# GEORGIAN MEDICAL MEWS

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# ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии საქართველოს სამედიცინო სიახლენი

### **GEORGIAN MEDICAL NEWS**

Monthly Georgia-US joint scientific journal published both in electronic and paper formats of the Agency of Medical Information of the Georgian Association of Business Press. Published since 1994. Distributed in NIS, EU and USA.

**GMN:** Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board since 1994. GMN carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.

GMN is indexed in MEDLINE, SCOPUS, PubMed and VINITI Russian Academy of Sciences. The full text content is available through EBSCO databases.

GMN: Медицинские новости Грузии - ежемесячный рецензируемый научный журнал, издаётся Редакционной коллегией с 1994 года на русском и английском языках в целях поддержки медицинской науки и улучшения здравоохранения. В журнале публикуются оригинальные научные статьи в области медицины, биологии и фармации, статьи обзорного характера, научные сообщения, новости медицины и здравоохранения. Журнал индексируется в MEDLINE, отражён в базе данных SCOPUS, PubMed и ВИНИТИ РАН. Полнотекстовые статьи журнала доступны через БД EBSCO.

GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.

ჟურნალი ინდექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНИТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებიდან.

## WEBSITE

www.geomednews.com

### К СВЕДЕНИЮ АВТОРОВ!

При направлении статьи в редакцию необходимо соблюдать следующие правила:

- 1. Статья должна быть представлена в двух экземплярах, на русском или английском языках, напечатанная через полтора интервала на одной стороне стандартного листа с шириной левого поля в три сантиметра. Используемый компьютерный шрифт для текста на русском и английском языках Times New Roman (Кириллица), для текста на грузинском языке следует использовать AcadNusx. Размер шрифта 12. К рукописи, напечатанной на компьютере, должен быть приложен CD со статьей.
- 2. Размер статьи должен быть не менее десяти и не более двадцати страниц машинописи, включая указатель литературы и резюме на английском, русском и грузинском языках.
- 3. В статье должны быть освещены актуальность данного материала, методы и результаты исследования и их обсуждение.

При представлении в печать научных экспериментальных работ авторы должны указывать вид и количество экспериментальных животных, применявшиеся методы обезболивания и усыпления (в ходе острых опытов).

- 4. К статье должны быть приложены краткое (на полстраницы) резюме на английском, русском и грузинском языках (включающее следующие разделы: цель исследования, материал и методы, результаты и заключение) и список ключевых слов (key words).
- 5. Таблицы необходимо представлять в печатной форме. Фотокопии не принимаются. Все цифровые, итоговые и процентные данные в таблицах должны соответствовать таковым в тексте статьи. Таблицы и графики должны быть озаглавлены.
- 6. Фотографии должны быть контрастными, фотокопии с рентгенограмм в позитивном изображении. Рисунки, чертежи и диаграммы следует озаглавить, пронумеровать и вставить в соответствующее место текста в tiff формате.

В подписях к микрофотографиям следует указывать степень увеличения через окуляр или объектив и метод окраски или импрегнации срезов.

- 7. Фамилии отечественных авторов приводятся в оригинальной транскрипции.
- 8. При оформлении и направлении статей в журнал МНГ просим авторов соблюдать правила, изложенные в «Единых требованиях к рукописям, представляемым в биомедицинские журналы», принятых Международным комитетом редакторов медицинских журналов http://www.spinesurgery.ru/files/publish.pdf и http://www.nlm.nih.gov/bsd/uniform\_requirements.html В конце каждой оригинальной статьи приводится библиографический список. В список литературы включаются все материалы, на которые имеются ссылки в тексте. Список составляется в алфавитном порядке и нумеруется. Литературный источник приводится на языке оригинала. В списке литературы сначала приводятся работы, написанные знаками грузинского алфавита, затем кириллицей и латиницей. Ссылки на цитируемые работы в тексте статьи даются в квадратных скобках в виде номера, соответствующего номеру данной работы в списке литературы. Большинство цитированных источников должны быть за последние 5-7 лет.
- 9. Для получения права на публикацию статья должна иметь от руководителя работы или учреждения визу и сопроводительное отношение, написанные или напечатанные на бланке и заверенные подписью и печатью.
- 10. В конце статьи должны быть подписи всех авторов, полностью приведены их фамилии, имена и отчества, указаны служебный и домашний номера телефонов и адреса или иные координаты. Количество авторов (соавторов) не должно превышать пяти человек.
- 11. Редакция оставляет за собой право сокращать и исправлять статьи. Корректура авторам не высылается, вся работа и сверка проводится по авторскому оригиналу.
- 12. Недопустимо направление в редакцию работ, представленных к печати в иных издательствах или опубликованных в других изданиях.

При нарушении указанных правил статьи не рассматриваются.

### REQUIREMENTS

Please note, materials submitted to the Editorial Office Staff are supposed to meet the following requirements:

- 1. Articles must be provided with a double copy, in English or Russian languages and typed or computer-printed on a single side of standard typing paper, with the left margin of 3 centimeters width, and 1.5 spacing between the lines, typeface Times New Roman (Cyrillic), print size 12 (referring to Georgian and Russian materials). With computer-printed texts please enclose a CD carrying the same file titled with Latin symbols.
- 2. Size of the article, including index and resume in English, Russian and Georgian languages must be at least 10 pages and not exceed the limit of 20 pages of typed or computer-printed text.
- 3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

- 4. Articles must have a short (half page) abstract in English, Russian and Georgian (including the following sections: aim of study, material and methods, results and conclusions) and a list of key words.
- 5. Tables must be presented in an original typed or computer-printed form, instead of a photocopied version. Numbers, totals, percentile data on the tables must coincide with those in the texts of the articles. Tables and graphs must be headed.
- 6. Photographs are required to be contrasted and must be submitted with doubles. Please number each photograph with a pencil on its back, indicate author's name, title of the article (short version), and mark out its top and bottom parts. Drawings must be accurate, drafts and diagrams drawn in Indian ink (or black ink). Photocopies of the X-ray photographs must be presented in a positive image in **tiff format**.

Accurately numbered subtitles for each illustration must be listed on a separate sheet of paper. In the subtitles for the microphotographs please indicate the ocular and objective lens magnification power, method of coloring or impregnation of the microscopic sections (preparations).

- 7. Please indicate last names, first and middle initials of the native authors, present names and initials of the foreign authors in the transcription of the original language, enclose in parenthesis corresponding number under which the author is listed in the reference materials.
- 8. Please follow guidance offered to authors by The International Committee of Medical Journal Editors guidance in its Uniform Requirements for Manuscripts Submitted to Biomedical Journals publication available online at: http://www.nlm.nih.gov/bsd/uniform\_requirements.html http://www.icmje.org/urm\_full.pdf
- In GMN style for each work cited in the text, a bibliographic reference is given, and this is located at the end of the article under the title "References". All references cited in the text must be listed. The list of references should be arranged alphabetically and then numbered. References are numbered in the text [numbers in square brackets] and in the reference list and numbers are repeated throughout the text as needed. The bibliographic description is given in the language of publication (citations in Georgian script are followed by Cyrillic and Latin).
- 9. To obtain the rights of publication articles must be accompanied by a visa from the project instructor or the establishment, where the work has been performed, and a reference letter, both written or typed on a special signed form, certified by a stamp or a seal.
- 10. Articles must be signed by all of the authors at the end, and they must be provided with a list of full names, office and home phone numbers and addresses or other non-office locations where the authors could be reached. The number of the authors (co-authors) must not exceed the limit of 5 people.
- 11. Editorial Staff reserves the rights to cut down in size and correct the articles. Proof-sheets are not sent out to the authors. The entire editorial and collation work is performed according to the author's original text.
- 12. Sending in the works that have already been assigned to the press by other Editorial Staffs or have been printed by other publishers is not permissible.

Articles that Fail to Meet the Aforementioned Requirements are not Assigned to be Reviewed.

### ᲐᲕᲢᲝᲠᲗᲐ ᲡᲐᲧᲣᲠᲐᲓᲦᲔᲑᲝᲓ!

რედაქციაში სტატიის წარმოდგენისას საჭიროა დავიცვათ შემდეგი წესები:

- 1. სტატია უნდა წარმოადგინოთ 2 ცალად, რუსულ ან ინგლისურ ენებზე,დაბეჭდილი სტანდარტული ფურცლის 1 გვერდზე, 3 სმ სიგანის მარცხენა ველისა და სტრიქონებს შორის 1,5 ინტერვალის დაცვით. გამოყენებული კომპიუტერული შრიფტი რუსულ და ინგლისურენოვან ტექსტებში Times New Roman (Кириллица), ხოლო ქართულენოვან ტექსტში საჭიროა გამოვიყენოთ AcadNusx. შრიფტის ზომა 12. სტატიას თან უნდა ახლდეს CD სტატიით.
- 2. სტატიის მოცულობა არ უნდა შეადგენდეს 10 გვერდზე ნაკლებს და 20 გვერდზე მეტს ლიტერატურის სიის და რეზიუმეების (ინგლისურ,რუსულ და ქართულ ენებზე) ჩათვლით.
- 3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).
- 4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).
- 5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.
- 6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრამების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით tiff ფორმატში. მიკროფოტო-სურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შეღებვის ან იმპრეგნაციის მეთოდი და აღნიშნოთ სუ-რათის ზედა და ქვედა ნაწილები.
- 7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა უცხოური ტრანსკრიპციით.
- 8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფჩხილებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.
- 9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.
- 10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.
- 11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.
- 12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

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### ORAL HEALTH OF CHILDREN IN MY COUNTRY

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### Abstract.

**Introduction:** Dental caries is the most prevalent chronic disease worldwide. It is a disease characterized by multifactorial etiology and slow evolution leading to the destruction of hard tooth tissue.

**Purpose:** Throughout this article we aim to review some important aspects related to dental caries and the main etiological factors in order to gain knowledge for oral health professionals in the treatment and prevention of caries. At the same time, the purpose of this study is to assess the state of oral health of children in Kosovo.

Material and Methods: To conduct this study, we researched electronic databases, such as PubMed, Cochrane Library, ResearchGate, Science Direct, in selected scientific research and textbooks. Selection criteria included articles published from 1990 to 2021 describing the definition, etiology, and other characteristics associated with dental caries.

**Discussion:** Tooth decay is a disease that develops through the gradual complex biological interactions of acidogenic bacteria, fermentable carbohydrates, tooth and saliva factors, as well as the time factor. Implementation of preventive measures, the need to invest in education for appropriate oral health maintenance measures, related to preventive and ongoing medical and dental care, are key to raising public awareness of its existence and contributing to reducing the prevalence of caries.

**Conclusion:** Dental caries is a disease that can greatly affect the health and quality of life of patients, so it is extremely important to increase knowledge about treatment, focusing especially on preventive measures. However, educating and promoting oral health is essential.

**Key words.** Oral health, dental caries, etiological factors, prevention.

### Abbreviations.

WHO: World Health Organization; DMFT INDEX: Index for Evaluation of Teeth With Caries; Extraction and Filling for Milk Teeth; Extraction and Filling for Permanent Teeth; AAD: American Academy of Dentistry; ECC: Early Childhood Caries; OHI-S Index: Simplified Oral Hygiene Index.

### Introduction.

Dental caries is a multi-factorial disease that affects a large part of the population initially by age, gender or ethnicity, although it tends to affect to a greater extent those with low socioeconomic status [1]. Caries is one of the most common diseases in children [2]. The increase in caries rate also depends on the following situations: saliva, dental plaque microorganisms, oral flora, food and the histomorphological characteristics of enamel attacks [3].

However, the decrease in caries prevalence rates has been attributed to preventive programs with fluoride changes, promotion of oral health, regular maintenance of oral hygiene and reduction of sugars.

The increase in the rate of caries in many underdeveloped and developing countries is a result of poor health, access to fluoride preparations and oral health care. The sum of the reduction standards of caries prevalence is attributed to preventive programs, which have given more importance compared to restorative measures [4,5].

The World Health Organization (WHO) 2000 goals for the year 2000 have a 50% global reduction for children up to 6 years of age and an average DMFT index of no more than 3.0 for 12-year-olds [6-8].

In addition, it is the good manner of the mouth and good oral hygiene that do the most to do the job of oral disease. Maintaining good oral hygiene means brushing your teeth regularly with fluoride toothpaste twice a day. Society of children all over the world brush their teeth as a daily routine once a day [9-14]. On the other hand, socio-economic factors have a great impact on oral hygiene practices among preschool and primary school children [15,16].

Kosovo is the youngest European country in Southeast Europe with a total area of 10,908 km<sup>2</sup> and about 1,804,944 inhabitants [17]. Actually, Kosovo has an underdeveloped economy with poor related oral to health education and a healthy system. In fact, no training program for the promotion of oral health or concrete activities in preventive stomatology has been organized until today [5].

### Materials and Methods.

This paper is based on a review of the literature related to caries and its prevalence in Kosovo. To carry out this study, we have researched electronic databases, such as PubMed, Cochrane Library, ResearchGate, Science Direct, Scopus, Web of Science, scientific research and selected textbooks. Selection criteria included articles published from 1990 to 2021 that described the definition, etiology, and other characteristics related to dental caries. The data are based on a strong scientific basis, which help us to find the causes that affect the appearance of caries in our country, the high rate of spread among children and which measures are important in its prevention. In general, 50% of children have one or more baby teeth with caries, but the importance of these teeth should not be neglected, because healthy teeth in childhood play an important role in the emergence of healthy permanent teeth, in nutrition and aesthetic appearance [18,19]. Factors such as malnutrition, genetic predisposition, specific eating habits, the presence of bacteria that affect tooth decay such as streptococci, lack of fluoride and

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Autor	Average dmf	Average DMFT			Sweets	Teeth cleaning	Dental visits	sealings
Begzati A with collaborators (2010)	5.8		17.36%	1.52	93%	52%		
Begzati A with collaborators (2011)	5.9	5.8	17.6%				Very rare	
Ferizi L with collaboratrs (2015)		contry DMFT = village 2.6, DMFT=2.4		1.4				
Ferizi L with collaboratrs (2017)	4.36	1.20			40%	50%		1.58%
Ferizi L (2020)		3.67		1.75		54.1%		



Figure 1. Baby teeth (primary dentition). https://www.sciencedirect.com/topics/medicine-and-dentistry/primary-dentition

vitamin D, excessive sugar consumption and prolonged bottle feeding, and factors of others such as age, gender and socioeconomic conditions of children are considered as many factors that influence the initiation and progression of caries in children [20]. Baby or primary teeth erupt from about 6 months to 3 years of age, including 10 teeth in the upper jaw and 10 in the lower jaw [21]. Since baby teeth are the basis of permanent teeth, on the one hand, they also have a high susceptibility to caries. However, on the other hand, these teeth are very important, so taking care of this dentition so that it is not affected by caries is very important [19,22-29].

In our country, a considerable number of researches have been done regarding caries in children. Researches have included the prevalence of caries in milk and permanent dentition, the consumption of foods that affect the appearance of caries, the dental plaque index, the frequency of teeth cleaning, dental visits, etc.

A research was done by Begzati A with collaborators (2010), regarding early caries in children, in 1008 preschool children in Pristina, where the dmft index for milk teeth and the level of colonies of streptococcus mutans, as the main bacteria associated, was analyzed with caries. The obtained results showed that the average dmft index in preschool children was 5.8. The prevalence of early caries reached 17.36%, while the prevalence of streptococcus mutans was 98% [30].

During his research, the author also found that the frequency of daily consumption of sweets was on average 93% and taking sweets between meals was quite frequent. So, a correlation was observed between the intake of sweets and the dmft index.

Regarding the frequency of teeth cleaning, about 52% of the children did not clean their teeth, therefore the dental plaque index was 1.52. The characteristic of this research was that none of the examined children had used fluorides, which have a role important in the prevention of caries [30].

In the other research also done by Begzati A with collaborators (2011), the values of the dmft index (for the milk dentition) and the DMFT index (for the permanent dentition) were analyzed in children aged 2-6 years, 12 years, 7 - 14 years old. In the research that lasted from 2002-2005, 1,237 preschool children and 2,556 school children were included. From the results obtained in the research, it emerged that the average dmft index for preschool children was 5.9 (dmft=5.9), while the average DMFT index for school children aged 12 was 5.8 (DMFT=5.8). On the other hand, caries prevalence in children aged 2-6 was 91.2%, while in children aged 7-14 this value reached 94.4%. The prevalence of early caries in children turns out to be about 17.6%, with an average of 10.6 [31].

In another study regarding the correlation between the DMFT index and the OHI-S index in children aged 10-15 treated at the University Clinical Center of Kosovo - KKSUK, 695 children from urban and rural settlements were examined. The study lasted 2 years (2013/14), and during the research, the DMFT index for permanent teeth and the OHI-S index according to Green-Vermilion were analyzed in the examined children. In the obtained results, it was seen that the DMFT index for children in urban areas was 2.6, while in rural areas DMFT=2.4. while the average value of the OHI-S index was 1.4. according to the obtained results, a strong correlation can be seen between the DMFT index and the OHI-S index in children aged 10-15 years, which also indicates a high prevalence of caries.

## Results and Discussion.

Caries is one of the oral diseases of pandemic proportions, which depends on many circumstances. Oral health is a part of overall health and is most important for children and their other lives [32-36]. According to the 2003 World Oral Health Report, caries is still a serious problem of the healthy public worldwide. In most developed countries, caries affects 60-90% of schoolchildren and most adults. Mainly, caries is a big problem in both developed and developing countries [37].

Oral health is also in the "Strategy against chronic diseases in Europe" project. These political goals that were proposed and adopted were the main goals of education - brushing the teeth twice a day with fluoride toothpaste, cleaning the interdental spaces, balanced healthy food, regular dental visits fluoridation of the teeth and sealing, especially of the first permanent molars [37].

The goals of the World Health Organization (WHO) in the year 2000 have been a reduction of caries 50% for children aged 6 years and globally a mean DMFT index of no more than 3.0 for children aged 12 years [38].

Caries prevalence vary from country to country and from region to region. Geographical variables such as race, climate, diet, culture and climatic influences have a great influence on caries prevalence [39,40]. The results from our literature review show that the prevalence of caries is quite high in Kosovar children. But, compared to Albania, our results regarding them are higher [41]. Also, the average values of the DMFT index in the country are higher than the established European countries: Finland (1.2), Denmark (1.3), USA (1.4), England (1.4), Sweden (1.5), Slovenia (1.8), Norway (2.1) and Ireland (2.1) [42,43].

DMFT of Kosovar children aged 12 years is similar to the values found earlier in Germany (2.6), Croatia (2.6) and North Macedonia (3.0), but lower than in Latvia (7.7), Poland (5.1) and Bosnia (7.18) [13]. Saudi Arabia, on the other hand, has reported the higher DMFT index values than in Kosovo (5.9) in 2002 [34].

During the review of our literature, we found that preventive measures - tooth sealing are little applied in our population. This happens also because of little knowledge about preventive measures in oral health. A low prevalence of seals was also found in children aged 12-15 years in Greece (26% in 12-year-olds and 19% in 15-year-olds), but that is higher than in our country. While high prevalence of sealing has been found in Germany and Denmark.

Our literature review also shows low levels of frequent daily tooth brushing in the country, high levels of candy consumption and irregular dental visits.

### Conclusion.

Dental caries in children in Kosovo remains an important oral health challenge. Consequently, motivating and educating children is essential for encouraging and fostering early behaviors for a healthy life. Parents and schoolteachers should be made aware of dentistry, through programs, brochures, lectures and trainings related to oral health education, and especially by demonstrating the proper method and duration of brushing teeth. Such work should be performed by professional dentists who deal with children-pedodontists. In addition, early regular dental visits and preventive measures such as sealants and fluoridation among children would decrease dmft/DMFT index values for caries.

Since oral health is an integral part of general health, policy makers should include oral health in public health policies, so that within the framework of preventive and promotional programs for oral health, all children are included without distinction.

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