Oral-health awareness among pregnant women in the region of Republika Srpska

Svjetlana Janković1, Bojana Davidović1, Igor Radović1, Vladimirka Ikonić2, Ivana Dmitruk-Miljević3

1University of East Sarajevo, Faculty of Medicine, Foča, Bosnia and Herzegovina; 2JZU “Stari Grad”, Istočni Stari grad, Bosnia and Herzegovina; 3JZU “Sveti vračevi”, Bijeljina, Bosnia and Herzegovina

SUMMARY
Introduction Oral diseases during pregnancy are an important reason for enhanced dental care of this vulnerable population. The aim of this study was to determine the degree of oral health awareness among pregnant women and examine their oral hygiene habits, attitudes and behaviors in relation to the professional qualification.

Material and methods The study was conducted in Foča, East Sarajevo, Bijeljina and Pale (Republika Srpska, Bosnia and Herzegovina). A total of 198 respondents voluntarily filled an anonymous survey, specially created for this research.

Results In addition to toothbrush and toothpaste, 39.8% of pregnant women did not use any additional oral hygiene resources. When brushing their teeth, 60.1% of pregnant women had bleeding gums. Also, 54.1% of pregnant women visited dentist, while 34.3% did not. Obstetrician did not advise 69.7% of respondents that they should visit dentist during pregnancy. Furthermore, 80.8% of pregnant women thought that they were more susceptible to pregnancy caries, and 29.6% of them thought that caries is a disease that cannot be prevented. Respondents with university education understood that minerals from the mother’s teeth were not lost during pregnancy, which was statistically significant compared to pregnant women with secondary education.

Conclusion The level of oral health awareness of pregnant women is low. It is important that all women perform regular dental examination during pregnancy, as they will receive useful information from their dentist how to prevent oral diseases.

Keywords: pregnancy; oral health; primary prevention; oral hygiene

INTRODUCTION
Pregnancy is a dynamic period in the life of a woman followed by numerous physiological and emotional changes. A healthy lifestyle and proper nutrition in pregnancy play a key role in general health of women, as well as proper growth and development of a child. Oral diseases during pregnancy are an important reason for enhanced dental care of this vulnerable population [1]. During pregnancy the level of sex hormones (estrogen and progesterone) is significantly increased in relation to non-pregnant women [2]. As a result of a hormonal disbalance soft tissue changes in mouth are visible and followed by various degrees of tissue inflammation and bleeding marginal gingiva [3].

Periodontal diseases during pregnancy can be associated with preeclampsia, premature birth, and birth of a baby with low body weight [4]. Literature data indicate that transfer of cariogenic microorganisms from mother to child is one of the key factors in development of children’s decay [5]. Modern dentistry aims to promote health and favors preventive over curative measures [6, 7]. Prophylactic-preventive measures in pregnant women have dual function: create optimal conditions for intra-uterine formation and teeth development and prevent the occurrence of oral diseases in pregnant women. However, the fact is that only when a disease occurs, future mothers show interest in prevention [8]. Therefore, it is especially important that dentists insist on applying timely preventive measures in the period of early pregnancy.

The American Academy of Dentistry recommends that oral health care in children should begin in prenatal period by their parents oral health improvement [9]. A large number of pregnant women have not developed awareness of the impact of their own oral health and poor oral hygiene during pregnancy on the child’s oral health. It is the fact that pregnant women, in most cases, have need for frequent and increased intake of sweet or sour food and beverages and ignore oral hygiene habits [8].

Parents play an important role in children’s life, therefore their oral health knowledge and attitudes have major impact on the child’s behavior model [10]. Many women during pregnancy are not visiting dentists. Literary evidence show that dental services are provided to low number of pregnant women even in industrialized countries: USA (23–49%), Great Britain (33–64%) and Greece (27%) [11]. During pregnancy, dental visits should be obligatory with the goal to obtain adequate information on how to...
preserve oral health of a child [12]. Advices should be understandble and practically applicable so that future mothers could easily implement their knowledge toward oral and general health [13].

The aim of the study was to determine the degree of oral health awareness among pregnant women as well as oral hygiene habits, attitudes and behaviors in relation to the professional qualifications.

MATERIALS AND METHODS

The study was conducted in 4 municipalities: Foća, Istočno Sarajevo, Bijeljina and Pale (Republika Srpska, B&H). Criteria for inclusion in the study were pregnant women regardless of age, education and social status chosen by random selection in obstetrical ambulances during regular checkups. All respondents gave written consent to participate in research. A total of 198 subjects, who were examined in the period from 8th to 38th week of gestation, voluntarily filled an anonymous survey, specially created for this research. The questionnaire consisted of 25 questions in order to receive the following information: socio-demographic data, oral hygiene habits of pregnant women, acquired knowledge and patterns of behavor during pregnancy as well as perception of pregnant woman about the harmfulness of dental interventions and medications on fetus. The obtained data were numerically processed using standard statistical procedures in statisti- cal program SPSS 19.0 for Windows. Chi-square test was used to test the difference between the survey responses. Values p/q<0.05 were considered statistically significant.

RESULTS

The average age of examined subjects was 33.3 years. Most pregnant women (67.7%) had secondary education; slightly more than half of them were unemployed. 39.9% of respondents were pregnant for the first time (Table 1).

Table 2 shows oral hygiene habits and behavior of pregnant women. In addition to toothbrushes and toothpastes, 39.8% subjects did not use any other oral hygiene resources. More than three-quarters of pregnant women (76.9%) with university education used additional oral hygiene resources and that was significantly different from pregnant women with secondary education, (p<0.05). When brushing teeth, 60.1% of pregnant women had bleeding gums, while nausea and vomiting were present in 55.0%.

The survey showed that 15.1% of respondents would eat gums, while nausea and vomiting were present in 55.0%. Oral health awareness among pregnant women as well as oral hygiene habits, attitudes and behaviors in relation to the professional qualifications.

DISCUSSION

Research of oral hygiene habits, knowledge and behavior of pregnant women in areas are very scarce. This study was conducted with the aim of gaining information about knowledge of pregnant women about oral health, in order to develop adequate preventive measures and raise awareness of oral health importance. Pregnancy is period when women are highly motivated to acquire knowledge in order to improve both their own and their child’s health. Therefore this period is suitable for identifying existing risk factors, educating women (future mothers) to be conscious that oral health can be preserved and improved.

Adequate oral hygiene is a prerequisite for teeth and complete mouth health. Pregnant women are usually occupied by their condition and positive habits may be ignored. There is no doubt that eating habits change during pregnancy, but the question is which bad habits may increase incidence of dental diseases. Good oral-hygiene habits are result of good oral health education. In
In this study, 77.0% of pregnant women brushed their teeth after each meal, while the remaining 23.0% brushed teeth 1-2 times a day. Similar results were obtained by Nogueira et al. [8] where 75.5% of pregnant women brushed their teeth after every meal, while in the study Shabirr et al. [14] 98.5% of pregnant women brushed their teeth 1-2 times a day. Thomas et al. [15] indicated that the frequency of brushing teeth and use of additional means of maintaining oral hygiene is in correlation with professional qualifications. This research showed that pregnant women with university education brushed their teeth more often and that they used other oral hygiene products.

Gingivitis is one of the most common oral complications during pregnancy. It usually occurs after the second month of pregnancy and is followed by the most common bleeding gums during brushing teeth. This research showed that

| Questions                                                                 | Answer | Total Ukupno | Education Obrazovanje | SS  | SZ |
|---------------------------------------------------------------------------|--------|--------------|-----------------------|-----|----|
| How often do you brush your teeth?                                       | 1-2 times 1-2 puta | 23.0 | 18.2 | 2.9 | p<0.001 | q<0.05 |
|                                                                            | >2 times >2 puta | 77.0 | 81.8 | 97.1 |
| Do your gums bleed while brushing your teeth?                             | Yes    | 60.1 | 65.2 | 50.0 | p<0.01 | q<0.05 |
|                                                                            | No     | 39.9 | 34.8 | 50.0 |
| Do you use some additional means of maintaining oral hygiene in addition to brushes and pastes? Osam četkice i paste, da li koristite neka dodatna sredstva za održavanje oralne higijene? | Yes    | 60.2 | 54.2 | 76.9 | p<0.05 | q<0.01 |
|                                                                            | No     | 39.8 | 45.8 | 23.1 |
| Do you smoke during pregnancy?                                            | Yes    | 13.6 | 19.7 | 5.9 | p<0.001 | q<0.05 |
|                                                                            | No     | 86.4 | 80.3 | 94.1 |
| Do you consume alcohol during pregnancy?                                  | Yes    | 2.0  | 4.0  | 5.9 | p<0.001 | q<0.05 |
|                                                                            | No     | 98.0 | 96.0 | 94.1 |
| Do you get up at night to eat?                                            | Yes    | 15.1 | 19.7 | 5.9 | p<0.001 | q<0.05 |
|                                                                            | No     | 84.9 | 80.3 | 94.1 |
| Do you have nausea and vomiting during pregnancy?                         | Yes    | 55.0 | 57.6 | 50.0 | P>0.05 | q<0.05 |
|                                                                            | No     | 45.0 | 42.4 | 50.0 |
| If this is not your first pregnancy, have you changed your oral hygiene habits in relation to previous pregnancies? Ako vam ovo nije prva trudnoća, da li ste promenili svoje oralnohigijenske navike u odnosu na prethodne trudnoće? | Yes    | 47.5 | 52.6 | 39.1 | p>0.05 | q>0.05 |
|                                                                            | No     | 52.5 | 47.4 | 60.9 |
| Did you visit a dentist during your pregnancy?                            | Yes    | 54.1 | 51.4 | 61.5 | p>0.05 | q>0.05 |
|                                                                            | No     | 45.9 | 48.6 | 38.5 |
| Did you intend to visit a dentist during pregnancy?                       | Yes    | 65.7 | 63.9 | 69.2 | p<0.001 | q<0.05 |
|                                                                            | No     | 34.3 | 36.1 | 30.8 |
| Did your obstetrician advise you to visit a dentist?                      | Yes    | 30.3 | 31.9 | 26.9 | p<0.001 | q<0.05 |
|                                                                            | No     | 69.7 | 68.1 | 73.1 |
| Did you have any fear of visiting a dentist during pregnancy?             | Yes    | 30.6 | 36.1 | 15.4 | p<0.001 | q<0.05 |
|                                                                            | No     | 69.4 | 63.9 | 84.6 |

SSS – secondary education; VSS – university education; SZ – statistical significance; p – statistical significance in responses when the whole sample of respondents concerned; q – statistical significance in responses in relation to the professional qualifications of respondents

SSS – srednja stručna sprema, VSS – visoka stručna sprema, SZ – statistička značajnost; p – statistička značajnost u odgovorima kada je celokupan uzorak ispitanica u pitanju; q – statistička značajnost u odgovorima u odnosu na stručnu spremu ispitanica
60.1% of subjects had bleeding gums while brushing their teeth. Bleeding can be reason for not maintaining proper oral hygiene, causing rapid development of caries and teeth loss [16]. Factors such as tobacco and alcohol increase the risk of low body weight in newborns, premature birth and other complications [17]. The results of this research showed that 13.6% of pregnant women smoked during pregnancy, while 2% of them consumed alcohol. Results of Esposito et al. [17] showed that 22.3% of women in Italy smoked the during pregnancy, while 28.9% consumed alcohol before pregnancy, and 7.2% of them continued using alcohol during pregnancy. These numbers are significantly higher compared to our results. On the other hand research from United States and Great Britain showed that 57.4%, and 46.0% of pregnant women, respectively, were consuming cigarettes during pregnancy [17, 18].

There is no known relation between pregnancy and decay. However, in our study, as many as 80.8% of respondents considered that teeth in pregnancy were more susceptible to decay. Even though there is belief that “every pregnancy is taking one tooth”, no data actually confirmed this thesis. Increased risk of developing caries lesions, gingivitis and periodontal diseases during pregnancy is primarily due to the change in hormonal status and change in eating habits [1]. In our study it was found that pregnant women with secondary education in higher percentage contemplated that every pregnancy resulted in a loss of minerals from the mother’s teeth. Loss of teeth during pregnancy is primarily consequence of continuation of poor oral or hygienic habits that existed even before pregnancy.

Dental interventions (restorations, endodontic treatment and tooth extraction) can be safely administered in any trimester of pregnancy, while more complex and time-consuming interventions are recommended after giving birth [15]. In the current study, large percentage of pregnant women (67.0%) considered that dental interventions are not safe during pregnancy. When it comes to receiving local anesthesia 72.0% said that it was not recommended.

### Table 3. Knowledge and attitudes of pregnant women about the influence of dental interventions on the fetus

| Questions                                                                 | Answer | Total Ulusno % | Education Obrazovanje | SS SZ |
|--------------------------------------------------------------------------|--------|----------------|-----------------------|-------|
| Do you think that extracting and treating your teeth is safe during pregnancy? | Yes Da | 33.0 | 37.9 | 23.5 | p<0.001 q>0.05 |
| Da li snimate da su vadenje i lečenje zubki sigurni tokom trudnoće? | No Ne | 67.0 | 62.1 | 76.5 | |
| Do you think anesthesia can be received during pregnancy? | Yes Da | 28.0 | 27.3 | 29.4 | p<0.001 q>0.05 |
| Da li snimate da se anestezija može primati u toku trudnoće? | No Ne | 72.0 | 72.7 | 70.6 | |
| Do you think that teeth in pregnancy are more susceptible to caries? | Yes Da | 80.8 | 81.9 | 77.9 | p<0.001 q>0.05 |
| Da li snimate da su zubi u trudnoći podložni karijesu? | No Ne | 19.2 | 18.1 | 22.1 | |
| Do you know that caries can be prevented? | Yes Da | 70.4 | 69.4 | 73.1 | p<0.001 q>0.05 |
| Da li znate da se nastanak karijesa može sprečiti? | No Ne | 29.6 | 30.6 | 26.9 | |
| Do you think that the mother’s teeth can affect the early development of caries in children? | Yes Da | 60.2 | 54.2 | 76.9 | p<0.05 q>0.05 |
| Da li snimate da oboleli zubi kod majke mogu uticati na rani nastanak karijesa kod dece? | No Ne | 39.8 | 45.8 | 23.1 | |
| Have you received instructions from a professional about maintaining oral hygiene for baby? | Yes Da | 26.6 | 23.6 | 38.5 | p>0.001 q>0.05 |
| Da li ste dobili uputstvo od stručnog lica o održavanju oralne higijene bebe? | No Ne | 73.4 | 76.4 | 61.5 | |
| Do you know that there are gels, varnishes and fissure sealants for the prevention of caries in children? | Yes Da | 79.8 | 83.3 | 69.2 | p<0.001 q>0.05 |
| Da li znate da postoje gelovi, lakovi i zalivači koji služe za prevenciju karijesa kod dece? | No Ne | 20.2 | 16.7 | 30.8 | |
| Do you consider that pregnancy as a condition affects the loss of calcium from the mother’s teeth? | Yes Da | 58.0 | 65.2 | 44.1 | p<0.05 q>0.05 |
| Da li snimate da trudnoća kao stanje utiče na gubitak kalcijuma iz zuba majke? | No Ne | 42.0 | 34.8 | 55.9 | |

SSS – secondary education; VSS – university education; SS – statistical significance; p – statistical significance in responses when the whole sample of respondents concerned; q – statistical significance in relation to the professional qualifications of the respondents.

SSS – srednja stručna sprema; VSS – visoka stručna sprema; SS – statistička značajnost; p – statistička značajnost u odgovorima kada je celokupan uzorak ispitanica u pitanju; q – statistička značajnost u odnosu na stručnu spremu ispitanica.
importance of teeth health, biases about the impact of pregnancy on teeth and concern about safety of fetus during dental treatment [8]. In our study, 45.9% of respondents did not visit dentist, while 34.3% had no intention to do so. These values are slightly higher than results of Mangskau et al. [19] where 39% of pregnant women declared that they had not visited dentist during pregnancy. Hashim et al. [20] found that more than 40% of pregnant women did not visit dentist, even though dental interventions for pregnant women are free. Most of dental interventions in pregnant women happened due to certain painful conditions in the mouth. Also, more than half of pregnant women in Australia and USA did not visit dentist during pregnancy [15]. On the other hand, Christensen et al. [21] reported that 90% of Danish pregnant women visited dentists during pregnancy. In our study, significant difference in dental visits in relation to professional qualifications was not recorded.

73.4% of pregnant women reported that they did not receive any advice related to maintenance of their oral health and oral health of children. Similar results were obtained in the research of Rogers et al. [22] and Gunay et al. [23], where it was shown that only less than one-third of respondents received advice about the effects of women’s oral health on pregnancy and newborns. 69.7% of pregnant women reported that they did not receive advice from their obstetrician about dental visits. Research of Basser et al. [24] showed poor oral health knowledge among obstetricians, who first come in contact with pregnant women, providing them adequate medical care and advice. Similar results were shown in the studies of Zanata et al. [25] and Rocha et al. [26]. Therefore, education and motivation of health workers, in the first place obstetrician, is one of the possible preventive measures to improve oral health of pregnant women. Cardenas et al. [27] found in their research that knowledge of pregnant women was significantly improved after 10 minutes of oral health presentations by dentist and the same women 4 weeks after testing retained most of the informations.

It is necessary to emphasize that in the area where our study was conducted there is no organized counseling for pregnant women in which the dentist is involved. It is therefore desirable to achieve better cooperation with obstetrician, because teamwork is the guarantee of successful prevention.

CONCLUSION

The level of oral health education among pregnant women is low. It is important that all women perform regular dental examinations during pregnancy even if they have healthy oral tissues. Dentist is important to spread useful information about the prevention of oral diseases that will contribute to improvement of pregnant women overall health as well as the health of a future child.

REFERENCES

1. Blagoveč D, Brikanić T, Stojić S. Oralno zdravlje u trudnoći. Med Pregl. 2002; LV (5-6):213–6.
2. Steinberg Bl, Hilton IV, Iida H, Samelson R. Oral health and dental care during pregnancy. Dent Clin North Am. 2013; 57(2):195–210. [DOI: 10.1016/j.dcn.2013.01.002] [PMID: 23570802]
3. Bobetesis AY, Bortnakke SW, Pappanou PN. Periodontal infections and Adverse Pregnancy Outcomes. In: Glick M. Systemic Oral Health Connection. Illinois: Quinnesence Publishing Co Inc; 2014; p. 201–15.
4. Gupta S, Jain A, Mohan S, Bhaskar N, Waia PK. Comparative Evaluation of Oral Health Knowledge, Practices and Attitude of Pregnant and Non-Pregnant Women, and Their Awareness Regarding Adverse Pregnancy Outcomes. J Clin Diagn Res. 2015; 9(11):26–32. [DOI: 10.7860/JCDR/2015/138196756] [PMID: 26673216]
5. Wan AK, Seow WK, Purdie DM, Bird PS, Wash LJ, Tudehope DI. Oral colonisation of streptococcus mutans in six-month-old preductate infants. J Dent Res. 2001; 80(12):2060–5. [DOI: 10.1177/00220345010800120701] [PMID: 11880762]
6. Kurien S, Kattimani VS, Srimar RR, Srimar SK, Rao VKP, Bhupathi A, et al. Management of pregnant patient in dentistry. J Int Oral Health. 2013; 5(1):88–97. [PMID: 24155583]
7. Paul S, Thakur R, Madhu K, Paul ST, Gadchera P. Oral health coalition: Knowledge, attitude, practice behaviours among gynaecologists and dental practitioners. J Int Oral Health. 2013; 5(1):8–15. [PMID: 24155572]
8. Nogueira BVL, Nogueira BCL, Fonseca RRS, Brando CAV, Menezes TOA. Tembra DPS. Knowledge and attitudes of pregnant women about oral health. Int J Odontostomat. 2016. 10(2):297–302.
9. American Academy on Pediatric Dentistry Clinical Affairs Committee-Infant Oral Health Subcommittee; American Academy on Pediatric Dentistry Council on Clinical Affairs. Guideline on infant oral health care. Pediatr Dent. 2008-2009. 30(Suppl):90–3.
10. Davidović B, Ivanović M, Janković S, Lečić J. Knowledge, attitides and behavior of children in relation to oral health. Vojnosanit Pregl. 2014; 71(10):949–56. [DOI: 10.2298/VSP130710434D] [PMID: 25151825]
11. George A, Dahlenet HG, Reath J, Ajwani S, Bhole S, Korda A, et al. What do antenatal care providers understand and do about oral health during pregnancy: a cross-sectional survey in New South Wales, Australia. BMC Pregnancy and Childbirth. 2016; 16:382. [DOI: 10.1186/s12884-016-1163-x] [PMID: 27930257]
12. Geisinger ML, Gueye NC, Bain JL, Kaur M, Vasilopoulos PJ, Clever SP, et al. Oral health education and therapy reduces gingivitis during pregnancy. J Clin Periodontol. 2013; 41(2):141–8. [DOI: 10.1111/jcpe.12188] [PMID: 24164645]
13. George A, Johnson M, Blinkhorn A, Ajwani S, Bhole S, Yeo AE, et al. The oral health status, practices and knowledge of pregnant women in south-western Sydney. Aust Dent J. 2013; 58(1):26–33. [DOI: 10.1111/adj.12024] [PMID: 23441789]
14. Shabbir S, Zahid M, Qazi A, Muneeb A. Practices and knowledge of oral hygiene among pregnant women in a Pakistani tertiary care hospital. Biomedica. 2014; 30(2):134–8.
15. Thomas N, Middleton PF. Crowther CA. Oral and dental health care practices in pregnant women in Australia: a postnatal survey. BMC Pregnancy Childbirth. 2008; 8(1):13. [DOI: 10.1186/1471-2393-8-13] [PMID: 18426558]
16. Hemalatha V, Manigandan T, Sarumathi T, Aarthi Nisha V, Amudhan A. Dental considerations in pregnancy – a critical review on the oral care. J Dent Res. 2013; 7:948–53. [DOI: 10.7860/JCDR/2013/16382] [PMID: 24155583]
17. Esposito G, Ambrosio R, Napolitano F, Giuseppe GD. Women’s Knowledge, Attitudes and Behavior about Maternal Risk Factors and Adverse Pregnancy Outcomes. In: Glick M. Systemic Oral Health Connection. Illinois: Quinnesence Publishing Co Inc; 2014; p. 201–15.
18. Orton S, Bowker K, Cooper S, Naughton F, Ussher M, Pickett KE, et al. Longitudinal cohort survey of women’s smoking behaviour and attitudes in pregnancy: study methods and baseline data. BMJ Open. 2014; 4:e004915. [DOI: 10.1136/bmjopen-2014-004915] [PMID: 24833689]
19. Mangskau KA, Arrindell B. Pregnancy and oral health utilization of the oral health care system by pregnant women in North Dakota. Northwest Dent. 1996; 75(6):823–8. [PMID: 9487880]

20. Hashim R. Self reported oral health, oral hygiene habits and dental service utilization among pregnant women in United Arab Emirates. Int J Dent Hyg. 2012; 10(2):142–6. [DOI: 10.1111/j.1601-5037.2011.00531.x] [PMID: 22040165]

21. Christensen LB, Jeppe-Jensen D, Petersen PE. Self-reported gingival conditions and self-care in the oral health of Danish women during pregnancy. J Clin Periodontol. 2003; 30(11):949–53. [DOI: 10.1034/j.1600-051X.2003.00404.x] [PMID: 14761116]

22. Rogers SN. Dental attendances in a sample of pregnant women in Birmingham, UK. Community Dent Health. 1991; 8(4):361–69. [PMID: 1790481]

23. Gunay H, Goepel K, Stock KH, Schneller T. Position of health education knowledge concerning pregnancy. Oral prophylaxe. 1991; 13(4–7). [PMID: 1931189]

24. Baseer MA, Rahman G, Asaad F, Alamoudi F, Albluwi F. Knowledge, attitude and practices of gynecologists regarding the prevention of oral diseases in Riyadh city, Saudi Arabia. Oral Health Dent Manag. 2014; 13(1):97–102. [PMID: 24603924]

25. Zanata RL, Fernandes KB, Navarro PS. Prenatal dental care: Evaluation of professional knowledge of obstetricians and dentists in the cities of Londrina/PR and Bauru/SP Brazil, 2004. J Appl Oral Sci. 2008; 16(3):194–200. [DOI: 10.1590/S1678-77572008000300006] [PMID: 19089217]

26. Rocha JM, Chaves VR, Urbanetz AA, Baldissera R, Rdos S, Rosing CK. Obstetrician’s knowledge of periodontal disease as a potential risk factor for preterm delivery and low birth weight. Braz Oral Res. 2011; 25(3):248–45. [DOI: 10.1590/S1806-83242011000300010] [PMID: 21670856]

27. Cardenas LM, Ross DD. Effects of an oral health education program for pregnant women. J Tenn Dent Assoc. 2010; 90(2):23–6. [PMID: 20698433]

Received: 08.01.2019 • Accepted: 04.03.2019
Svjetlana Janković1, Bojana Davidović1, Igor Radović1, Vladimirka Ikonić2, Ivana Dmitruk-Miljević3

1Univerzitet u Istočnom Sarajevu, Medicinski fakultet, Foča, Bosna i Hercegovina; 2JZU „Stari grad“, Istočni Stari grad, Bosna i Hercegovina; 3JZU „Sveti vračevi“, Bijeljina, Bosna i Hercegovina

Oralnozdravstvena prosvećenost kod trudnica na području Republike Srpske

Uvod

Oralna oboljenja tokom trudnoće predstavljaju važan razlog za pojačan stomatološku zaštitu ove vulnerabilne populacije. Cilj studije je bio da se utvrdi stepen oralnozdravstvene prosvećenosti trudnica, kao i da se ispitaju oralnohigijenske navike, stavovi i ponašanje u odnosu na stručnu spremu. Material i metode

Studija je sprovedena u Foči, Istočnom Sarajevu, Bijeljini i Palema (Republika Srpska, BiH). Ukupno 198 ispitanica dobrovoljno su ispunile anonimnu anketu, posebno kreiranu za ovo istraživanje. Rezultati

Osim četkice i paste za zube, 39,8% ispitanica za oralnu higijenu nije koristilo dodatna sredstva. Prilikom pranja zuba 60,1% ispitanica dala pisanu saglasnost za učešće u istraživanju. Ukupno 198

Zaključak

Nivo zdravstvene prosvećenosti trudnica o oralnom zdravlju je nizak. Važno je da sve žene u toku trudnoće obave redovan

Ključne reči: trudnica; oralno zdravlje; primarna prevencija; oralna higijena

Uvod

Oralna oboljenja tokom trudnoće predstavljaju važan razlog za pojačan stomatološku zaštitu ove vulnerabilne populacije [1]. U trudnoći je nivo polnih hormona (estrojen i progesteron) značajno povišen u odnosu na žene koje nisu u drugom stanju [2]. Kao posledica hormonskog disbalansa javljaju se promene na mekim tkivima u usnoj duplji, a praćene su rastresivošću [3]. Kao posledica hormonskog disbalansa javljaju se promene na mekim tkivima u usnoj duplji, a praćene su rastresivošću [3].

Parodontalna oboljenja tokom trudnoće mogu se dovesti u vezu sa preeklampsijom, prevremenim porođajem i rođenjem beba male telesne težine [4]. Podaci iz literature ukazuju da je prenos kariogenih mikroorganizama sa majke na dete jedan

Metodologija

Studija je sprovedena u četiri opštine: Foča, Istočno Sarajevo, Bijeljina i Pale (Republika Srpska, BiH). U studiju su bile uključene trudnice bez obzira na starost, obrazovanje i materijalni

Zaključak

Nivo zdravstvene prosvećenosti trudnica o oralnom zdravlju je nizak. Važno je da sve žene u toku trudnoće obave redovan stomatološki pregled jer će od stomatologa dobiti korisne informacije o prevenciji oralnih oboljenja. Znanje o oralnom zdravlju sadrži većinu informacija kako na najbolji način sačuvati oralno zdravlje svog deteta [10]. Saveti treba da budu razumljivi i praktično primenljivi kako bi budućim majkama poboljšali svest o značaju kako oralnog tako i celokupnog zdravlja [13].

Cilj studije bio je da se utvrdi stepen oralnozdravstvene prosvećenosti trudnica, kao i da se ispitaju oralnohigijenske navike, stavovi i ponašanje u odnosu na stručnu spremu.

Materijal i metode

Studija je sprovedena u četiri opštine: Foča, Istočno Sarajevo, Bijeljina i Pale (Republika Srpska, BiH). U studiju su bile uključene trudnice bez obzira na starost, obrazovanje i materijalni status, koje su odabrane metodom slučajnog izbora u gineko-loškim ambulantama tokom redovne kontrole. Sve ispitanice su bile pisanu saglasnost za učešće u istraživanju. Ukupno 198

Zaključak

Nivo zdravstvene prosvećenosti trudnica o oralnom zdravlju je nizak. Važno je da sve žene u toku trudnoće obave redovan stomatološki pregled jer će od stomatologa dobiti korisne informacije o prevenciji oralnih oboljenja. Znanje o oralnom zdravlju sadrži većinu informacija kako na najbolji način sačuvati oralno zdravlje svog deteta [10]. Saveti treba da budu razumljivi i praktično primenljivi kako bi budućim majkama poboljšali svest o značaju kako oralnog tako i celokupnog zdravlja [13].

Cilj studije bio je da se utvrdi stepen oralnozdravstvene prosvećenosti trudnica, kao i da se ispitaju oralnohigijenske navike, stavovi i ponašanje u odnosu na stručnu spremu.

Materijal i metode

Studija je sprovedena u četiri opštine: Foča, Istočno Sarajevo, Bijeljina i Pale (Republika Srpska, BiH). U studiju su bile uključene trudnice bez obzira na starost, obrazovanje i materijalni

Zaključak

Nivo zdravstvene prosvećenosti trudnica o oralnom zdravlju je nizak. Važno je da sve žene u toku trudnoće obave redovan stomatološki pregled jer će od stomatologa dobiti korisne informacije o prevenciji oralnih oboljenja. Znanje o oralnom zdravlju sadrži većinu informacija kako na najbolji način sačuvati oralno zdravlje svog deteta [10]. Saveti treba da budu razumljivi i praktično primenljivi kako bi budućim majkama poboljšali svest o značaju kako oralnog tako i celokupnog zdravlja [13].

Cilj studije bio je da se utvrdi stepen oralnozdravstvene prosvećenosti trudnica, kao i da se ispitaju oralnohigijenske navike, stavovi i ponašanje u odnosu na stručnu spremu.
intervencija i medikamenta na fetus. Dobijeni podaci su numerički obrađeni standardnim statističkim procedurama u statističkom programu SPSS 19.0 za Windows. Za testiranje razlike između anketnih odgovora upotrebilen je χ² test. Vrednosti p/q < 0.05 smatrane su statistički značajnim.

**REZULTATI**

Sve trudnice odgovorile su na ponuđena pitanja. Prosečna starost ispitanica bila je 33,3 godine. Većina trudnica (67,7%) imala je srednju stručnu spremu, nešto više od polovine njih je nezaposlena, dok je kod 39,9% ispitanica konstatovana prva trudnoća (Tabela 1).

Iz Tabele 2 može se videti koje oralnohigijenske navike su imale i kakvo je ponašanje ispitanica tokom trudnoće. Osim četkice i paste za zube, 39,8% ispitanica za oralnu higijenu nije koristilo dodatna sredstva. Više od tri četvrtine trudnica (76,9%) sa visokom stucnom spremom upotrebjavale su dodatna sredstva, što je u odnosu na trudnice sa srednjom stručnom spremom statistički značajna razlika (q < 0.05). Prilikom pranja zuba 60,1% trudnica je imalo kravljenje desn, dok je mučninu i povraćanje navelo njih 55%. Anketa je pokazala da je 15,1% ispitanica ustajalo noću kako bi konzumirale hranu, 13,6% su pušači, a 2% trudnica je konzumiralo alkohol. U ovoj studiji trećina ispitanica (30,6%) imala je strah od stomatoloških intervencija. Više od polovine anketiranih (54,1%) posetile su stomatologa u toku trudnoće, dok se 34,3% izjasnilo da nema nameru da to učini. Anketa je pokazala da je 69,7% ispitanica ginekolog nije savetovao da posete stomatologa u toku trudnoće (Tabela 2).

Tabela 3 pokazuje nivo znanja, ponašanja kao i mišljenja trudnica o uticaju stomatoloških intervencija na taj. Oko dve trećine trudnica je smatrala da u toku trudnoće ne bi trebalo lečiti i vladiti zube, kao i da ne mogu primiti anesteziju. Takođe, 80,8% trudnica bilo je mišljenja da su u trudnoći zubi podložniji karijesu, a skoro trećina (29,6%) da je karijes oboljenje koje se ne može sprečiti. Ispitanice sa visokom stručnom spremom u značajno većem procentu su smatrale da se u trudnoći ne gube minerali iz zuba majke u odnosu na trudnice sa srednjom stručnom spremom (q < 0.05) (Tabela 3).

**DISKUSIJA**

Istraživanja o oralnohigijenskim navikama, znanju i ponašanju trudnica na našim prostorima su vrlo oskudna. Ova studija je sprovedena sa ciljem da se stekne uticaj na oralno-zdravstvenu prosvećenost trudnica, kako bi se adekvatnim preventivnim merama delovalo na podizanje nivoa svesti o oralnom zdravlju. Trudnoća je period kada su žene izuzetno motivisane za adekvatnu oralnu higijenu, što uslovljava ubrzan razvoj karijesa i oboljenja gingive i parodoncijuma u trudnoći. Osim znanja, a 2% trudnica je konzumiralo alkohol. Međutim, u našem istraživanju čak 80,8% ispitanica je smatrao da su zubi u trudnoći podložniji kravljenju. Takođe, 80,8% trudnica bilo je mišljenja da su u trudnoći zubi podložniji karijesu, a skoro trećina (29,6%) da je karijes oboljenje koje se ne može sprečiti. Ispitanice sa visokom stručnom spremom u značajno većem procentu su smatrale da se u trudnoći ne gube minerali iz zuba majke u odnosu na trudnice sa srednjom stručnom spremom (q < 0.05) (Tabela 3).

**DISKUSIJA**

Istraživanja o oralnohigijenskim navikama, znanju i ponašanju trudnica na našim prostorima su vrlo oskudna. Ova studija je sprovedena sa ciljem da se stekne uticaj na oralno-zdravstvenu prosvećenost trudnica, kako bi se adekvatnim preventivnim merama delovalo na podizanje nivoa svesti o oralnom zdravlju. Trudnoća je period kada su žene izuzetno motivisane za adekvatnu oralnu higijenu, što uslovljava ubrzan razvoj karijesa i oboljenja gingive i parodoncijuma u trudnoći. Osim znanja, a 2% trudnica je konzumiralo alkohol. Međutim, u našem istraživanju čak 80,8% ispitanica je smatrao da su zubi u trudnoći podložniji kravljenju. Takođe, 80,8% trudnica bilo je mišljenja da su u trudnoći zubi podložniji karijesu, a skoro trećina (29,6%) da je karijes oboljenje koje se ne može sprečiti. Ispitanice sa visokom stručnom spremom u značajno većem procentu su smatrale da se u trudnoći ne gube minerali iz zuba majke u odnosu na trudnice sa srednjom stručnom spremom (q < 0.05) (Tabela 3).

**DISKUSIJA**

Istraživanja o oralnohigijenskim navikama, znanju i ponašanju trudnica na našim prostorima su vrlo oskudna. Ova studija je sprovedena sa ciljem da se stekne uticaj na oralno-zdravstvenu prosvećenost trudnica, kako bi se adekvatnim preventivnim merama delovalo na podizanje nivoa svesti o oralnom zdravlju. Trudnoća je period kada su žene izuzetno motivisane za adekvatnu oralnu higijenu, što uslovljava ubrzan razvoj karijesa i oboljenja gingive i parodoncijuma u trudnoći. Osim znanja, a 2% trudnica je konzumiralo alkohol. Međutim, u našem istraživanju čak 80,8% ispitanica je smatrao da su zubi u trudnoći podložniji kravljenju. Takođe, 80,8% trudnica bilo je mišljenja da su u trudnoći zubi podložniji karijesu, a skoro trećina (29,6%) da je karijes oboljenje koje se ne može sprečiti. Ispitanice sa visokom stručnom spremom u značajno većem procentu su smatrale da se u trudnoći ne gube minerali iz zuba majke u odnosu na trudnice sa srednjom stručnom spremom (q < 0.05) (Tabela 3).
trudnoće. Hashim i sar. [20] navode da više od 40% trudnica nije posetilo stomatologa, iako su svi troškovi stomatoloških interventija za trudnice besplatni, i da se najveći broj njih javlja uglavnom zbog određenih bolnih stanja u ustima. Takođe, više od polovine trudnica u Australiji i SAD nije posetilo stomatologa u trudnoći [15]. S druge strane, Christensen i sar. navode da je 90% danskih trudnica posetilo stomatologa tokom trudnoće, što je daleko bolji rezultat od istog u našem istraživanju [21]. U ovom istraživanju nije uočena značajnost razlike u posetama stomatologu u odnosu na stručnu spremu ispitanica.

Kada je u pitanju edukacija trudnica od strane stručnog lica, 73,4% trudnica se izjasnilo da nije dobilo savete vezane za održavanje oralnog zdravlja kod deteta. Slične rezultate dobili su u svojim istraživanjima Rogers i sar. [22] i Gunay i sar. [23], u kojima je takođe manje od jedne trećine ispitanica dobilo savete o uticaju oralnog zdravlja na trudnoću i novorođenče. Što se tiče saveta od strane ginekologa o poseti stomatologu, 69,7% trudnica je izjavilo da nisu dobili preporuku da to učine. Istraživanje Bassera i sar. [24] pokazalo je da je slaba oralnozdravstvena prosvećenost među ginekologima, koji prvi dolaze u kontakt sa trudnicama pružajući im adekvatnu medicinsku zaštitu i savete. Slično navode Zanata i sar. [25] i Rocha i sar. [26] u svojim studijama. Stoga su edukacija i motivacija zdravstvenih radnika, u prvom redu ginekologa, jedna od mogućih preventivnih mera kako bi se poboljšalo oralno zdravlje kod trudnica. Cardenas i sar. [27] u svom istraživanju su utvrdili da se znanje trudnica značajno poboljšalo nakon desetominutnih prezentacija o oralnom zdravlju od strane stomatologa i da su iste testiranjem posle četiri nedelje zadržale većinu usvojenih informacija.

Neophodno je istaći da na području na kojem je studija sprovedena ne postoji organizovano savetovalište za trudnice u koje je uključen stomatolog. Samim tim poželjno je ostvariti bolju saradnju sa ginekologima, jer timski rad je garant uspešne prevencije.

**ZAKLJUČAK**

Nivo zdravstvene prosvećenosti trudnica o oralnom zdravlju je nizak. Važno je da sve žene u toku trudnoće obave redovan stomatološki pregled i ako imaju zdrava oralna tkiva. Nesumnjivo je da će od stomatologa dobiti korisne informacije o prevenciji oralnih oboljenja koje će doprineti poboljšanju njihovog celokupnog zdravlja, kao i zdravlja budućeg deteta.