

Youth Alcohol Consumption in Romania: Results of a Student Survey in Pitești.

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ABSTRACT

Aim

In this article we report on the results of an alcohol student survey that was administered in Pitești, the first city in Romania to develop local alcohol policy.

Method

The ESPAD questionnaire 2003 was the bases for the DRAIN questionnaire that was developed to investigate the prevalence of alcohol use and alcohol related issues of Pitești youth. The student survey data was collected by the University of Pitesti in May 2008 amongst students in the high schools of Pitești. A stratified sample of 1.500 students was drawn, 50 classes total and 3 classes per school (assuming that each class contains about 30 students), using type of school, grade and path as stratifyers. A total of 1.026 questionnaires were useable for data analysis.

Results

Pitesti's youth generally starts drinking at a young age and many of them are currently regular drinkers. This pattern is worrisome, since early onset of drinking and regular drinking as a teenager increases the chances of developing health risks and an addiction to alcohol later in life. Our study supports the peer influence on teens and also shows that the norms of parents are (too) liberal.

Conclusion

Compared to Romanian youth, Pitesti's youth tends to drink a bit more. By allowing early initiation of alcohol, parents are laying the foundation for alcohol problems of their children later in life. Parents should set the norm of 'no alcohol until the age of 18' for their children. Also no alcohol should be sold to or bought for youth under the age of 18 and no alcohol outlets should be sold within 200 metres of high schools, as Romanian alcohol legislation stipulates.

Key words

Alcohol consumption, risk behavior, adolescent, age of first use, Romania

INTRODUCTION

Alcohol in Romanian culture

Drinking alcohol is a common practice in Romanian culture. Statistics show that the recorded sale of alcohol in Romania increased from about 6 liters of pure alcohol per capita in 1960 to a peak of almost 13 liters per capita in 1981 (age 15+) (Eurocare Romania profile, 2007). Since then a steadily declining trend is recorded until 2003 (approximately 9,7 liters) (WHO Core Health Indicators database, 2008). The practice of home brewing of țuică (plum brandy with an alcohol percentage of about 40%), makes it very difficult to measure the true level of alcohol consumption in Romania. Unrecorded alcohol consumption is estimated to reach an additional 4 liters of pure alcohol per capita, which is much higher than in other parts of the world (Popova et al., 2006; Anderson & Baumberg, 2006).

The consequences of the high amount of alcohol intake are visible in the standardized mortality rates (per 100.000 inhabitants) due to alcohol related illnesses in Romania: 175,06 for Ischaemic heart disease, 37,09 for liver cirrhosis, 5,72 for mouth and oropharynx cancer, 5,10 for accidental poisonings and 3,38 for alcohol use disorders (WHO global status report on alcohol, 2004). The hepatotoxic compounds in illegally-produced spirits may be partly responsible for the high mortality rate of, for one, liver cirrhosis (Szücs et al., 2005). General practitioners and the local clergy report that about 60% of the inhabitants in rural communities have alcohol related problems or related medical conditions (WHO global status report on alcohol, 2004).

Youth drinking in Romania

Alcohol is the most prevalent substance used among early and late adolescent youth, also in Romania (Hibell et al., 2004; Johnston et al., 2006). Alcohol consumption by young people can cause serious forms of disorder and health damage. Drinking, especially at an early age, leads to a variety of social and health problems, including problem behaviours, crime, accidents, fights, neurological deficiencies, intoxication, poor school performance and an increased likelihood of later alcohol dependence (Brown et al., 2000; Ellickson et al., 2003; Warner & White, 2003; Tapert et al., 2003; Sindelar et al., 2004; Macdonald et al., 2005).

In the ESPAD 2007 survey (Hibell et al., 2009), one of the few international surveys on youth alcohol consumption Romania participates in, 74 percent of Romanian students aged 15 and

16 indicated to have drunk alcohol in the past 12 months (average 82% in Europe). The proportion of students reporting to being drunk in this same period is also lower than the European average (26% versus 39% in Europe). This makes Romanian youth moderate drinkers compared to youth in, for example, Western Europe. However, Romanian students are rather prone to giving socially desirable answers, which means that the level of (initiation of) alcohol use is probably higher than what is reported (Hibell et al., 2009).

Romanian boys are more severe drinkers compared to girls. An average of 25% of the students (37% of boys and 14% of girls) reported to have drunk alcohol on three or more occasions in the past month, a much smaller percentage reported to have become drunk because of this (17% boys, 5% girls and 10% on average). 12% of Romanian youth has already been drunk before the age of 13 (20% of boys and 6% of girls). Early onset of alcohol use is a strong predictor for alcohol related health problems and addiction later in life (Dawson et al., 2006; Grant et al., 2001). Youth that starts drinking before the age of 15 has four times more chance to develop alcohol dependence later in life than youth that postpones the initiation of alcohol until the age of 21 (Grant & Dawson, 1997). The initiation of alcohol use should therefore be postponed as long as possible.

The influence of parents and peers

Parents should not underestimate the influence they have on their child when it comes to alcohol use. A high-quality parent-child relationship (the child is securely attached, feels close to their parents and they can talk easily about personal worries) has a significant influence in the delay of alcohol use for example (Rose et al., 2001). This good relationship between parents and their child will trigger a sequence of healthy developments, from postponing the age of first use to lowering alcohol-use levels and perhaps even fewer alcohol-related problems later in life (McNally et al., 2003). Recent research indicates that the delay of initiation of drinking of their child is a very important premise if parents want to prevent further alcohol related problems for their child later in life. In the instance where the parent – child relation is of low quality, the influence of the parents on the child's drinking behaviour diminishes and peers become more influential also because youth will spend more time hanging out with peers (Kuntsche et al., 2009).

In general youth hangs out with friends with similar kind of alcohol use, because adolescents tend to associate with like-minded individuals (Bauman & Ennett, 1996; Fowler et al., 2007). This selection mechanism gets stronger over the years (Parra et al., 2007). Youth tends to overestimate the alcohol consumption of their friends (Komro & Toomey, 2002). This causes them to start drinking according to this perceived pattern to 'fit in', meaning that they will drink more than they would if they thought that less of their friends drank less alcohol (Fowler et al., 2007).

The need for alcohol policy in Romania

Although early initiation of alcohol use by teens and alcohol related problems in general are being viewed as serious by some, Romania and its inhabitants currently lack an awareness of the scale and character of the problems and insight in the way the most pregnant problems can be tackled in an effective way. Although national alcohol legislation has been designed, specifying for example that no alcohol can be sold to youth under the age of 18 (Anderson & Baumberg, 2006), research has shown that compliance with this alcohol law is virtually non-existent (van Hoof & Moll, 2009). On the community level the need for local alcohol policies is great, especially since there is no national alcohol policy to apply, nor are there clear guidelines on how to apply and enforce national alcohol legislations.

In order for an alcohol prevention policy to be successful contextual factors need to be taken into account. A successful prevention strategy needs to use proven effective methods and approaches. Reducing the availability of alcohol is the most effective strategy, combined with creating awareness of alcohol related issues in the community and support for the policy measures through continuous and intensive media attention. Identifying the prevalence of alcohol use and alcohol related problems is a vital element of the local strategy, so that the severity of the alcohol related problems and need for local alcohol policy can be communicated to local politicians and the public (Babor et al., 2003; Reynolds, 2003; Holder, 1997; Holder, 1999).

Developing local alcohol policy in Pitesti

In this article we report on the results of an alcohol student survey that was administered in Pitești, the first city in Romania to develop local alcohol policy. The Dutch Romanian Alcohol policy Implementation Network (DRAIN project, financed by the Social

Transformation Programme (Matra) of the Dutch Ministry of Foreign Affairs), strives to develop a method for integral alcohol policy. The Pitești DRAIN project aims to reduce the availability of alcohol for under aged youth and to change the permissive attitude towards youth drinking.

METHOD

The DRAIN questionnaire

The ESPAD questionnaire 2003 (Hibell et al., 2004) was the bases for the DRAIN questionnaire that was developed to investigate the prevalence of alcohol use and alcohol related issues of Pitești youth. Several specific Romanian and Pitești questions have been added to the original ESPAD questionnaire, such as the consumption of home brewed alcohol and the local hotspots for young people to hang out. The ESPAD questions on tobacco or other drugs use have not been included in the questionnaire. The DRAIN questionnaire consists of four sections: alcohol consumption (8 main questions, 37 sub questions), attitudes on alcohol (5 main questions, 53 sub questions), alcohol availability & social influence (7 main questions, 47 sub questions) and background characteristics (8 questions).

Sample

The student survey data was collected by the University of Pitesti in May 2008 amongst students in the high schools of Pitești. There are about 15.000 students in 17 high schools and 590 classes in the city (see table 1, data from Pitești's school inspectorate, 2008). Students aged 15 – 18 attend these schools in grade IX till XII (there is one additional year for some, grade XIII). There is a large diversity in the type of schools and the type of track pupils take within these schools (Eurydice, 2008). Therefore a stratified sample of 1.500 students was drawn, 50 classes total and 3 classes per school (assuming that each class contains about 30 students), using type of school, grade and path as stratifiers.

Table 1 Population of classes in Pitești high schools, stratified on school path and grade

	IX		X		XI		XII		XIII		Total	
		%		%		%		%		%		%
Technological lyceum	44	32,4	43	31,2	41	30,4	53	35,3	0	-	181	30,7
Theoretic lyceum	47	34,6	52	37,7	57	42,2	61	40,7	0	-	217	36,8
Progressive route	0	-	0	-	0	-	27	18,0	26	83,9	53	9,0
School of art and profession	40	29,4	41	29,7	32	23,7	0	-	0	-	113	19,2

Evening or after job studies/reduced frequency lyceum/without frequency lyceum/post-lyceum	5	3,7	2	1,4	5	3,7	9	6,0	5	16,1	26	4,4
Total	136	23,1	138	23,4	135	22,9	150	25,4	31	5,3	590	100,1

Data collection

The head of the school was asked to select the 3 class rooms that fitted the selection for his school. The questionnaire was administered in selected class rooms during a regular school hour. Students that were absent during the data collection were not revisited. All high schools and classes approached, participated in the study. In the selected class rooms a total of 1.300 students could have participated in the study, but 247 students were absent (41 students were absent because they are excellent students and following classes elsewhere, 100 students were absent with a legitimate reason (such as sickness), 1 student was expelled from school and 105 students were truant), 4 students refused to participate and 2 students did not complete the questionnaire correctly. This brings a total of 1048 questionnaires that were entered into SPSS, a response of 80,6%. After data cleaning 1.026 questionnaires were evaluated to be useable for data analysis, 22 questionnaires were eliminated because students had indicated on their questionnaire that they had not answered all questions honestly.

Table 2 Realisation of students in Pitești high schools, stratified on school path and grade (after data cleaning)

	IX		X		XI		XII		XIII		Total	
		%		%		%		%		%		%
Technological lyceum	111	48,3	64	22,4	90	36,4	55	25,2	0	-	320	31,2
Theoretic lyceum	67	29,1	114	39,9	122	49,4	102	46,8	0	-	405	39,5
Progressive route	0	-	30	10,5	0	-	22	10,1	45	100,0	97	9,5
School of art and profession	52	22,6	78	27,3	35	14,2	20	9,2	0	-	185	18,0
Evening or after job studies/reduced frequency lyceum/without frequency lyceum/post-lyceum	0	-	0	-	0	-	19	8,7	0	-	19	1,9
Total	230	22,4	286	27,9	247	24,1	218	21,2	45	4,4	1.026	100,0

Data set

Since there is no list of the number of students in Pitesti stratified to school path and grade, it is not possible to calculate the representativeness of the realized sample (see table 2).

However, the comparison of the distribution of the number of classes in the random sample

and the realized sample shows that the dispersal over grades and classes does not deviate more than a few percentages. Therefore we conclude that sample is representative for the high school population in Pitesti. Fewer boys than girls participated in the survey (58% girls versus 42% boys), 5% of students were 15 years old or younger, 22% were 16 years old, 31% were 17 years old, 27% were 18 years old and 15% were 19 or older. 41% of students considered themselves economically well off compared to other students and 7% considered themselves less well off. No data weighing was possible, since there is no population data available.

RESULTS

Alcohol consumption

Pitești's youth starts drinking alcohol at a young age. Before the age of 13, 37% of the students drank their first glass of beer, 33% their first glass of wine and 24% their first glass of homebrewed alcohol. This resulted in 15% of the students who state to have been drunk (at least once) before the age of 13. Since the brains of youth are still developing at this age, alcohol can have a very damaging effect when youth drinks at this young age (Tapert, 2005). Beer and wine are the preferred drinks of youth in Pitești, spirits, mixed-drinks and homebrewed alcohol are consumed less frequent. In the past 12 months 35% of Pitești's youth drank beer on more than 10 occasions and 21% drank wine on more than 10 occasions. Most students drink about once a month or every two months on average, 57% drank wine on 1 - 9 occasions, 49% beer, 38% spirits or homebrewed alcohol and 33% mixed-drinks.

About 30% of the students drank excessively on more than one occasion in the 30 days leading up to the survey. They consumed five or more alcoholic drinks on one drinking occasion (binging). About 5% of the students do this on regular a base, which leads to drunkenness. The liver needs time to metabolize the alcohol, which takes about 1 to 1,5 hours per standard glass of alcohol (10 grams of pure alcohol), while the speed of consumption is just too fast to do so (Alcohol alert, 1997). Although beer and wine contain a lower alcohol percentage than for example spirits, the glass or container in which an alcoholic beverage is served, makes that the amount of pure alcohol per serving is more or less equal. Although a stroll through a Romanian supermarket shows that alcohol, especially beer, is sold in *very* large containers (in bottles up to 2 litres), meaning that this assumption is not always true in Romania.

Availability of alcohol

The students questioned state that alcohol is very easily available in Pitesti; 83% believe that it is easy to get alcohol in discotheques and bars (77%), but also at kiosks (75%), liquor stores (73%) and supermarkets (69%). The most popular bars and discotheques where youth hangs out are all considered to be places where you can easily get alcohol (also for youth which hasn't reached the legal age limit of 18 years yet).

Social norms regarding alcohol

54% of the students sometimes drink in the presence of their parents. However, only about 6% of the students believe that their parents approve of their drinking. Most parents forbid it (26%), while others advise against it (20%) or ask for moderation (13%). About 34% of the students indicate that their parents do not know that they drink, or they have at least never discussed it with them. According to students their parents find it more serious when they are misbehaving in public (69% of parents forbids it) or skipping school (67% forbids), than when they are drinking beer (23% forbids) or wine (28% forbids).

Students believe that it would be responsible to take a first sip of alcohol at the age of 14 (8% believes that you should never take a sip of alcohol), a first glass of alcohol at the age of 16 (10% believes that you should never drink a glass of alcohol), regular drinking can take place at the age of 18 (44% believes that you should never drink alcohol regularly) and you should not get drunk before the age of 20 (68% believes that you should never get drunk). 33% of students believe that drinking 1 or 2 drinks a day poses a serious health risk, 55% believes that having 3 or 4 drinks a day is serious and most students (86%) believe that 5 drinks or more a day poses a serious risk to the health of the drinker.

Consequences of alcohol use

Students believe that heavy drinking has serious influences on society and the individual: 89% conceives that heavy drinking is a risk for traffic accidents or other accidents (80%), 76% sees a risk for health problems, 73% for family problems, 72% for violent crime, 66% for relationship problems and 64% for financial problems. The perceived influence of heavy drinking on the students own behaviour, is lower than the perceived impact on society. 70% of students expects to misbehave in public when drinking heavily, 68% expects to get into fights, 59% to be truant, 58% to engage in unsafe sex and 57% to get bad school grades. 15%

of the students has engaged in sexual intercourse while under the influence of alcohol, 10% in unprotected sex and 4% of students regretted this engagement. 11% of students has been involved in a physical fight while under the influence of alcohol, 10% has been in trouble with the police and 3% has been victimized by robbery or theft.

When experiencing negative consequences of alcohol, 73% of the students would expect to drink less, when taking part in traffic or having to do a lot of work the next day. Also bars closing earlier (58%) and alcohol being less easily available for minors in for example supermarkets is seen as reason to drink less for 67% of the students. These type of legal measures are in line with the theory that limiting the availability of alcohol, will cause students to drink less. Just as some factors will cause students to drink less, others will possibly cause them to drink more. Over a quarter of the questioned students (28%) drinks more if they are having a lot of fun, 19% if there are promotions in bars or discotheques (such as Happy Hours) and 16% would drink more if alcohol would be cheaper. Less influential are drinking when not feeling happy in one's own skin (13%), going out late at night (11%), feeling tensed (8%) and seeing funny alcohol commercials on television or the internet (3%).

CONCLUSIONS

Compared to Romanian youth, Pitesti's youth tends to drink a bit more. 8% of Romanian youth has indicated in the ESPAD survey (Hibell et al., 2009) to have drunk alcohol in the past 30 days on 10 or more occasions. In Pitesti 11% of the students drank beer on 10 or more occasions in the 30 days leading up to the survey, meaning that this percentage would rise if we would extend the comparison to other types of alcohol. Not only the recent drinking patterns differ, also the percentage of students that has been drunk before the age of 13, an indication of early onset of alcohol use, is higher. 12% of Romanian youth has been drunk before the age of 13, while this happened to 15% of Pitesti's youth. Considering that the dataset from Pitesti has an underrepresentation of boys, who generally drink more, the abovementioned differences between Romanian and Pitesti youth would be even bigger when an equal number of boys and girls participated in the study (or when the Pitesti data set was weighed to correct for this).

Parents play a key role in changing the patterns of drinking of their children (Kuntsche et al. 2009). Students in Pitesti often drink together with their parents and parents generally have a

permissive attitude towards youth drinking. By allowing, and sometimes even stimulating, early initiation of alcohol, the foundation for alcohol problems is laid out. Parents should set the norm of 'no alcohol until the age of 18' for their children. This also means that no alcohol should be sold to or bought for youth under the age of 18 by enforcing and no alcohol outlets can be within 200 metres of high schools, just as the Romanian alcohol legislation stipulates.

Limiting the availability of alcohol is one of the most effective preventive measures to reduce the use of alcohol, as well as the harm that derives from alcohol use. Alcohol use can most effectively be reduced by controlling the price of alcohol, the assortment of alcohol, the number of alcohol outlets (stores and bars/restaurants/discos), the compliance and enforcement with alcohol legislations (such as the age limit for buying alcohol) and the intensity of the marketing of alcohol. Along with limiting the availability of alcohol, also the social norms and attitudes towards alcohol use need to be addressed (Anderson & Baumberg, 2006).

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