

PREVALENCE OF PSYCHOACTIVE SUBSTANCE USE AMONG SECONDARY SCHOOL STUDENTS IN ŽUPANJA

Marijana Delić¹, Dragan Babić^{1,2} , Darjan Franjić² 

¹ Faculty of Humanities and Social Sciences, University of Mostar, 88 000 Mostar, Bosnia and Herzegovina

² Faculty of Health Studies, University of Mostar, 88 000 Mostar, Bosnia and Herzegovina

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ABSTRACT

Introduction: The use of psychoactive substances is a serious and difficult problem in many countries of the world, and is taking on epidemic proportions, especially in the youth population. Disorders caused by the psychoactive substance use include a wide range of disorders. Experts are finding it increasingly difficult to monitor the possible consequences that drugs can cause in the human body.

Aim: To examine the prevalence of the psychoactive substance use among high school students in Županja.

Respondents and methods: A cross-sectional survey was conducted during May 2023. The first group of respondents consisted of 115 students of the third and fourth grades of the Županja Grammar School, while the second group consisted of 100 students of the third and fourth grades of the Županja Vocational School. The research instrument was a standardised internationally agreed questionnaire "European Research in Schools on Smoking, Drinking and Drug Use among Pupils" (2011). European School Survey Project on Alcohol and Other Drugs (ESPAD).

Results: A statistically significant number of respondents has never used cigarettes, alcoholic beverages, adhesives and other solvents. Respondents from the Vocational School used cigarettes on a larger scale daily, while Grammar school students started smoking at an older age. In the last 12 months, when compared to the Vocational School students, a higher percentage of Grammar School students have used adhesives and other solvents. Grammar School students experimented with "drugs" in a higher proportion due to curiosity.

Conclusion: The prevalence of the psychoactive substance use among high school youth in Županja is at a satisfactory low level.

Keywords: psychoactive substances, students, secondary school

Corresponding author: Prof. Dragan Babić, PhD

E-mail: dragan.babic@fzs.sum.ba

INTRODUCTION

The use of psychoactive substances is a serious and difficult problem in many countries of the world, and it is taking on epidemic proportions, especially in the youth population (1). Experts define a psychoactive substance as a substance that acts on the central nervous system in such a way that it changes not only the psychological, but also the physical functioning of a person (2). People have used psychoactive substances in almost all cultures throughout all periods of human history. Concerns about the abuse of psychoactive substances arise when behaviour is presented as a potential cause of adverse consequences for the user or society (3). Disorders caused by the use of psychoactive substances include a wide range of disorders, ranging from acute intoxication of abuse or harmful use, addiction, abstinence syndrome to psychotic and other disorders caused by psychoactive substances (1). Diagnosis should be used when the use of more psychoactive substances is so improper or when improperly mixed multiple agents are being used. Treatment of psychoactive substance addicts is very demanding and complicated and requires a wide range of organic, psychological and social

interventions as part of integral and multidimensional treatment (4).

Addiction is now considered a chronic, progressive recurrent disease and the health care system must define its role both in treatment and rehabilitation, but also in the prevention of addiction syndrome (5). It is estimated that almost a quarter of the adult population in the European Union has used illicit substances at some point in their lives. In most cases, they used cannabis (6). According to the mode of action on consciousness, we distinguish six basic groups of psychoactive substances: stimulants, central nervous system depressors, opioids, hallucinogens, nicotine and marijuana (3). The addictive scene has changed significantly in the last ten years, so that today it is characterized by an increasing number of non-opiate addicts, cannabis users and new "drugs", with the continuation of decreasing heroin use tendency (7). Experts are finding it increasingly difficult to monitor the possible consequences that drugs can cause in the human body (8). The increase in addiction among adolescents is usually attributed to the family environment and the school system characteristics. When considering our environment and conditions, we can add psychosocial consequences of war events,

unemployment and changes in the family structure (9) to these risk factors.

Some experts suggest that the use of psychoactive substances is the result of interactive action of demographic variables, socialization factors, psychological characteristics, attitudes and beliefs (10). Out of the demographic variables, the most important are age, gender, religious affiliation, socioeconomic status and family structure. Socialization factors that have a protective function are religious identification, school success and successful adaptation to the school environment. Unfavourable socialization factors include family conflicts and peer pressure. Psychological characteristics that increase the risk of using psychoactive substances are low self-esteem, feeling alienated, shyness, social isolation, etc. Genetic factors provide an explanation for about a quarter of addicts. Sons of alcoholics carry a higher risk of becoming alcoholics themselves, even when adopted by parents who do not consume alcohol (11). Early recognition of addictive substance abuse increases the likelihood of timely intervention or taking appropriate measures to prevent further abuse and the development of addiction (12).

The aim of this study was to examine the prevalence of the psychoactive substance

use among high school students in Županja.

RESPONDENTS AND METHODS

During May 2023, a cross-sectional survey was conducted at the Županja Grammar school and at the Županja Vocational School. The tested sample consisted of 215 students from the above-mentioned schools. The first group consisted of 115 students of the third and fourth grade of the Županja Grammar School, while the second group consisted of 100 students of the third and fourth grades of the Županja Vocational School.

The research instrument was a standardised internationally agreed questionnaire "European Research in Schools on Smoking, Drinking and Drug Use among Pupils" (2011). European School Survey Project on Alcohol and Other Drugs – ESPAD) (13).

The study was conducted voluntarily and anonymously. The study excluded students who had a history of mental illness, mental disorders, as well as respondents who did not fill out the questionnaire correctly. After obtaining consent from the school, before conducting the survey, students were introduced with the basic research objective in order to give oral consent to participate, i.e. filling out the

questionnaire. They were told they could opt out of filling out the questionnaires at any point while conducting the survey. Also, they were informed that the collected data is confidential and that it would be used solely for the purpose of making a thesis.

STATISTICAL ANALYSIS

The collected data were statistically processed using descriptive statistics methods and presented in pictorial form. To test the differences between groups the χ^2 test was used, as well as Fisher's exact test. The probability level of $p < 0.05$ in all tests was taken as statistically significant. The following software was used for statistical analysis of the obtained data: the SPSS system for Windows (version 13.0, SPSS Inc, Chicago, Illinois, USA) and

Microsoft Excell (version office 2007, Microsoft Corporation, Redmond, WA, USA).

RESULTS

There were no statistically significant differences in gender representation between the groups ($p=0.013$). The Grammar School students achieved significantly higher success in school than the respondents of the Vocational School ($t=3.971$; $p<0.001$), and they smoked cigarettes in a higher proportion, most of them aged 16 and over ($p=0.003$).

Respondents of the Vocational School used cigarettes on a larger proportion daily, while the Grammar school students started smoking at an older age. The largest number of respondents has never used cigarettes (Figure 1).

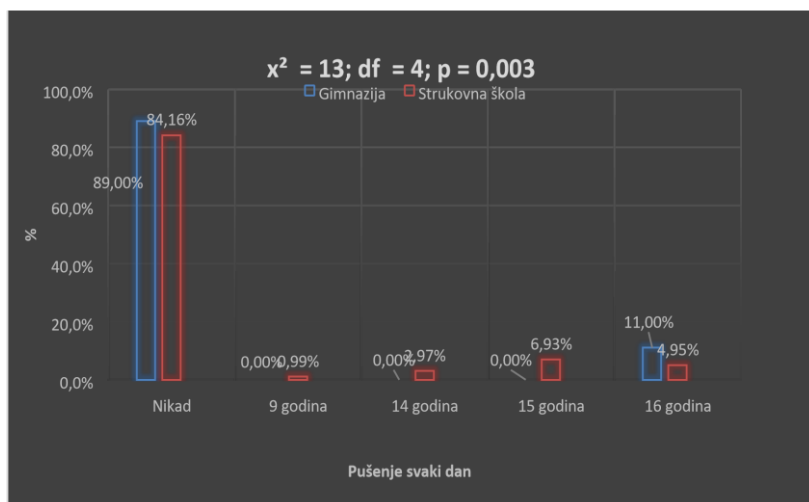


Figure 1. - Age of smokers who smoke on daily basis

Vocational School respondents were getting drunk in a higher percentage than the Grammar School respondents ($p < 0.001$), while there were no statistically significant differences in the frequency of

use of adhesives and other solvents in life among groups ($p = 0.111$). In the last 12 months, the Grammar school students have used adhesives and other solvents in a higher percentage compared to the Vocational School students (Figure 2).

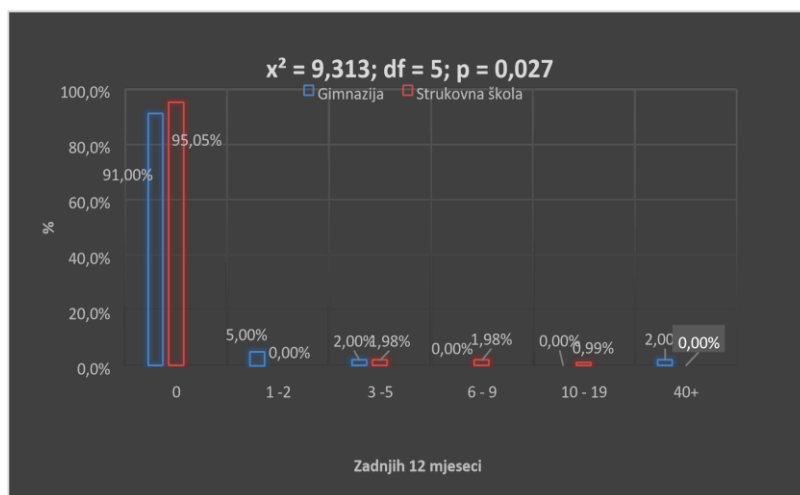


Figure 2. - Frequency of use of adhesives and other solvents in the last 12 months

There were no statistically significant differences in satisfaction with the child-mother relationship ($p = 0.444$), as well as in satisfaction with the child-father relationship between the groups ($p = 0.480$). The Grammar School students were significantly less satisfied with their personal health ($p = 0.035$), as well as with themselves ($p < 0.001$) than the Vocational School students. There were no statistically

significant differences in satisfaction with friends ($p = 0.352$), as well as in satisfaction with the families' financial situation among groups ($p = 0.728$). The Grammar School students tried "drugs" in a significantly higher proportion due to curiosity, while the Vocational School students tried "drugs" in order to forget about their problems, the differences were statistically significant (Figure 3).

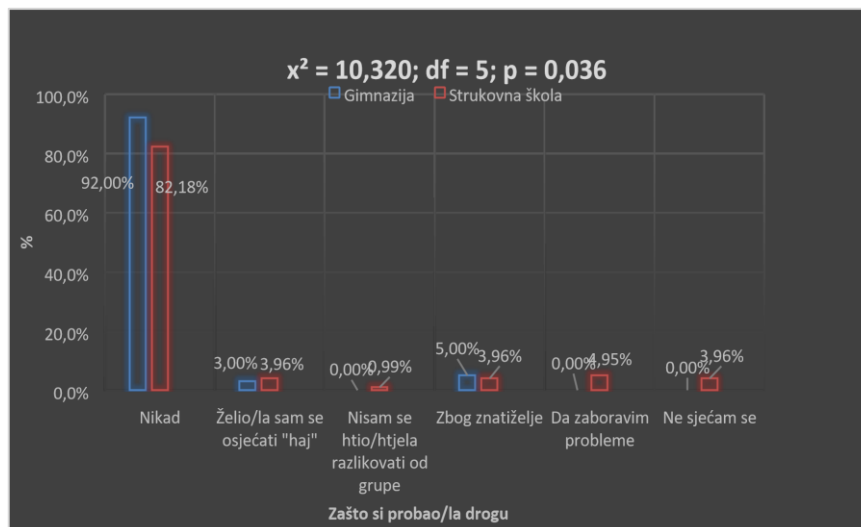


Figure 3. - *Reasons for trying "drugs"*

DISCUSSION

The results of this study indicated a low prevalence of cigarette smoking in high school students. These results are in some contrast to the results of the ESPAD study on smoking, drinking and taking psychoactive substances among students conducted in 2015. When it comes to smoking, 37.9% of students in Croatia have never smoked, while 62% have had this experience. With a percentage of 33% of current smokers, Croatia is, with Italy, Romania and Bulgaria, at the very top among the 48 participating countries (14). The beginning of smoking is associated with the young people's desire to express "adult" behaviour, and to get closer to their role models who smoke, and they are also influenced by the characteristics of the young person, school, and the wider

environment. The biggest role is played by peer groups, parents and older siblings. Early experimentation, peer pressure, insufficient social support and vague parental attitudes favour early adoption of smoking habits. The earlier a person starts smoking, the more likely they are to smoke more intensely and longer in adulthood. On drinking alcoholic beverages, students mostly stated that they drink occasionally. Most people encounter the use of alcoholic beverages at an early age, most often, which is also a paradox, in the presence of the elderly, neighbours, and often in the presence of parents. Some studies indicate that society as a whole, when socializing its youngest members in all areas of addiction, is acting incorrectly, which is ultimately reflected in the number of adult members of society suffering from alcoholism (15). In particular, it should be

noted that alcohol negatively affects the psychophysical health of young people, whose organism is more sensitive, so the harmful effects are more pronounced. Concentration, thinking, creativity and interest decrease. Alcoholism belongs to the group of socio-psychiatric disorders, because drinking alcoholic beverages causes numerous and severe consequences for the health of the individual, his family and society in a broader sense. Alcoholism is a disease that, due to excessive and prolonged use of alcoholic beverages, leads to damage to all organs, as well as the biopsychosocial characteristics of a person. Drinking alcohol once a week on weekends is a relatively common occurrence in high school students. The prevalence of alcohol use increases with age in both sexes. Lately, the increase in "risky drinking" that is, six or more times in a month has been worrying. Since early acquired bad habits can lead to the development of alcoholism, it is essential to know what action can be taken (16). Of the positive answers to the question about the use of addictive substances, the most mentioned psychoactive substances are marijuana and adhesives. Marijuana is almost the only addictive substance mentioned, from which it can be concluded that adolescents perceive it more

acceptable than other substances. This speaks of a high perception of drug availability to the surveyed high school students, which is in line with ESPAD's previous research, according to which in 2015 there was an increase in the perception of the availability of addictive substances, especially marijuana (17).

While the Vocational School students are extremely satisfied with their health, the Grammar School students mostly consider their own health to be good, which may indicate the fact that Grammar School students have a higher level of stress than the Vocational School students. The same is evident in life satisfaction, where it turned out that the Vocational School students are more satisfied than the Grammar school students. The importance of adolescents' life satisfaction has been revealed in numerous studies, which show that individual differences in life satisfaction in adolescents can predict important life outcomes, such as the development of internalized and externalized behavioural problems, bullying, loneliness, self-confidence, leadership abilities and sociability, peer acceptance, popularity and popularity, and love and other social relationships (18).

In European countries, there has been an increase in the number of uses of psychoactive substances among adolescents, as confirmed by the results of a study conducted in Poland, which indicate that more than half of students (53.6%) can be diagnosed with a significant risk of addiction to psychoactive substances and that they should be immediately subjected to preventive actions (19). Although the use of new psychoactive substances is observed mainly in young, so-called recreational users, it also occurs in the population of problematic users of psychoactive substances. The Internet as a mechanism for the rapid spread of new trends presents an increasing challenge, but also as a large anonymous market with global reach. In this way, a new connection between the use of psychoactive substances and their supply is created. In parallel, the Internet provides opportunities to find new ways of treating, preventing and intervening (20). Cigarettes, alcohol, but also some types of psychoactive substances are easily available to young people at their most vulnerable age. In addition to adapting the necessary prevention measures, the public attitude towards numerous forms of addiction should be changed, and young people

should be more pointed out to new types of addiction (21). Compared to other cultures, Zarrouq et al. report that in Morocco the overall prevalence of high school students' smoking was 16.1%, while the highest life prevalence was recorded in cannabis use (22). In Tunisia, a national survey was conducted among high school students, which showed that 3.8% of adolescents consumed alcohol and other drugs once or more in their lives, which is lower than the results of our study (23). In contrast to our results, a study was conducted in Nigeria indicating a high rate of about 22% of alcoholic beverage drinking among high school students, which is associated with male sex, low socioeconomic status, student status and public-school attendance (24).

Numerous studies have been conducted at our university regarding the incidence of the use of psychoactive substances in school youth. Several papers (25-27) cite results similar to those of this study. Bošnjak and colleagues in their research on the prevalence of the use of psychoactive substances among high school students state that the prevalence of the use of psychoactive substances among high school students of Mostar youth is at a satisfactory low level, while the most common risky behaviours among students

are cigarette smoking and drinking alcoholic beverages (28).

When considering the results of this study, one should take into account certain limitations of the research, which relate primarily to the honesty of high school students when completing the survey, the cross-sectional design of the study that prevents the monitoring of changes in research variables over a certain period of time, and the conditions for filling out questionnaires that could have contributed to distorted responses by respondents. The results of this study indicated a low prevalence of the use of addictive substances in the examined adolescent population. Most students spoke negatively about the use of addictive substances, and there is a large percentage of those who had a hard time agreeing to answer this question, from which it can be concluded that the actual number of users is probably higher.

CONCLUSION

The prevalence of psychoactive substances use among high school students in Županja is at a satisfactory low level. Grammar School students tried smoking cigarettes at a younger age, while the Vocational School students smoke cigarettes and drink alcoholic beverages on a daily basis in a

significantly larger number. The Grammar School students significantly more often use adhesives and other solvents compared to the Vocational School students.

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POJAVNOST UPORABE PSIHOAKTIVNIH TVARI UČENIKA SREDNJIH ŠKOLA U ŽUPANJI

Marijana Delić¹, Dragan Babić^{1,2} , Darjan Franjić² 

¹Filozofski fakultet Sveučilišta u Mostaru, 88 000 Mostar, Bosna i Hercegovina

²Fakultet zdravstvenih studija Sveučilišta u Mostaru, 88 000 Mostar, Bosna i Hercegovina

SAŽETAK

Uvod: Uporaba psihoaktivnih tvari je ozbiljan i težak problem u mnogim zemljama svijeta, te poprima epidemijske razmjere, posebno u populaciji mladih. Poremećaji uzrokovani uporabom psihoaktivnih tvari obuhvaćaju širok spektar poremećaja. Stručnjaci sve teže prate moguće posljedice koje droge mogu izazvati u ljudskom organizmu.

Cilj: Ispitati pojavnost uporabe psihoaktivnih tvari učenika srednjih škola u Županji.

Ispitanici i metode: Provedeno je presječno istraživanje tijekom svibnja 2023. godine. Prvu skupinu ispitanika tvorilo je 115 učenika trećeg i četvrtog razreda Gimnazije Županja, dok je drugu skupinu tvorilo 100 učenika trećeg i četvrtog razreda Srednje strukovne škole Županja. Instrument istraživanja bio je standardizirani međunarodno usuglašeni upitnik „Europsko istraživanje u školama o pušenju, pijenju i uzimanju droga među učenicima“ (engl. European School Survey Project on Alcohol and Other Drugs – ESPAD).

Rezultati: Statistički značajno veći broj ispitanika nikada nije koristilo cigarete, alkoholna pića, ljepila i druga otapala. Ispitanici Srednje strukovne škole su u većem omjeru svakodnevno koristili cigarete, dok su gimnazijalci započinjali pušiti u starijoj dobi. Gimnazijalci su u zadnjih 12 mjeseci u većem postotku koristili ljepila i druga otapala od učenika Srednje strukovne škole. Gimnazijalci su u višem omjeru „drogu“ probali zbog znatiželje.

Zaključak: Pojavnost uporabe psihoaktivnih tvari u srednjoškolske mladeži Županje je na zadovoljavajuće niskoj razini.

Ključne riječi: psihoaktivne tvari, učenici, srednja škola

Autor za korespondenciju: prof. dr. sc. Dragan Babić

E-mail: dragan.babic@fzs.sum.ba