#### УДК: 613.84 ВЛИЯНИЕ ЭЛЕКТРОННЫХ И ТАБАЧНЫХ СИГАРЕТ НА ЗДОРОВЬЕ ПОЛОСТИ РТА

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#### Аннотация

Введение. Курение – это одна из самых вредных привычек, влияющих на здоровье. Многие знают, что курение наносит непоправимый вред здоровью легких, влияет на сердечно-сосудистую систему. Мало кто задумывается о том, какой вред курение наносит полости рта. В данном исследовании рассмотрим, какие проблемы могут возникнуть у курящего человека. Цель исследования – оценивание привычки к курению опрошенных студентов-стоматологов, определение их уровня знаний и отношение к курению, а также выявление вреда курения на здоровье полости рта. Материал и методы. Проведение опроса и анализ статистических данных. Результаты. По данным опроса удалось определить отношение студентов к курению и осведомленность респондентов о вреде курения и оценить влияние курения на здоровье полости рта. Курения вляяется источником многих заболеваний полости рта. Польза электронных сигарет в альтернативе к табачным является ложной.

Ключевые слова: курение, вейп, сигареты, заболевания, вредные химические вещества.

# IMPACT OF ELECTRONIC AND TOBACCO CIGARETTES ON ORAL HEALTH

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### Abstract

**Introduction.** Smoking is one of the most harmful habits affecting health. Many people know that smoking causes irreparable damage to lung health, affects the cardiovascular system. Few people think about the damage smoking does to the oral cavity. In this study we will look at what problems can arise in a person who smokes. **The aim of the study** is to evaluate the smoking habits of the dental students interviewed, determine their level of knowledge and attitude to smoking, as well as identify the harm of smoking on oral health. **Material and methods**. Conducting a survey and analyzing statistical data. **Results**. According to the survey, it was possible to determine the attitude of students to smoking and the awareness of respondents about the dangers of smoking and to assess the impact of smoking on oral health. **Conclusion**. Smoking is the source of many oral diseases. The benefits of electronic cigarettes as an alternative to tobacco cigarettes are false.

Keywords: smoking, vape, cigarettes, diseases, harmful chemicals.

### **INTRODUCTION**

Smoking and dental health are two issues that are more connected than you may realize. It is widely known that smoking has a negative impact on oral health and stress levels, yet many people still choose to smoke. Nearly a quarter of adults worldwide have this unhealthy habit.

Smoking is one of the most common causes of poor oral health, which can lead to many dental problems. Whether you are about to start smoking or have been smoking for many years, understanding the effects and risks of smoking, as well as the diseases it can cause, will help you make an informed decision. [1]

A vape is an electronic device that heats a liquid and turns it into vapor, which is then inhaled by the person. The liquid used in vape devices usually, contains nicotine.

Many people use vape as a way to quit smoking cigarettes. Others see it as a healthier alternative. The use of electronic smoking devices is growing; vaping is gaining popularity among young people who have never used nicotine products before and are now trying flavored e-cigarettes. [2]

However, vaping is not safe for both general health and oral health. Vaping is especially harmful to young people whose bodies are still developing.

The aim of the study is to identify the effect of smoking on oral health.

# MATERIAL AND METHODS

Thanks to the questionnaire method, a survey was conducted of 30 first-year dental students aged 18 to 20 years. The following questions were asked:

1) Do you know what an electronic cigarette is?

2) How do you feel about smoking?

3) Do you think smoking is harmful to the oral cavity?

4) Do you think e-cigarettes are less harmful to health than regular cigarettes? [3]

#### RESULTS

The analysis was carried out among first-year dental students aged 18 to 20 years and these are the results obtained. 29 people (97%) know what an electronic cigarette is, 1 person (3%) does not know. 23 people (76.7%) expressed a negative attitude towards smoking, 4 people (13.3%) – a neutral attitude, 1 person (3.3%) – a positive attitude, 1 person (3.3%) – spoke negatively, but replied that he smokes and 1 person (3.3%) replied that he smokes, but does not recommend it. 30 people (100%) believe that smoking is harmful to the oral cavity. To the question that e-cigarettes are less harmful to health than regular cigarettes, 16 people (53.3%) answered negatively, 8 people (26.7%) found it difficult to answer and 7 people (20%) answered positively.

### DISCUSSION

Scientific articles describe diseases such as periodontal disease, oral cancer, smoker's keratosis, leukoplakia, etc. caused by smoking both tobacco products and vaping liquids. Smoking is one of the major causes of oral diseases and has serious detrimental effects on the health of teeth, gums and mucous membranes. Discussing the oral health effects of smoking can help people recognise the serious consequences of the habit and encourage them to take steps to keep their teeth and gums healthy.

Dental diseases caused by smoking:

The tar and nicotine contained in the cigarette cause severe damage to the teeth, and the first thing that the smoker pays attention to is the yellowing of the enamel. However, this is not all: after aesthetic problems come functional ones: ulcerative necrotic gingivostomatitis of the gums develops, which leads to periodontitis and periodontal disease. These conditions are accompanied by bleeding gums, increased salivation, constant bad breath and a taste of copper. A characteristic disease of smokers is nicotine stomatitis, a pathological keratinization of the tissues of the upper palate. [4]

According to the American Lung Association (ALA), more than 7,000 chemicals are produced as a result. At least 69 of them are toxic or cause cancer, heart disease, lung disease and other health problems. The most dangerous chemicals include:

Formaldehyde, Lead, Arsenic, Ammonia, Benzene, Carbon Monoxide, Nitrosamines, Polycyclic Aromatic Hydrocarbons (PAHs), Resin, Toluene.

The U.S. Food and Drug Administration (FDA) notes that e-cigarettes contain carcinogens and toxins, including toxic compounds contained in antifreeze. Among them:

Solvent carriers (propylene glycol and glycerin), Nitrosamines, Aldehydes, Ultrafine particles that can be inhaled deep into the lungs, Flavors, Volatile Organic compounds (VOCs), Heavy metals such as nickel, tin and lead, Polycyclic aromatic hydrocarbons (PAHs), Nicotine impurities.

As for whether e-cigarettes are actually safer than traditional ones, in this case we cannot be sure, because it may take years for the disease to develop, and e-cigarettes appeared on the market a little more than ten years ago. It takes time to conduct long-term research on the use of e-cigarettes before we can find out to what extent e-cigarettes are harmful to human health. [5]

A dentist who examines your mouth can tell if you are using a tobacco product or vape by the following signs:

- Bad breath

- Stains or discoloration of the teeth
- Tooth decay
- Gum disease or inflammation
- Dry mouth
- Burns or pain

Most of the effects of vaping on your teeth, gums and mouth can be seen during a dental check-up.

### CONCLUSION

After analyzing the information, conducting a survey and research, we can draw the following conclusions:

1. Smoking is a source of many diseases of the oral cavity. Nicotine stomatitis becomes the most common;

2. Many people wrongly believe that e-cigarettes are less harmful than tobacco cigarettes. This is due to their relatively recent appearance;

3. The modern population is informed about the harm to oral health.

4. A dentist will be able to identify a person who smokes by certain signs.

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