral health advice from pediatricians, obstetricians, gynecologists, or general practitioners. A 2014 study in Nigeria also reported data similar to ours, with only 9.6% of participants claiming to have received some form of oral health education from a doctor or nurse ⁽³⁾. In the same year, a study in Saudi Arabia showed that only 8% of pregnant women sought a dentist for advice, 71% of women did not visit a dentist during pregnancy, and 21% visited a dentist because of a complaint (pain or bleeding from the gums) ⁽¹²⁾. Mohammad Baseer and co-authors, in their survey of 200 gynecologists, found that 35% of gynecologists ignored the oral examination ⁽¹²⁾, and another 37% recommended checking the oral status of their patients soon after becoming pregnant ⁽¹³⁾. Another study indicated that 50.3% of gynecologists refer their patients to a dentist ⁽¹⁴⁾. Authors report that only 35% of physicians advised their patients on good oral hygiene and routine dental checkups during pregnancy ⁽¹⁴⁾. A survey of pediatricians and general practitioners showed they were only aware of some aspects of early childhood caries but not all risk factors for its development ⁽¹⁵⁾. Most pediatricians and family physicians consider their role in children's oral health necessary and report including some aspects of oral health in children's preventive visits ⁽¹⁵⁾. However, a lack of dental knowledge and training among family physicians and pediatricians appears to create barriers, limiting them from playing a more active role in oral prevention ⁽¹⁵⁾. Our results point us to the need to popularize among obstetrician-gynecologists and pediatricians in Bulgaria the idea of early and regular preventive check-ups for every child.

According to Begzati and colleagues, mothers reported that their children's first dental visit was due to dental pain 65% of the time, which was correspondingly reflected in the dmft index of these children - its mean value was 6.69 ⁽³⁾. The same study found that only 24% of mothers felt they should take their child to the dentist for a dental examination when the first tooth erupts or after the age of 1 year ⁽³⁾. Our data shows that only 5.55% of mothers sought health advice about their baby's oral hygiene and well-being (table 2). According to the U.S. Department of Health and Human Services, health education for mothers should begin during pregnancy because improving oral health during pregnancy not only increases a woman's general health but also affects the oral health of their children ⁽¹⁶⁾.

A survey study by Suresh and colleagues on maternal dental health practices revealed that the children of 67.1% of mothers surveyed had never visited a dentist, and regular dental visits were reported by only 2.1% of participants ⁽¹⁷⁾. Even in countries such as Qatar, ranked 13th for the state of its health system, published data show that more than 2/3 of children did not have a routine visit to the dentist in the first 12 months of life ⁽¹⁸⁾.

Transmission and contamination of cariogenic microorganisms from mother to child is well documented and demonstrated, and the risk increases with increasing amounts of cariogenic microorganisms in the mother's mouth ⁽¹⁹⁾. In our study, it can be seen that more than 60% of mothers do not know that they can infect their children with cariogenic microorganisms through contact and household. A study by Dhull et al. reported an even higher result, with 77.8% of mothers disagreeing that caries-causing bacteria can be transmitted from person to person ⁽²⁰⁾. A study in India showed that 27.2% and 41% of mothers did not believe they could be the primary source of bacterial transmission to their children ⁽²¹⁾. Therefore, public health strategies should be promoted to reduce the likelihood of transmission and colonization of cariogenic microorganisms ⁽²²⁾.

The data from our survey regarding mothers' knowledge of whether long-night feeding with a bottle can cause tooth decay shows that just under 30% of mothers know this is possible. Just over 40% of respondents are still determining if this is true. Our result almost coincides with the data published by Khanduri and co-authors ⁽²³⁾. The authors found that only 33% of parents knew that nighttime bottle feeding could cause tooth decay.

A 2009 study reported that 48% of participants believed eating at night could cause tooth decay ⁽²⁴⁾. Only 29.2% of mothers consider night feeding a risk factor for caries development ⁽²⁰⁾. The results of our study indicate a severe need for mothers' knowledge of risky long-night bottle feeding to be discussed by pediatricians and children's dentists and for mothers to be provided with instruction training and guidance on proper feeding practices regarding oral health.

Another part of our results showed that 80% of the mothers assumed that nutrition mistakes would lead to the development of caries, which makes our data close to the data published by Khanduri and colleagues ⁽²³⁾. About 83% of parents agreed that diet played a role in the occurrence of caries ⁽²³⁾. According to other authors, 92.95% of mothers know that nutrition is vital to the health of the baby's teeth and oral cavity ⁽²⁵⁾. Although the percentage of informed mothers is high, the frequency and amount of carbohydrate foods remain one of the main etiological factors in developing dental and early childhood caries ⁽²⁶⁾. Therefore, additional counseling and mothers' education on healthy eating and teeth is necessary.

The importance of the microelement fluorine for the health and resistance of tooth enamel has been known for a long time. Our data shows that about 57% of mothers know fluoride is good for teeth, and the remaining 43% do not know its benefits or are unsure. These data are much higher than those other authors gave ⁽²⁷⁾. According to Alshehri and colleagues, 11.45% of respondents in their study scored high on their knowledge of the microelement fluorine ⁽²⁷⁾. In the same study, it was reported that nearly 60% of parents disagreed with the statement that fluoride toothpaste can increase the resistance of teeth ⁽²⁷⁾. A recent study showed that only 25% of parents surveyed knew the importance of fluoride toothpaste ⁽²³⁾. Some authors also give lower data - only ten mothers, or 5% of the women studied, know how vital fluoride is ⁽²⁸⁾. Some of the publications contain data that is different from what we found. According to the authors of a study of questions about the importance of fluorides in caries prevention, 304 participants, or 91.3% of the respondents, answered correctly ⁽²⁹⁾.

Our survey data showed that the relative share of mothers who sweeten their baby's water or pacifier is tiny. The results are logical, given that these are outdated practices - to give water to an infant, to

sweeten the water, or the child's pacifier. A study in India showed that 16.2% of mothers added sugar to milk during bottle feeding of their toddler ⁽¹⁰⁾. The American Academy of Pediatric Dentistry makes no recommendations regarding using sweetened pacifiers or sweetened water ⁽³⁰⁾. The ECC guidelines highlight a risk factor for developing early childhood caries, again based on high consumption of sugars. Night feeding with a juice bottle, frequent use of a non-spillable cup of sweetened liquid, and frequent consumption between meals of snacks or beverages with added sugar (e.g., juice or formula) increase the risk of caries ⁽³¹⁾.

Early childhood caries is a disease that affects children up to 6 years of age, and the reasons for its development are incorrect eating habits and practices. The main factors contributing to the high prevalence of ECC are poor nutrition, family environment, lack of parental education, and lack of access to dental care ⁽³²⁾. The answers to our second task survey showed that more than 77% of mothers had not heard of this disease, which poses a significant risk to their children. The AAPD recognizes early childhood caries as a significant chronic disease among children resulting from an imbalance of multiple risks and protective factors over time. To reduce the risk of developing ECC, the AAPD promotes and recommends various occupational and home preventive measures ⁽³³⁾. In its recommendations, the AAPD also emphasizes the need to establish a Dental Home no later than 12 months of age and to provide parent education through advance directives ⁽³³⁾. Our data confirm this need - 77.5% of mothers do not know the disease ECC.

Mothers' oral hygiene knowledge and behavior are critical to their children's oral health care. Children are known to imitate their parents' behavior and oral hygiene habits. Parental behavior can also influence child behavior. Our study found that more than 30% of mothers do not clean their child's mucous membrane and teeth in any way, and another 13% do it rarely. Nearly 55% of the surveyed mothers do it regularly - in the morning and the evening. In a similar study in Kosovo, researchers found that 38% of mothers reported that their children did not brush their teeth, and only 11% of those interviewed showed good knowledge of brushing methods ⁽³⁾.

In contrast, data from previous years were published by a group of researchers from England. They claimed that for 60% of children, oral hygiene started as early as 1 year of age ⁽³⁴⁾. A study by Alshehri and colleagues shows that overall awareness of preventive oral care strategies is relatively good ⁽²⁵⁾. According to them, 52.13% of participants claim that the child's oral cavity should be cleaned ⁽²⁵⁾, and the data are close to ours - 55% of the surveyed mothers regularly clean their child's oral cavity. Other authors provide more unsatisfactory data - only 25% of the participants clean their child's teeth ⁽³⁵⁾, and according to Retna Kumari, this percentage is 32% ⁽³⁶⁾. A study conducted in Lithuania found that parents' attitudes and behavior toward oral health were significantly related to their children's understanding of the importance of oral hygiene ⁽³⁷⁾. Poor oral hygiene and frequent sugar consumption are critical behavioral risk factors for dental caries and periodontal disease.

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