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Original article

SMOKING AS A RISK FACTOR IN ATHLETES

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ABSTRACT

After the pandemic and at the beginning of 2023, our team carried out a survey among active athletes about the risks associated with smoking.

The purpose of the study is to assess smoking as a risk factor in athletes using a survey method.

Methods: The respondents were asked to participate anonymously in a survey consisting of 14 questions. We surveyed 50 active athletes (35 men and 15 women).

Results: Forty-three of the participants were aged between 18 and 22 years old, and 7 were aged between 23 and 27 years old. Results: 30% of the surveyed athletes are smokers, 40% are non-smokers and 30% used to smoke in the past; 66% are familiar with the risk of smoking; 42% would support a ban on smoking in public; 22% report that cigarettes influence athletic achievements; 80% of the athletes consider that they are smoking due to stress; 34% think that only a health problem could make them quit smoking.

Conclusions: The fact that 66% of the athletes are aware of the risks associated with smoking gives us hope in the combat against smoking. The effect of cigarettes on the human body should be emphasized. The survey showed that there are insufficient campaigns to raise awareness about the harmful effects of smoking which is key to quitting cigarettes.

Keywords: smoking, sport, athletes, stress,

INTRODUCTION

After the COVID-19 pandemic and at the beginning of 2023, our team carried out a survey among active athletes regarding their perceptions of the risks of tobacco smoking. According to the World Health Organization (WHO), there are more than 1 billion smokers worldwide, and the number is steadily increasing [1, 2]. There are many factors contributing to the initiation of smoking, and although most smokers want to quit, they usually continue due to strong nicotine addiction [1, 3]. Smoking is more prevalent among men and in lower socioeconomic classes [1, 4]. The risk of cardiovascular disease is two to five times higher in male smokers [1, 5].

According to the WHO, there are several mechanisms underlying cigarette-smoke induced atherosclerosis, arterial thrombosis, stroke and cardiac infarction. First, smoking induces cardiac remodeling observed as left ventricular hypertrophy and atrial fibrosis, which increase the risk of stroke [1, 6]. Many athletes exhibit left ventricular hypertrophy due to daily physical exercise while smoking additionally exacerbates this process. Oxidative stress caused by systemic oxygen free radicals resulting from smoking causes systemic and local inflammation seen as an elevation in the levels of C reactive protein and peripheral leucocytes in addition to other proinflammatory cytokines increasing the risk of arterial thrombosis [1, 7]. The second mechanism involves the nicotine-stimulated release of adrenal medulla hormones modifying cardiac output by increasing heart rate and blood pressure, which may lead to cardiac ischemia [1, 8]. Third, compounds in cigarette smoke increase the risk of myocardial ischemia and arterial stenosis in smokers [1, 9, 10].

Smoking, whether active or secondhand, is a serious health problem associated with increased risk for malignancies and cardiovascular and respiratory diseases and represents a significant public health challenge [11, 12, 13, 14, 15].

OBJECTIVES

This study aimed to assess smoking as a perceived risk factor in athletes using a survey method. The objective was to establish whether active athletes are aware of the risks associated with smoking.

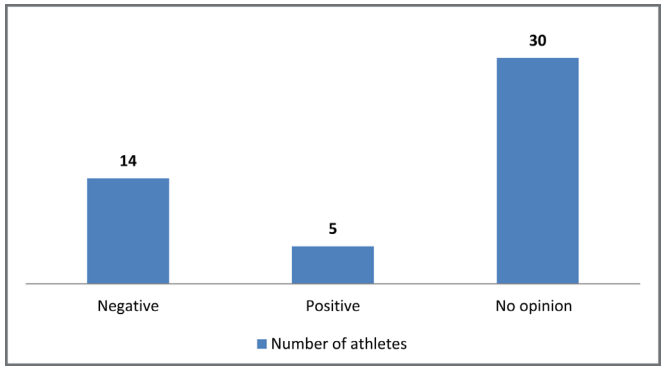
MATERIALS AND METHODS

The respondents were asked to complete an anonymous survey consisting of 14 questions. We surveyed 50 active athletes (35 men and 15 women). Forty-three of the surveyed athletes were aged between 18 and 22 years old, and 7 athletes were between 23 and 27 years old. The athletes were split into 3 groups depending on the duration of the exercises in the disciplines they practice. The first group included 23 athletes practicing exercises with a duration of up to 10 seconds (ATP-PC); the second group included 12 athletes practicing exercises with a duration from 2 to 3 minutes (anaerobic); the third group consisted of 15 athletes practicing exercises with duration more than 3 minutes (aerobic).

RESULTS

The question „What is your attitude towards smoking?" yielded interesting answers (Fig. 1). Thirty athletes of the respondents did not have an opinion which suggests that they are not sufficiently aware of the risks of smoking.

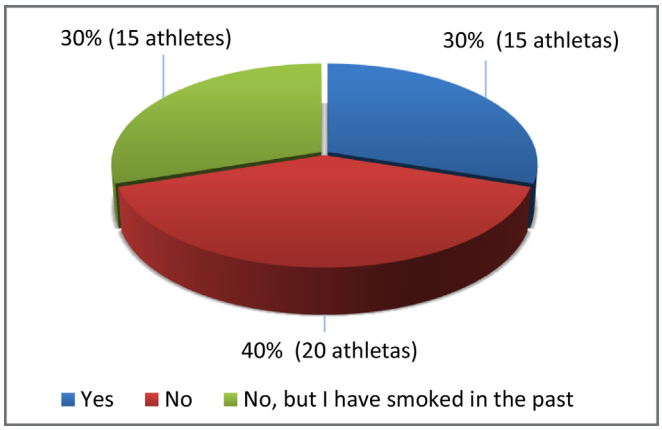
Fig 1. Attitude of athletes towards smoking



The results of the survey show that 56% of athletes are in contact equally with smokers and non-smokers, while 28% are in contact with non-smokers only.

When asked, „Do you smoke?" 30% of the respondents replied positively, and another 30% indicated that they had smoked in the past. (Fig. 2)

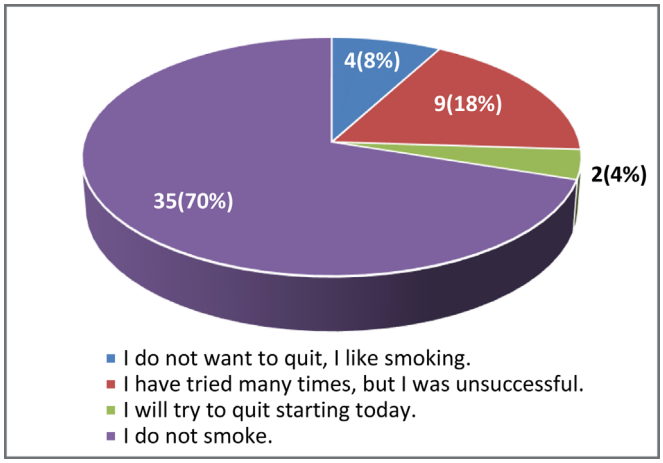
Fig. 2. Answers to the question, „Do you smoke?"



Approximately one fifth of the respondents (18%) stated that they smoked several cigarettes a day, while 12% replied that they smoked up to a pack a day.

When asked, "Have you ever tried to quit smoking?" 8% (4 athletas) replied that they would not quit because they liked smoking (Fig. 3).

Fig 3. Answers to the question, „Have you ever tried to quit smoking?"



Thirty-two per cent of the respondents stated that they were not interested in learning about the diseases caused by smoking tobacco.

Forty-two per cent of the athletes supported the enforcement of a ban on smoking in public, while 53% did not have an opinion on the matter.

One of the most important questions in the survey was: „What would make you quit smoking?" Fourteen per cent think that they would quit based on campaigns raising awareness about the harmful effects of smoking; 34% considered that only a health problem would make them quit, while 16% stated that nothing could make them quit.

Twenty-two per cent of the athletes are convinced that cigarettes do not affect their athletic achievements.

Sixty per cent of athletes are sure that smoking has a negative influence on their appearance.

The main reason for smoking for 80% of athletes is stress due to upcoming competitions.

CONCLUSIONS:

The fact that 66% of the athletes are familiar with the risks of cigarette smoking gives us hope in the combat against smoking. The effect of cigarettes on the human body should be emphasized. Our survey found that the existing campaigns for raising awareness about the harmful effects of smoking are insufficient, while this is a key measure in motivating people to quit.

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