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**RESEARCH ARTICLE** 

## Prevention of Oral Health in Persons with Tobacco Smoking of Steam Cocktails

Elena Emelina\*, Valentina Platonova, Sergei Mironov, Anton Timoshin, Aliasker Natig ogly Akhmedov, Ivan Kuznetsov

I.M. Sechenov First Moscow State Medical University (Sechenov University), Moscow, Russian Federation.

\*Corresponding Author: Elena Emelina

### Abstract

Recently, tobacco smoking has an epidemiological character. The largest number of smokers, according to many studies, was found between the ages of 30 and 35. Studies conducted by the World Health Organization (WHO) indicated that if a young man smoked at least two cigarettes, 70 out of 100 would continue to smoke for life. Due to the increasing prevalence of tobacco smoking, WHO began to consider smoking not only as a bad habit, but also included tobacco dependence in the International Statistical Classification of Diseases and Health Problems (10th revision); Class V: Mental and behavioural disorders; group: Mental and substance use behavioural disorders; heading: Mental and behavioural disorders caused by tobacco use (code F 17).

**Keywords:** Oral hygiene, Tobacco smoking, Hookah smoking, Health, Safety, Smoker.

### Introduction

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Due to the increasing prevalence of tobacco smoking, WHO began to consider smoking not only as a bad habit, but also included tobacco dependence in the International Statistical Classification of Diseases and Health Problems (10th revision); Class V: Mental and behavioural disorders; group: Mental and substance use behavioural disorders; heading: Mental and behavioural disorders caused by tobacco use (code F 17).

In Russia, the total mortality from tobacco smoking is 36.4% of the total mortality of men and 7.5% of the total mortality of women. According to many studies conducted by various scientists, passive smoking has been found to lead to the development of diseases associated with tobacco dependence in people who do not have this habit.

Thus, the fight against smoking should be considered a particularly important medical problem. In order to prevent the harmful effects of smoking steam cocktails during tobacco smoking on the human body, as well as to reduce the risk of motivation to smoke, it is necessary to intensify awareness-raising about their harm to health, both among adults and among children, using all sources, including the media and the Internet.

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All of the above suggests the need to create a system of anti-smoking education, especially among students. This can be a fairly effective measure to improve the health of the population. In tobacco-dependent individuals, changes in the mucosa of the oral cavity and small salivary glands are detected. These are the earliest manifestations that can be found in persons who use steam cocktails.

The resulting pathological processes in the oral cavity are of both theoretical and practical interest. An increase in the rate of death of surface epithelium cells, as well as the presence of cornea and an increase in the manifestations of fibrosis in the sub mucous layer occur due to the fact that tobacco smoke

affects the epithelial cells of the oral mucosa, this is proved by the studies of various authors.

## **Materials and Methods**

In the study, 30 patients were comprehensively examined. Special research methods included a set of objective indicators that characterize the condition of teeth and parotid tissues. The study of the dental status was carried out by the method of interviewing and clinical examination of patients. As a result of the survey, we found out general somatic complaints and smoking experience. According to the patient, the data was recorded in questionnaires. During the external examination determined by facial skin condition, presence symmetry. pathological elements, skin color, presence of pathological changes.

After the visual examination, a palpatory examination of the lymph nodes of the maxillofacial region was performed. Also, in order to assess the degree of mouth opening, a study of the temporomandibular joint was performed. The condition of the parotid salivary glands was palpated: size, consistency, and soreness. The red border of the lips was examined. During visual examination, the depth of the vestibule of the oral cavity, the condition of the upper and lower lip bridles, their attachment point and length were evaluated.

The color of the oral mucosa, the presence of puffiness, and hyperemia of the mucous membranes were analyzed. On the mucous membrane of the cheeks, they determined the presence of chronic injuries, dental impressions, and also looked at the state of the excretory ducts of the parotid salivary glands. When examining the tongue, the

condition of the papillae, color, the presence of injuries, and the size were determined.

Later there was carried out examination of the dentition. The color, gloss, and condition of the tooth surfaces were visually assessed, as well as carious and non-carious lesions, fillings, restorations, the presence of teeth, diastemas, and dentures, as well as the presence of supragingival and subgingival dental deposits, smoker's plaque, and tooth mobility. The results of the examination were recorded in the dental formula. prevalence and intensity of caries were assessed according to the method recommended by the WHO, by calculating the index of the DMF index of teeth. The structure of the DMF index ("carious, filled, removed teeth") was studied.

The condition of the periodontal tissues was studied using standard clinical examination external examination of methods: patient, examination of the oral cavity, probing, determination of the depth of the dentoalveolar pockets with a periodontal end. The prevalence intensity of inflammatory periodontal diseases were evaluated using the Rüssel periodontal index (PI). The assessment of the hematological care provided in the groups of smoking and non-smoking patients was carried out using the DMF index and the analysis of the the DMF index structure.

## **Results and Discussions**

The analysis of tobacco-dependent patients by smoking experience was carried out and it was determined that 10 people (33.3%) belonged to the first experience group (smoking experience up to 5 years). In the second training group (more than 10 years) - 12 people (40%). In the third target group (non-smokers) - 8 people (26.7 %) (Figure 1, Table 1).

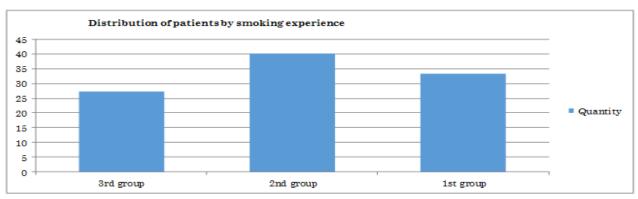


Figure 1: Distribution of patients by smoking experience

Table 1: Distribution of patients by smoking experience

No. of group	Group name	Number of people
1	Smoking experience up to 5 years	10
2	Experience of smoking more than 10 years	12
3	Non-smokers	8

When analyzing the clinical state of the oral cavity in tobacco-dependent patients, the indicators of the intensity of caries were evaluated. The following results were obtained. The intensity of dental caries according to the DMF index in the first group was -8.4. In the second -11.3. In the third-6.7 (Figure 2).

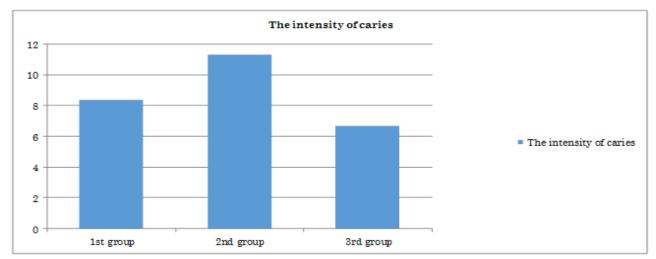


Figure 2: The intensity of caries

According to the results of the study of the periodontal index, it was revealed that the duration of the use of the steam cocktail negatively affects the state of the periodontal tissues. The analysis of the average values of the periodontal index in each group showed that the destruction of tissues increases with the increase in smoking experience. As a result of the survey and examination of the oral mucosa in smoking patients, such symptoms as: cheilitis, glossitis, chronic mucosal trauma, bleeding gums, halitosis and xerostomia were revealed. All patients had two or more signs [1-27].

### Conclusion

The results of the study showed that the DMF index, periodontal index and the intensity of caries significantly deteriorate depending on the length of smoking. This suggests that inflammatory and destructive changes in the tissues of the oral mucosa and periodontal tissue are increasing. Tobacco smoking is an unfavorable factor that negatively affects the dental health of people who use steam cocktails, primarily on the condition of the hard tissues of the teeth, on the clinical condition of the periodontal disease. In order to prevent tobacco smoking, it is necessary to conduct a survey of the

patient to find out the length of smoking experience, the level of motivation to quit smoking; a study of the DMF index, PI in tobacco-dependent persons at the initial reception. The examination should be carried out every 12 months to identify the dynamics of dental health.

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