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ORIGINAL ARTICLE

ATTITUDES OF ACTIVE ATHLETES TOWARDS ALCOHOL

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Abstract. Purpose: *The purpose of this study is to assess the attitudes of active athletes towards alcohol using a survey method. The task of this survey is to find out whether active athletes consume alcohol and whether they know how alcohol affects their bodies.* ***Materials and Methods:*** *We surveyed 50 active male athletes who had been training for more than 10 years. They completed an anonymous paper survey containing 14 closed questions. The survey was conducted in January 2024.* ***Results:*** *80% of respondents do not know whether systematic alcohol consumption leads to the medical condition known as alcohol use disorder. Only 4% of respondents admit that their germ cells can be damaged when drinking alcohol. All male respondents drink regularly alcohol, and only 4% of them do this occasionally. 80% of respondents drink beer and distilled alcohols; 12% prefer distilled alcohol, and 8% drink only beer.* ***Conclusions:*** *The survey shows that all respondents regularly drink alcohol, and only 4% of them do this occasionally. In Bulgaria, a campaign to clarify the harms caused by alcohol to active athletes should be proposed.*

Key words: *alcohol, sports, athletes, survey*

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INTRODUCTION

Alcohol advertisements are everywhere, even in stadiums and athletes' outfits. The awareness of the adverse effects of alcohol on human health is the subject of a number of worldwide studies, and therefore, we conducted this survey to understand the attitudes of 50 active athletes towards alcohol. At the beginning of 2024, we conducted a survey among active athletes about their attitudes towards alcohol.

Alcohol consumption is common among active athletes [1]. A study showed that 81% of respondents consumed alcohol in the past year, 44% of men and 33% of women reported binge drinking (i.e., drinking more than four drinks in a row for women or more than five drinks in a row for men), and 18% of men and 3% of women reported excessive drinking (i.e., drinking more than ten drinks in a row) [1]. As a result, the Sports Science Institute (NCAA) stated that alcohol consumption continues to be the most important health issue that its members face [1].

Another study found that 62% of American student athletes consumed alcohol at least once in the past 30 days, 33% consumed five or more drinks in a row in the past two weeks (i.e., binge drinking), and 10% were involved in excessive drinking five or more times in the last month [2].

Alcohol is the most commonly used legal recreational drug worldwide, and its consumption often takes place in large quantities. Actually, athletes are not exempt from the influence that alcohol has on society; they often consume a greater quantity of alcohol while overeating than the general population, although athletes are often expected and recommended to abstain from drinking alcohol to avoid the negative impact it can have on their recovery and sporting performance. Those responsible for the welfare of athletes, including the athletes themselves, should carefully monitor the alcohol consumption so as to avoid the common negative health and social outcomes associated with the devastating effects of alcohol [3].

The aim of this study is to find out whether active athletes consume alcohol and whether they know how alcohol affects their bodies.

MATERIALS AND METHODS

All respondents in our survey were active athletes who had been training for more than 10 years. The athletes completed an anonymous survey containing 14 questions. All 50 active athletes surveyed were men aged between 20-30. The survey was conducted in January 2024.

The following statistical methods were used: descriptive statistics – absolute (number) and relative (percentage) frequency; Kruskal–Wallis method (Kruskal–Wallis χ^2 coefficient) for dependences. Anonymous paper survey cards were provided in a fitness club. After the anonymous survey was completed, the paper form was put in a box next to the stack of surveys. All surveys were processed by a statistician.

RESULTS

The answers to the question "Which systems in the human body are damaged by alcohol consumption?" were as follows: 58% of respondents answered that the nervous system is damaged by alcohol consumption; 20% admitted that alcohol damages the cardiovascular system; 12% thought that the digestive system is damaged by alcohol consumption; only 10% thought that all systems are damaged by alcohol consumption (Figure 1).

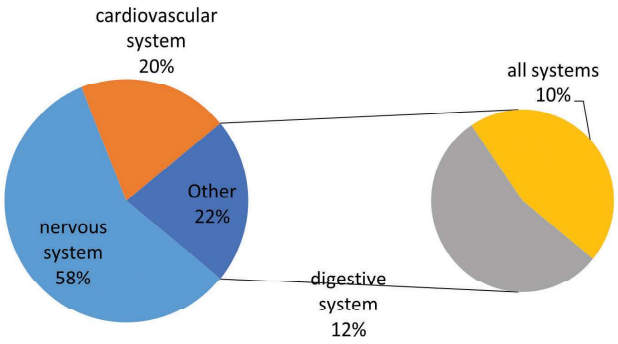

Fig. 1. Answers to the question "Which systems in the human body are damaged by alcohol consumption?"

One of the most important questions in this survey is "Does systematic alcohol consumption lead to the medical condition known as alcohol use disorder?". 80% of respondents do not know whether systematic alcohol consumption leads to the medical condition known as alcohol use disorder (AUD). Only 12% of respondents are sure that AUD is due to systematic alcohol consumption. Only 8% of respondents think that there is no connection between AUD and alcohol (Figure 2).

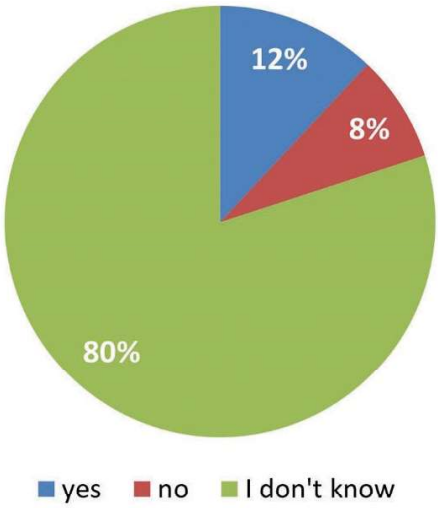

Fig. 2. Answers to the question "Does systematic alcohol consumption lead to the medical condition known as alcohol use disorder?"

Only 4% of respondents admit that germ cells can be damaged as a result of drinking alcohol, while the remaining 96% believe that alcohol does not damage germ cells.

58% of respondents believe that alcohol consumption, even in small quantities, is harmful to pregnant women. 42% of respondents expressed the opposite opinion – small quantities of alcohol during pregnancy are not harmful.

All the male respondents drink alcohol, and only 4% of them drink alcohol occasionally (Figure 3).

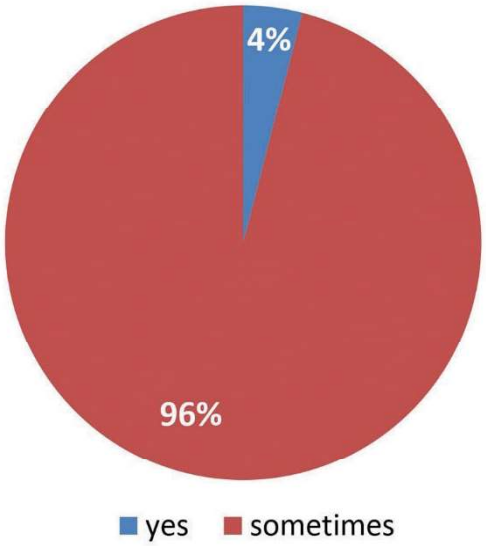

Fig. 3. Answers to the question "Do you drink alcohol?".

The answers to the question "How old were you when you started drinking alcohol?" were as follows: 78% of respondents started drinking aged 13, 20% – aged 14, and 2% – aged 10 (Figure 4).

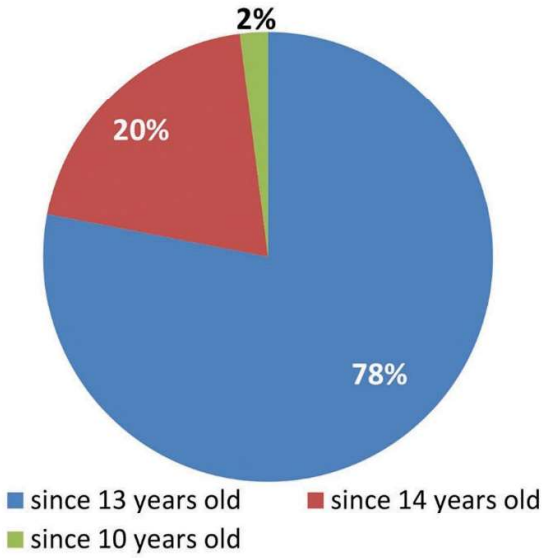

Fig. 4. Answers to the question "How old were you when you started drinking alcohol?"

We examined the dependences between the frequency of alcohol consumption and the other variables used in the study and found as follows:

– Statistically significant dependence between the frequency of alcohol consumption and the opinion about the harmful influence of alcohol on some of the systems of human body (χ^2 Kruskal–Wallis = 24.231, $p < 0.001$). 52.6% of those who drink alcohol once a week believe that the cardiovascular system is mostly damaged. 69% of those who drink alcohol believe that the nervous system is mostly damaged, and all the occasional drinkers believe that all body systems are damaged.

– Statistically significant dependence between the frequency of alcohol consumption and the opinion that the most harmful influence of alcohol is seen in two of the systems of human body (χ^2 Kruskal–Wallis = 15.529, $p < 0.001$). All those who drink alcohol once a week and 55.2% of those who drink alcohol everyday believe in the harmful effects on the nervous system. All the occasional drinkers and 44.8% of those who drink alcohol everyday believe in the harmful effect on the cardiovascular system.

– Statistically significant dependence between the frequency of alcohol consumption and the awareness of AUD (χ^2 Kruskal–Wallis = 19.75, $p < 0.001$). All the occasional drinkers and all those who drink alcohol everyday are not aware of the dependence between systemic alcohol consumption and the disease. Only 31.6% of those who drink alcohol once a week are convinced of the existence of dependence between alcohol consumption and this disease.

– Statistically significant dependence between the frequency of alcohol consumption and the awareness of the diseases that are due to alcohol (χ^2 Kruskal–Wallis = 20.497, $p < 0.001$). All the occasional drinkers think that there is a dependence between stroke and alcohol. 86.2% of those who drink alcohol everyday believe that alcohol is a cause of liver cancer and 42.1% of those who drink alcohol once a week associate stroke with alcohol consumption.

– There is insufficient evidence of the dependence between the frequency of alcohol consumption and germ cell damage ($\chi 2$ Kruskal–Wallis = 3.331, $p = 0.189 > 0.05$). Only 10% of those who drink alcohol once a week believe that alcohol affects germ cells. All the others believe that such an influence does not exist.

– Statistically significant dependence between the frequency of alcohol consumption and the harmful effects of even small quantities of alcohol in pregnant women (χ^2 Kruskal–Wallis = 22.642, $p < 0.001$). All those who drink alcohol once a week believe that pregnant women should not drink. All the occasional drinkers and 65% of those who drink alcohol everyday believe that small quantities of alcohol are not harmful to pregnant women.

– Statistically significant dependence between the frequency of alcohol consumption and the age at which alcohol is consumed (χ^2 Kruskal–Wallis = 14.993, $p < 0.001$). All those who drink alcohol

once a week and 69% of those who drink alcohol everyday started drinking alcohol at the age of 13. 50% of the occasional drinkers and 31% of those who drink alcohol everyday started drinking alcohol at the age of 14. 50% of the occasional drinkers started drinking alcohol at the age of 10.

– Statistically significant dependence between the frequency of alcohol consumption and the reason to consume alcohol (χ^2 Kruskal–Wallis = 15.44, $p < 0.001$). All those who drink alcohol once a week drink it to relax. All the occasional drinkers do it to imitate friends. As regards those who drink alcohol everyday, the distribution is as follows: 58.6% of them drink to relax, 27.6% – to imitate friends, and 13.8% of them drink out of curiosity.
– Statistically significant dependence between the frequency of alcohol consumption and the type of alcohol (χ^2 Kruskal–Wallis = 19.75, $p < 0.001$). All the occasional drinkers and those who drink alcohol everyday have no preferences – they drink both beer and hard liquor. As regards those who drink alcohol once a week, the distribution is as follows: 47.4 % of them drink all types of alcohol, 31.6% of them drink distilled spirit, and 21.1 % of them drink beer.

We examined the dependences between the type of alcohol consumed and the other variables used in the study and found as follows:

– Statistically significant dependence between the type of alcohol consumed and the opinion about the harmful influence of alcohol on some of the systems of human body (χ^2 Kruskal–Wallis = 29.616, $p < 0.001$). All those who drink only beer or only distilled spirit think that the cardiovascular system is mostly damaged. 72.5% of those who drink all types of alcohol think that the nervous system is mostly damaged.
– Statistically significant dependence between the type of alcohol consumed and the awareness of AUD (χ^2 Kruskal–Wallis = 48.677, $p < 0.001$). All those who drink beer and 33.3% of those who drink distilled spirit are not aware of the dependence between systemic alcohol use and the disease. 66.7% of those who drink distilled spirit believe that there is no dependence between this disease and alcohol. All those who drink any type of alcohol are not aware of the existence of dependence between alcohol and this disease.
– Statistically significant dependence between the type of alcohol consumed and the awareness of alcohol-related diseases (χ^2 Kruskal–Wallis = 27.072, $p < 0.001$). All those who drink only beer and 66.7% of those who drink concentrate believe that there is no dependence between heart attack and alcohol. 85% of those who drink any type of alcohol believe that alcohol causes liver cancer. Only 15% of those who consume both types of alcohol are convinced of the dependence between alcohol and heart attack.
– Statistically significant dependence between the type of alcohol consumed and germ cell damage (χ^2 Kruskal–Wallis = 23.479, $p = < 0.001$). 50% of those who drink only beer believe that alcohol affects germ cells. All the others believe that such an influence does not exist.
– Statistically significant dependence between the type of alcohol consumed and harmful effects of even small quantities of alcohol in pregnant women (χ^2 Kruskal–Wallis = 8.871, $p < 0.05$). 50% of those who drink only beer or only hard liquor think that pregnant women should not drink. 52.5% of those who consume both types of alcohol believe that small quantities of alcohol are not harmful to pregnant women.

DISCUSSION

Athletes are exposed to a lot of stress and need to rest and relive the stress from competitions. They do this by drinking alcohol. Similarly to other studies, our survey confirms that athletes consume alcohol to cope with sports-related stress, in order to improve their sporting performance and to adapt to their teammates. In other words, one of the reasons for alcohol consumption among athletes may be that they spend considerable time in sports-related activities and, therefore, with their peers [1, 4].

A number of studies confirm that higher alcohol consumption in athletes is due to their environment and friends; our survey shows that 20% of athletes drink because of their friends [1, 5, 6]. Other studies confirm our results, i.e., that athletes consistently report increasingly risky models of alcohol consumption compared to their non-athlete peers [7-12]. The risk associated with alcohol consumption can be increased due to stress [7, 8]. This is also confirmed by our survey – 72% of athletes consume alcohol to relax.

The survey shows that all the male respondents drink alcohol, and only 4% of them drink alcohol occasionally. This is what motivated us to write this article. In Bulgaria, a campaign to clarify the harms caused by alcohol to active athletes should be conducted.

CONCLUSIONS

In Bulgaria, there are many studies on stress in athletes. The strength of this anonymous survey is that athletes can tell the truth about their alcohol use.

The large number of alcohol consuming athletes who do not know the damage alcohol causes motivated us to write this article. The second step will be to prepare leaflets about the harm of alcohol to be distributed to gyms.

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Ethical statement: *This study has been performed in accordance with the ethical standards as laid down in the Declaration of Helsinki.*

Informed Consent from Participants: *Informed consent was obtained from all participants included in the study.*

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