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# THE KNOWLEDGE OF ORAL HYGIENE AND ORAL HYGIENE HABITS DURING PREGNANCY AND PUERPERIUM

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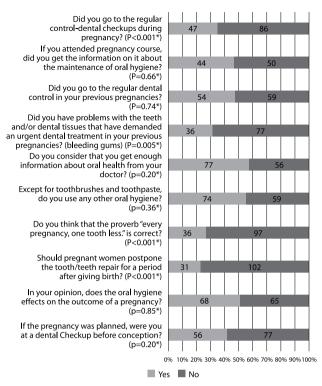
SUMMARY. Aim. We wanted to explore the knowledge and attitudes of pregnant women and women after giving birth to oral health. Likewise, we wanted to determine whether there was any awareness of oral hygiene during pregnancy in the population. Our aim was to establish the correlation between oral hygiene habits in relation to age, level of education and place of residence (urban / rural) and to determine the importance of the role of experts in further education of the patient. Study design. A cross-sectional study. Patients and methods. The subjects were patients admitted to the Maternal and Puerperal Ward of the General Hospital Zabok in the period from December 1st 2016 till February 15th 2017. Data for statistical analysis were obtained based on an anonymous questionnaire of 15 questions. Results. Nearly half of pregnant women and women after delivery (49%) believe that oral hygiene does not affect the outcome of pregnancy. In Planned Parenthood pregnancy 70% of women with the lowest levels of education are not going to control dental examinations. Over 90% of highly educated respondents used additional oral hygiene products, while only 20% of women with low levels of education used additional products. The results showed that 71% of women thought they had not received enough oral health information from their doctor. Also, in 60% of respondents, primary data on oral hygiene and health were not received by health professionals but from other sources. Conclusion. The obtained data show that almost half of the respondents did not develop the habit of awareness of the need for oral hygiene. The prevalence of monitoring the level of education but are weaker indicators correlate with low skill levels. The emphasis of the modern approach to the prevention of and given that over half of the surveyed women does not the necessary knowledge of oral health opens space for continuing education and the promotion of information programs by the health system.

# Introduction

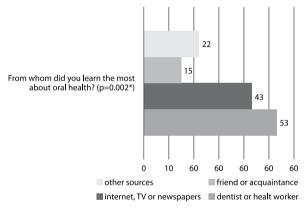
Despite the great efforts in preserving oral health, one of the most common oral diseases, dental caries, still occupies the first place among the most extensive form of diseases, both in Croatia and in the whole world. If we take the fact that the good health of the population is one of the main objectives of the State policy of social welfare, it is more than obvious that the prevention of caries and periodontal disease should be a priority. One of the key measures in promoting oral health is a measure of informing and educating the population. Oral health is an integral part of the general health and an important factor in the overall quality of life. Only healthy cavity provides nutrition, speech, and social contact without any difficulty. Optimal maternal oral hygiene in induced perinatal period can reduce the

number of oral bacteria and inflammatory mediators who disseminate with the blood through the placental on embryo or fetus (1–6).

Caries is a chronic infectious disease with the lack of tooth substance. At the same time, it is a place of entry of the infection in the pulp of teeth, periodontal structures, and ultimately in the whole organism (7, 8). Periodontal disease is one of the most common chronic disorders of infective origin. According to some authors, the prevalence in adults varies by up to 60%, depending on the diagnostic criteria. The cause is dental plaque and bacteria in plaque (9). During pregnancy the risk of caries is increased. One of the risk factors is the presence of gastric acid in oral cavity, because of vomiting that occurs in earlier stages of pregnancy while in the later stages of pregnancy occurs because of esophageal



\* Chi-Square Test Figure 1. Proportions of answers on each question



\*Chi-Square Test

Figure 2. The distribution of responses to the question about the source of information among all the respondents (n = 133)

reflux due to the increased intraabdominal pressure. Although the pregnancy is a physiological status, it is also often the first time that the body experiences a state of "metabolic stress". However, apart from physiological changes, there is a possibility of occurrence of pathological condition induced by altered hormonal status during pregnancy. Progesterone level during pregnancy reaches 10 times and estrogen 30 times higher value than in normal reproductive cycle (9–12).

To set up the foundations of good oral health, we must maintain the oral structure healthy and to motivate the patients to cooperate and encourage them for the use of dental services. The aim of control examinations

Table 1. Relation between oral-hygiene habits with mothers' age and children's weigh

0	Arithmetic mean (SD)		D. *
Questions	Yes	No	P *
The age of the respondents			
Control dental examination?	30.4 (5.2)	28.8 (6.0)	0.11
Regular dental examinations in previous pregnancies?	30.1 (5.0)	29.8 (5.9)	0.77
Does oral hygiene affect the outcome of pregnancy?	29.3 (5,6)	29.6 (5,8)	0.78
Problems with teeth for emergency dental treatment?	29.7 (5,6)	30.0 (5,4)	0.81
Should you delay the repair teeth?	29.6 (6,5)	29.4 (5,5)	0.90
If it's true the proverb "every pregnancy, one tooth less"?	29.1 (6,4)	29.5 (5,4)	0.69
If you use other means of oral hygiene apart from toothbrushes and toothpaste?	30.5 (5,0)	28.2 (6,2)	0.02
The child's birth weight in grams			
Are you going to the control of the regular dental checkups?	3366(358)	3450 (493)	0.77
Are you in previous pregnancies went to the regular dental checkups?	3458 (433)	3513 (401)	0.54
Does oral hygiene on the outcome of a pregnancy?	3445(341)	3479 (540)	0.78
Have you had problems with your teeth for emergency dental treatment?	3505(357)	3486 (440)	0.85
Should you delay the repair teeth?	3528(450)	3441 (439)	0.40
If it's true the proverb "every pregnancy, one tooth less"?	3360(368)	3501 (464)	0.14
If you use other means of oral hygiene apart from toothbrushes and toothpaste?	3466 (410)	3454 (487)	0.89

<sup>\*</sup>Student's T Test

is individually-focused education, making and correcting oral-hygiene habits, the determination of the index of plaque, ambulance analysis of the composition of saliva and caries risk assessment. Pregnancy is a specific moment when most women are motivated to adopt healthy behaviors, eager for knowledge and insights. Education of patients involves providing information and guidelines for maintaining oral health. It is focused on the patient, but also on the other members of the dental team, the gynecologic infirmary and patronage service. The relationship of all stakeholders should be based on mutual trust. Education is carried out through all available channels: a personal conversation with the patient, educational brochures, online forums, social networks and pregnancy courses. To have results, education should be high quality vertically and horizontally designed but also available and individually adjusted (4-7).

## Subjects and methods

The survey included a total of 133 women who were received in the General Hospital Zabok and Croatian Veterans hospital in the period from 1 December 2016

Number (%) of Number (%) of P P Ouestion SECOND. MA/PhD PRIM.S BAVillage City Did you go to the regular control-dental checkups during pregnancy? Yes 3 (30.0) 31 (38.8) 11 (50.0) 11 (52.4) 23 (44.2) 33 (40.7) 0.49\* 0.69 \* 7 (70.0) 10 (47.6) 48 (59.3) No 49 (61.3) 11 (50.0) 29 (55.8) Did you go to the regular dental control in your previous pregnancies? I do 4 (40.0) 32 (48.5) 11 (52.4) 7 (43.8) 24 (49.0) 30 (46.9) 0.91 \* 0.82 \* 6 (60.0) 9 (56.3) 25 (51.0) 34 (53.1) Nο 34 (51.5) 10 (47.6) Does the oral hygiene effects on the outcome of a pregnancy? 3 (30.0) 38 (47.5) 17 (81.0) 26 (50.0) 42 (51.9) I do 10 (45.5) 0.02 \* 0.84 \* No 7 (70.0) 42 (52.5) 12 (54.5) 4 (19.0) 26 (50.0) 39 (48.1) Have you had problems with your teeth for emergency dental treatment? I do 6 (60.0) 17 (25.8) 7 (33.3) 5 (31.3) 23 (35.4) 13 (26.5) 0 14 † 0.31\* 4 (40.0) 49 (74.2) 14 (66.7) 11 (68.8) 36 (73.5) 42 (64.6) Should you delay the repair teeth? 4 (40.0) 21 (26.3) 3 (13.6) 3 (14.3) 13 (25.0) 18 (22.2) I do 0.28 † 0.71 \* 6 (60.0) 59 (73.8) 19 (86.4) 18 (85.7) 39 (75.0) 63 (77.8) Do you think that the proverb "every pregnancy, one tooth less." is correct? I do 3 (30.0) 24 (30,0) 5 (22,7) 4 (19.0) 13 (25.0) 23 (28,4) 0.73\* 0.67\* No 7 (70.0) 56 (70,0) 17 (77,3) 17 (81.0) 39 (75.0) 58 (71,6) Except for toothbrushes and toothpaste, do you use any other oral hygiene? 2(20,0)38 (47.5) 15 (68,2) 19 (90,5) 20 (38,5) 54 (66,7) <0.001\* 0.001\* 8 (80,0) 42 (52.5) 7 (31,8) 2 (9,5) 32 (61,5) 27 (33,3) No

Table 2. Correlation between oral-hygiene habits in relation to the degree and in relation to a dwelling place

till 15 February 2017. The subjects are the patient admitted to the department of maternal and puerpera in the maternity ward of the General Hospital Zabok and Croatian Veterans hospital due to pathological changes in pregnancy and/or finishing the birth at the time of the survey. The measuring instrument – is a questionnaire constructed for research on oral health, composed of fifteen questions about an existing knowledge and attitudes about oral hygiene and oral-hygiene habits of pregnant women and puerperas. The first part of the questionnaire (of 1-4 issues) includes questions about the age, educational status, and place of residence. The second part of the questionnaire refers to information about oral health during pregnancy and puerperium (annex 1). The way of testing – research was conducted on the anonymous survey. The Ethics Committee of Zabok General Hospital and Croatian Veterans hospital and the Ethics Commission of Faculty of Dental Medicine and Health in Osijek, the Josip Juraj Strossmayer University of Osijek, have approved the implementation of the research.

### Statistical methods

Categorical data is represented by absolute and relative frequencies. Numerical data are described with arithmetic mean and standard deviation in the case of a distribution that follow the normal, and in other cases, with median and the limits of interquartile range. Com-

parison analysis between categorical variables was tested with Chi-square Test, and if necessary with Fisher's Exact Test. The differences of normally distributed numerical variables between two independent groups have been tested with Student's t test. All *P* values were two-sided and significance level was set at 0.05. For statistical analysis was used MedCalc statistical software (version 15.11.4, Ostend, Belgium).

### **Results**

In this study there was a total of 133 pregnant women in the age of  $29.5 \pm 5.7$  (arithmetic mean  $\pm$  SD). The youngest woman was 17 and the oldest woman was 41 years old. Most of them (60.2%) had high school education (P < 0.001, Chi-square Test) and were from the city or suburb (60.9%, P = 0.07, Chi-square Test). To the most women this was not the first pregnancy (85.5%, P < 0.001, Chi-square Test).

The distribution of the responses to individual issues is shown graphically (Figure 1 and Figure 2).

Significantly more subjects considered a proverb "every pregnancy, one tooth less" being true, while significantly more subjects considered that one should not put off repairing teeth after giving birth (*Figure 1*).

A significant majority of the respondents said that in previous pregnancies had no problems with their teeth or tissues that have demanded an urgent dental treatment (Figure 1).

<sup>\*</sup> Chi-Square Test

<sup>†</sup> Fisher's Exact Test

Table 3. Comparing demographic parameter, knowledge and attitude with a question regarding receiving enough information about oral health

	Number (%) of examinees			
Compared parameters	` ′	Didn't received enough information	P	
School education subject				
Elementary school	7 (9,1)	3 (5,4)		
Secondary school	48 (62,3)	32 (57,1)		
BA	9 (11,7)	13 (23,2)	0.42†	
MA	10 (13,0)	5 (8,9)		
PhD	3 (3,9)	3 (5,4)		
The place of residence of the				
Village	31 (40,3)	21 (37,5)	0.75*	
Town or city	46 (59,7)	35 (62,5)		
Do you think that is the corre one tooth less"?	ect proverb "ever	ry pregnancy,		
I do	15 (19,5)	21 (37,5)	0.02 4	
No	62 (80,5)	35 (62,5)	0.02 *	
From whom did you learn the	e most about ora	l health?		
Your dentist or health professional	45 (58,4)	8 (14,3)		
Internet, TV or newspapers	15 (19,5)	28 (50,0)	<0.001 *	
Friend or acquaintance	7 (9,1)	8 (14,3)		
Other sources of	10 (13,0)	12 (21,4)		
Should pregnant women post	pone repair teeti	h?		
Yes	13 (16,9)	18 (32,1)	0.04*	
No	64 (83,1)	38 (67,9)		
In your opinion does oral hyg	giene on the outo	come of a pregnar	ıcy?	
Yes	45 (58,4)	22 (39,3)	0.03*	
No	32 (41,6)	34 (60,7)	U.U3"	
Are you going to the regular	control-dental c	heckups during pi	regnancy?	
Regularly	37 (48,1)	10 (17,9)		
If necessary,	35 (45,5)	34 (60,7)	<0.001 *	
Not at all	5 (6,5)	12 (21,4)		
A total of	77 (100,0)	56 (100,0)		

<sup>\*</sup>Chi-Square Test †Fisher's Exact Test

An equal number of the subject, said that have, and that have not received information about the oral hygiene on pregnancy courses (*Figure 1*).

A total of 74 of the subjects (55.6%) declared that they used something else than a toothpaste. Predominantly they used dental floss, 32 of them (43.2%), while mouthwash is used by 24 (32.4%) and both by 18 (24.3%) subjects. Significantly small number of subjects doesn't go to the regular control-dental checkups during the pregnancy (Figure 1).

It is large and statistically significant difference in the number of subjects that used, as a source of information on oral health during pregnancy, the internet, TV, newspaper, friend, or health professional (Figure 2).

The average birth weight of the child for the subjects that were given birth (n = 105) is  $3460 \pm 441$  grams (the

arithmetic mean  $\pm$  standard deviation) in the range from 2017 to 4560 grams. There was no significant association between the birth weight of the child and bad oral-hygienic habits and knowledge. Only one of the respondents who gave birth (0.95%), was born before the term and it was not possible to analyze the association of gestation and poor oral hygiene habits and knowledge (Table 1).

There is a significant connection between the degree of professional qualifications with the opinion that oral hygiene can affect the outcome of the pregnancy and with the use of additional oral hygiene products, besides toothbrushes and toothpaste (*Table 2*). A higher level of education assumes a greater awareness of the potential impact of oral hygiene on the outcome of pregnancy. Also, more education means frequent and significant use of the additional oral hygiene products.

The subjects that live in the city or in the village considerably more often use additional oral hygiene products (*Table 2*).

Slightly more than half (57.9%) of them believes that have received enough information about the oral health from their doctor. In the table there is the result of analysis of the connection according to the examined demographic parameters (*Table 3*).

Subjects who feel that they have received enough oral health information from their physician significantly less believe in the popular proverb "Every pregnancy, one tooth less". They most commonly received information from a dentist or a healthcare professional, would not delay the tooth repair during pregnancy, at a higher percentage know that oral hygiene can affect the outcome of pregnancy and at a significantly lower percentage avoid regular control-checkups during pregnancy (*Table 3*).

### **Discussion**

Most of the surveyed women's have high professional qualifications, just as many of them are from the urban environment, and to most of them this is not the first pregnancy. Although pregnancy is not the cause of caries, tooth decay is easier to develop in pregnancy. In Croatia there is a saying that says that in each pregnancy mother loses one tooth, which was explained with the increased need for calcium due to the construction of the skeletal system of the baby. It is true that after the fifth month of the growing, the need for calcium in teeth is increased, but in teeth it is in a stable compound, so once embedded, it can no longer be digested from the tooth except by the action of bacteria and decay. In other words, an embryo or a fetus could not "draw" calcium from tooth (13).

Most of the women surveyed say they consider that repairing teeth should not be put off and does not believe that will lose a tooth in a pregnancy. It is still a large percentage, a quarter of them that mean that. Especially bad is an indicator that nearly half the women

consider that oral hygiene does not affect the outcome of the pregnancy.

During pregnancy twenty dairies and four permanent molars are formed (7). In conclusion, pregnancy is a time for the prevention of the health of teeth offspring and is the best time to teach pregnant women teach about basic preventive protective dental-health measures in an infant (5).

Most of the subjects in previous pregnancies had no problems with teeth or tissues such that they require urgent dental treatment, but also don't have a habit of preventive dental examination.

While the world dental – medicine Federation-FDI (Federation Dentaire Internationale) is just adopting a strategy of action up to year 2020 on strengthening capacity and efficiency and the availability of the health system, the Republic of Croatia with almost 2000 teams has a remarkably widespread network of dental protection of the population. However, we cannot boast with good statistical indicators of oral health of the nation. Moreover, only Bulgaria has worse epidemiological results from all the Member States of the European Union (3).

Although the inflammation of the gums during pregnancy is the frequently state, if oral hygiene is good and there is no food deposits and plaque, gingivitis will not develop because only action of hormones is not enough to develop inflammation (12). Regular check-up and professional teeth cleaning will reduce and slow down the progression of initial carious lesion, while those large lesions, which can worsen and cause other complications, need to be restored as soon as possible. In case of a need for more complex dental procedures that must be performed prior to delivery, the Doctor of Dental Medicine in consultation with the gynecologist will choose the best way and time of treatment, which will not be harmful to a pregnant woman or even fetus (5). Accordingly, pregnant women should be educated that oral health effects on general health and that delaying treatment can get to more complex problems.

Research conducted on knowledge and attitudes about oral hygiene in Spain in 201 on a sample of 337 pregnant women, talks about the significant correlation between the high level of self-assessment of oral health in pregnant women and low levels of dental caries and low periodontal index (14).

In this study, more than half of the women did not go to the examination before pregnancy, even though it was planned, nor went on regular control-dental checkups in previous pregnancies. Only one-third of the subject went to the regular control-dental checkups during pregnancy, while others didn't go at all, or they went only if they needed to. Almost half of the respondents for oral hygiene used only the toothbrush and toothpaste. The remaining surveyed women most commonly used dental floss, mouthwash or both.

In the neighboring Hungary, the results are similar. In a survey conducted in 2011 on a sample of 275 pregnant

women, even 70% of them declared that have visited the dentist during pregnancy, but only one-third used additional oral hygiene products (15).

Prematurely children constitute a significant public health problem because birth weight is one of the most important factors in the growth, development and survival of the infants (2).

In a study conducted on a sample of 124 pregnant women, it has been shown that the premature childbirth children with small birth weight is seven times more common in pregnant women with periodontal diseases – it is a bigger risk factor than smoking, consumption of alcohol and the age of the mother (13). Measuring the levels of C-reactive protein (as a measure of the degree of systemic inflammation) in the blood is also interesting. According to one survey, in periodontal disease the level of CRP is increased, and after periodontal therapy decreased (9, 10). That is exactly what can be interpreted as a link between periodontal disease and systemic health (2, 16).

The other or additional oral hygiene products are more used by elderly pregnant women where a statistically significant difference was found. Nearly one third of primary and secondary educated women consider that in every pregnancy they will lose one tooth.

A significant connection is found between the degree of professional qualifications with the opinion that oral hygiene can affect on the outcome of the pregnancy and with the use of additional oral hygiene products other than toothbrushes and toothpaste. In the already mentioned study in Hungary, a statistically significant correlation between the level of education and the use of dental floss was found (15). According to these results, we can conclude that a higher level of education correlate with a higher awareness of oral hygiene.

This research showed that the subjects from the urban environment significantly more often use additional oral hygiene products.

Slightly less than half of the surveyed women believe that have not received enough information about the oral health from their doctor. The remaining women statistically significantly less believe in folk proverb "every pregnancy, one tooth less" and they would not postpone repairing teeth during pregnancy.

However, more significant is the fact that 50 of 94 subjects, which have attended pregnancy courses, responded that they didn't get information on oral health there.

Primary information about the oral health needs to be given by a dentist or other health professional. On the trail of this there is a devastating fact that only 53 of that kind of information is received from a health professional. The reasons could be found in systematic and continuous negligence of preventive programs and thus imposes the need for updating the guidelines and practices of health care.

In the empirical research conducted in Poland in 2015, from 1380 pregnant women only 40% of them

#### Annex 1. SURVEY OF ORAL HEALTH

Sincerely, in order to observe the thoroughly oral health issues, we invite you to answer the questions in the survey. Your opinion is important to us and we will study your answers carefully. The questionnaire is anonymous. We thank you in advance for your contribution.

- 1. Your age in years
- 2. Your school education: Primary / Secondary / BA / MA / PhD
- 3. Place of residence: village place / town
- 4. Term of delivery:
  - For pueperas, the actual date of childbirth, and the weight of the newborn
- 5. Did you go to the regular control-dental checkups during pregnancy? Yes / No
- 6. If the pregnancy was planned, were you at a dental Checkup before conception? Yes / No
- 7. Did you go to the regular dental control in your previous pregnancies? Yes / No
- 8. In your opinion, does the oral hygiene effects on the outcome of a pregnancy? Yes / No
- 9. Did you have problems with the teeth and/or dental tissues that have demanded an urgent dental treatment in your previous pregnancies? (bleeding gums) Yes / No
- 10. Should pregnant women postpone the tooth/teeth repair for a period after giving birth? Yes No
- 11. Do you think that the proverb "every pregnancy, one tooth less." is correct? Yes / No
- 12. Except for toothbrushes and toothpaste, do you use any other oral hygiene? Yes / No If Yes, write what
- 13. From whom did you learn the most about oral health?

  Dentist / health professional / Internet / TV / newspaper friend / acquaintance / other
- 14. Do you consider that you get enough information about oral health from your doctor? Yes / No
- 15. If you attended pregnancy course, did you get the information on it about the maintenance of oral hygiene?

provide the right answers to questions about dental problems. More than 70% of pregnant women developed gingivitis or periodontitis, and Poland is trying to implement a European principle of treatment of pregnant women as a vulnerable group of dental patients (17).

To get comparable indicators with an average "old" EU Member States, you need a symbiosis of primary, secondary and tertiary levels of the health system. Specialists for preventive dental medicine are needed. However, where they exist they do a polyvalent job and the system does not recognize or does not use their knowledge (3).

Pregnancy course, where the pregnant women should educate themselves about oral health, is attended by 94 of 133 subjects. In conclusion, over a quarter of the women did not even had a chance to get the complete information oriented towards reducing the fear and the building of positive attitudes.

Similarly, research conducted in Poland in 2016, shows how knowledge of future parents starts on pregnancy courses is not satisfactory, however at the same time most of them are ready to take part in organized lectures on given topic (18).

Oral health is to be maintained throughout the entire life span of women, and during pregnancy. In dental medicine, protection of pregnant women, according to experts of the World Health Organization for medical priorities comes immediately after protecting children of school and preschool age children, old people and chronic patients. If we know how most oral diseases can be prevented, it is obvious that the system we have now is not preventive. If we know the cost of curative is greater than prevention, it is obvious that a change is necessary. The ability to reply to the oral health threats requires a system of rapid detection, quick reactions, adequate responses and communication about the threats. A precondition for the functioning of the system are the organizational network and corresponding action plans (2–6).

The state of oral health in the Republic of Croatia indicates infinite scale of damage that has occurred by eliminating the network of specialist children's and preventive dental medicine, and whose results are twenty years ago pointed to the improvement of the same. Today, the Government is trying to implement the existing specialists to participate in the planning, implementation and control of prevention programs. In conclusion, the Government of the Republic of Croatia in early 2015 has proposed the adoption of a document with the name: a strategic plan to promote and protect the oral health for the period from 2012 to 2020 (4).

Comparison of knowledge and behavior of children and parents in the maintenance of oral hygiene, in a survey conducted in Croatia in 2016, it was found that children whose parents regularly maintain oral hygiene, have better oral-hygienic habits compared to children whose parents do not wash their teeth regularly (19). As well as all other health habits, oral hygiene is adopted in an environment of family, and the future mother is the one who should teach her child the correct adoption of hygienic habits (5).

Thus, we raise awareness of oral health and we encourage and develop the principle of self-responsibility, and it is long-lasting and continuous process of the multidisciplinary approach (3).

The possible lack of this research is the lack of strengths to evaluate causal relationship. One of the main conclusions of the work is repeated education and accordingly, one of the guidelines of some the following research could be a comparison between "educated" and "not educated" pregnant woman and puerperal women with specific risk factors or the connection between oral hygiene and systematic health.

Despite this, the visible data show us that almost half of the patients haven't developed habits nor awareness of oral hygiene. The prevalence follows the degree of education levels, so the worse indicators are correlated with a lower education degree. The emphasis of the contemporary approach is prevention, and according to the fact that over half of surveyed women doesn't have the necessary knowledge about oral health, opens a space for continuous education and promoting informative program by the health system.

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# ZNANJE O ORALNOJ HIGIJENI I NAVIKE O ORALNOM ZDRAVLJU TIJEKOM TRUDNOĆE I BABINJA

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Ključne riječi: karijes, gingivitisg, oralno zdravlje, svijest, trudnoća.

SAŽETAK. Cilj. Željeli smo istražiti znanje i stavove trudnica i žena nakon rođenja o oralnom zdravlju. Isto tako, željeli smo ispitati koliko je zastupljena svijest o oralnoj higijeni tijekom trudnoće u navedenoj populaciji. Cilj nam je bio utvrditi povezanost između navika oralne higijene u odnosu na dob, razinu obrazovanja i mjesto stanovanja (urbano / ruralno) te utvrditi važnost uloge stručnjaka u daljnjem obrazovanju pacijenta. Ispitanice i metode. Ispitanice su bile pacijentice primljene u Odjel za porodništvo Opće bolnice Zabok i Hrvatskih ratnih veterana u razdoblju od 1. prosinca 2016. do 15. veljače 2017. Podaci za statističku analizu dobiveni su temeljem anonimno ispunjenog upitnika s 15 pitanja. Rezultati. Gotovo polovica trudnica i babinjača (49%) vjeruje da oralna higijena ne utječe na ishod trudnoće. Od svih planiranih trudnoća gotovo 70% žena s najnižim stupnjem obrazovanja ne ide na stomatološke preglede. Više od 90% visokoobrazovanih ispitanika koristilo je dodatne proizvode za oralnu higijenu, dok je takvo što koristilo 20% žena s niskim stupnjem obrazovanja. Rezultati su pokazali da 71% žena smatra da o oralnom zdravlju nije dobilo dovoljno informacija od svog liječnika. Također, u 60% ispitanika, primarni podaci o oralnoj higijeni i zdravlju nisu primljeni od strane zdravstvenih djelatnika nego iz drugih izvora. Zaključak. Dobiveni podaci pokazuju da gotovo polovica ispitanika nema dovoljno razvijenu svjesnost. Niži socioekonomski status i stupanj obrazovanja povezani su nižom razinom brige za oralno zdravlje. Naglasak suvremenog pristupa prevenciji bolesti, s obzirom na to da više od polovice ispitanih žena ne posjeduje potrebno znanje o oralnom zdravlju otvara prostor za kontinuirano obrazovanje i promicanje informativnih programa od strane zdravstvenog sustava.