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ARTIFICIAL FEEDING AND DENTAL HEALTH

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Abstract

In the course of this study, according to the questionnaire data, it was established: 88% of children in the study group were breastfed from the moment of birth, but were transferred to artificial nutrition at the age of 6 months. Of these, 26% of children were breastfed for no more than 2 months. 43% of children were transferred to artificial feeding at the age of 3-6 months, 13% at the age of 6 months.

Keywords: teeth, artificial feeding, bad habits, caries, caries complications, prevention of dental diseases

抽象的

在本研究过程中，根据问卷数据确定：研究组88%的儿童从出生那一刻起就进行母乳喂养，但在6个月大时转入人工营养。其中，26%的儿童母乳喂养时间不超过2个月。43%的儿童在3-6个月大时转为人工喂养，6个月大时为13%。

关键词：牙齿，人工喂养，不良生活习惯，龋齿，龋齿并发症，预防牙病

Introduction

According to world experience, practically 96-98% of women can feed babies with breast milk - the most valuable and irreplaceable food product for children in the first months of life, ideally adapted for a child. Natural feeding has several advantages over other types of infant feeding in the first year of life. Nutrition is one of the most important factors characterizing the degree of adaptation of a child to the outside world and determining the growth and development of a child's body. [1,3].

According to the WHO, feeding a baby with breast milk during the first 4 months of life significantly reduces the risk of many diseases,

for example, leukemia by 22%, lower respiratory tract infections and nonspecific enterocolitis by up to 77%.

The advantage of natural feeding is not in doubt, but, unfortunately, the prevalence of breastfeeding remains low, ranging from 30 to 50% among children by 4 months of age. According to G.N. Speransky, in 1926, 98.1% of children received breast milk before one year of age, only 1.9% of infants were artificially fed. In subsequent years, there was a gradual decline in the level of breastfeeding. [1,4]. Breastfeeding of a child is an important factor contributing to the optimal realization of his genetic potential for morphological and functional development both

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in the early stages and in subsequent periods of life. An indisputable advantage in this regard belongs to natural feeding with mother's milk, which has a unique composition and biological properties that provide optimal parameters for the physical, psychomotor, intellectual development and immunological reactivity of children.

Being breastfed, the child is less susceptible to infectious diseases of the gastrointestinal tract and urinary tract, respiratory infections, otitis media and pneumonia, the development of food allergies, bronchial asthma, diabetes mellitus and obesity. Despite the fact that modern technologies have made great strides forward, the prevalence of caries and dentoalveolar pathologies in children continues to grow. Various factors can cause such diseases, among them, the peculiarities of feeding young children. There is no doubt that breast milk has been the best source of nutrition for babies for centuries. But in the world there is more and more a tendency towards parents abandoning natural feeding of their children in favor of artificial feeding. Avoiding natural feeding is a risk factor for the development of many dental diseases in children.

Currently, much attention is paid to the nature of the nutrition of young children, the composition of breast milk, the type and composition of formulas for artificial nutrition, the feeding regimen, but in pediatric practice not enough attention is paid to the influence of the above factors on the state of dental diseases in children.

Consumption of large amounts of carbohydrate foods, feeding with sweet dairy and sour-milk products contribute to the development of caries in children under one year old and subsequently lead to premature extraction of milk teeth. All of the above factors

and the fact that the prevalence of caries and its complications, dentoalveolar anomalies in children is growing every year, and this confirms that this topic remains relevant.

Purpose of work: Increasing the effectiveness of early prevention of major dental diseases in children by studying the characteristics of the development of dental diseases depending on the type of feeding.

Materials And Methods

We carried out a dental examination of 124 children aged 3 months to 6 years on the basis of children's city polyclinics in Bukhara. All surveyed children were divided into 2 groups depending on the nature of feeding in the first year of life: group I - 54 children who were breastfed from birth for 6 months or more, group II - 70 children who were artificially fed from birth. According to the stage of bite formation, children are divided into 2 groups: 1) from 0 to 3 years old (developing milk bite); 2) from 3 to 6 years (the period of the formed bite);

Clinical examination of children began with the collection of anamnesis, heredity, and comorbidities. During an objective examination, attention was paid to the hygienic state of the oral cavity, the presence of caries and its complications, fillings and the absence of teeth. The location of the frenulum of the upper and lower lip, the condition and color of the tongue, the presence of erupted deciduous teeth, and their condition were recorded.

The intensity of caries in deciduous teeth was determined by the index of CFD teeth, the prevalence was calculated separately within the age group, and when talking with mothers, we analyzed the outpatient records of children, the development of the child in the first year of life. The questionnaire we compiled contained 10 questions about the nature of feeding and the

identification of risk factors for the occurrence of dental diseases. Using the survey method, we studied the duration of breastfeeding of the child. Collected data on the time of meals and drinks before bedtime. Attention was drawn to continued breastfeeding. The age of the child at which complementary foods were introduced, up to what age the bottle was used to feed the child were recorded. All clinical and laboratory data obtained were entered into a medical record.

Results

In the course of this study, according to the questionnaire data, it was found that 88% of the children in the study group were breastfed from the moment of birth, but were transferred to artificial nutrition at the age of 6 months. Of these, 26% of children were breastfed for no more than 2 months. 43% of children were transferred to artificial feeding at the age of 3-6 months, 13% at the age of 6 months. The main reason why we had to give up breastfeeding is the lack of breast milk - 45% of the respondents answered positively to this question. The second place among the reasons for refusing breastfeeding is taken by the child's refusal to breastfeed, this reason was indicated by 32% of the respondents. The next in importance is the early departure of the mother to work (12.8%).

In artificially fed infants, swallowing rather than sucking movements of the lower jaw predominated; the head was thrown back during feeding, which led to a delay in the growth of the lower jaw, which can lead to the formation of a distal occlusion. All this indicated that natural feeding leads to the harmonious development of the jaws, especially the lower, and contributes to the formation of the correct physiological bite. It was interesting that in children who are bottle-fed, the first teeth appeared earlier.

The intensity of caries in primary teeth was determined by the KPU index. In children from 3 months to 3 years, there is mainly a compensated form of caries. Not all children visited the dentist regularly. It was found that in children aged 12-24 months, carious cavities were localized only in the area of the upper incisors, with the simultaneous involvement of the upper and lower molars in the process. In the third year of life, isolated localization of caries on the upper incisors was observed in 22% of cases. Thus, according to the typical localization of carious lesions, in all children of the first year of life, 85.3% - in the second, in 56.7% - in the third, caries can be attributed to the so-called "bottle caries". It is characterized as planar caries affecting the incisors from the palatine and vestibular surfaces. Fangs are rarely affected by caries, due to the later terms of eruption. The incisors on the lower jaw are not affected, since they are protected by the tongue, which, when sucking, tightly covers the nipple from below.

It was revealed that at the age of a child from 3 to 6 years old, parents begin to seek help from an orthodontist. This is justified by the need to cover previously treated teeth with crowns. At this time, it was revealed: distal occlusion 24%, open bite in 8%, cross bite in 11% of patients. It was noted that in children who were breastfed, in 67% of cases, the absence of bite pathology was revealed.

Conclusion

Thus, the results of the study showed a high negative report of artificial feeding in the formation of dental diseases. Bottle-fed children are at risk of developing dental diseases that can and should be prevented. The ratio of complicated to uncomplicated caries in such children is 1: 3, that is, we have to depulp every fourth tooth. It is important to systematically

competently carry out sanitary and educational work among pregnant women, explaining to them the need to breastfeed a child up to 1 year old. It is necessary to refuse feeding, feeding the child with sweet dairy products. It is important to form parents' motivation for regular preventive observation of the child at the dentist in order to early detection and prevention of dental diseases. We believe that the problem of prevention and treatment of carious lesions in children of the first years of life should attract the attention of not only pediatric dentists, but also pediatricians, as it is of high medical and social importance.

References:

1. Kamalova F. R., Eshonkulov G.T. The study of the prevalence of anomalies of the dentition in the Bukhara region, their early diagnosis and treatment// *Academica*: Vol. 10 Issue 1, January. Vol. 1. - 2020. - P. 61-63.
2. Kamalova F.R. Development and evaluation of the effectiveness of the dental dental examination program for children with diabetes in adverse environmental Conditions// *Academica*10 Issue 1, January. - 2020. Vol. 1. - P. 1364 - 1366.
3. Kamalova F.R. Elaboration and evaluation of the effectiveness of the dental examination program for children with diabetes// *Актуальные вызовы современной науки. Сборник научных трудов выпуск*. - 2020. - № 4 (48). - P. 55-56.
4. Davlatov, S., Rakhmanov K., Qurbonov N., Vafayeva I., & Abduraxmanov D. (2020). Current State of The Problem Treatment of Mirizzi Syndrome (Literature Review)// *International Journal of Pharmaceutical Research*, 12, – P. 1931-1939. DOI:<https://doi.org/10.31838/ijpr/2020.SP2.340>
5. Davlatov, S., Rakhmanov, K., Usarov, S., Yuldoshev, F., Xudaynazarov, U., & Tuxtayev, J. (2020). Inguinal hernia: Modern aspects of etiopathogenesis and treatment. *International Journal of Pharmaceutical Research*, 12, 1912-1921. doi:10.31838/ijpr/2020.SP2.338
6. Rakhmatillaevna, K. F. (2020). Diagnostic value of salivator cytokines in dental diseases in children with diabetes mellitus type 1. *European Journal of Molecular and Clinical Medicine*, 7(3), 1518-1523. Retrieved from www.scopus.com
7. Rakhmatillaevna, K. F., & Torakulovich, E. G. (2020). Early diagnosis and prevention of dentoalveolar anomalies and cariogenic situation in children suffering from diabetes. *European Journal of Molecular and Clinical Medicine*, 7(3), 2468-2472. Retrieved from www.scopus.com
8. Yariyeva O.O. Clinic, Early Diagnosis and Treatment of Dental Caries in Children// *International journal of Bio-Science and Bio-Technology*. – India. – 2019. Vol. 6. – P. 15-23.
9. Yariyeva O.O. Importance of medical and social factors in etiology of carious and non-carious diseases of children// *«International journal of pharmaceutical»*. - 2019. Vol. 7. – P. 456-461.