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**ПРОФИЛАКТИКА КАРИЕСА МЕТОДОМ ФТОРИРОВАНИЯ**

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**Резюме.** Данная работа посвящена вопросам фторирования зубов, являющимся одним из методов профилактики кариеса.

**Ключевые слова:** фторирование, кариес, профилактика, статистика.

**Resume.** This work is devoted to questions of tooth fluoridation which is one of the methods of caries prophylaxis.

**Keywords:** fluoridation, caries, prophylaxis, statistics.

**Topicality.** Dental caries is a common disease that is accompanied by pain and leads to a tooth loss if it is untreated, which entails to negative social and economic consequences. The organization of an effective system of the disease primary prevention is one of the most topical problems of medical science and practice. Fluoridation is quite effective method of prophylaxis.

**Objective:** to form the notion of fluoridation importance for caries prophylaxis.

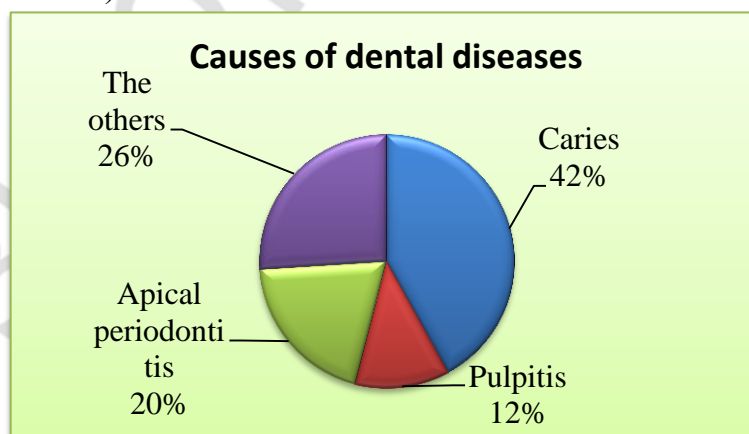
**Tasks:**

1. To study the basic means of caries prevention and the impact of fluoridation on teeth.

2. To identify the prevalence of caries in Pinsk.

**Material and methods.** The Summary list of Pinsk dental clinic and dissertations on dentistry were analyzed.

**Results and discussion.** Dental caries is a major oral health problem in most industrialized countries. It is defined as progressive, irreversible microbial disease of multifactorial nature affecting the calcified tissue of the tooth characterized by demineralization of the inorganic portion and destruction of the organic portion the tooth. Treatment involves removing affected tooth structure and restoring it with various materials. Untreated caries can have serious complications such as pulpitis and periodontitis. Thus, according to the Summary list of Pinsk dental clinic in 2014, in 42% of cases patients caries was diagnosed. In 12% – pulpitis. And in 20% – apical periodontitis. That can prove the relevance of caries prevention and warning of developing complications (picture №1).



Picture 1 – Causes of dental diseases

The most effective means of preventing caries are: fluoridation of drinking water and food, a rational diet, fissure sealing, deep fluoridation of dental hard tissues, various means and methods of oral hygiene. The amount of tooth-damaging acid can be reduced by a diet low in sugar or starchy products.

After studying scientific works by R. R. Tursunova, V. I. Laptev, A. A. Nekrasova, I. V. Moskalyova [1,2,3,4] we have come to the conclusion that fluoridation is one of the most important means of caries prevention. Fluoride works mainly by slowing down the process of demineralization and provides remineralization. Deep fluoridation normalizes electroexcitability of the decayed tooth pulp.

We can use fluoride toothpaste, water, gels, varnishes, fluoride tablets, lozenges and drops, fluoride vitamin preparation, fluoridated milk and juices, fluoride containing devices. Fluoride gel can be applied by using a tray that looks like a mouth guard for one to four minutes. Fluoride varnish can be painted directly on parts of the teeth that are most

likely to get a cavity, to strengthen them. Fluoride strengthens teeth by helping to speed remineralization. It also strengthens teeth from within. Swallowed fluoride enters the bloodstream and becomes part of permanent teeth as they develop. Fluoride also helps to stop bacteria from making acids which dissolve minerals in the hard enamel, also it can seep through pores in the enamel up to destruction the dentin layer, so forming a cavity [5].

Most recently, the efforts of Community Dent Oral Epidemiology have been made to summarize these extensive datasets through systematic reviews. That concluded that water fluoridation reduces the prevalence of dental caries by 15%.

Fluoride treatment helps to prevent decay in both children and adults. Anyone who is at risk of dental decay is a good candidate for fluoride treatment.

**Conclusion:**

1. A little fluoride every day strengthens teeth.
2. Fluoride has benefits for both children and adults: it makes teeth more resistant to decay, interferes with the growth of the bacteria, which cause cavities, and helps repair the early stages of tooth decay.
3. Fluoride may have benefits in reducing the incidence of secondary or recurrent caries activities.

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**PROPHYLAXIS OF CARIES BY FLUORIDATION**

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