

# Frequency of Substance Abuse Among Adolescents

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## ABSTRACT

**Introduction:** Drug addiction is one of the most prominent problems in many countries in transition, including Bosnia and Herzegovina. Age limit of drug addiction is shifted to the younger age groups, especially is troubling the increase in number of injection drug users. Our study was aimed to investigate the habits, attitudes and practices related to drug use among young people from the area of Sarajevo city. We can still feel the effects of the war, among which are the most important life without closest relatives, banishment and various types of war and post-war trauma. **Goals:** To determine the frequency of substance abuse among adolescents; Identify potentially relevant biological, psychological and socio economic characteristics of the adolescents; To explore adolescents attitudes towards drug use; Examine the general level of knowledge of adolescents about drugs and their effects. **Material and Methods:** The study was conducted on randomized sample of 502 students in two primary and three secondary schools in Sarajevo and Gracanica. To study used survey method. Survey instrument was a self-made questionnaire with the research variables. The obtained data were processed by a computer and statistically correlated. The study is of combined, retrospective, prospective and transversal type. **Results:** To the question „How many times have you consumed cannabis in the last 30 days“ about 6% of the respondents have tried once or twice, while 1.5% use it daily, ecstasy have tried one or two times 2.25%, while 0.5% have daily use. Based on the obtained results it can be concluded that students at schools in Sarajevo consumed drugs 50% more than the children in Gracanica. Analyzing the age at which the subjects consumed the drug for the first time, we came to the conclusion that in the third year of high school only 8% of adolescents have tried any drugs before they turned 15 years. This percentage among eighth graders is about three times higher. **Conclusion:** Presented research results clearly suggest a strong contamination of the living environment of young people with different types of psychoactive substances. Offer of drugs is extensive and distribution network covers all the places where young people visits, including schools. It is clear that today's teenagers sooner or later hear about drugs, see, get in touch with a „junkie“ and have a chance to take the drugs if they want to. From our research, we found that the following factors: Marital status of parents, employment of parents, the number of family members, type of school and satisfaction with oneself are not crucial for the eventual drug use among young people. While, the biological status of the parents, educational status of parents, financial status of parents, the tendency of parents tobacco and alcohol use, adolescents' attitude to parents, the harmony of relationships between parents, school performance, positive attitude toward the so-called light drugs, represent significant risk factors for adolescent populations.

**Key words:** Drug use, adolescence, risk and protective factors, Bosnia and Herzegovina.

## 1. INTRODUCTION

Drug addiction is one of the most prominent problems in many countries in transition, including Bosnia and Herzegovina (1-10). Age limit of drug addiction is shifted to the younger age groups, especially is troubling the increase in number of injection drug users. Our study was aimed to investigate the habits, attitudes and practices related to drug use among young people from the area of Sarajevo city. We can still feel the effects of the war, among which are the most important life without closest relatives, banishment and various types of war and post-war trauma. General situation is making much worse unemployment, insufficient and inadequate space for recreation and entertainment of young people. Open borders and lack of link between police and judicial institutions contribute to the widespread of psychoactive substances illegal trade. The drugs are available

to everyone, at many places in the city. The main reasons for taking drugs are the current dissatisfaction with the social and political, and especially economic situation. Although the drug addiction is recognized as a major socio-medical problem, still in the fight against it there is no necessary interconnections of different segments of the society. Drug use is an attempt to escape from reality. Only a small number of addicts are ready for treatment. To solve the problem of drug abuse it is necessary to include in the joint work several sectors, but of course the role of the family and a healthy upbringing has the primary position.

### 1.1. The etiology and pathogenesis of drug abuse among adolescents

Carr (1999) classified different explanations of psychoactive substances abuse of among adolescents into the following

theoretical groups: biological theories, theories of intrapsychic deficits, behavioral theory, family systems theory, social theory and the theory of multiple risk factors.

Predisposing factors for substance abuse are creating psychological vulnerability or susceptibility for the development of the disorder.

*Personal predisposing factors*

- Conduct disorder, emotional problems, specific learning difficulties, positive beliefs about drug use, risk-taking and creating excitement, problematic temperament, low self-esteem, externally control focus.

*Environmental predisposing factors*

- Factors related to the parent–child relationship in childhood: problems of emotional attachment, inconsistent parental discipline, lack of intellectual stimulation, authoritative parenting, indulgent parenting, parents neglect.
- Exposure to family problems in early childhood: abuse of psychoactive substances by parents, parent’s psychological problems, criminal behavior of parents, marital discord or violence, family disorganization, deviant behavior of siblings.
- Stressful situations in childhood: loss, separation, abuse, social difficulties, growing up in an institution.
- Precipitating factors for substance abuse are „triggers“ or they encourage the development of the disorder.
- Curiosity about drugs, peer pressure to take drugs, the desire to control the negative mood with the help of drugs, the benefits of the use of drugs, acute stress situations, illness or injury, abuse, being violated by peers.
- Maintaining factors contribute to the maintenance of psychological problems once they have already occurred.

*Personal maintaining factors*

- Biological factors: physical addiction, HIV, hepatitis and other diseases associated with drug use can cause negative emotional reactions, which maintains drug abuse.

*Environmental maintaining factors*

- Treatment factors: problem denial by family, family ambivalence toward solving problems; family that for the first time encountered a similar problem.
- Family factors: family support model of drug abuse through drug use, expressing positive attitudes about drug use and tolerance of drug use.
- Parental factors: misleading information about drug abuse, insecurity in relationships, and low self-esteem of parents.
- Factors of social network: the use of drugs in order to achieve certain goal; association with a group of peers who abuse drugs, adverse social environment, high levels of crime, low employment opportunities.
- Protective factors preventing further deterioration enhance and maintain the healthy development and have strong implications for prognosis and treatment.

*Personal protective factors*

- Biological factors: good physical health.
- Psychological factors: high IQ, good temperament, high self-esteem, high self-efficacy, optimistic attributional style; mature defense mechanisms.

*Environmental protective factors:*

- Treatment factors: family that accepts and wants to solve the problem, families who previously faced a similar prob-

lem; family that accepts the treatment plan.

- Family factors: secure parent-child relationship; authoritative parenting, clear family communication, flexible, family organization, the involvement of the father.
- Parental factors: good adaptation of parents; incorrect expectations regarding drug use, high self-esteem, high self-efficacy, safety in relationships with others; mature defense mechanisms, functional strategies of coping with stress.
- Factors of social network: a good network of social support, low levels of family stress, positive educational environment, high socioeconomic status.

**2. GOALS**

To determine the frequency of substance abuse among adolescents; Identify potentially relevant biological, psychological and socio economic characteristics of the adolescents; To explore adolescents attitudes towards drug use; Examine the general level of knowledge of adolescents about drugs and their effects.

**3. METHODOLOGY**

**Material**

The study was conducted on randomized sample of 502 students in two primary and three secondary schools in Sarajevo and Gracanica.

**Methods**

To study used survey method. Survey instrument was a self-made questionnaire with the research variables. The survey was anonymous and contained 20 questions. For most of the questions respondents had to circle the answers on YES or NO principle, or multiple choice questions. Given is the possibility that the respondent chooses one answer from those available, and for some it sought a written reply. The obtained data were processed by a computer and statistically correlated. The study is of combined, retrospective, prospective and transversal type.

**4. RESULTS**

Results are presented in tabular and graphical form. The answers given are grouped according to the issues in relation to the school in which the survey was conducted, for more accurate comparisons of some answers. The tables show data in absolute and relative numbers, somewhere was performed and the correlation among tested variables. (Table 1,2,3,4 and Figure 1).

The gender structure dominated girls (62, 55%) compared to the number of boys (37.45%).The survey covered two primary and three secondary schools in the two cities (Sarajevo and Gracanica). The largest number of respondents was from the Mixed Secondary School in Gracanica.

The polling included 502 students of which 110 (22%) at eight grade of primary, 120 (24%) from the first, then 130 (26%) in the second and 142 (28%) from the third grade of high school. On average 6% of respondents had consumed marijuana in the past month.

In the schools in the city of Sarajevo data show that 9.5% of respondents consumed once in a lifetime marijuana, ecstasy 5.25%, 4% LSD and speed, 2.5% sedatives, 1.5% cocaine and heroin and 5% inhalants. Of the total of 200 respondents in schools in Gracanica 5.75% of them tried marijuana, 1.5% speed and LSD, 1.25% ecstasy and inhalants, sedatives 1%, 0.5% cocaine and 0.25% heroin with statistically significant difference

between adolescents in Sarajevo and Gracanica ( $p < 0.05$ ).

Of the total of 502 respondents in the survey, 15.25% of them consumed marijuana, about 6% ecstasy, speed, LSD and inhalants, sedatives, with 4% and 2% cocaine and heroin.

Variable	%		
School performance	Excellent	6	
	Very good	50	
	Good	40	
	Sufficient	4	
Family status Lives with...	Both parents	70	
	With mother	15	
	With father	7	
	Stepmother and father	3	
	Father and stepmother	2	
	Other	3	
Parents employment	Both parents employed	25	
	Only father employed	50	
	Only mother employed	20	
	Both unemployed	5	
Number of siblings	1	67	
	2	20	
	3	9	
	4	3	
	5 and more	1	
Parents education		Father	Mother
	College	7	5
	Higher school	15	11
	Secondary school	66	61
	Primary school	9	18
	Don't know	4	5

Table 1. The socio-demographic data

We note that 50% of respondents completed previous class with very good grades. The 70% of respondents living with both parents, and 22% live with a single parent. In case of 70% of respondents only one parent is employed and only in 25% of cases both parents are employed. As many as 67% of respondents have only one sibling. Over 60% of parents have a high school diploma and about 7% are college-educated.

Most respondents (60%) are very satisfied with themselves.

Variable	%		
Do your parents know that you use drugs?	Yes	9	
	No	85	
	Maybe	2	
	Don't know	5	
What do your parents think about smoking marijuana?	Very negative	83	
	Negative	10	
	Somewhat negative	6	
	Does not have negative opinion	1	
Mutual relationship of adolescents and parents		Father	Mother
	Very poor	7	4
	Mostly poor	10	7
	Unstable	18	13
	Good	20	21
Excellent	45	55	

Table 2. Knowledge and attitudes of parents about drug use among adolescents

The absolute majority of parents (85%) do not know that their children are consuming drugs. The absolute majority of the parents of the respondents (83%) have a very negative opinion on drugs. Most respondents have excellent relationship with their parents (50%), while about 20% have poor, mostly poor or very poor relationship with parents

Variable	%	
Have you tried any drugs before the age of 15?	8 grade of primary school	19
	1 grade of secondary school	14
	2 grade of secondary school	15
	3 grade of secondary school	8
Why do young people take drugs?	Affirmation of one's peers	19
	Personal problems	23
	Family problems	9
	Hedonism	5
	Reduction of discomfort	10
	Curiosity	30
Sources of information about the harmful effects of drugs	Unfavorable living conditions	3
	Ignorance	1
	Parents	30
	Teachers	20
	Friends	19
	Older adolescents	4
	Internet, TV and magazines	20
	Professional literature	3
	Other	4

Table 3. Age, the causes of drug use and sources of information about the harmful effects of drugs

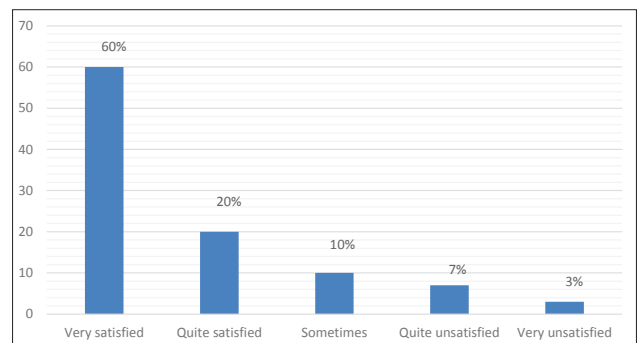


Figure 1. The degree of satisfaction with oneself

At the third year of high school only 8% of adolescents have tried some drugs before the age of fifteen, while the percentage of eighth grade students is about 3 times higher. The highest percentage of respondents listed curiosity, a personal problem and recognition among peers. Most information about the harmful effects of drugs adolescents have received from parents, teachers and over the internet and media.

The drug is available at all places, even within the school premises. Most drug users choose to take this step at its own initiative or as offer from a close friend. Exactly 20% of the eighth grade and even 60% of the high school third grade came in contact with a person who consumed an illicit drug.

## 5. DISCUSSION

The study included a total of 502 students from two primary and three secondary schools. The survey was conducted among students in the cities of Sarajevo and Gracanica. The ratio of

Variable	%			
		In school	At the school	At the cafe
Availability of drugs	Cannot / do not know	30	25	40
	Possible but difficult	20	25	45
	Possible and easy	22	15	63
Offering and soliciting for drug use	No one ever	50		
	I've decided to try myself	15		
	Friend	20		
	Girlfriend, boyfriend	5		
	older adolescents	5		
	Drug dealers	2		
Come in contact with a person who consumes one illicit drug	Other	3		
	8 grade of primary school	20		
	1 grade of secondary school	30		
	2 grade of secondary school	40		
	3 grade of secondary school	60		

Table 4. The availability of drugs and methods of spreading

respondents was 66% female respondents (318) and 33% of male respondents (188).

Most of the respondents completed previous class with very good grades, followed by a good success, average, etc. The largest number of respondents is living with both parents (70%). When it comes to the employment of parents of respondents of 70% of respondents work only one parent, while in 25% of cases both parents are employed. Also 67% of patients had only one brother or sister. Examining the level of parental education, we have found that 66% of parents have completed secondary education and only 7% have higher education.

To the question „Do you have consumed any of the drugs?“ 15% of respondents said that they had tried or regularly consume marijuana, about 6% of the respondents had tried or regularly consume ecstasy, speed, LSD, sedatives and inhalants, while cocaine and heroin have tried around 2% of respondents.

To the question „How many times have you consumed cannabis in the last 30 days“ about 6% of the respondents have tried once or twice, while 1.5% use it daily, ecstasy have tried one or two times 2.25%, while 0.5% have daily use. Based on the obtained results it can be concluded that students at schools in Sarajevo consumed drugs 50% more than the children in Gracanica.

Analyzing the age at which the subjects consumed the drug for the first time, we came to the conclusion that in the third year of high school only 8% of adolescents have tried any drugs before they turned 15 years. This percentage among eighth graders is about three times higher.

As for parent’s knowledge about whether they know that their children are taking drugs, we get that 85% of parents do not know that their children are using any of the drugs, while only 8% are aware of this fact. We also found that 83% of parents have a very negative opinion of drugs. Most respondents experiencing drugs are readily available, even within the school premises. Living environment of today’s adolescents is characterized by high availability of drugs, and is likely the contact with people who consume drugs.

Most adolescents who consume drugs decide to take this

step on its own initiative or at the urging of close friends (2, 6, 8, 11).

When it comes to informing pupils about the negative effect of drugs on the body, adolescents received most information from parents, teachers, over the Internet and from the literature. The most common motive of drug consumption by the opinion of adolescent is curiosity, then affirmation among peers.

Adolescents’ relation to parents in 50% is excellent, while 20% have a poor or mostly poor. From the survey we received information that the adolescents are generally satisfied with them self.

Important role in preventing use of illicit drugs among youth have parents. They should observe the child’s behavior, they should be informed about the symptoms that arise due to the consumption of drugs, especially if the family belongs to a high risk group. It is necessary to make better contact with the teachers and spent more leisure time with children. Young people need to create a negative image of narcotics, but it should find a modus how to do it and that it does not cause counter effect. Perhaps it would be advisable

to use once the shock therapy, that is, to show to young people any danger due to the consumption of intoxicants. The media also play an important role. Through them we can organize content which will inform young people about the harmfulness of drugs, and the program content should present persons who consume intoxicants. In parallel with these should be adopted more stringent regulations, or at least the consistently apply current ones. In addressing the problem of drug addiction should be involved parents, schools, cultural and sporting institutions, health care workers and so on.

## 6. CONCLUSIONS

Presented research results clearly suggest a strong contamination of the living environment of young people with different types of psychoactive substances. Offer of drugs is extensive and distribution network covers all the places where young people visits, including schools. It is clear that today’s teenagers sooner or later hear about drugs, see, get in touch with a „junkie“ and have a chance to take the drugs if they want to.

It seems that the fear from the drugs weakens from generation to generation and first experiences with drugs adolescents acquire earlier, often as early as in elementary school.

Smaller are genders differences in interest for opiates and at the level of experimentation among girls keep pace with the boys.

Drugs today are not asking for financial status, does not care in which neighborhood adolescents live, where they go to school, or to what subculture they belong. Research has shown that tobacco smokers showed a greater preference for consuming other drugs, compared with their nonsmoking peers. The same goes for users of alcohol, where we find that significantly more users of alcohol consumed other drugs compared to teens that do not drink alcohol.

Reciprocal links do not show up only on the qualitative level (consume–not consume), but also include the quantitative aspect. So among heavy smokers of tobacco (or marijuana) we found a higher rate of consumption of other drugs than among moderate smokers.

We also found quite solid chronological sequence of consum-

ing different types of drugs. Teens prone to drug use, as a rule, are entering the world of narcotic substances through alcohol and tobacco, followed by marijuana and then other illicit drugs.

From our research, we found that the following factors: Marital status of parents, employment of parents, the number of family members, type of school and satisfaction with oneself are not crucial for the eventual drug use among young people. While, the biological status of the parents (both parents died), educational status of parents (and higher university degree), financial status of parents (extreme poverty and extreme wealth), the tendency of parents tobacco and alcohol use (father smokes, father drinks), quantitative aspects of education (weak presence of the mother, the weak presence of the father), adolescents' attitude to parents (poor relationship with the mother or father), the harmony of relationships between parents (poor relations between parents), school performance (poor grades, grade repetition), the harmfulness of drugs (low perception of harmfulness of drugs), positive attitude toward the so-called light drugs (moderately negative attitude), knowledge about drugs (user knowledge, misconceptions about drugs), represent significant risk factors for adolescent populations.

It is unquestionable that in the earliest grades of elementary schools should start the primary prevention of drug use among children using all types of education that needs to be implemented by teachers in collaboration with health educators and possibly professionals working in drug discovery and sanctioning those who take them. Community must devote more resources to this activity, because the consequences are costly or irreparable, for the community and for the family of consumers of the drugs.

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