Drug Use among Croatian Students

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ABSTRACT

The subject of this study was to determine the frequency of drug use and attitudes toward drug use in Croatian high school students. The study was carried out in a middle-class high school in Zagreb. Out of 273 students who participated in an anonymous, self-report, 23-item questionnaire, 69 reported that they had at least once used drugs. The most frequently used drug was cannabis. While one third of students have been offered drugs, even 41% of the students would have take the drug if it becomes available. It can be concluded that the drugs appear to be highly available among Croatian students. According to our results, even more stronger increase in the number of drug users in Croatia could be expected.

Introduction

Although the history of drug misuse is centuries old, during mid 1960's a widespread introduction of marijuana, and subsequently other illicit drugs, occurred among the young. Since the first experience with drugs occurs most frequently at the age of mid adolescence, between 15 and 19 years, the highest prevalence of drug use is between the age of 18 and 25 years, and later tends to decrease, being rare after age of 35 years. Therefore, adolescents, being in intensive physiological and psychological growth transformation, seem to be the most vulnerable population regarding the drug use. Drug use is a consequence of interaction between complex circumstances as heredity, individual predisposition, personality traits, family and peer influence and the role of an individual in a society. New tools are being established and develop further, including an insight into one's own behaviour and anticipation of the future. Attitudes towards self and society start to consolidate, and the person becomes increasingly aware of his/her own talents, capacities and limitations. These young people represent the future of the society. An estimation tracking the prevalence of drug use and attitudes towards drugs among adolescents seem to be very important.

While some data indicate decrease in alcohol abuse among adolescents in recent years, it is not the case with drugs, especially with cannabis. In Croatia, the
data estimating illicit substance use are derived from hospital records of medically treated drug users and from police records\textsuperscript{7}. The real number of drug users in Croatia is unknown. Other systems currently available to gauge drug use levels and trends, such as national household survey of drug use estimating the drug use in the total population\textsuperscript{1}, have not been performed in Croatia until now. Furthermore, derived from the available database, the number of registered drug users has rapidly increased since Croatia became engaged in war in 1991\textsuperscript{8}. While the number of newly registered drug addicts was between 60 and 70 before the war, after the escalation of the war that number has rapidly grown up to more than 500 new addicts per year. According to hospital records, 1123 new addicts were registered in Croatia in 1998, 984 of whom are heroin addicts\textsuperscript{7}. After the end of the war, the number of new addicts appears to increase further. About 1000 drug addicts are registered in Zagreb, with the mean age of 21 years. The majority of them (80\%) are dependent on heroin, but the use of stimulants is reported to be in increase, and 20\% of addicts are found to use PCP, Ecstasy, amphetamine and cocaine. In general, all of them have started with marijuana and hashish, or both, and continue to use it. In Zagreb, drug users are recruited usually from the undisrupted families, originating from an ex-middle high society class, while a half of them have at least one parent with a university degree. After 1991, the focus of their parents' attention had shifted to war, with a significant number of them who did get involved in war by themselves. Subsequently, the children spent much less time with their parents, and have faced an unexpected freedom. On the other hand, we confront a whole new set of social and political realities emerging from the wreckage of communism\textsuperscript{9}.

Because of the lack of data specifically regarding adolescent drug use and attitudes toward drugs, we decided to carry out a study to determine the latter just where it begins, in one high school in Zagreb. On the other hand, the right information about drug use and opinions regarding drugs are too easy to get. Persons involved with drug use are not willing to discuss it, unless they begin to trust the interviewer\textsuperscript{10}. These persons prefer anonymous questionnaires rather than direct conversation. Thus, we decided to create our own «drug-use survey» and give it to students in the chosen high school.

The purpose of this study was to investigate adolescent drug use among high school students in Zagreb. In addition to record the prevalence of students who have used drugs once and of current drug users, we focused the interest on perceived drug availability, the extent of drug use in a school environment, the location of drug use, the quality of relationship with parents, knowledge regarding drugs, as well as attitudes toward drugs and drug users.

**Methods**

**Sample**

During April and May 1997, an anonymous self-report questionnaire was distributed among 273 students from a general high school (gymnasium) during regular class time. The study included grades 1 through 4 (age range 14–19 years), with each grade encompassing two classes. The investigated school is a typical, middle-class high school and is considered to be a representative high school in Zagreb, being situated in the centre of the city. Students from different parts of the town attend this school, and about half of them continue education at different universities after the 4th class.
Survey

The questionnaire encompassed 23 items, regarding age and sex, the first drug use, current drug use, school performance and attitudes towards various aspects of drug use, and persons who use drugs. The survey was performed in Croatian language (see the English version at the end of the issue). All of the 273 students who were asked to participate finished the survey. The sample consisted of 207 female and 66 male students.

Results

Frequency of drug use

From the entire sample, 69 students (47 female, 22 male) reported that they had tried drugs. The number of students who use drugs increased as they advanced to a higher grade.

The number of students who have ever tried drugs according to their grade is presented in Figure 1. The majority of students who reported to have experimented with drugs corresponded to the 3rd (20) and 4th grade (30 students), respectively. Furthermore, 46 out of 69 students continued to use them during the previous month. The mean age of the first drug experience was 15 years in 23 students and 16 years in 19 students, whereas 11 of them tried drugs for the first time when they were 14. Thus, the vast majority appears to try drugs first between the age of 14 and 16, as can be seen from Figure 2. The mean age of the first experience with drugs is 15.8 years.

Fig. 1. Number of students who have tried a drug at least ones.

Fig. 2. The mean age of first use of any drug.
The rest of them reported the first experience with drugs when they were 17 in eight cases, 13 in six cases, and two at the age if 12 and 18 years, respectively. Marijuana appears to be the most commonly used drug, reported to be tried at least once by 57 students. It was followed by hashish, taken by 18 students. The presence of other drugs is shown in Table 1.

Seven students report the use of stimulants. Inhalants and LSD were reported more rarely, while only one student reported to be using heroin. No one appeared to be using cocaine.

**School performance**

Among the drug users none of the students managed to reach excellent school performance. Very good and good performance was registered in 21 students, and 4 students reported poor performance, whereas one student had to attend the same grade twice.

**Quality of relationship with parents**

Among the drug users, 32 students described family relationship as usually satisfactory. The remainder described them as always satisfactory (5 students) and as sometimes satisfactory and rarely satisfactory, 4 students in each category. One drug user reported them as never satisfactory.

**Drug availability**

Among all the students, 88 reported to be offered a drug by someone at least once. Most commonly that happened at private parties (organised at someone’s home), whereby other places involved with easy drug availability were reported to be discotheques, cafe bars and parks, as can be seen from Table 2.

Two students had a chance to take drug at school, and 18 could not localise the place where they could use the drug. When asked about the possibility to buy drugs at school, 18% of all the students gave a positive answer. The higher age of

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**TABLE 1**
REPORTED INCIDENCE OF «EVER USED» DRUGS IN DECREASING ORDER

<table>
<thead>
<tr>
<th>Drug</th>
<th>Number of students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marijuana</td>
<td>57</td>
<td>24.0</td>
</tr>
<tr>
<td>Hashish</td>
<td>18</td>
<td>6.9</td>
</tr>
<tr>
<td>Stimulants (other than cocaine)</td>
<td>7</td>
<td>2.5</td>
</tr>
<tr>
<td>Inhalants</td>
<td>4</td>
<td>1.6</td>
</tr>
<tr>
<td>LSD</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>Heroin</td>
<td>1</td>
<td>0.4</td>
</tr>
</tbody>
</table>

**TABLE 2**
NUMBER OF STUDENTS WHO HAVE BEEN OFFERED A DRUG AT DIFFERENT LOCATIONS

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>At parties</td>
<td>39</td>
</tr>
<tr>
<td>In discos</td>
<td>13</td>
</tr>
<tr>
<td>In cafe bars</td>
<td>12</td>
</tr>
<tr>
<td>In parks</td>
<td>12</td>
</tr>
</tbody>
</table>
students, the higher the awareness of drug availability in school settings. Mari-
juana seems to be the most widely dis-
tributed drug, being offered to 75 stu-
dents. Additionally, hashish was offered to 20 students, followed by hallucinogens offered to 9 students, heroin to 6, stimu-
lants to 7 (out of them 3 with cocaine), and 2 students were offered various other drugs. Even 42.5% of the students re-
ported to know someone from the same school who uses drugs.

The reasons for drug use

When drug users were asked about their motives, the most of them (45 out of 69) reported curiosity to be the main rea-
son, as can be seen from Table 3.

Furthermore, 25 out of them men-
tioned to use drugs because of not being oc-
cupied by some other leisure activities, while 9 users wanted to change reality and 7 were looking for a better mood. Other reasons were better entertainment for 3 drug users, while 3 students wanted new experiences and 2 of them hoped to solve their problems by using drugs. When asked whether they will ever agree to use drugs, 144 out of 273 (41%) stu-
dents gave a positive answer. Among them, 41 students are prepared to take a drug immediately, usually marijuana and hashish. Another 6 students are ready to take hallucinogens without hesitation, while 3 students will use stimulants, 2 of them will use cocaine and one will take heroin, if the latter is provided. The re-
mainning 73 students will possibly take drugs under some »special circumstan-
ces«. Those circumstances are: being disappointed for 32 students, being curi-
ous for 13 students, searching for better entertainment for 10 students, being per-
svuad by peers for 8 students. Another 4 students believe that drugs can make them happy, and one student will use it if he feels an urge to do so.

Responsibility for drug use

The majority of adolescents blame the society (58.6%), and the individual who uses drugs (54.2%) for drug use. Family is regarded responsible for drug use by 24.9% of the students, and loss of self-
confidence and of trust in society in gen-
eral is regarded responsible by 23.9% of the students, while 1.5% of the students mentioned some other reasons. The drug use is considered to be a serious problem by 198 students, a moderate problem by 67 students, and a mild problem by fur-
ther 5 students, while for the remaining 3 students drug use is not considered to be a problem at all.

Knowledge regarding drug use

Most of the students (68.5%) find their current knowledge regarding drug use and the harm resulting from it to be quite sufficient, and the rest 31.5% of the stu-
dents find their knowledge about drugs insufficient. In spite of this observation, 71.2% of the students want to know more about the issue. In order to test their cur-
rent knowledge, the students were asked how could a particular drug be taken. The

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>To experiment</td>
<td>101</td>
</tr>
<tr>
<td>To change self-esteem</td>
<td>49</td>
</tr>
<tr>
<td>To be modern</td>
<td>15</td>
</tr>
<tr>
<td>To be different</td>
<td>4</td>
</tr>
</tbody>
</table>
right answer was obtained by 90.1% of the students for marijuana and by 84.9% for hallucinogens. To some lesser extent the correct answers were given for cocaine and heroin by 73.6% and 72.9% of the students, respectively. On the other hand, 8.9% of the students did not have any idea about how particular drugs are used.

Furthermore, 63.7% of the students included cocaine, and 68.1% heroin in the so-called »hard drugs«. A similar number of students (68.5%) included marijuana in the so-called »soft drugs«, but only 30.8% of them considered hashish to belong to the same group. However, 12.5% of the students classified hallucinogens and stimulants in the »soft drugs« group as well.

**Attitudes towards drug use**

The majority of students (39.6%) regard drug users as dependent persons who require medical help. Further 27.1% stated that drug users need to assume the full responsibility for their behaviour, and another 21.6% regard them as victims of the society. As for other 11.7%, they consider themselves as totally innocent, whereas the rest 8.4% of them regarded drug users as fools who have got just what they were looking for. Almost two thirds (71.8%) of all the students are against drug legalisation, while another 28.2% support legalisation of at least some illicit substances. The majority of them (55 students) will approve marijuana legalisation and 15 will agree if the same is to be done with hashish. Whereas 7 students agree with hallucinogen legalisation, only a minority supposes that stimulants, heroin (3 students) and cocaine (2 students) need to be legalised. Finally, 6 students stated that all existing drugs need to be legalised.

**Discussion**

In our study, 26% of high school students in an anonymous self-reported questionnaire stated that they had used drugs. Marijuana is the most commonly used drug, as reported by 20% of all the students, followed by hashish, taken by 6.9% of the students. After cannabis, stimulants are used by 2.5% of students, while heroin was registered in one student only. These results are similar to the results of other studies. According to the American epidemiological data, where 13% of youth aged 12 to 17 years did try cannabis at least once, while the incidence of cannabis use in persons aged from 18 to 25 years increased up to 51%. Our results also indicate a dramatic increase of drug use in older high school age groups, since more than 50% of drug users belong to the age of 18 years. Quite similar to our results is the report of much larger sample of the New York adolescents, where 32% of them reported drug use, while 28% reported marijuana use. Those are followed by stimulants, while the least commonly used drug was heroin.

The critical age when our students try drugs for the first time appears to be at the age from 14 to 16 years. The average onset of drug use was 15.8 years. The age of onset of drug use is continuing to be a crucial risk factor for progression towards its most severe forms. The mean age of onset of marijuana use was 12.7 years for crack-users, compared with 15.0 years for those who remained exclusive marijuana users. There is a strong association between an early age of the first drug use and a subsequent drug misuse. The development of drug misuse and dependence is more likely to occur if the age of first use precedes the age of 15. Thus, our students, because of an average onset of drug use (usually marijuana) slightly after the age of 15, seem to be
protected against the future use of more devastating drugs. While marijuana appears to be far the most common drug of use throughout the world\textsuperscript{2,4,6,11,14}, analyses have documented that marijuana use precedes the use of other illicit drugs\textsuperscript{12}, suggesting the developmental pattern of use.

Drug users in our study did not report disturbed interpersonal relationships in their families. According to other results, drug users have less satisfactory relationships with their parents than nonusers, and they were less close to them\textsuperscript{12}. Drugs seem to be highly available and easy accessible to our students. Almost one third of the students have been offered a drug. Private parties appear to be places most commonly involved in drug use. In Canada marijuana is most frequently used at "a friend's home", compared with "other places", as well as in "a car". In fact, very little is known about where drug misuse beings. Thus, more knowledge about the location and circumstances surrounding an initial drug use would be valuable.

While, as expected, marijuana was the commonest drug offered to our students, the presence of other drugs is also noteworthy. Although none of the students had tried cocaine, 3 of them were offered this extremely dangerous drug. In our neighbourhood, in Hungary, from the entire sample of 234 students, no substance use other than alcohol and tobacco was reported. But, on the other hand, the perceived availability seems to be fairly high (higher among older students). While none of them had tried the substance, 53% out of 11th grade males considered marijuana as easy or fairly easy to get. They are considered as "vulnerable" to future use\textsuperscript{15}.

According to our results, 42.5% of the students know someone from the same school who uses drugs. In England there is a very dramatic increase in the percentage of students acquainted with some other student who takes drugs. While in 1969 only 15% of students reported to know someone who takes drugs, in 1994 the number of those students increased up to 65%. In our study 30% of the students have been offered drugs. Whereas in 1969 only 5% of the students had been offered drugs, in 1994 even 45% of them obtained the drug from someone\textsuperscript{6}.

The main reason for taking drugs appears to be curiosity, according to our drug users' opinion. In the former Soviet Union 40% of juvenile addicts initially tried drugs due to curiosity, whereas peer pressure, family problems and boredom had motivated 20% of the responders\textsuperscript{4}. Being persuaded and encouraged by peers seems to be the crucial reason in making decision to take drugs, as well as to assume certain attitudes toward drug use. The search for pleasure of gratification is a very well known modulator of behaviour, considering it as the source of pleasure. Probably led by curiosity, and fascinated by peers' stories, a young person decides to try drugs, seemingly over-estimating his/hers self-control resources.

None of 69 drug users in our study reported excellent school performance. Adolescent drug users reach weaker school performance, are less religious, and more often involved in delinquent activities when compared to nonusers\textsuperscript{12}. Whether failure in functioning weakens school performance after the student has started using drugs, or the persons prone to neglect their responsibilities are more easily involved with drugs and locations where the drugs are easy to get, still remains an unanswered question. A reciprocal relationship is presumed, with maladjustment behaviour leading to drug abuse, subsequently impoverishing the already existing bad performance\textsuperscript{12}. Although even 72.5% of all the students consider drug use as harmful and danger-
ous, 26% of them have reported to use drugs, and even 41% of them are ready to use drugs if given. Some of them will take it immediately if given, whereas the remaining 64% will do it under special circumstances. Our students appear to be sufficiently informed, but in spite of their knowledge, they do not apply it in everyday life. The problem is firmly underestimated and ignored by them. Students taking drugs are at a high risk of becoming drug addicts in their near future. While 19.3% of all addicts medically treated in 1998, are aged 16–20 years, even 35.0% of them are in the next age range of 21–25 years. Together with high availability and easy accessibility of drugs, our students are at an extremely high risk for future drug use. Since preventive measures have obviously failed, drug use seems to be a serious problem that may have devastating consequences. Our findings highlight the importance of developing early prevention and educational efforts in order to restrain the ongoing »drug epidemic« in Croatia.

REFERENCES


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UZIMANJE DROGE MEDU UČENICIMA U HRVATSKOJ

SAŽETAK

Cilj studije bio je istražiti učestalost uzimanja droge te stavove prema uzimanju droge u učenika srednje škole u Hrvatskoj. Studija je provedena u jednoj općoj gimnaziji u Zagrebu. Ukupno je samoocjenskom, anonimnom anketom, ispitano 273 učenika, među kojima je 69 navelo da su najmanje jednom probali drogu, najčešće kanabis. Dok je jednoj trećini studenata ponuđena droga, čak 41% studenata izjavilo je da bi uzeli drogu ukoliko bi im bila ponuđena. Zaključno se može reći da je droga lako dostupna učenicima u Hrvatskoj. Prema rezultatima naše ankete, možemo u budućnosti očekivati još veći porast broja osoba koje uzimaju drogu u Hrvatskoj.