



Basis for Determining the Effectiveness of Organizing and Implementing Prophylaxis of Dental Diseases during Pregnancy and Lactation

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Abstract: Pregnancy and lactation are critical periods in a woman's life where oral health often receives insufficient attention, despite being closely tied to both maternal and fetal well-being. This study aims to identify and evaluate the foundational criteria for effectively organizing and implementing preventive dental care during these stages. Drawing on clinical data, patient interviews, and healthcare system audits, the research focuses on the practical and strategic factors that impact the success of prophylactic interventions. The findings reveal that the effectiveness of such programs depends not only on clinical outcomes (e.g., reduced caries and gingivitis rates) but also on timely patient education, accessibility of dental services, and integration with obstetric care. The study supports the development of structured, patient-centered protocols that bridge the gap between dental and maternal healthcare, ensuring that oral health is treated as an essential part of prenatal and postnatal care.

Key words: dental prophylaxis; pregnancy oral care; lactation dental health; maternal oral hygiene; prenatal dental education; public health programs; preventive dentistry; oral disease prevention; integrated maternal care; clinical effectiveness.

The complex of preventive measures for dental diseases in pregnant women includes the following measures: regular examinations, at least three times during pregnancy, professional hygiene and therapeutic sanitation of the oral cavity, proper personal hygiene, which includes teaching teeth cleaning techniques, choosing personal hygiene products, and explanatory work aimed at creating motivation to maintain the dental health of oneself and the future child, as well as recommendations on proper nutrition, vitamin and mineral intake.

The most effective measure to prevent dental diseases in pregnant women is to develop a scheme of measures for doctors and patients. The purpose of these schemes is to increase the motivation of pregnant and lactating women to maintain individual hygiene and personal health, as well as to establish a conscious concern for the dental and general health of the newborn.

S. mutans microbe was detected in large quantities in pregnant women. After a complex of preventive measures, which included professional hygiene, as well as coating teeth with the Tooth Mousse preparation and prescribing chewing gum containing xylitol for 5 minutes three times a day after meals, positive dynamics were noted after three months - a decrease in the *S. mutans* titer, as well as other hygiene indicators, including improved hygiene, was observed. The complex of preventive measures includes explanatory work aimed at correcting individual hygiene with the selection of hygiene products in order to achieve acid-base balance in the oral cavity, prevention, which includes the appointment of additional hygiene products, oral baths with decoctions of medicinal herbs, massage and remineralizing therapy. At the same time, the author suggests treatment and preventive measures: the appointment of multivitamin and mineral complexes, vitamin preparations, herbal immunity enhancers, as well as proper nutrition.

In order to study the state of oral hygiene during different periods of pregnancy, 86 pregnant women were examined. It was found that the motivation for visiting the dentist's office in 72.09% of pregnant women was to support their own health and the health of their future child, 23.25% of women were concerned about the preservation of their own dental system, and 4.65% of women did not understand the need to visit a dentist. It was found that the level of oral hygiene was related to the duration of pregnancy, while the severity of the inflammatory process did not depend on the trimester.

The positive effect of using therapeutic and prophylactic toothpastes and elixirs with various active ingredients has been proven. Thus, after examining women in the first trimester of pregnancy and prescribing them "Apident" toothpaste, "Tentorium" mouthwash and "Zabrus wax" chewing gum, a repeated examination was conducted in the third trimester of pregnancy. It was found that the caries index, complex periodontal index and papillary-marginal-alveolar index decreased by 41.7%, 22.4% and 14.7%, respectively. The effectiveness of toothpastes based on plant extracts (Paradontax, "Asepta") has been proven. When pregnant women with a moderate degree of gestosis used "Pregnadent" toothpaste and PresiDent Exclusive therapeutic and prophylactic agents, a threefold decrease in gingivitis was noted. Mexidol dentactiv toothpaste prevented the development of gingivitis during pregnancy in 93.50% of women. The positive effect of Mexidol active toothpaste was also proven when it was used in patients with diabetes mellitus and inflammatory periodontal diseases.

The health of parents, and above all the mother, is directly related to the health of the unborn child, therefore dental care for a pregnant woman is of great importance. Dispensary monitoring of the implementation of therapeutic and preventive measures by a dentist throughout the entire period of pregnancy and in the postpartum period is aimed at reducing the risk of the occurrence and exacerbation of dental diseases in the expectant mother and at antenatal prevention of dental diseases in the child.

According to their data, 19% of women did not visit a dentist for preventive examinations before pregnancy, and 14% of women did not visit a dentist at all until the end of pregnancy. 42% of pregnant women preferred to visit a state dental clinic for treatment, 28% of women preferred to visit a commercial dentist, only 1% of pregnant women were treated in the office of a women's consultant dentist, and the rest were not treated during the entire pregnancy. On average, one pregnant woman needs to fill 2.77 to 2.94 carious lesions and remove 0.43 to 0.56 teeth. Based on the results of filling out the questionnaire, the authors determined that pregnant women have a low level of information and motivation on the prevention of dental diseases during pregnancy and noted the need to develop an algorithm for providing treatment and preventive dental care to pregnant women. Based on information about the dental and general somatic condition of the pregnant woman, a plan of therapeutic and preventive dental measures was developed, which provides for individualization during pregnancy.

As a result of a one-month Prophylactic Program in pregnant women using extracts of walnut and licorice leaves, vitamins C, PP and E, as well as oral hygiene products based on lactoperoxidase and lactoferrin, the acid-base efficiency of oral fluid increased, the value of oral fluid viscosity reached 44.12%, and the effectiveness of the desensitizing effect was 53.88%.

An anonymous survey using the International Federation of Dentists questionnaire revealed that 129 parents had a "good" level of knowledge (8.43 points out of a possible 10) on the prevention of dental diseases in children. The "problematic" questions were the use of fluoride toothpaste and measures to protect teeth from injuries during sports. Prevention of major dental diseases during pregnancy is an important link in maintaining the dental health of pregnant women and in the antenatal prevention of caries in primary teeth in children.

67 pregnant women aged 18-34 were observed by researchers. The effectiveness of the proposed treatment-prophylactic scheme for pregnant women was confirmed by a 4.67-fold lower increase in the

incidence of dental caries in pregnant women. It was proven that women need to visit a dentist for regular preventive and treatment examinations during pregnancy.

The level of dental knowledge, motivation to prevent dental diseases and maintain oral hygiene among pregnant women is very low. However, from 10 to 55% of women visit a dentist for preventive purposes. The formation of healthy lifestyle values in pregnant women requires their awareness of the need for preventive oral hygiene during pregnancy.

Data obtained from a survey of pregnant women indicate that most pregnant women have insufficient knowledge about maintaining dental health and hygienic care of the oral cavity, which may be a risk factor for the development of diseases in the oral cavity of pregnant women. A pregnant woman must adhere to hygiene rules that will help maintain the health and normal development of the fetus, as well as prevent complications of pregnancy and childbirth.

The results of studies on the diagnosis, treatment and prevention of dental diseases among pregnant and lactating women have also been published. However, the risk factors for dental diseases among women of this category living in rural areas are not specifically identified, and the data on the relationship between the number of pregnancies and the incidence of dental diseases are scattered and unclear. Changes in the dynamics of pregnancy in pregnant and lactating women have not been revealed, and prognostic indicators as immunological criteria among risk factors have not been identified. Taking into account the above, we believe that research in this area of research is relevant and necessary.

From the list of used literature:

1. Vohidov Elbek Rakhimovich . The influence of the gestation period on the development of dental diseases in pregnant women // No. 9 (71) 2024 Journal of a New Day in Medicine, -2024. –P.413 - 415 (14.00.00; No.22).
2. Rizaev Jasur Alimzhanovich, Vahidov Elbek Rahimovich. Izuchenie etiopathogeneticheskikh aspektov stomatologicheskikh zabolevaniy u beremennyx i sovershenstvovanie mer ix prophylactici // Stomatology. – 2024. – no. 2-3 (95-96). - S. 117- 119. (14.00.00; No. 12)
3. Vohidov Elbek Rakhimovich . Pathogenetic aspects of the development of periodontal diseases in pregnant women // Journal of humanities & natural sciences № 11(06), 2024. Vol.2
4. Jasur A. Rizayev, Elbek R. Vohidov , Nodira Sh. Nazarova. The importance of the clinical picture and development of the condition of periodontal tissue diseases in pregnant women // Central Asian Journal of Medicine. #2 . 2024 . PP-5-89.
5. Vahidov Elbek Rahimovich. Assessment of Dental Status and Oral Health in Pregnant Women // American journal of pediatric medicine and health sciences. Vol 2. 2024. PP-241-243.
6. Vahidov Elbek Rahimovich. Assessment of dental status and oral health in pregnant women // Journal of biomedicine and practice. No. 3 - no. 9 volumes. 2024. (14.00.24). Tashkent. B. 16 - 20
7. Elbek R. Vohidov, Jasur A. Rizayev, Nodira Sh. Nazarova. Clinical manifestations and prognosis of periodontal tissue diseases in pregnant women the importance of development // Jurnal stomatologii craniofacialnyx issledovaniy. No. 5. / 3rd volume. 2024. Samarkand. B. 66-70
8. Vahidov Elbek Rahimovich . Etiopathogenetic aspects of improving the prevention of dental diseases in pregnant women // Boffin Academy Vol. 2 No. 1 2024. 2024-01-23