

The purpose of the study: to investigate the clinical manifestations of exudative erythema multiforme associated with the herpes simplex virus in an 11-year-old child; to develop a scheme of complex treatment of this disease. *Object and research methods.* A clinical and laboratory examination of an 11-year-old child with a diagnosis of exudative erythema multiforme associated with the herpes simplex virus was carried out. During the clinical dental examination of the mucous membrane of the oral cavity, we evaluated its color, localization, number, dynamics of the lesion elements, as well as the involvement of other anatomical areas in the process; analyzed signs and nature of general intoxication (temperature reaction, presence and duration of regional lymphadenitis). The anamnesis data were taken into account: the frequency of disease relapses, the presence of concomitant and transferred diseases. Additional laboratory research methods are prescribed: clinical blood test, immunological blood test for the determination of IgE class antibodies; immunoenzymatic blood analysis for specific IgM, IgG to the herpes simplex virus with determination of the avidity index; PCR study of oral fluid for herpes simplex virus. *Research results.* A scheme of complex treatment of exudative erythema multiforme associated with the herpes simplex virus with the use of a helium-neon laser has been developed. Clinical control of the effectiveness of the proposed treatment scheme was carried out by assessing the dynamics of the main clinical symptoms of the disease: duration of the inflammatory process in the oral cavity, epithelization of the lesion elements. *Conclusions.* A exudative erythema multiforme was diagnosed in an 11-year-old child, which developed against the background of activation of the herpetic process in the oral cavity and around the mouth, which was confirmed by clinical and laboratory research data. Our proposed scheme of complex treatment with the use of a helium-neon laser contributed to a significant reduction of the clinical manifestation of the disease, namely: a significant reduction of the painful red border of the lips on the third day of treatment, acceleration of epithelization processes – on the fifth day of treatment. When establishing the diagnosis of EEM, it is necessary to take into account the allergic history, previously prescribed drugs, as well as conduct diagnostic tests for herpes virus infection in order to prescribe rational therapy.

Key words: herpes-associated multiform exudative erythema, herpes simplex virus, helium-neon laser, children.

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ORAL HEALTH AWARENESS AND DENTAL HYGIENE SKILLS AMONG PREGNANT WOMEN (BASED ON SURVEY DATA)

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To assess the level of dental hygiene education and the quality of hygiene skills among pregnant women living in Baku city, a survey was conducted among 157 pregnant women aged 18-35 years, who were divided into 3 age groups: Group I - 31.8% of women aged 18-23 years, Group II - 34.4% of women aged 24-29 years, Group III - 33.8% of women aged 30-35 years. The educational status of the respondents did not differ significantly. The majority of respondents in all age groups considered it possible to save teeth during pregnancy and consulted a dentist for treatment. 63.0% of respondents in the age group of 24-29 years old had oral examination before pregnancy, which is significantly higher than in other age groups. Young pregnant women (18-23 years old) were least likely to undergo an oral cavity examination, 60.0±6.93% of pregnant women of group I and 51.9±6.80% of women of group II brushed their teeth twice a day. 49.1±6.87% of respondents in group III brushed their teeth for 3 minutes, which was signifi-

cantly higher than in group II. The toothpaste with medicinal herbs was significantly more often used by women in the age group of 24-29 years ($44.4 \pm 6.76\%$), toothpaste with a whitening effect was preferred by younger respondents ($40.0 \pm 6.93\%$), and older respondents (Group III) preferred toothpaste against bleeding gums ($52.8 \pm 6.86\%$). The older respondents used additional hygiene products. Before pregnancy, the majority of respondents of groups I ($96.0 \pm 2.77\%$) and II ($51.9 \pm 6.80\%$) did not visit the dentist for professional hygiene, while the respondents of group III ($58.5 \pm 6.77\%$) visited for that purpose 1 time in 2-3 years. In general, the need to improve the relevant work on informing about oral hygiene and improving the quality of hygiene skills was identified among pregnant women living in Baku.

Key words: pregnant women, oral cavity, hygiene, questionnaire.

Connection of the publication with planned research works.

This work is a fragment of a dissertation on topic "Comparative analysis of the effectiveness of prevention of dental diseases in pregnant women".

Introduction.

Dental diseases are one of the major health problems, which are highly prevalent worldwide. Good oral health is an important part of a healthy pregnancy as its deterioration can affect both the overall health of the woman during pregnancy and the health of the child [1]. In turn, changes in the body during pregnancy can affect oral health. Therefore, there is no doubt that it is important to be more aware of and monitor oral health during pregnancy.

Poor oral health can affect the course of pregnancy and increase the risk of caries in the baby [2]. The pregnancy hormones can cause swelling (inflammation) and bleeding of the gums (gingivitis). The frequent vomiting and food cravings can increase the quantity of plaque bacteria and acidity in the mouth, leading to increased tooth sensitivity and bleeding gums. Daily oral hygiene and visits to the dentist can support overall health [3].

The oral health awareness is of great importance in improving oral health. Maintaining proper oral hygiene and the rapid treatment of various oral diseases have a positive impact in that regard [4]. However, special attention is required to be paid to oral health in women, as various physiological conditions such as pregnancy should be additionally considered [5].

Periodontal health is one of the most important aspects of oral health to consider during pregnancy. According to the report provided by the American Dental Association, 60% to 75% of pregnant women suffer from gingivitis [6]. It has been found that pregnancy itself does not cause gingivitis but aggravates it.

There has been shown an association between longer pregnancy duration and worse oral health, as measured by pre-pregnancy self-assessment. However, women's knowledge of the impact of oral hygiene on the development of pregnancy and fetus is still insufficient and requires constant attention. The self-assessment of oral health by pregnant women may be the first step in enhancing their health promotion activities [7].

The aim of the study.

To determine the level of dental hygiene education and assess the quality of hygiene skills in pregnant women living in Baku using the questionnaire.

Object and research methods.

The study was conducted by questioning 157 pregnant women living in Baku. The age of women ranged from 18 to 35 years. Inclusion criteria were pregnant women who agreed to participate in the study. Exclusion criteria: non-pregnant women; pregnant women who did not agree to participate in the survey.

There was used a self-explanatory questionnaire, consisting of the following sections: awareness of oral cavity care, oral hygiene skills of pregnant women. The questionnaire was compiled in Azerbaijani. The questionnaire was based on the modified data of the questionnaire proposed by S.B. Ulitovsky [8]. At the beginning of the questionnaire there were questions regarding the socio-demographic characteristics of the participants, such as age, educational status. That was followed by 14 and 11 questions in Azerbaijani language on dental hygiene education and quality of hygiene skills, respectively.

All correctly completed questionnaires were analyzed using the SPSS v. 23.0 (IBM, USA). Descriptive statistics was used to determine the main statistical parameters (mean, standard deviation, etc.). Differences in responses associated with the attitude of pregnant women to the question were examined using Pearson's chi-square test (χ^2). The significance level was 0.05.

Research results.

The respondents were divided into 3 age groups. Group I included 50 (31.8%) women aged 18 to 23 years, group II included 54 (34.4%) women aged 24 to 29 years, group III – 53 (33.8%) women aged 30 to 35 years. The women had secondary or higher education (**table 1**).

The data from table 1 shows that the educational status of the respondents did not differ significantly.

In **table 2** shows the respondents' answers to the questionnaire on the awareness of oral care.

The data of **table 2** showed that the majority of respondents in all age groups consider it possible to save teeth during pregnancy. At the same time, that opinion significantly increased with the age of the respondents. The survey showed regular consultation with a dentist of 51.9% of pregnant women aged 24-29 years, which is significantly higher compared to the group of pregnant women aged 18-23 ($\chi^2=16.66$, $p=0.0001$) and slightly higher than in pregnant women

Table 1 – Distribution of respondents by education status

Variable	Group I (n=50)		Group II (n=54)		Group III (n=53)		χ^2 1-2	p	χ^2 1-3	p	χ^2 2-3	p
	n	%	n	%	n	%						
Education												
Average	8	56,0 $\pm$ 7,02	28	51,9 $\pm$ 6,80	30	56,6 $\pm$ 6,81	0,18	0,672	0,00	0,951	0,24	0,62
Higher	22	44,0 $\pm$ 7,02	26	48,1 $\pm$ 6,80	23	43,4 $\pm$ 6,81						

Notes: χ^2 1-2 – differences between groups I and II; χ^2 1-3 – differences between groups I and III; χ^2 2-3 – differences between groups II and III; p – statistical significance of differences between indicators.

Table 2 – Distribution of respondents based on the questionnaire responses

Questions	Group I (n=50)		Group II (n=54)		Group III (n=53)		χ^2 1-2	P	χ^2 1-3	P	χ^2 2-3	p
	n	%	n	%	n	%						
1. Is it possible to save teeth during pregnancy?												
Yes	36	72,0±6,35	48	88,9±4,28	52	98,1±1,87	4,77	0,0290	14,10	0,0002	3,72	0,05
No	13	26,0±6,20	6	11,1±4,28	1	1,9±1,87	3,85	0,0496	12,74	0,0004	3,72	0,05
Don't know	1	2,0±1,98	0	0	0	0	1,09	0,2964	1,07	0,3009		
2. Do you visit to a dentist regularly during pregnancy?												
Yes	7	14,0±4,91	28	51,9±6,80	25	47,2±6,86	16,66	0,0001	13,22	0,0003	0,23	0,63
No	43	86,0±4,91	26	48,1±6,80	28	52,8±6,86	16,66	0,0001	13,22	0,0003	0,23	0,63
3. What is the purpose of visiting the dentist during pregnancy?												
Preventive examination	13	26,0±6,20	16	29,6±6,21	25	47,2±6,86	0,17	0,6800	4,95	0,0261	3,48	0,06
Tooth treatment	30	60,0±6,93	30	55,6±6,76	25	47,2±6,86	0,21	0,6467	1,70	0,1920	0,75	0,39
Extraction	0	0	0	0	0	0						
Treatment of oral mucosa	0	0	4	7,4±3,56	0	0	3,85	0,0497			4,08	0,04
Getting an advice on oral care	7	14,0±4,91	4	7,4±3,56	3	5,7±3,17	1,19	0,2747	2,04	0,1531	0,13	0,71
Obtaining the signature of a dentist in the exchange card of a pregnant woman	0	0	0	0	0	0						
4. Was there an oral cavity examination done by a dentist before pregnancy?												
Yes	6	12,0±4,60	34	63,0±6,57	23	43,4±6,81	28,49	0,0001	12,54	0,0004	4,11	0,0425
No	44	88,0±4,60	20	37,0±6,57	30	56,6±6,81	28,49	0,0001	12,54	0,0004	4,11	0,0425
5. Have you been informed by the dentist how often to visit the dental office?												
Yes, during pregnancy	10	20,0±5,66	36	66,7±6,42	35	66,0±6,51	22,92	0,0001	22,17	0,0001	0,00	0,9451
Yes, before pregnancy	0	0	0	0	0	0						
No	40	80,0±5,66	18	33,3±6,42	18	34,0±6,51	22,92	0,0001	22,17	0,0001	0,00	0,9451
6. The choice of toothpaste												
Personal preference for taste/smell/feel of freshness	20	40,0±6,93	18	33,3±6,42	7	13,2±4,65	0,50	0,4806	9,55	0,0020	6,05	0,0139
The price of a toothpaste	0	0	0	0	3	5,7±3,17			2,92	0,0878	3,14	0,0762
Dentist recommendation	0	0	30	55,6±6,76	30	56,6±6,81	39,04	0,0001	39,93	0,0001	0,01	0,9130
TV advertising	30	60,0±6,93	6	11,1±4,28	13	24,5±5,91	27,42	0,0001	13,31	0,0003	3,30	0,0694
Recommendations from other specialists	0	0	0	0	0	0						
7. Do you know about correct nutrition intake during and after pregnancy?												
Yes	27	54,0±7,05	38	70,4±6,21	43	81,1±5,37	2,97	0,0849	8,70	0,0032	1,68	0,1944
Only during pregnancy	6	12,0±4,60	2	3,7±2,57	10	18,9±5,37	2,52	0,1127	0,92	0,3362	6,18	0,0129
Only after pregnancy	0	0	0	0	0	0						
I'm not sure I know enough information on this subject	1	2,0±1,98	6	11,1±4,28	0	0	3,43	0,0639	1,07	0,3009	6,24	0,0125
Didn't think about that	7	14,0±4,91	0	0	0	0	8,11	0,0044	7,96	0,0048		

Difficult to answer	9	18,0± 5,43	8	14,8± 4,83	0	0	0,19	0,6607	10,45	0,0012	8,49	0,0036
8. Did you receive any information from a dentist about the peculiarities of oral care during pregnancy?												
Yes	0	0	22	40,7± 6,69	28	52,8± 6,86	25,84	0,0001	36,28	0,0001	1,57	0,2101
I do not remember	40	80,0± 5,66	8	14,8± 4,83	18	34,0± 6,51	44,39	0,0001	22,17	0,0001	5,33	0,0209
No	10	20,0± 5,66	24	44,4± 6,76	7	13,2± 4,65	7,05	0,0079	0,86	0,3534	12,68	0,0004
Yes, I received it, but from another specialist	0	0	0	0	0	0						
9. Do you take the calcium supplements?												
Yes, on the recommendation of a physician	10	20,0± 5,66	34	63,0± 6,57	33	62,3± 6,66	19,63	0,0001	18,90	0,0001	0,01	0,9405
Yes, it is my choice	0	0	0	0	0	0						
No, although I received such recommendations from the physician	0	0	0	0	0	0						
No, I did not receive such recommendations from the physician	40	80,0± 5,66	20	37,0± 6,57	20	37,7± 6,66	19,63	0,0001	18,90	0,0001	0,01	0,9405
10. Do you take vitamin D?												
Yes, on the recommendation of a physician	10	20,0± 5,66	40	74,1± 5,96	25	47,2± 6,86	30,41	0,0001	8,47	0,0036	8,12	0,0044
Yes, it is my choice	0	0	0	0	0	0						
No, although I received such recommendations from the physician	0	0	0	0	0	0						
No, I did not receive such recommendations from the physician	40	80,0± 5,66	14	25,9± 5,96	28	52,8± 6,86	30,41	0,0001	8,47	0,0036	8,12	0,0044
11. Do you take Omega-3 fatty acids?												
Yes, on the recommendation of a physician	10	20,0± 5,66	30	55,6± 6,76	21	39,6± 6,72	13,87	0,0002	4,71	0,0300	2,72	0,0990
Yes, it is my choice	0	0	0	0	0	0						
No, although I received such recommendations from the physician	0	0	0	0	0	0						
No, I did not receive such recommendations from the physician	40	80,0± 5,66	24	44,4± 6,76	32	60,4± 6,72	13,87	0,0002	4,71	0,0300	2,72	0,0990
12. Do you eat sweets and flour products during pregnancy?												
Yes, after the main meal	26	52,0± 7,07	18	33,3± 6,42	20	37,7± 6,66	3,71	0,0542	2,12	0,1456	0,23	0,6342
Yes, as a snack	7	14,0± 4,91	10	18,5± 5,29	8	15,1± 4,92	0,39	0,5335	0,02	0,8750	0,22	0,6359
Rarely	16	32,0± 6,60	14	25,9± 5,96	14	26,4± 6,06	0,47	0,4945	0,39	0,5330	0,00	0,9541
No, just fruits	1	2,0± 1,98	12	22,2± 5,66	11	20,8± 5,57	9,71	0,0018	8,79	0,0030	0,03	0,8534
13. How useful are promotional and educational dental materials for pregnant women?												
Useful, because it helped to consolidate the information received from the dentist	20	40,0± 6,93	42	77,8± 5,66	43	81,1± 5,37	15,39	0,0001	18,32	0,0001	0,18	0,6677
Useful, I got enough new and interesting information	0	0	0	0	0	0						
Useful, as I hadn't given some of the information much thought before	0	0	0	0	0	0						
I did not learn anything new, the dentist told the same thing at the consultation	30	60,0± 6,93	12	22,2± 5,66	10	18,9± 5,37	15,39	0,0001	18,32	0,0001	0,18	0,6677
14. Would you like to share your knowledge with pregnant women?												
Yes, definitely	7	14,0± 4,91	32	59,3± 6,69	28	52,8± 6,86	22,69	0,0001	17,29	0,0001	0,45	0,5029
Maybe	43	86,0± 4,91	22	40,7± 6,69	25	47,2± 6,86	22,69	0,0001	17,29	0,0001	0,45	0,5029
I think no	0	0	0	0	0	0						

Notes: χ^2 1-2 – differences between groups I and II; χ^2 1-3 – differences between groups I and III; χ^2 2-3 – differences between groups II and III; p – statistical significance of differences between indicators.

Table 3 – Distribution of respondents depending on teeth brushing and oral hygiene skills

Characteristics	Group I (n=50)		Group II (n=54)		Group III (n=53)		χ^2 1-2	P	χ^2 1-3	p	χ^2 2-3	p
	n	%	n	%	n	%						
1. How many times a day do you brush your teeth?												
1	13	26,0±6,20	10	18,5±5,29	43	81,1±5,37	0,84	0,3584	31,52	0,0001	41,95	0,0001
2	30	60,0±6,93	28	51,9±6,80	10	18,9±5,37	0,70	0,4032	18,32	0,0001	12,71	0,0004
3 or more	7	14,0±4,91	16	29,6±6,21	0	0	3,68	0,0550	7,96	0,0048	18,46	0,0001
2. Brushing time												
1 min	3	6,0±3,36	6	11,1±4,28	0	0	0,86	0,3543	3,28	0,0703	6,24	0,0125
2 min	23	46,0±7,05	22	40,7±6,69	13	24,5±5,91	0,29	0,5886	5,22	0,0224	3,19	0,0739
3 min	20	40,0±6,93	14	25,9±5,96	26	49,1±6,87	2,34	0,1263	0,85	0,3555	6,11	0,0134
4 min	0	0	12	22,2±5,66	14	26,4±6,06	12,56	0,0004	15,29	0,0001	0,26	0,6131
5 min or more	0	0	0	0	0	0						
Don't know	4	8,0±3,84	0	0	0	0	4,49	0,0340	4,41	0,0357		
3. When do you brush your teeth?												
In the morning and evening after meals	26	52,0±7,07	26	48,1±6,80	30	56,6±6,81	0,15	0,6947	0,22	0,6392	0,77	0,3813
In the morning before meals, in the evening after	14	28,0±6,35	22	40,7±6,69	23	43,4±6,81	1,86	0,1724	2,65	0,1036	0,08	0,7809
In the morning and evening before meals	0	0	2	3,7±2,57	0	0	1,89	0,1694			2,00	0,1573
After every meal	0	0	0	0	0	0						
I never brush	0	0	0	0	0	0						
In the evenings	7	14,0±4,91	0	0	0	0	8,11	0,0044	7,96	0,0048		
Find it difficult to answer	3	6,0±3,36	4	7,4±3,56	0	0	0,08	0,7747	3,28	0,0703	4,08	0,0434
4. Which type of toothpastes do you most often use when brushing your teeth?												
For sensitive teeth	0	0	2	3,7±2,57	5	9,4±4,02	1,89	0,1694	4,96	0,0260	1,44	0,2307
Containing calcium, phosphorus (Ca2+, P)	0	0	0	0	0	0						
Containing fluoride (F)	0	0	0	0	0	0						
with medical herbs	0	0	24	44,4±6,76	13	24,5±5,91	28,89	0,0001	14,04	0,0002	4,69	0,0303
For teeth whitening	20	40,0±6,93	12	22,2±5,66	5	9,4±4,02	3,85	0,0497	13,08	0,0003	3,27	0,0704
Against bleeding gums	7	14,0±4,91	4	7,4±3,56	28	52,8±6,86	1,19	0,2747	17,29	0,0001	26,33	0,0001
Find it difficult to answer	23	46,0±7,05	12	22,2±5,66	2	3,8±2,62	6,57	0,0103	24,96	0,0001	8,01	0,0047
5. Do you use additional oral hygiene products?												
Yes, regularly	0	0	6	11,1±4,28	8	15,1±4,92	5,90	0,0152	8,18	0,0042	0,37	0,5413
Sometimes	16	32,0±6,60	18	33,3±6,42	38	71,7±6,19	0,02	0,8848	16,26	0,0001	15,78	0,0001
No, because I don't know much about them	20	40,0±6,93	24	44,4±6,76	7	13,2±4,65	0,21	0,6467	9,55	0,0020	12,68	0,0004
No, because I don't see the need for that	13	26,0±6,20	6	11,1±4,28	0	0	3,85	0,0496	15,77	0,0001	6,24	0,0125
Find it difficult to answer	1	2,0±1,98	0	0	0	0	1,09	0,2964	1,07	0,3009		

	48	96,0 ± 2,7	28	51,9 ± 6,8	22	41,5 ± 6,7	25,72	0,00001	35,08	0,00001	1,15
Does not attend											

Notes: x2 1-2 – differences between groups I and II; x2 1-3 – differences between groups I and III; x2 2-3 – differences between groups II and III; p – statistical significance of differences between indicators.

aged 30-35 years ($\chi^2=0.23$, $p=0.63$). During pregnancy, most respondents of all age groups visited the dentist for treatment. Older pregnant women (30-35 years old) more often applied for prophylactic purposes and significantly exceeded young (18-23 years old) pregnant women ($\chi^2=4.95$, $p=0.0261$). A small number of pregnant women of all 3 groups visited the dentist for advice on oral care. Before pregnancy, 63.0% of respondents in the age group of 24-29 years had dental examination of the oral cavity, which is significantly higher than in the age group of 18-23 years ($\chi^2=28.49$, $p=0.0001$) and 30-35 years ($\chi^2=4.11$, $p=0.0425$). According to the survey, young pregnant women (18-23 years old) were the least likely to visit the dentist for oral cavity examination, which, in comparison with groups II ($\chi^2=28.49$, $p=0.0001$) and group III ($\chi^2=12.54$, $p=0.0004$) was significantly lower. Information about the need for pregnant women to visit a dentist was not given to 80% of respondents aged 18-23 years, which was significantly higher than the group of pregnant women aged 24-29 years ($\chi^2=22.92$, $p=0.0001$) and the group of pregnant women aged 30-35 years ($\chi^2=22.17$, $p=0.0001$). A significant part of the pregnant women of age groups II and III chose toothpaste on the recommendation of a dentist 55.6% and 56.6%, respectively, while pregnant women of I age group chose TV advertising – 60.0% and personal preferences of smell and taste – 40, 0%. 54.0% of women of group I, 70.4% of group II and 81.1% of pregnant women of group III knew about proper nutrition during pregnancy. Only respondents aged 18-23 did not think about that – 14.0%, which is significantly higher than group II ($\chi^2=8.11$, $p=0.0044$) and group III ($\chi^2=7.96$, $p=0, 0048$). Only 40.7% and 52.8% of pregnant women of groups II and III, respectively, were informed by the dentist about the peculiarities of oral care during the gestational period. At the same time, 80.0% of pregnant women in Group I could not remember the source of information. 44.4% of women of the II age group did not receive any information. The pregnant women of groups II and III had more often taken calcium preparations, vitamin D and Omega-3-fatty acids, on the recommendation of the physician: 63.0%, 74.1% and 55.6%, as well as 62.3%, 47.2% and 39.6% respectively. 80.0% of pregnant women in group I did not receive recommendations to take calcium preparations, vitamin D and Omega-3 fatty acids. Sweets during pregnancy were most commonly eaten by pregnant women in the age group 18-23 years with 52.0%, while in the age groups 24-29 and 30-35 years such women accounted for 33.3% and 37.7%, respectively. During pregnancy, only 2.0% of women in group I consumed fruits, while in groups II and III such women accounted for 22.2% and 20.8%, respectively. When asked about the usefulness of promotional and informative dental materials, 77.8% and 81.1% of pregnant women in groups II and III, respectively, responded positively, whereas 60.0% of pregnant women in age group I did not find anything new to them. According to the survey, 59.3% and 52.8% of pregnant women of groups II and III will definitely share their knowledge. At the same time, 86.0% of women in group I noted that they might share their knowledge.

Table 3 shows the respondents' answers to the oral care questionnaire.

The data in **table 3** presented that $60.0 \pm 6.93\%$ of pregnant women of group I and $51.9 \pm 6.80\%$ of women

of group II brushed their teeth twice a day, which significantly exceeded the indicator in group III ($p=0.0001$). Almost half of the respondents ($49.1 \pm 6.87\%$) included in group III noted that they brush their teeth for 3 minutes, which significantly exceeded the indicator of group II ($p=0.0134$). Only $14.0 \pm 4.91\%$ of women in group I brushed their teeth in the evening. Toothpaste with medical herbs was used significantly more by women in the age group of 24-29 years ($44.4 \pm 6.76\%$), toothpaste with whitening effect was preferred by younger respondents ($40.0 \pm 6.93\%$), and older respondents (Group III) preferred toothpaste against bleeding gums ($52.8 \pm 6.86\%$). At the same time, $46.0 \pm 7.05\%$ of women in group I, $22.2 \pm 5.66\%$ of women in group II and $3.8 \pm 2.62\%$ of women in group III were undecided about the choice of toothpaste. Additional hygiene products were used by older respondents, and regularly $15.1 \pm 4.92\%$, sometimes – $71.7 \pm 6.19\%$. $40.0 \pm 6.93\%$ and $44.4 \pm 6.76\%$ of women in groups I and II, respectively, did not have sufficient information about such products. The changes in the oral cavity during pregnancy were significantly less frequently reported by group I women ($60.0 \pm 6.93\%$), which was statistically considerably different from group II ($p=0.0018$) and group III ($p=0.0001$). The majority of respondents in the study groups indicated that they change their toothbrush every 3 months. There were also no significant differences in toothbrush storage between the groups. $37.7 \pm 6.66\%$ of respondents in group III, when brushing their teeth, applied toothpaste to half of the brush, while $40.0 \pm 6.93\%$ and $29.6 \pm 6.21\%$ of respondents in groups I and II, respectively, applied only traces of toothpaste. Women of all age groups in the teeth brushing process mainly used circular and sweeping movements. Before pregnancy, the majority of respondents of groups I ($96.0 \pm 2.77\%$) and II ($51.9 \pm 6.80\%$) did not visit the dentist for the purpose of professional hygiene, while the respondents of group III ($58.5 \pm 6.77\%$) visited the dentist for this purpose 1 time in 2-3 years.

Discussion of research results.

According to our study, only 38.2% ($n=60$) women had regular oral cavity examination during pregnancy. At the same time, 54.1% ($n=85$) of pregnant women visited the dentist for treatment, and only 34.4% ($n=54$) of respondents for the purpose of prevention, and 8.9% to get advice. Before pregnancy, 40.1% ($n=63$) of women had oral cavity examination. Our results are comparable with the data of other studies [9-12]. Although general health, dental, gynecology and obstetrics professionals are involved in highlighting and discussing the importance of oral health awareness among pregnant women, but, as presented in published results, this knowledge and awareness among women is still insufficient [6, 7, 13].

According to the data of our survey, the majority of pregnant women of young age (18-29 years) brushed their teeth 2 times a day, women aged 30-35 years – 1 time. These results are comparable with those of S. John, H.S. AlMesmar [14].

Our data revealed that only $4.0 \pm 2.77\%$ of women aged 18-23 visited the dentist for 2-3 years before pregnancy. The literature on comparable questionnaire-based surveys has yielded mixed results [15-18]. R. Aiuto et al. [15] think that young women often underestimate the importance of oral hygiene before pregnancy, and the impact of oral hygiene persists throughout

pregnancy and continues after childbirth. According to B. Gonik et al. [16], patients more often noted a "good" oral condition and visited the dentist for 6 months. Results of study F. Constantinides et al. [17] emphasize the urgent need for educational programs for oral care in pregnant women.

Conclusions.

Based on the study, it can be concluded that pregnant women of young reproductive age visit the dentist relatively less frequently during pregnancy and, consequently, do not receive the necessary recommendations from the doctor regarding oral health. Pregnant women of young, middle and older reproductive age had differences in tooth brushing, in dental visits before pregnancy. According to the study, in pregnant women living in Baku city, the need to improve the relevant work on informing about oral hygiene and improving the quality of hygiene skills was identified.

Prospects for further research.

Determine the intensity of dental caries in women in different periods of pregnancy. To study the composition of the oral fluid in women during pregnancy: the content of mineral components (calcium, phosphorus, magnesium), the circulating immune complex IgA, IgM, IgG, free fatty acids and natural peptide – calprotectin. To analyze the data of the general blood test and the content of calcium, phosphorus and magnesium in the blood of pregnant women. To study the effectiveness of the combined use Omega-3, Calcium-D-3-Nycomed for the prevention of dental caries in pregnant women. To develop a scientifically based system of preventive measures for dental diseases in pregnant women using the mentioned products.

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ОБІЗНАНІСТЬ ПРО ЗДОРОВ'Я ПОРОЖНИНИ РОТА ТА СТОМАТОЛОГІЧНІ ГІГІЄНІЧНІ НАВИЧКИ СЕРЕД ВАГІТНИХ ЖІНОК (ЗА ДАНИМИ АНКЕТУВАННЯ)

Керімлі Н. К.

Резюме. Мета дослідження – визначити рівень стоматологічної санітарно-гігієнічної обізнаності та оцінка якості гігієнічних навичок у вагітних жінок, що мешкають у місті Баку, за допомогою анкетування. У анкетуванні взяли участь 157 вагітних жінок у віці від 18 до 35 років, що мешкають у місті Баку. За рівнем освітнього статусу респонденти суттєво не відрізнялися. За віком респонденти були розділені на три вікові групи: I група – 31,8% жінок віком 18-23 роки, II група 34,4% жінок віком 24-29 років, III група – 33,8% жінок віком 30-35 років. Більшість респондентів всіх вікових груп вважали збереження зубів при вагітності можливим. Регулярний огляд у стоматолога частіше проходили вагітні віком 24-29 років (51,9%). Більшість респондентів всіх вікових груп зверталися до стоматолога з метою лікування. Санацію ротової порожнини до вагітності пройшли 63,0% респондентів у віковій групі 24-29 років, що значно вище, ніж у віковій групі 18-23 роки ($p=0,0001$) та 30-35 років ($p=0,0425$). Згідно опитування, рідше за всіх проходили санацію ротової порожнини молоді вагітні (18-23 роки), що у порівнянні з II ($p=0,0001$) та III групою ($p=0,0004$) було значно нижче. Інформацію

щодо необхідності вагітним відвідувати стоматолога не отримали 80% респондентів у віці 18-23 роки, що значно перевищувало групу вагітних у віці 24-29 років ($p=0,0001$) і групу вагітних у віці 30-35 років ($p=0,0001$). Двічі на день чистили зуби $60,0\pm 6,93\%$ вагітних I групи та $51,9\pm 6,80\%$ жінок II групи, що суттєво перевищувало показник у III групі ($p=0,0001$). $49,1\pm 6,87\%$ респондентів III групи чистили зуби 3 хвилини, що значно перевищувало показник II групи ($p=0,0134$). Увечері чистили зуби лише $14,0\pm 4,91\%$ пацієнтів I групи. Зубну пасту з лікувальними травами суттєво частіше використовували жінки вікової групи 24-29 років ($44,4\pm 6,76\%$), пасті з відбілюючим ефектом надавали перевагу більш молоді респонденти ($40,0\pm 6,93\%$), а більш старші респонденти (III група) надавали перевагу зубній пасті проти кровоточивості ясен ($52,8\pm 6,86\%$). $46,0\pm 7,05\%$ жінок I групи, $22,2\pm 5,66\%$ жінок II групи та $3,8\pm 2,62\%$ жінок III групи не визначилися з вибором зубної пасту. Додатковими гігієнічними засобами користувалися дорослі респонденти, регулярно $15,1\pm 4,92\%$, інколи – $71,7\pm 6,19\%$. Не володіли достовірною інформацією про такі засоби $40,0\pm 6,93\%$ та $44,4\pm 6,76\%$ жінок I та II групи відповідно. Зміни стану порожнини рота при вагітності значно рідше відмічали жінки I групи ($60,0\pm 6,93\%$), що значимо відрізнялося від II групи ($p=0,0018$) та III групи ($p=0,0001$). До вагітності більшість респондентів I ($96,0\pm 2,77\%$) та II ($51,9\pm 6,80\%$) групи не відвідували стоматолога з метою професійної гігієни, тоді як опитані III групи ($58,5\pm 6,77\%$) були у стоматолога з цією метою 1 раз на 2-3 роки.

Вагітні молодого репродуктивного віку відносно рідше відвідують стоматолога під час вагітності та, відповідно, не отримують необхідних рекомендацій лікуючого лікаря щодо здоров'я порожнини рота. Вагітні молодого, середнього та старшого репродуктивного віку мали відмінності гігієнічних навичок по чистці зубів, у відвідуванні стоматолога до вагітності з метою професійної гігієни. Згідно дослідження, у вагітних, що мешкають у місті Баку, визначена необхідність удосконалення роботи щодо інформування відносно гігієни порожнини рота та покращенню якості гігієнічних навичок.

Ключові слова: вагітні жінки, порожнина рота, гігієна, анкета.

ORAL HEALTH AWARENESS AND DENTAL HYGIENE SKILLS AMONG PREGNANT WOMEN (BASED ON SURVEY DATA)

Karimli N. K.

Abstract. The aim of this study was to determine the level of dental hygiene education and assess the quality of hygiene skills in pregnant women living in Baku using the questionnaire. The survey involved 157 pregnant women aged 18 to 35 living in Baku. The educational status of the respondents did not differ significantly. The respondents are divided into 3 age groups: group I – 31.8% of women aged 18-23 years, group II – 34.4% of women aged 24-29 years, group III – 33.8% of women aged 30-35 years. The majority of respondents in all age groups consider it possible to save teeth during pregnancy. Pregnant women aged 24-29 (51.9%) were more likely to have regular dental examination. Most respondents of all age groups visited the dentist for treatment. 63.0% of respondents in the age group of 24-29 years old had examination of the oral cavity before pregnancy, which is significantly higher than in the age group of 18-23 years old ($p=0.0001$) and 30-35 years old ($p=0.0425$). According to the survey, young pregnant women (18-23 years old) had dental examination less often, which was significantly lower in comparison with groups II ($p=0.0001$) and group III ($p=0.0004$). 80% of respondents aged 18-23 years did not receive information about the need for pregnant women to visit the dentist, which significantly exceeded the group of pregnant women aged 24-29 years ($p=0.0001$) and the group of pregnant women aged 30-35 years ($p=0.0001$). $60.0\pm 6.93\%$ of pregnant women of group I and $51.9\pm 6.80\%$ of women of group II brushed their teeth twice a day, which considerably exceeded the indicator in group III ($p=0.0001$). $49.1\pm 6.87\%$ of respondents in group III brushed their teeth for 3 minutes, which significantly exceeded the indicator in group II ($p=0.0134$). Only $14.0\pm 4.91\%$ of women in group I brushed their teeth in the evening. Toothpaste with medical herbs was considerably more often used by women in the age group of 24-29 years ($44.4\pm 6.76\%$), toothpaste with whitening effect was preferred by younger respondents ($40.0\pm 6.93\%$), and older respondents (group III) preferred toothpaste against bleeding gums ($52.8\pm 6.86\%$). $46.0\pm 7.05\%$ of women of group I, $22.2\pm 5.66\%$ of women of group II and $3.8\pm 2.62\%$ of women of group III did not decide on the choice of toothpaste. Additional hygiene products were used by older respondents, and regularly $15.1\pm 4.92\%$, sometimes – $71.7\pm 6.19\%$. $40.0\pm 6.93\%$ and $44.4\pm 6.76\%$ of women in groups I and II, respectively, did not have sufficient information about such products. The changes in the state of the oral cavity during pregnancy were noted much less frequently by women of group I ($60.0\pm 6.93\%$), which significantly differed from group II ($p=0.0018$) and group III ($p=0.0001$). Before pregnancy, the majority of respondents of groups I ($96.0\pm 2.77\%$) and II ($51.9\pm 6.80\%$) did not visit the dentist for the purpose of professional hygiene, while the respondents of group III ($58.5\pm 6.77\%$) visited the dentist for this purpose 1 time in 2-3 years.

Pregnant women of young reproductive age visit the dentist relatively less often during pregnancy and, consequently, do not receive the necessary recommendations from the doctor regarding oral health. Pregnant women of young, middle and older reproductive age had differences in hygienic skills in brushing their teeth, in visiting the dentist before pregnancy for the purpose of professional hygiene. According to the study, in pregnant women living in Baku city, the need to improve the relevant work on informing about oral hygiene and improving the quality of hygiene skills was identified.

Key words: pregnant women, oral cavity, hygiene, questionnaire.

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STATE OF THE AUTONOMOUS NERVOUS SYSTEM AND STRESS AT OUTPATIENT APPOINTMENT OF DENTAL-SURGEON'S PATIENTS WITH SYNCOPATHIC CONDITIONS

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Emergency conditions remain an urgent problem for a doctor of any speciality. At the same time, epileptic seizures, cardiac arrest, various syncopal conditions, and others can occur during an outpatient visit to a dental surgeon. Although syncope is considered a benign transient condition, its prevention can improve the quality of dental care and increase patient satisfaction by reducing anxiety about the procedures. The aim is to assess the level of perceived stress and the state of the autonomic nervous system in outpatients of a dental surgeon at the beginning of the appointment, depending on the further development of syncope. We conducted a pilot prospective study that included 33 outpatients of a dental surgeon, who were divided into two groups: group 1 - patients who developed syncope (n=11); group 2 - patients who did not develop syncope during the visit to the clinic (n=22). The PSS-10 was used to assess perceived stress, and the state of the autonomic nervous system was determined by the Kerdo index and dermographism. Patients in both groups did not have statistically significant differences in gender, age, diagnosis, and time spent in the queue. There were no statistically significant differences between the groups of patients in terms of perceived stress. A statistically significant higher Kerdo index was found in group 1 with a tendency to sympathicotonia. Thus, we have determined that it is the increased activity of the sympathetic nervous system before an outpatient visit to a dental surgeon, rather than the subjective level of perceived stress, that may be potentially associated with the likelihood of developing a syncopal state, which requires more detailed research.

Key words: autonomic nervous system, stress, syncopal states, dentistry.

Connection of the publication with planned research works.

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Introduction.

In clinical practice, a dental surgeon encounters a wide range of emergencies, including epileptic seizures, cardiac arrest, fainting (or syncope) and others. At the same time, syncope is often overlooked against the background of more severe and dangerous conditions. Nevertheless, syncope accounts for up to 84% of all emergencies in the dental practice of German dentists [1].

Syncope is a transient loss of consciousness and postural tone lasting several minutes. According to

the European Society of Cardiology classification, there are reflex syncope, syncope due to orthostatic hypotension, and cardiac syncope [2]. Vasovagal syncope is relatively common. Hypotension and loss of consciousness are associated with depression of sympathetic vascular tone and/or parasympathetic bradycardia. Although several factors can lead to vasovagal syncope, the initial compensatory increase in cardiac sympathetic activity can paradoxically activate cardiac sensory nerves that follow the vagus nerve, thereby causing reflex inhibition of sympathetic vascular activity, vasodilation, parasympathetic activation, and bradycardia [3]. Several factors are known to exacerbate or accelerate the development of vasovagal syncope, namely fatigue, dehydration, blood shift to the lower body, hypersensitivity of left ventricular receptors to stretch, fear, emotional stress, and pain response [4]. The psycho-emotional state is directly related to cardiovascular disease [5].

The autonomic nervous system, consisting of sympathetic and parasympathetic divisions, can reflect the state of mental health (e.g. stress, depression or anxiety) [6, 7]. Emotional stress through the limbic system activity leads to activating the sympathoadrenal system [8]. At the same time, the activity of the