

**UNIVERZITET U SARAJEVU  
STOMATOLOŠKI FAKULTET SA KLINIKAMA SARAJEVO  
NASTAVNO-NAUČNO VIJEĆE FAKULTETA**

**Predmet:** Izvještaj Komisije za pripremanje prijedloga za izbor 2 nastavnika u sva zvanja za nastavnonaučnu oblast Preventivna stomatologija i pedodoncija prema Konkursu za izbor akademskog osoblja objavljenom 16. 10. 2017. godine u dnevnom listu Dnevni Avaz.

Na osnovu odredbi Zakona o visokom obrazovanju (Sl. novine Kantona Sarajevo, broj 33/17), i člana 92. statuta Univerziteta u Sarajevu, a vezano za saglasnost Senata Univerziteta u Sarajevu broj: 01-4506/17 od 27.06.2017. godine, raspisan je Konkurs za izbor akademskog osoblja u jedno od naučno-nastavnih zvanja: docent, vanredni ili redovni profesor za nastavno-naučnu oblast Preventivna stomatologija i pedodoncija, i to za dva izvršioca.

Odlukom Nastavno-naučnog vijeća Stomatološkog fakulteta sa klinikama u Sarajevu broj 01-4-333-3/17 od 06. 11. 2017. godine, imenovana je Komisija za pripremanje prijedloga za izbor dva nastavnika u sva zvanja za nastavno-naučnu oblast Preventivna stomatologija i pedodoncija u sastavu:

-Prof. dr. sci. Mediha Selimović- Dragaš, vanredni profesor, naučna oblast Preventivna stomatologija i pedodoncija, Stomatološki fakultet Univerziteta u Sarajevu, predsjednik Komisije;

-Prof. dr. sci. Sedin Kobašlija, redovni profesor, naučna oblast Preventivna stomatologija i pedodoncija, Stomatološki fakultet Univerziteta u Sarajevu, član Komisije;

-Prof. dr. sci. Amila Zukanović, vanredni profesor, naučna oblast Preventivna stomatologija i pedodoncija, Stomatološki fakultet Univerziteta u Sarajevu, član Komisije.

Komisija za pripremanje prijedloga za izbor dva nastavnika u sva zvanja za nastavno-naučnu oblast Preventivna stomatologija i pedodoncija Nastavno-naučnom vijeću Stomatološkog fakulteta sa klinikama u Sarajevu podnosi sljedeći

**I Z V J E Š T A J**

Na Konkurs koji je objavljen 16. 10. 2017. godine u dnevnom listu Dnevni Avaz, za izbor u jedno od nastavnih zvanja: docent, vanredni ili redovni profesor za nastavno-naučnu oblast Preventivna stomatologija i pedodoncija za dva izvršioca, prijavili su se u propisanom konkursnom roku sljedeći kandidati:

1. Doc. dr. sci. Nina Marković– u zvanje vanredni profesor;
2. Doc. dr. sci. Amra Arslanagić Muratbegović– u zvanje vanredni profesor.

Komisija je uvidom u priloženu konkursnu dokumentaciju utvrdila da su oba kandidata u svojim prijavama dostavili svu, prema Konkursu propisanu dokumentaciju, kao i sve što je potrebno kako bi ponaosob dokazali da ispunjavaju uslove za izbor u naučnonastavna zvanja, i to doc. dr. sci. Nina Marković u zvanje vanredni profesor, doc. dr. sci. Amra Arslanagić Muratbegović u zvanje vanredni profesor za nastavno-naučnu oblast Preventivna stomatologija i pedodoncija, a u skladu sa uslovima Konkursa i važećim zakonskim propisima. U tom smislu se u narednom dijelu izvještaja navode i potvrđuju dijelovi biografije i bibliografije za pomenuta dva kandidata uz komentare Komisije.

### **Doc. dr sci. Nina Marković**

Doc.dr sci. Nina Marković rođena je 11.07.1973. godine u Sarajevu, gdje je završila osnovnu školu i Prvu sarajevsku gimnaziju. Diplomirala je na Stomatološkom fakultetu u Sarajevu 2001. godine.

Postdiplomski studij na Stomatološkom fakultetu u Sarajevu upisala je 2002. godine. Pripravnički staž je obavila na Stomatološkom fakultetu u Sarajevu, a stručni ispit položila 2002..godine. Magistrirala je 2008. godine, doktorirala 2011. godine. U zvanje docenta je izabrana 18.12..2012.godine.

Aktivno govori engleski jezik i pasivno poznaje francuski jezik. Poznaje rad na računaru u obimu i programima potrebnim za realizaciju poslova i zadataka iz domena nastavno - naučnog rada.

### **Doktorat, magisterij, specijalizacija:**

2011. na Stomatološkom fakultetu u Sarajevu odbranjena doktorska disertacija pod nazivom: „Faktori rizika i detekcija inicijalnih promjena na parodontu u dječijem uzrastu (komparativna, stratificirana, kliničko-radiološka studija), stekla zvanje doktor stomatoloških nauka

2009. položen specijalistički ispit iz Dječije i preventivne stomatologije, stekla zvanje specijalista dječije i preventivne stomatologije

2008. na Stomatološkom fakultetu u Sarajevu odbranjen magistarski rad pod nazivom: “Parodontalni status kod adolescenata (kliničko-radiološka studija)” , stekla zvanje magistar stomatoloških nauka.

### **Kretanje u službi i napredovanje :**

2016. - šef Klinike za Preventivnu stomatologiju i pedodonciju;

2012. – 2017. - docent na Katedri za preventivnu stomatologiju i pedodonciju;

2008. –2012 - viši asistent na Katedri za Dječiju i preventivnu stomatologiju;

2003. - 2008. Stomatološki fakultet, Sarajevo / asistent saradnik na Katedri za Dječiju i preventivnu stomatologiju;

2002. - 2003. – Bosnalijek, Sarajevo / stručno-komercijalni saradnik za liniju antimikrobnih lijekova;

2001. - 2002. – Stomatološki fakultet, Sarajevo / demonstrator- volonter na Katedri za Dječiju i preventivnu stomatologiju;

1997. - 1998. - Ured Evropske unije u Sarajevu, EC Housing, Pomoćnik šefa ureda za administraciju i finansije i prevodilac .

## **Stručno usavršavanje**

### **(kongresi, stručni skupovi, seminari, kursevi) :**

Od 2003. godine do danas učestvovala je na više od trideset domaćih i inostranih stručnih i naučnih skupova.

Stručno usavršavanje:

- 2007-2011. Savjetovanje: "Reforma visokog obrazovanja implementacija Bolonjskog procesa na Univerzitetu u Sarajevu", Sarajevo, BiH
- 2007- Edukativni seminar: "Kompozitna restauracija endodontski tretiranih zuba", Stomatološki fakultet Sarajevo, BiH
- 2007 – Ivoclar Vivadent/Komora liječnika- doktora stomatologije FBiH – edukacija: Osnovni funkcionalni i visoki estetski tretmani- gdje su kompromisi i što su rješenja, Novembar, Sarajevo, BiH.
- 2009 – edukacija „Pedagoško obrazovanje nastavnika i saradnika“ na Univerzitetu u Sarajevu
- 2009 - Foundation of minimally invasive and caring dentistry dr.Dan Fisher, Ultradent, USA- Kurs: Minimalno invazivna endodoncija sa AET Endo- Eze tehnikom, dr.Dan Fisher, Ultradent, USA/ Komora liječnika/doktora stomatologije FBiH , Sarajevo, BiH
- 2010- ITOP – Curaprox – individualni trening za oralnu profilaksu (Basic level), Vlašić, Bosna i Hercegovina
- 2012- "Postupni vodič kroz analizu podataka pomoću SPSS-a za Windows- prvi stepen", Centar za kompjutersku edukaciju (CCED), Sarajevo, mart 2012.

### **Članstvo i rad u strukovnim organizacijama :**

- Komora liječnika / doktora stomatologije KS
- Udruženje stomatologa FBiH
- Evropsko društvo za javno oralno zdravlje (EADPH).
- 2006.- 2008.- urednik web stranice i povjerenik Udruženja stomatologa FBiH , sekretar redakcije časopisa BILTEN STOMATOLOGIA BiH
- 2006.-2011- predstavnik za FBiH u FDI (Svjetska stomatološka federacija) –oficir za vezu
- 2007.-2011.- član Vijeća Balkanskog stomatološkog društva
- 2008.-2011. – generalni sekretar Udruženja stomatologa FBiH i izvršni urednik časopisa „Bilten Stomatologia BiH“

### **Aktivno učešće u organizaciji stručnih i naučnih skupova:**

- II Kongres stomatologa BiH sa međunarodnim učešćem, Teslić, 2007., sekretar Kongresa
- Simpozijum iz opšte stomatologije sa međunarodnim učešćem, Udruženje Stomatologa FBiH, Mostar, BiH, Mart, 2008. , generalni sekretar
- Međunarodni Simpozijum iz stomatologije, Udruženje stomatologa FBiH i Hrvatsko stomatološko društvo, Neum, BiH, Mart, 2009. , generalni sekretar i član organizacionog odbora
- III Stomatološki dani BiH sa međunarodnim učešćem, Sarajevo, BiH, Oktobar, 2009. član Kongresnog komiteta.

- 21. Kongres Balkanskog stomatološkog društva (BaSS) Banja Luka, Bosna and Hercegovina, 2016, član Naučnog odbora.

### **Nastavna djelatnost:**

2012- Izvodi teoretsku i praktičnu nastavu na obaveznim predmetima „Pedodoncija“ „Preventivna stomatologija“ , „Javno oralno zdravlje“, „Sveobuhvatna stomatološka zaštita za djecu i adolescente“, te na izbornom predmetu „ Stomatološka zastita trudnica “.

Mentor i član komisija za izradu i odbranu magistarskih teza i završnih studentskih radova;

2013 - Mentor specijalizantima Dječije i preventivne stomatologije, te Pedijatrije i Ortodoncije u dijelu specijalizacije koja se odnosi na Pedodonciju, a od 2015 član/predsjednik ispitnih komisija za specijalističke ispite iz Preventivne i dječije stomatologije i Ortodoncije;

U nastavnom procesu kao asistent, viši asistent i docent učestvuje od 2003. godine do danas.

### **OBJAVLJENI RADOVI:**

#### **Radovi objavljeni u priznatim publikacijama nakon izbora u zvanje docent**

1. Sacic L, **Markovic N**, Arslanagic Muratbegovic A, Zukanovic A, Kobaslija S. The prevalence and severity of early childhood caries in preschool children in the Federation of Bosnia and Herzegovina. Acta Medica Academica 2016; 45(1): 19-25

Abstract

Objective. The aim of this study was to assess caries prevalence and severity in preschool children in the Federation of Bosnia and Herzegovina. In addition, the relationship between the frequency and clinical types of early childhood caries and behavioral factors, oral hygiene and eating habits were assessed. Materials and methods. An oral health survey was performed in line with the World Health Organization methodology and criteria. The research consisted of clinical examinations of children to determine dentition status, oral hygiene and severity of caries distribution according to Wyne's classification. Information about behavioral factors was collected by means of a questionnaire administered to parents/guardians. Results. The sample consisted of a total of 165 preschool children aged 3-5 years. Mean dmft (decay, missing, filled teeth index for primary dentition) was 6.79. The percentage of caries-free children was 17.0%. The results showed a statistically significant correlation between oral hygiene and eating habits, and also the frequency and types of early childhood caries. Conclusion. The present study demonstrates high caries prevalence in preschool children in the Federation of Bosnia and Herzegovina. Community based preventive programs should be developed and urgently implemented, in order to achieve the WHO goals, improve oral and general health, thus improving the quality of life of these populations. Key words: Early childhood caries, Oral health, Behavioral factors, Epidemiology. Indexed in: Medline/PubMed, EBSCOhost, Index Copernicus, CAB Abstract/Global Health Databases, IndexScholar, DOAJ, CrossRef Dostupno: <https://www.ncbi.nlm.nih.gov/labs/articles/27284794/>

2. **Marković N**, Arslanagić Muratbegović A , Kobašlija, Bajrić E , Selimović-Dragaš M, Huseinbegović A, Čuković-Bagić I. Knowledge and attitudes regarding child abuse and neglect. *Mater Sociomed.* 2015 Dec; 27(6): 372-375.

#### Abstract

**Purpose:** The aim of this study was to assess knowledge and attitude of dentists in Bosnia and Herzegovina (BH) regarding signs and symptoms of child abuse and neglect (CAN), reporting procedure and level of education. **Methods:** Data were collected through a self-administrated structured questionnaire adopted and modified from previous studies. It was administrated to 300 dentists out of which a total number of 210 subjects were in final sample for statistical analyses. Response rate was seventy percent. Descriptive statistics, Chi-square and Kruskal-Wallis H test were used to analyze statistical differences in responses. The level of significance was set at  $p < 0.05$ . **Results:** Dentists in BH are very rarely provided (80%) with training related to recognition and reporting of CAN. Sixty six percent of dentists had never suspected CAN in their practice. Only nine percent of dentists would report suspicious of CAN. Prevailing reasons for not reporting suspected case of CAN was lack of knowledge of the reporting procedure (43%), and combination of indicated answers that never had a case and lack of knowledge about the procedure (31%). **Conclusion:** Results of this study suggest that dentists need an effective education to increase their knowledge and awareness of all aspects of CAN. **Keywords:** child abuse and neglect, dentist knowledge, Bosnia and Herzegovina. Indexed/abstracted in: PubMed, PubMed Central (PMC), Europe PubMed Central, EMBASE/Excerpta Medica, EBSCO, DOAJ, Index Copernicus, Ulrich's Periodicals Directory, Geneva Foundation for Medical Education and Research – GFMER, HINARI, ProQuest, NewJour, ISC Master Journals List, CrossRef, Google Scholar, Genamics JournalSeek, WorldCat, NLM Catalog, VINITI of RAS, Catalyst, SafetyLit, EastView, ScopeMed, EastView, Cab Abstracts, Global Health, Research Bible, Academic Keys. Dostupno: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4733545/>.

3. Bajrić E, Kobašlija S, Huseinbegović A, **Marković N**, Selimović-Dragaš M, Arslanagić Muratbegović A. Factors that Determine Child Behavior during Dental Treatment. *Balk J Dent Med* 2016; 20(2):69-77

#### Abstract

In this review paper we wanted to summarize all the aspects which could affect the behavior of the child patients in the dental office. At the beginning, the factors that are related to the child patients are mentioned. Various segments of child psychological, cognitive, physiological and other kinds of development are discussed. Also, the reasons for dental fear and anxiety (DFA) and dental behavior problems (DBP) were analyzed, and how the child dental patients could cope with them. Finally, types of patients according to their behavior in the dental office were discussed. Furthermore, the influences of child patients' parents were studied, including parenting styles, as well as factors related to dentist, dental team and the dental office. Finally, critical evaluation of administration of assets to measure the presence of DFA and DBP is provided. Every part of the text was corroborated by the results from our

own and other authors' recent bibliography data. Keywords: dental fear and anxiety; dental behavior problems; children; parents; dentists. Indexed/abstracted in: Baidu Scholar, Celdes, CNKI Scholar (China National Knowledge Infrastructure), CNPIEC, EBSCO Discovery Service, Google Scholar, J-Gate, JournalTOCs, Naviga (Softweco), Primo Central (ExLibris), ReadCube, Summon (Serials Solutions/ProQuest), TDOne (TDNet), WorldCat (OCLC). Dostupno: <http://balkandentaljournal.com/factors-determine-child-behavior-dental-treatment/>

4. **Marković N**, Arslanagić-Muratbegović A, Kobašlija S, Bajrić E, , Selimović-Dragaš M, Huseinbegović A, Čuković-Bagić I. Dental aspects of child abuse and neglect – knowledge and attitudes of dentists in Bosnia and Herzegovina. *Stomatološki vjesnik* 2014; 3 (2):83-90.

Abstract:

Dentists can play an important role in detecting and reporting cases of CAN, particularly in cases of medical and dental neglect of their young patients. The objective of this study was to assess the current status of knowledge and attitudes of dentists in Bosnia and Herzegovina regarding CAN, particularly in recognition of signs and symptoms and reporting procedure of suspected cases. Methods: Data were collected through a self-administrated structured questionnaire offered to 300 dentists. The questionnaire consisted of twenty- seven questions adopted and modified from previous studies. Final sample consisted of a total number of 210 questionnaires that were filled correctly and returned. Questions were analyzed by means of descriptive statistics. Non parametric statistical tests were used to analyze differences among respondents in respect of age, gender, professional experience, specialty, and workplace.

Results: Only 7.6% of respondents indicated that they had formal training about CAN, 66% of dentists had never suspected CAN. In the section of social indicators respondents usually indicated correct answer (more then 60% ). If they suspect, only 9% of them would report CAN. Prevailing reasons for not reporting suspected case of CAN was lack of knowledge of the reporting procedure (43%), never had a case and lack of knowledge about the procedure (31%) and lack of adequate history (15%). Conclusion: The study demonstrated a lack of overall understanding of the problem and also a lack of awareness of dentists' responsibilities regarding this issue. Key words: child abuse, child neglect, dental neglect, dentist, Bosnia and Herzegovina.

Indexed in: ICI (Index Copernicus International), DOAJ (Directory of Open Access Journal), EBSCO, HINARI, INFOBASE, EZB (Electronische Zeitschriftenbibliothek), SJIF (Scientific Journal Impact Factor Value 2.502), GOOGLE SCHOLAR. Dostupno: <http://stomatoloskivjesnik.ba/bs/wp-content/uploads/2014/12/SV-3-2-2014.pdf>

5. **Markovic N**. Muratbegovic A A. Oral Health in Bosnia and Herzegovina Schoolchildren – Findings of First National Survey. *Austin J Dent*. 2014;1(2): 1010.

Abstract

Aim: The aim of this study was to investigate the oral health of schoolchildren in Bosnia and Herzegovina (BH) according to the WHO methods and propositions. Materials and Methods: Survey was conducted as observational, descriptive (cross-sectional) study. Study sample were children aged 6 and 12. A total of 1,120 children were examined.

Observable oral health parameters were dental caries, periodontal condition and demarcated opacities. Results: In 12-year-olds the DMFT was  $4.16 \pm 2.92$ , and the decayed teeth constituted the major part of the index (45.43%). In 6-year-olds the DMFT was  $6.71 \pm 3.89$ , and the decayed teeth constituted the major part of the index (88.79%). 43% of 12-year-olds had healthy periodontal tissues. The prevalence of developmental defects of enamel among BH twelve-year-olds was 32.8%. Conclusion: Results of national survey for two monitoring children population groups revealed insufficient preventive and curative dental care in all examined sites in BH. Key words: Oral health; Schoolchildren; DMFT; dmft; Periodontal status; DDE  
Indexed in: J-GATE, Academic Resource Index, Google scholar, Academic keys.  
Dostupno: <https://www.scribd.com/document/317431318/Bosnia-Herzegovina-pdf>

- 6. Marković N, Arslanagić Muratbegović A, Kobašlija S, Bajrić E, Selimović-Dragaš M, Huseinbegović A.** Caries prevalence of children and adolescents in Bosnia and Herzegovina. *Acta Med Acad.* 2013 Nov;42(2):108-16.

Abstract:

Objective. The aim of this study was to present epidemiological parameters of caries prevalence in children and adolescents in index age groups on a national and regional level in Bosnia and Herzegovina (BH). Materials and methods. The study was conducted during 2004 year for children aged 6 and 12, and during 2007 for adolescents aged 15. An oral health survey was performed on a total number of 1,240 children and adolescents in line with World Health Organization methodology and criteria. Results for caries prevalence and treatment needs were presented and discussed in this paper. Results. Mean dmft (decay, missing, filled teeth for primary dentition) for children aged six was 6.7 (SD±3.9) in that the decayed teeth constituted the major part of the index (88.8%), followed by extracted teeth (8.9%) and a small percentage of filled teeth (2.3%). In 12-year-olds DMFT (Decay, Missing, Filled Teeth for permanent dentition) was 4.2 (SD±2.9), Significant Caries index (SiC) was 7.7 (SD±2.9), the decayed teeth constituted the major part of the index (45.4%), followed by 42.1% of FT and 12.5% of extracted teeth. Among 15-year-olds the DMFT was 7.6 (SD±4.1), SiC was 9.2 (SD±1.2), and filled teeth constituted the major part of the index. Conclusion. The present study provides some evidence of relatively high caries prevalence and severity in comparison with Western European countries. It is necessary to devote more attention to the oral health of children and adolescents. Community based oral health promotion, preventive programs and preventive oriented public dental health care services should be made available and accessible to all children in Bosnia and Herzegovina. Key words: Oral health, Caries, Children, Epidemiology. Indexed in: Medline/PubMed, EBSCOhost, Index Copernicus, CAB Abstract/Global Health Databases, IndexScholar, DOAJ, CrossRef Dostupno: <https://www.ncbi.nlm.nih.gov/labs/articles/24308391/>

- 7. Marković N, Muratbegović A, Kobašlija S, Bajrić A, Huseinbegović A, Selimović-Dragaš M.** Caries Prevalence in Bosnia and Herzegovina Schoolchildren – Findings of First National Survey. *Stomatološki vjesnik* 2013; 2 (1):9-15

## Abstract:

The World Health Organization (WHO) recommends conducting periodic national oral health surveys. Similar research was conducted in some parts of Bosnia and Herzegovina's territory.

**Objective.** The objective of this research was to investigate and present the oral health status of six-year and twelve-year old children in Bosnia and Herzegovina according to the WHO indicators.

**Methods.** The research was conducted using the model of observational, descriptive (cross-sectional) study. The examinations were carried out in the period from April to July 2004. The survey was performed in nine cities throughout Bosnia and Herzegovina, namely: Sarajevo, Banja Luka, Sanski Most, Tuzla, Visoko, Gorazde, Vitez, Siroki Brijeg and Mostar. A total of 1,120 six- and twelve-year old children were examined. The dental examinations were carried out in schools according to the WHO criteria.

**Results.** In 12-year-olds the DMFT was 4.16 (S.D.± 2.92), out of which decayed teeth constituted the major part of the index (45.43%), followed by 42.07% of filled teeth and 12.50% of extracted teeth. In 6-year-olds the dmft was 6.71 (S.D.± 3.89), out of which decayed teeth constituted the major part of the index (88.79%), followed by extracted teeth (8.89%) and a small percentage of filled teeth (2.32%).

**Conclusions.** The imperative is to develop and implement a disease prevention program, based on education of parents and care providers, as well as to improve access to dental care and shift focus from curative to preventive procedures.

**Key words.** Oral health, schoolchildren, DMFT, dmft.

Indexed in: ICI (Index Copernicus International), DOAJ (Directory of Open Access Journal), EBSCO, HINARI, INFOBASE, EZB (Elektronische Zeitschriftenbibliothek), SJIF (Scientific Journal Impact Factor Value 2.502), GOOGLE SCHOLAR Dostupno: [http://stomatoloskivjesnik.ba/bs/wp-content/uploads/2013/06/SV2013\\_2\\_1.pdf](http://stomatoloskivjesnik.ba/bs/wp-content/uploads/2013/06/SV2013_2_1.pdf)

## **Radovi u ostalim stručnim-naučnim časopisima objavljeni nakon izbora u zvanje docent**

1. **Markovic N**, Arslanagic Muratbegovic A. Study of periodontal Condition in Adolescents. Stomatoloski Informator (Dentistry Review). 2014; IX (35):5-10.

### Abstract

The aim was to investigate periodontal conditions of adolescents through clinical and radiological investigation and to compare results of clinical and radiological findings. The sample included a total of 120 15-years-old adolescents from Sarajevo pursuant to World Health Organization criteria. 18% of examinees were scored as healthy, needing no treatment. Gingival bleeding on probing was registered found in 38% and it was the most prevalent condition. When it comes to treatment, examinees were most frequently referred to oral hygiene for elimination of deposits and tooth polishing. Only 22 persons have all six healthy sextants. Twenty-six percent of investigated population has no radiological evidence of bone destruction, 55% has first signs of alveolar bone resorption, and 19% has the evidence of abnormal bone resorption related to periodontitis. Bearing in mind the fact that caries and periodontitis are the most

frequent dental and oral illnesses, the results of the study point to an alarmingly bad condition of oral health in our fifteen-year-olds and to an urgent need for preventive action. Key words: Adolescent; Periodontium; Periodontal Index; Epidemiology; Dental Plaque; Periodontitis; Dental Caries; Alveolar Bone Loss; Oral Health; Preventive Dentistry

#### Sažetak

Cilj istraživanja bio je utvrditi parodontalni status adolescenata pomoću kliničko-radiološke analize i uporediti rezultate kliničkog i radiološkog ispitivanja. Istraživanje je vršeno na uzorku od 120 sarajevskih petnaestogodišnjaka. Kriterijumi za odabir uzorka sledili su preporuke Svetske zdravstvene organizacije za ovu vrstu istraživanja. Kod 18% ispitanika parodont je registrovan kao potpuno zdrav. Krvarenje gingive registrovano je kao najučestalije stanje (38%). Od potreba tretmana najčešće je registrovano upućivanje u oralnu higijenu s eliminacijom naslaga i poliranjem zuba. Samo 22 ispitanika imaju svih šest zdravih sekstanata. Rezultati radiološkog ispitivanja pokazuju da 26% ispitanika nema promene na alveolarnoj kosti, dok početne promene ima 55% ispitanika. Uzimajući u obzir činjenicu da su karijes i parodontitis najčešća dento-oralna oboljenja, rezultati istraživanja ukazuju na zabrinjavajuće loše stanje oralnog zdravlja petnaestogodišnjaka i urgentnu potrebu za preventivnim delovanjem.

Ključne reči: Adolescent; Periodoncijum; Periodontalni indeks; Epidemiologija; Zubni plak; Periodontitis; Zubni karijes; Resorpcija alveolarne kosti; Oralno zdravlje; Preventivna stomatologija.

UDK: 616.311.2-053.6 Dostupan na: [http://www.dlvsl.org/download/informator\\_35.pdf](http://www.dlvsl.org/download/informator_35.pdf)

2. Arslanagic Muratbegovic A. **Markovic N.** Brankovic Hasic L. Contemporary Concept of Local Effects of Fluorides in Dental Caries Prevention- review. Stomatoloski Informator (Dentistry Review). 2014; IX (34):26-32.

#### Abstract

The aim of this paper was to describe the role of fluorides in dental caries prevention and maintenance of optimal oral health. Fluorides have largely been used in preventive dentistry for over 50 years and they have contributed to the reduction in the number of dental caries in numerous developed countries worldwide. Fluoride reduces the incidence of dental caries and slows or reverses the progression of existing lesions. Extensive experimental and clinical research which certified fluoride as an effective and a safe preventive agent preceded its widespread use in dentistry and public oral health promotion activities. Key words: Fluorides; Fluorides, Topical; Fluoridation; Dental Caries; Oral Health; Preventive Dentistry; Toothpastes

Sažetak – Cilj ovog rada bio je da se predstavi savremeni koncept uloge lokalnog delovanja fluorida kao važnog sredstva u prevenciji zubnog karijesa i održavanju optimalnog oralnog zdravlja. Fluoridi se u velikoj meri upotrebljavaju u preventivnoj stomatologiji duže od pedeset

godina i mnogo su doprineli smanjenju nastanka zubnog karijesa u brojnim razvijenim zemljama širom sveta. Masovnoj primeni fluorida prethodila su opsežna eksperimentalna, klinička i epidemiološka istraživanja koja su potvrdila njihovu efikasnost u prevenciji karijesa, kao i neškodljivost po zdravlje ljudi. Ključne reči: Fluoridi; Lokalni fluoridi; Fluorizacija; Karijes; Oralno zdravlje; Preventivna stomatologija; Zubne paste

UDK: 616.314-007-053.4/.5

Dostupan na: [http://www.dlvsl.org/download/informator\\_34.pdf](http://www.dlvsl.org/download/informator_34.pdf)

3.Jancek Pejcinovic T, Katana E. Sacic L. **Markovic N.** Clinical cases of Dental Anomalies with School and Preschool Children. Stomatoloski Informator (Dentistry Review). 2014; IX (34):39-43.

Abstract

The aim of this paper is to present various teeth anomalies which dentists may encounter in their everyday practices. Examinations were done over a period starting in May 2012 to January 2014 in the Public Health Care Centre of Sarajevo Canton "Centar", Paediatric Dental Clinic. Anomalies in this study are macrodontia, Turner's tooth, gemination, fusion, hypodontia, retention and ectopic eruption. Dental anomalies are clinically evident abnormalities and they may be the cause of various dental problems. Careful observation and appropriate investigations are required to diagnose the condition and plan treatment. Key words: Child; Child, Preschool; Tooth Abnormalities; Tooth + embryology; Tooth + growth and development; Diagnosis

Sažetak – Cilj ovog rada bio je da se prikažu različiti slučajevi anomalija zuba koji se mogu dijagnosticirati u svakodnevnoj stomatološkoj praksi. Pregledi su izvođeni u periodu od maja 2012. do januara 2014. godine, u ambulanti dečje stomatologije sarajevskog Doma zdravlja „Centar“ Kantona Sarajevo. Prikazane anomalije su makrodoncija zuba, Turnerov zub, geminacija, fuzija, hipodoncija, retencija i ektopija. Anomalije zuba klinički su evidentni poremećaji zuba i mogu biti uzrok raznih stomatoloških problema. Pažljiva opservacija i adekvatno znanje neophodni su da se dijagnosticiraju problemi i planira tretman.

Ključne reči: Dete; Predškolsko dete; Anomalije zuba; Zub + embriologija; Zub + rast i razvoj; Dijagnoza-

UDK: 616.314-007-053.4/.5 Dostupan na: [http://www.dlvsl.org/download/informator\\_34.pdf](http://www.dlvsl.org/download/informator_34.pdf)

### **Radovi prezentirani na stručnim i naučnim skupovima nakon izbora u zvanje docent**

1. Bajrić E, Kobašlija S, Huseinbegović A, Arslanagić Muratbegović A. **Markovic N.** Sample conditions interference to quality of dental fear and anxiety evaluation in children. In: 22 nd BaSS Congress Abstract book; Thessaloniki, Greece 2017: PP.320
2. Pejcinovic-Janecek T, Sacic L. **Markovic N.** Double Teeth formation

- (Gemination and Fusion)'anomalies of primary dentition. In: 22 nd BaSS Congress Abstract book; Thessaloniki, Greece 2017: PP.319
3. Sacic L, **Markovic N**, Arslanagic Muratbegovic A, Kobaslija S. Prevalence of early childhood caries and treatment needs in Federation of Bosnia and Herzegovina. In: 22 nd BaSS Congress Abstract book; Thessaloniki, Greece 2017: PP.334.
  4. **Markovic N**, Bajric E, Kobaslija S, Huseinbegovic A, Selimovic-Dragas M. The characteristics of self-report measures for evaluation of dental fear and anxiety presence in children. PP- 44 In: 21 st Congress of the Balkan Stomatological Society Abstract book; Banja Luka, Bosnia and Herzegovina, 2016:158
  5. Huseinbegović A, Selimović-Dragaš M, Fazlic R, **Markovic N**, Arslanagic Muratbegovic A. Assessment of periodontal health in type 1 diabetes mellitus school children and adolescents. PP- 64 In: 21 st Congress of the Balkan Stomatological Society Abstract book; Banja Luka, Bosnia and Herzegovina, 2016:169.
  6. **Markovic N**, Arslanagic Muratbegovic A, Bajric E, Selimovic Dragas M, Huseinbegovic A, Kobaslija S. **Dentists knowledge and attitude in detecting and reporting child abuse and neglect.**(Znanje i stav stomatologa o prepoznavanju i prijavljivanju zanemarivanja i zlostavljanja djece) U: Drugi simpozijum specijalista javnozdravstvenih disciplina Federacije Bosne i Hercegovine. Zbornik radova; Mostar, Bosna i Hercegovina, 10-12 dec. 2015:24-25.
  7. Arslanagic Muratbegovic A, **Markovic N**, Kobaslija S, Huseinbegovic A, Selimovic-Dragas M. **Knowledge and attitudes about child abuse and neglects among dentists in Bosnia and Herzegovina** (PP352). In: 19th Congress of the the Balkan Stomatological Society Book of Abstracts; Belgrade, Serbia, 24-27 apr. 2014: 259-260.
  8. Bajric E, Huseinbegovic A, Selimovic-Dragas M, Muratbegovic A, **Markovic N**. **Characteristics of measuring of dental fear and anxiety presence in children** (PP376). In: 19th Congress of the the Balkan Stomatological Society Book of Abstracts; Belgrade, Serbia, 24-27 apr. 2014: 270-71.
  9. **Markovic N**, Arslanagic Muratbegovic A. Radiografska analiza stanja parodonta u dječijem uzrastu. Prvi kongres dječje i preventivne stomatologije. Program i zbornik sažetaka. Beograd, oktobar 2014; O:20.

### **Predavanja po pozivu održana na Kongresima i simpozijima, objavljena u zbornicima radova nakon izbora u zvanje docent**

1. Marković N. Teorijsko-tehnološki napredak u prevenciji , ranoj dijagnostici i planiranju dento-oralnih bolesti. Osmi kongres stomatologa Vojvodine. Novi Sad, Srbija, Maj, 2017. Zbornik Radova, str; 18-19.
2. Marković N. Specifičnosti stomatološkog tretmana trudnica-vodič za zaštitu i

- unaprjeđenje oralnog zdravlja. Sedmi kongres stomatologa Vojvodine. Novi Sad, Srbija, Maj, 2016. Zbornik Radova, str; 16-17.
3. Marković N. Specifičnosti stomatološkog tretmana trudnica-vodič za zaštitu i unaprjeđenje oralnog zdravlja. Šesti kongres stomatologa Vojvodine. Novi Sad, Srbija, Maj, 2015. Zbornik Radova, str; 17-18-19.
  4. Marković N. Primjena preparata na bazi nano-bio-fuzijske tehnologije u stomatološkoj praksi. Simpozijum Stomatologija danas sa međunarodnim učešćem. Banja Vrućica, Teslić, Bosna i Hercegovina, decembar 2014, str; 24.
  5. Marković N. Oboljenja parodonta kod djece i adolescenata-značaj prevencije, rane dijagnostike i pravovremene terapije. Četvrti kongres stomatologa Vojvodine. Novi Sad, Srbija, Maj, 2013. Zbornik Radova, str; 92-93.

### **Knjige- Univerzitetski udžbenici**

#### **Univerzitetski udžbenik nakon izbora u zvanje docent :**

Jurić H i suradnici. Dječja dentalna medicina. Naklada Slap, Jastrebarsko, Hrvatska;2015.

Poglavlja: Arslanagić, Muratbegović A. Marković N. Nakaš E. Rast i razvitak (pp.7-21)

Marković N. Kobašlija S. Stomatološki tretman djece sa sistemskim bolestima (pp.447-467)

ISBN 978-953-191-799-5

CIP: 000916926 ; Nacionalna i sveučilišna knjižnica u Zagrebu

#### **Univerzitetski udžbenici do izbora u zvanje docent**

Kobašlija S. i saradnici. Minimalna invazivna terapija. Dobra knjiga d.o.o., Sarajevo; 2012.

ISBN 978-9958-27-048-2

CIP: 616.31-085(075.8) Katalogizacija u publikaciji Nacionalna i univerzitetska biblioteka Bosne i Hercegovine

Vulićević RZ i saradnici: Klinička primena materijala u stomatologiji. Beobook, Beograd; Srbija, 2010.

ISBN 978-86-87027-25-1

CIP: 615.461.314(082) Katalogizacija u publikaciji Narodna biblioteka Srbije

## **Naučno- istraživački projekti**

### **Nakon izbora u zvanje docent:**

Kobašlija S. Muratbegović A, Marković N, Selimović Dragaš M, Huseinbegović A, Bajrić E, Komšić S. " Uloga stomatologa u prepoznavanju zlostavljane i zanemarene djece" - Ministarstvo obrazovanja i nauke F BiH i Stomatološki fakultet, Sarajevo. 2013-2015.

### **Do izbora u zvanje docent:**

Kobašlija S. Muratbegović A, Marković N: "Oralno zdravlje djece F BiH, kliničko-epidemiološka studija". Ministarstvo obrazovanja i nauke Kantona Sarajevo i Stomatološki fakultet, Sarajevo. 2004- 2005.

### **Mentorstvo na magistarskom radu**

Kandidat: Šaćić Lejla

Naslov Magistarskog rada: Uticaj socijalnih i bihevioralnih faktora na prevalencu i distribuciju učestalosti kliničkih tipova ranog dječijeg karijesa.

Rad odbranjen: 22.05.2015. godine na Stomatološkom fakultetu Univerziteta u Sarajevu

### **Mentorstvo na završnim-diplomskim radovima realiziranim na Stomatološkom fakultetu univerziteta u Sarajevu**

1. Divanovic Dunja. Bolesti parodonta kod djece i adolescenata. septembar 2014.
2. Mustafic Emina. Antioksidansi i nano-bio-fuziona tehnologija u terapiji gingivitisa u dječijem uzrastu, septembar 2015.
3. Salkica Kemal Primjena Mineral trioksid agregata ( MTA )u liječenju pulpe mliječnih i mladih trajnih zuba. septembar 2016.
4. Kavazovic Saima Planiranje tretmana u pedodonciji-komparacija tradicionalnog koncepta i savremenog koncepta planiranja tretmana zasnovanog na dokazima. septembar ,2016.
5. Ćemer Azra. Uloga pljuvačke u zaštiti oralnog zdravlja. septembar 2017.
6. Kovačević Nađa. Oralno zdravlje adolescenata. septembar 2017.

## **SAŽETAK BIBLIOGRAFSKIH PODATAKA**

**(nakon izbora u zvanje docent)**

**Broj objavljenih knjiga: 1**

**Broj univerzitetskih udžbenika: 1**

**Broj naučnih radova objavljenih u priznatim publikacijama: 7**

**Broj radova objavljenih u ostalim naučno-stručnim publikacijama: 3**

**Broj učešća u naučnoistraživačkim projektima: 1**

**Broj mentorstava magistarskih radova: 1**

**Broj radova kongresnih radova objavljenih u zbornicima: 14**

**Broj mentorstava završnih radova: 6**

**Minimalni uslovi koji su potrebni da se ispune kako bi član akademskog osoblja bio izabran u naučnonastavno zvanje vanredni profesor su proveden najmanje jedan izborni period u zvanju docenta, najmanje pet naučnih radova objavljenih u priznatim publikacijama, objavljena knjiga i originalni stručni uspjeh kao što je projekt, patent ili originalni metod, sve nakon izbora u zvanje docenta te mentorstvo najmanje jednog kandidata za stepen drugog ciklusa studija. Na osnovu priložene dokumentacije Komisija konstatuje da kandidat doc. dr. sci. Nina Marković ispunjava pomenute uslove za izbor u zvanje vanrednog profesora.**

#### **Doc. dr sci. Amra Arslanagić Muratbegović**

Doc.dr sci. Amra Arslanagić Muratbegović rođena je 28.02.1976. godine u Sarajevu, gdje je završila osnovnu školu i Prvu sarajevsku gimnaziju. Diplomirala je na Stomatološkom fakultetu u Sarajevu 2001. godine. Postdiplomski studij na Stomatološkom fakultetu u Sarajevu upisala je 2002. godine. Pripravnički staž je obavila na Stomatološkom fakultetu u Sarajevu, a stručni ispit položila 2002. godine. Magistrirala je 2005. godine, doktorirala 2011. godine. U zvanje docenta je izabrana 18.12.2012. godine.

Aktivno govori engleski jezik . Poznaje rad na računaru u obimu i programima potrebnim za realizaciju poslova i zadataka iz domena nastavno - naučnog rada.

#### **Doktorat, magisterij, specijalizacija:**

2011. na Stomatološkom fakultetu u Sarajevu odbranjena doktorska disertacija pod nazivom: "Evaluacija kliničkih parametara molarno incizivnih hipomineralizacija u predikciji posteruptivnog loma cakline", stekla zvanje doktor stomatoloških nauka

2008. položen specijalistički ispit iz Dječije i preventivne stomatologije, stekla zvanje specijalista dječije i preventivne stomatologije

2005. na Stomatološkom fakultetu u Sarajevu odbranjen magistarski rad pod nazivom: "Istraživanje razvojnih defekta cakleni i molarno incizivnih hipomineralizacija kod dvanaestogodišnjaka" , stekla zvanje magistar stomatoloških nauka

## **Kretanje u službi i napredovanje :**

2012. – 2017. - docent na Katedri za preventivnu stomatologiju i pedodonciju;  
2008. –2012 - viši asistent na Katedri za Dječiju i preventivnu stomatologiju;  
2002. - 2008. Stomatološki fakultet, Sarajevo / asistent saradnik na Katedri za Dječiju i preventivnu stomatologiju;  
2001. - 2002. – Stomatološki fakultet, Sarajevo / demonstrator- volonter na Katedri za Dječiju i preventivnu stomatologiju;

## **Stručno usavršavanje**

### **(kongresi, stručni skupovi, seminari, kursevi):**

Od 2003. godine do danas učestvovala je na više od trideset domaćih i inostranih stručnih i naučnih skupova.

Stručno usavršavanje:

2002. - Edukativni seminar“ Panoramna radiografija stomatognatnog sistema“ u organizaciji US BiH

2007. - Edukativni seminar: “Kompozitna restauracija endodontski tretiranih zuba”, Stomatološki fakultet Sarajevo, BiH

2007. – Ivoclar Vivadent/Komora liječnika- doktora stomatologije FBiH – edukacija: Osnovni funkcionalni i visoki estetski tretmani- gdje su kompromisi i što su rješenja, Novembar, Sarajevo, BiH.

2008 – edukacija „Pedagoško obrazovanje nastavnika i saradnika“ na Univerzitetu u Sarajevu

2009. - Scientific Summer School in Trilj „ Research Design and Workshop Teaching Method“ u organizaciji Journal of Electrocardiology, Anatolian Journal of Cardiology, Croatian Medical Journal i Medicinskog fakulteta Univerziteta u Splitu.

2009. – Edukacija iz oblasti istraživanja sa sinhroton svjetlosnim izvorima u stomatologiji , Elettra Laboratory, Sincrotone Trieste, Italija.

2010. - Edukacija „Developing entrepreneurial skills for future career: moving from science toward practice“ , Poznan (Poljska) u organizaciji CEI (Central European Initiative).

## **Članstvo i rad u strukovnim organizacijama :**

- Komora liječnika / doktora stomatologije KS
- Udruženja stomatologa FBiH
- Evropsko društvo za javno oralno zdravlje (EADPH)

## **Aktivno učešće u organizaciji stručnih i naučnih skupova:**

21. Kongres Balkanskog stomatološkog društva (BaSS) Banja Luka, Bosna and Hercegovina, 2016, član organizacionog odbora.

## **Nastavna djelatnost:**

2012- Izvodi teoretsku i praktičnu nastavu na obaveznim predmetima „Pedodoncija“ „Preventivna stomatologija“ (odgovorni nastavnik), „Javno oralno zdravlje“, „Sveobuhvatna stomatološka zaštita za djecu i adolescente“, te na izbornom predmetu „ Stomatološka zaštita trudnica “.

Mentor i član komisija za izradu i odbranu magistarskih teza i završnih studentskih radova;  
2012 - Mentor specijalizantima Dječije i preventivne stomatologije, te Pedijatrije i Ortodoncije u dijelu specijalizacije koja se odnosi na Pedodonciju, a od 2015 član/predsjednik ispitnih komisija za specijalističke ispite iz Preventivne i dječije stomatologije i Ortodoncije;

U nastavnom procesu kao asistent, viši asistent i docent učestvuje od 2002. godine do danas.

## **OBJAVLJENI RADOVI:**

### **Radovi objavljeni u priznatim publikacijama nakon izbora u zvanje docent**

1.Sacic L, Markovic N, **Arslanagic Muratbegovic A**, Zukanovic A, Kobaslija S. The prevalence and severity of early childhood caries in preschool children in the Federation of Bosnia and Herzegovina. Acta Medica Academica 2016; 45(1): 19-25

#### Abstract

Objective. The aim of this study was to assess caries prevalence and severity in preschool children in the Federation of Bosnia and Herzegovina. In addition, the relationship between the frequency and clinical types of early childhood caries and behavioral factors, oral hygiene and eating habits were assessed. Materials and methods. An oral health survey was performed in line with the World Health Organization methodology and criteria. The research consisted of clinical examinations of children to determine dentition status, oral hygiene and severity of caries distribution according to Wyne's classification. Information about behavioral factors was collected by means of a questionnaire administered to parents/guardians. Results. The sample consisted of a total of 165 preschool children aged 3-5 years. Mean dmft (decay, missing, filled teeth index for primary dentition) was 6.79. The percentage of caries-free children was 17.0%.

The results showed a statistically significant correlation between oral hygiene and eating habits, and also the frequency and types of early childhood caries. Conclusion. The present study demonstrates high caries prevalence in preschool children in the Federation of Bosnia and Herzegovina. Community based preventive programs should be developed and urgently implemented, in order to achieve the WHO goals, improve oral and general health, thus improving the quality of life of these populations.

Key words: Early childhood caries, Oral health, Behavioral factors, Epidemiology.

Indexed in: Medline/PubMed, EBSCOhost, Index Copernicus, CAB Abstract/Global Health Databases, IndexScholar, DOAJ, CrossRef Dostupno: <https://www.ncbi.nlm.nih.gov/labs/articles/27284794/>

2.Marković N, **Arslanagić Muratbegović A**, Kobašlija, Bajrić E, Selimović-Dragaš M, Huseinbegović A, Čuković-Bagić I. Knowledge and attitudes regarding child abuse and neglect. Mater Sociomed. 2015 Dec; 27(6): 372-375.

#### Abstract

Purpose: The aim of this study was to assess knowledge and attitude of dentists in Bosnia and Herzegovina (BH) regarding signs and symptoms of child abuse and neglect (CAN), reporting procedure and level of education. Methods: Data were collected through a self-administrated structured questionnaire adopted and modified from previous studies. It was administrated to 300

dentists out of which a total number of 210 subjects were in final sample for statistical analyses. Response rate was seventy percent. Descriptive statistics, Chi-square and Kruskal-Wallis H test were used to analyze statistical differences in responses. The level of significance was set at  $p < 0.05$ . Results: Dentists in BH are very rarely provided (80%) with training related to recognition and reporting of CAN. Sixty six percent of dentists had never suspected CAN in their practice. Only nine percent of dentists would report suspicious of CAN. Prevailing reasons for not reporting suspected case of CAN was lack of knowledge of the reporting procedure (43%), and combination of indicated answers that never had a case and lack of knowledge about the procedure (31%). Conclusion: Results of this study suggest that dentists need an effective education to increase their knowledge and awareness of all aspects of CAN. Keywords: child abuse and neglect, dentist knowledge, Bosnia and Herzegovina

Indexed/abstracted in: PubMed, PubMed Central (PMC), Europe PubMed Central, EMBASE/Excerpta Medica, EBSCO, DOAJ, Index Copernicus, Ulrich's Periodicals Directory, Geneva Foundation for Medical Education and Research – GFMER, HINARI, ProQuest, NewJour, ISC Master Journals List, CrossRef, Google Scholar, Genamics JournalSeek, WorldCat, NLM Catalog, VINITI of RAS, Catalyst, SafetyLit, EastView, ScopeMed, EastView, Cab Abstracts, Global Health, Research Bible, Academic Keys. Dostupno: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4733545/>

3. Bajrić E, Kobašlija S, Huseinbegović A, Marković N, Selimović-Dragaš M, **Arslanagić Muratbegović A**. Factors that Determine Child Behavior during Dental Treatment. *Balk J Dent Med* 2016; 20(2):69-77

#### ABSTRACT

In this review paper we wanted to summarize all the aspects which could affect the behavior of the child patients in the dental office. At the beginning, the factors that are related to the child patients are mentioned. Various segments of child psychological, cognitive, physiological and other kinds of development are discussed. Also, the reasons for dental fear and anxiety (DFA) and dental behavior problems (DBP) were analyzed, and how the child dental patients could cope with them. Finally, types of patients according to their behavior in the dental office were discussed. Furthermore, the influences of child patients' parents were studied, including parenting styles, as well as factors related to dentist, dental team and the dental office. Finally, critical evaluation of administration of assets to measure the presence of DFA and DBP is provided. Every part of the text was corroborated by the results from our own and other authors' recent bibliography data. Keywords: dental fear and anxiety; dental behavior problems; children; parents; dentists

Indexed/abstracted in: Baidu Scholar, Celdes, CNKI Scholar (China National Knowledge Infrastructure), CNPIEC, EBSCO Discovery Service, Google Scholar, J-Gate, JournalTOCs, Naviga (Softweco), Primo Central (ExLibris), ReadCube, Summon (Serials Solutions/ProQuest), TDOne (TDNet), WorldCat (OCLC). Dostupno: <http://balkandentaljournal.com/factors-determine-child-behavior-dental-treatment/>

4. Marković N, **Arslanagić-Muratbegović A**, Kobašlija S, Bajrić E, , Selimović-Dragaš M, Huseinbegović A, Čuković-Bagić I. Dental aspects of child abuse and neglect – knowledge and attitudes of dentists in Bosnia and Herzegovina. *Stomatološki vjesnik* 2014; 3 (2):83-90.

**Abstract:**

Dentists can play an important role in detecting and reporting cases of CAN, particularly in cases of medical and dental neglect of their young patients. The objective of this study was to assess the current status of knowledge and attitudes of dentists in Bosnia and Herzegovina regarding CAN, particularly in recognition of signs and symptoms and reporting procedure of suspected cases. Methods: Data were collected through a self-administrated structured questionnaire offered to 300 dentists. The questionnaire consisted of twenty- seven questions adopted and modified from previous studies. Final sample consisted of a total number of 210 questionnaires that were filled correctly and returned. Questions were analyzed by means of descriptive statistics. Non parametric statistical tests were used to analyze differences among respondents in respect of age, gender, professional experience, specialty, and workplace.

Results: Only 7.6% of respondents indicated that they had formal training about CAN, 66% of dentists had never suspected CAN. In the section of social indicators respondents usually indicated correct answer (more then 60% ). If they suspect, only 9% of them would report CAN. Prevailing reasons for not reporting suspected case of CAN was lack of knowledge of the reporting procedure (43%), never had a case and lack of knowledge about the procedure (31%) and lack of adequate history (15%). Conclusion: The study demonstrated a lack of overall understanding of the problem and also a lack of awareness of dentists' responsibilities regarding this issue. Key words: child abuse, child neglect, dental neglect, dentist, Bosnia and Herzegovina.

Indexed in: ICI (Index Copernicus International), DOAJ (Directory of Open Access Journal), EBSCO, HINARI, INFOBASE, EZB (Electronische Zeitschriftenbibliothek), SJIF (Scientific Journal Impact Factor Value 2.502), GOOGLE SCHOLAR. Dostupno: <http://stomatoloskivjesnik.ba/bs/wp-content/uploads/2014/12/SV-3-2-2014.pdf>

5. Markovic N. **Muratbegovic A A.** Oral Health in Bosnia and Herzegovina Schoolchildren – Findings of First National Survey. *Austin J Dent.* 2014;1(2): 1010.

**Abstract**

Aim: The aim of this study was to investigate the oral health of schoolchildren in Bosnia and Herzegovina (BH) according to the WHO methods and propositions. Materials and Methods: Survey was conducted as observational, descriptive (cross-sectional) study. Study sample were children aged 6 and 12. A total of 1,120 children were examined. Observable oral health parameters were dental caries, periodontal condition and demarcated opacities. Results: In 12-year-olds the DMFT was  $4.16 \pm 2.92$ , and the decayed teeth constituted the major part of the index (45.43%). In 6-year-olds the DMFT was  $6.71 \pm 3.89$ , and the decayed teeth constituted the major part of the index (88.79%). 43% of 12-year-olds had healthy periodontal tissues. The prevalence of developmental defects of enamel among BH twelve-year-olds was 32.8%. Conclusion: Results of national survey for two monitoring children population groups revealed insufficient preventive and curative dental care in all examined sites in BH. Key words: Oral health; Schoolchildren; DMFT; dmft; Periodontal status; DDE

Indexed in: J-GATE, Academic Resource Index, Google scholar, Academic keys. Dostupno: <https://www.scribd.com/document/317431318/Bosnia-Herzegovina-pdf>

6. Marković N, **Arslanagić Muratbegović A**, Kobašlija S, Bajrić E, Selimović-Dragaš M, Huseinbegović A. Caries prevalence of children and adolescents in Bosnia and Herzegovina. *Acta Med Acad.* 2013 Nov;42(2):108-16.

Abstract:

**Objective.** The aim of this study was to present epidemiological parameters of caries prevalence in children and adolescents in index age groups on a national and regional level in Bosnia and Herzegovina (BH). **Materials and methods.** The study was conducted during 2004 year for children aged 6 and 12, and during 2007 for adolescents aged 15. An oral health survey was performed on a total number of 1,240 children and adolescents in line with World Health Organization methodology and criteria. Results for caries prevalence and treatment needs were presented and discussed in this paper. **Results.** Mean dmft (decay, missing, filled teeth for primary dentition) for children aged six was 6.7 (SD±3.9) in that the decayed teeth constituted the major part of the index (88.8%), followed by extracted teeth (8.9%) and a small percentage of filled teeth (2.3%). In 12-year-olds DMFT (Decay, Missing, Filled Teeth for permanent dentition) was 4.2 (SD±2.9), Significant Caries index (SiC) was 7.7 (SD±2.9), the decayed teeth constituted the major part of the index (45.4%), followed by 42.1% of FT and 12.5% of extracted teeth. Among 15-year-olds the DMFT was 7.6 (SD±4.1), SiC was 9.2 (SD±1.2), and filled teeth constituted the major part of the index. **Conclusion.** The present study provides some evidence of relatively high caries prevalence and severity in comparison with Western European countries. It is necessary to devote more attention to the oral health of children and adolescents. Community based oral health promotion, preventive programs and preventive oriented public dental health care services should be made available and accessible to all children in Bosnia and Herzegovina.

**Key words:** Oral health, Caries, Children, Epidemiology.

Indexed in: Medline/PubMed, EBSCOhost, Index Copernicus, CAB Abstract/Global Health Databases, IndexScholar, DOAJ, CrossRef Dostupno: <https://www.ncbi.nlm.nih.gov/labs/articles/24308391/>

7. Marković N, **Muratbegović A**, Kobašlija S, Bajrić A, Huseinbegović A, Selimović-Dragaš M. Caries Prevalence in Bosnia and Herzegovina Schoolchildren – Findings of First National Survey. *Stomatološki vjesnik* 2013; 2 (1):9-15

Abstract:

The World Health Organization (WHO) recommends conducting periodic national oral health surveys. Similar research was conducted in some parts of Bosnia and Herzegovina's territory.

**Objective.** The objective of this research was to investigate and present the oral health status of six-year and twelve-year old children in Bosnia and Herzegovina according to the WHO indicators.

**Methods.** The research was conducted using the model of observational, descriptive (cross-sectional) study. The examinations were carried out in the period from April to July 2004. The survey was performed in nine cities throughout Bosnia and Herzegovina, namely: Sarajevo, Banja Luka, Sanski Most, Tuzla, Visoko, Gorazde, Vitez, Siroki Brijeg and Mostar. A total of 1,120 six- and twelve year old children were examined. The dental examinations were carried out in schools according to the WHO criteria.

**Results.** In 12-year-olds the DMFT was 4.16 (S.D.± 2.92), out of which decayed teeth constituted the major part of the index (45.43%), followed by 42.07% of filled teeth and 12.50% of extracted teeth. In 6-year-olds the dmft was 6.71 (S.D.± 3.89), out of which decayed teeth

constituted the major part of the index (88.79%), followed by extracted teeth (8.89%) and a small percentage of filled teeth (2.32%).

Conclusions. The imperative is to develop and implement a disease prevention program, based on education of parents and care providers, as well as to improve access to dental care and shift focus from curative to preventive procedures.

Key words. Oral health, schoolchildren, DMFT, dmft.

Indexed in: ICI (Index Copernicus International), DOAJ (Directory of Open Access Journal), EBSCO, HINARI, INFOBASE, EZB (Elektronische Zeitschriftenbibliothek), SJIF (Scientific Journal Impact Factor Value 2.502), GOOGLE SCHOLAR Dostupno: [http://stomatoloskivjesnik.ba/bs/wp-content/uploads/2013/06/SV2013\\_2\\_1.pdf](http://stomatoloskivjesnik.ba/bs/wp-content/uploads/2013/06/SV2013_2_1.pdf)

## **Radovi u ostalim stručnim-naučnim časopisima objavljeni nakon izbora u zvanje docent**

1. Marković N, **Arslanagić Muratbegović A.** Study of periodontal Condition in Adolescents. Stomatoloski Informator (Dentistry Review). 2014; IX (35):5-10.

### **Abstract**

The aim was to investigate periodontal conditions of adolescents through clinical and radiological investigation and to compare results of clinical and radiological findings. The sample included a total of 120 15-years-old adolescents from Sarajevo pursuant to World Health Organization criteria. 18% of examinees were scored as healthy, needing no treatment. Gingival bleeding on probing was registered found in 38% and it was the most prevalent condition. When it comes to treatment, examinees were most frequently referred to oral hygiene for elimination of deposits and tooth polishing. Only 22 persons have all six healthy sextants. Twenty-six percent of investigated population has no radiological evidence of bone destruction, 55% has first signs of alveolar bone resorption, and 19% has the evidence of abnormal bone resorption related to periodontitis. Bearing in mind the fact that caries and periodontitis are the most frequent dental and oral illnesses, the results of the study point to an alarmingly bad condition of oral health in our fifteen-year-olds and to an urgent need for preventive action.

Key words: Adolescent; Periodontium; Periodontal Index; Epidemiology; Dental Plaque; Periodontitis; Dental Caries; Alveolar Bone Loss; Oral Health; Preventive Dentistry

### **Sažetak**

Cilj istraživanja bio je utvrditi parodontalni status adolescenata pomoću kliničko-radiološke analize i uporediti rezultate kliničkog i radiološkog ispitivanja. Istraživanje je vršeno na uzorku od 120 sarajevskih petnaestogodišnjaka. Kriterijumi za odabir uzorka sledili su preporuke Svetske zdravstvene organizacije za ovu vrstu istraživanja. Kod 18% ispitanika parodont je registrovan kao potpuno zdrav. Krvarenje gingive registrovano je kao najučestalije stanje (38%). Od potreba tretmana najčešće je registrovano upućivanje u oralnu higijenu s eliminacijom naslaga i poliranjem zuba. Samo 22 ispitanika imaju svih šest zdravih sekstanata. Rezultati radiološkog ispitivanja pokazuju da 26% ispitanika nema promene na alveolarnoj kosti, dok početne promene ima 55% ispitanika. Uzimajući u obzir činjenicu da su karijes i parodontitis najčešća dento-oralna oboljenja, rezultati istraživanja ukazuju na zabrinjavajuće loše stanje oralnog zdravlja petnaestogodišnjaka i urgentnu potrebu za preventivnim delovanjem.

Ključne reči: Adolescent; Periodoncijum; Periodontalni indeks; Epidemiologija; Zubni plak; Periodontitis; Zubni karijes; Resorpcija alveolarne kosti; Oralno zdravlje; Preventivna stomatologija.

UDK: 616.311.2-053.6 Dostupan na: [http://www.dlvsld.org/download/informator\\_35.pdf](http://www.dlvsld.org/download/informator_35.pdf)

2. **Arslanagic Muratbegovic A.** Markovic N. Brankovic Hasic L. Contemporary Concept of Local Effects of Fluorides in Dental Caries Prevention- review. Stomatoloski Informator (Dentistry Review). 2014; IX (34):26-32.

Abstract

The aim of this paper was to describe the role of fluorides in dental caries prevention and maintenance of optimal oral health. Fluorides have largely been used in preventive dentistry for over 50 years and they have contributed to the reduction in the number of dental caries in numerous developed countries worldwide. Fluoride reduces the incidence of dental caries and slows or reverses the progression of existing lesions. Extensive experimental and clinical research which certified fluoride as an effective and a safe preventive agent preceded its widespread use in dentistry and public oral health promotion activities. Key words: Fluorides; Fluorides, Topical; Fluoridation; Dental Caries; Oral Health; Preventive Dentistry; Toothpastes

Sažetak – Cilj ovog rada bio je da se predstavi savremeni koncept uloge lokalnog delovanja fluorida kao važnog sredstva u prevenciji zubnog karijesa i održavanju optimalnog oralnog zdravlja. Fluoridi se u velikoj meri upotrebljavaju u preventivnoj stomatologiji duže od pedeset godina i mnogo su doprineli smanjenju nastanka zubnog karijesa u brojnim razvijenim zemljama širom sveta. Masovnoj primeni fluorida prethodila su opsežna eksperimentalna, klinička i epidemiološka istraživanja koja su potvrdila njihovu efikasnost u prevenciji karijesa, kao i neškodljivost po zdravlje ljudi. Ključne reči: Fluoridi; Lokalni fluoridi; Fluorizacija; Karijes; Oralno zdravlje; Preventivna stomatologija; Zubne paste

UDK: 616.314-007-053.4/.5

Dostupan na: [http://www.dlvsld.org/download/informator\\_34.pdf](http://www.dlvsld.org/download/informator_34.pdf)

### **Radovi prezentirani na stručnim i naučnim skupovima nakon izbora u zvanje docent**

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5. Markovic N, **Arslanagic Muratbegovic A**, Bajric E, Selimovic Dragas M, Huseinbegovic A, Kobaslija S. Dentists knowledge and attitude in detecting and reporting child abuse and neglect. (Znanje i stav stomatologa o prepoznavanju i prijavljivanju zanemarivanja i zlostavljanja

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6. **Arslanagic Muratbegovic A**, Markovic N, Kobaslija S, Huseinbegovic A, Selimovic-Dragas M. Knowledge and attitudes about child abuse and neglects among dentists in Bosnia and Herzegovina (PP352). In: 19th Congress of the the Balkan Stomatological Society Book of Abstracts;Belgrade,Serbia, 24-27 apr. 2014: 259-260.

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## **Knjige- Univerzitetski udžbenici**

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Mediha Selimović-Dragaš, Amra Arslanagić Muratbegović, Jelena Juloski. Anomalije rasta i razvitka (pp.23-61)ISBN 978-953-191-799-5

CIP: 000916926 ; Nacionalna i sveučilišna knjižnica u Zagrebu

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Kobašlija S. i saradnici. Minimalna ivazivna terapija. Dobra knjiga d.o.o., Sarajevo; 2012.

ISBN 978-9958-27-048-2

CIP: 616.31-085(075.8) Katalogizacija u publikaciji Nacionalna i univerzitetska biblioteka Bosne i Hercegovine

Vulićević RZ i saradnici: Klinička primejna materijala u stomatologiji. Beobook, Beograd; Srbija, 2010.

ISBN 978-86-87027-25-1

CIP: 615.461.314(082) Katalogizacija u publikaciji Narodna biblioteka Srbije

## **Naučno- istraživački projekti**

### **Nakon izbora u zvanje docent:**

Kobašlija S. Muratbegović A, Marković N, Selimović Dragaš M, Huseinbegović A, Bajrić E, Komšić S. " Uloga stomatologa u prepoznavanju zlostavljane i zanemarene djece" - Ministarstvo obrazovanja i nauke F BiH i Stomatološki fakultet, Sarajevo. 2013-2015.

### **Do izbora u zvanje docent:**

Ganibegović Selimović M, Muratbegović A, Nikšić D: "Promocija dentalnog zdravlja predškolske djece". Andaluzijska škola javnog zdravstva- EASP evropske komisije i Udruženje ljekara i stručnih saradnika socijalne medicine- javnog zdravstva FBiH. 2002 godina  
Kobašlija S. Muratbegović A, Marković N: "Oralno zdravlje djece F BiH, kliničko-epidemiološka studija". Ministarstvo obrazovanja i nauke Kantona Sarajevo i Stomatološki fakultet, Sarajevo. 2004- 2005.

### **Mentorstvo na magistarskom radu**

Kandidat: Alma Muminović-Zulum

Naslov Magistarskog rada: Uticaj opšteg zdravlja na oralno zdravlje kod djece predškolskog uzrasta. Rad odbranjen: 14.09.2015. godine na Stomatološkom fakultetu Univerziteta u Sarajevu

### **Mentorstvo na završnim-diplomskim radovima realiziranim na Stomatološkom fakultetu univerziteta u Sarajevu**

1. Imširović Amina. Pljuvačka kao dijagnostički medij, septembar 2017

2. Begović Badema. Savremeni koncept djelovanja fluorida za zaštitu oralnog zdravlja, septembar 2017.

### **SAŽETAK BIBLIOGRAFSKIH PODATAKA**

(nakon izbora u zvanje docent)

**Broj objavljenih knjiga : 1**

**Broj naučnih radova objavljenih u priznatim publikacijama : 7**

**Broj radova objavljenih u ostalim naučno-stručnim publikacijama: 2**

**Broj učešća u naučnoistraživačkim projektima :1**

**Broj mentorstava magistarskih radova: 1**

**Broj kongresnih radova objavljenih u zbornicima: 9**

**Broj mentorstava završnih radova: 2**

**Minimalni uslovi koji su potrebni da se ispune kako bi član akademskog osoblja bio izabran u naučnonastavno zvanje vanredni profesor su proveden najmanje jedan izborni period u zvanju docenta, najmanje pet naučnih radova objavljenih u priznatim publikacijama, objavljena knjiga i originalni stručni uspjeh kao što je projekt, patent ili originalni metod, sve nakon izbora u zvanje docenta te mentorstvo najmanje jednog kandidata za stepen drugog ciklusa studija.**

**Na osnovu priložene dokumentacije Komisija konstatuje da kandidat doc. dr. sci. Amra Arslanagić Muratbegović ispunjava pomenute uslove za izbor u zvanje vanrednog profesora.**

## **PRIJEDLOG KOMISIJE**

Na osnovu uvida i analize dostavljene konkursne dokumentacije kandidata doc. dr. sci. Nine Marković i doc. dr. sci. Amre Arslanagić Muratbegovići po objavljenom Konkursu za izbor u jedno od naučno-nastavnih zvanja: docent, vanredni ili redovni profesor za nastavno-naučnu oblast Preventivna stomatologija i pedodoncija, Komisija za pripremanje prijedloga za izbor dva nastavnika u sva zvanja za nastavno-naučnu oblast Preventivna stomatologija i pedodoncija konstatuje da navedeni kandidati ispunjavaju uslove Konkursa i predlaže Nastavno-naučnom vijeću Stomatološkog fakulteta sa klinikama u Sarajevu da doc. dr. Ninu Marković izabere u zvanje vanredni profesor za nastavno-naučnu oblast preventivna stomatologija i pedodoncija, doc. dr. sci. Amru Arslanagić Muratbegović izabere u zvanje vanredni profesor za nastavno-naučnu oblast preventivna stomatologija i pedodoncija, te da se ovaj predmet proslijedi Senatu Univerziteta u Sarajevu na daljnji postupak.

Sarajevo, 13. 11. 2017. godine

KOMISIJA:

Prof. dr. sci. Mediha Selimović-Dragaš, predsjednik

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Prof. dr. sci. Sedin Kobašlija, član

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Prof. dr. sci. Amila Zukanović, član

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