

**ESTIMATION OF DENTAL CARIES PREVALENCE AND INTENSITY**

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Abstract. Quantitative characteristics of teeth and periodontal lesion determined by a variety of indices have a leading role in estimating a level of oral health. One of the main indices is caries intensity. CFE teeth index is an amount of carious teeth ("C"), filled teeth ("F") and the teeth extracted as a result of caries complications ("E") which one examined patient has. Despite some progress in prevention and treatment of dental caries indicators of its prevalence and intensity remain very high. Statistics show that dental diseases incidence reaches 90–100 %. This is a serious problem that it is impossible not to pay attention. We know that a beautiful smile and healthy teeth play an important role in modern life. Driven by the desire to live better, we need dentists who can carry out the treatment with a quality aesthetic result.

Keywords: carious process; index of caries intensity; dental care.

Dental caries is the key problem of dentistry. It is a very interesting theoretical problem and also extremely important in practical terms [3]. Many etiological factors are involved in caries formation, so caries can be considered to be a polyetiological disease. The main etiological factors are oral microflora, dietary habits, fluorine content in water, quantity and quality of salivation, overall health, and extreme conditions which affect the body [2].

With the help of CFE teeth index of dental caries lesion intensity (CFE) we can talk about a level of administering dental care aid to the population: the more "C" and "E" components we have the lower the level of dental care, but the more "F" components we have compared with "C" and "E", the better dental care is. In the dental aspect CFE index reflects a health level of an individual or the population, as well as the level of administering dental care aid [1].

Objective of this work. To determine a level of prevalence and intensity of dental diseases among the third year students of

medical institute, "Dentistry" specialty, in N. P. Ogarev National Research State University, Republic of Mordovia.

Tasks. Show a level of hygiene and a structure of dental disease rate in the examined group; as well as to attract students' attention to the need for prevention and timely treatment of dental diseases.

Materials and methods. This study was conducted in a standard age group: 20–21 years old. In November 2014, a prophylactic examination of the oral cavity was performed among the third year students of medical institute, "Dentistry" specialty, in N. P. Ogarev National Research State University, Republic of Mordovia. Dental mirrors, probes, forceps and basins were used. 50 students of medical institute (20 boys, 30 girls) living in the Republic of Mordovia (RM) (50 %) and outside the republic (50 %) were examined.

Results and discussion. Dental caries intensity (CFE) of the examined patients was $9,9 \pm 0,03$. If constant "C" = $1,2 \pm 0,004$, "F" = $7,9 \pm 0,001$, "E" = $0,5 \pm 0,001$. All the patients belong to the group with a decompens-



sated dental status, which clearly demonstrates the need for optimization and intensification of oral hygiene and expanding preventive hygienic means which are recommended to this group of patients.

The mean value of CFE index of the third year students' teeth was considered as a standard in a given period and it was considered to be 100 %. CFE index deviation was calculated in the direction of its decrease or increase. This made it possible to assess the quality of dental care in the Republic of Mordovia and other nearby areas (Penza region, Ulyanovsk region, Nizhny Novgorod region, Samara region).

The examination revealed the following data: the students of the Republic of Mordovia had the index of "C" = 52, "F" = 67, "E" = 14; students from outside the republic - "C" = 51, "F" = 55, "E" = 23. Therefore, the data obtained can be seen as evidence showing that caries is equally spread in the Republic of Mordovia and in other regions. Caries prevalence is nearly 100 %. That is to say that almost every resident of the studied regions of the Russian Federation (RF) suffers from this disease. Filling teeth procedure starts after caries lesion in early or middle stages. According to our results, we can see that the treatment of dental caries is 10 % more frequent in the Republic of Mordovia than in other regions. This indicates that administering dental care in the Republic of Mordovia is more effective.

Tooth extraction is an extreme measure in modern dentistry, but the main reason for the removal is that the tooth begins to cause damage to health (chronic periodontitis in the acute stage, a longitudinal fracture along a root, root canal occlusion, and motility of grade IV). According to our data a number of nonresident students who have tooth extractions prevails – it can be evidence of untimely visits to the dentist, untreated caries and other dental diseases. It should be noted that a number of extracted teeth which students

from Mordovia have is twice lower than in other regions.

Also CFE index of girls and boys who live in the Republic of Mordovia and other regions of Russia was compared. The results were the following: the girls from the Republic of Mordovia are likely to visit a dentist very often, more filled teeth and fewer extracted ones tell us about that. As for the young men from Mordovia, their CFE index is several times smaller than that of nonresidents.

Conclusion. Dental caries is a process, not an end point, which can be controlled with the help of advanced diagnostic methods of caries detection and before cavities are formed carious process can be stopped and converted back.

Modern therapeutic dentistry can work wonders and justify everyone's expectations. Nevertheless, we should not forget that regular checkups help prevent caries and its further spread.

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