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# ALCOHOL CONSUMPTION PATTERNS AMONG YOUNG PEOPLE FROM RURAL AREAS OF LUBLIN PROVINCE

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Abstract: The article aims at the increasing of knowledge among young people coming from the country, studying at various types of schools – from the aspect of frequency of their drinking, age of alcohol initiation and preferences towards alcoholic drinks. We examined 5,000 young people from rural areas in Lublin province between the ears 2002-2004. A screening questionnaire that included AUDIT test (the Alcohol Use Disorders Identification Test) was used. The AUDIT was developed by the WHO to identify hazardous and harmful alcohol consumption. The results showed that both frequency and alcohol initiation age were related to type of school and sex of young people. We found that young people from rural areas of Lublin province do not differ from all-Polish trends in relation to these patterns. Some changes in the alcohol consumption model in Polish villagers were noted. Young people in the country clearly prefer beer drinks. Restrictions regarding alcohol sales to young people are not complied with. In almost half of the group we found alcoholism in families. Our findings show that antialcoholic prophylaxis should be initiated in the first years of childrens' education. Preventive programmes should be based not only on school, but also on the family.

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## INTRODUCTION

Towards the end of the 20<sup>th</sup> century, alcohol drinking by youth became one of the main social problems in Europe. A big dynamic of this phenomenon and fixing of unfavourable trends in most European countries made numerous researches were undertaken in Poland for a discerning analysis of this isue.

In recent years in Poland one can observe a huge increase of problems related to alcohol drinking among young people. According to reports of the Public Agency for Solving Alcohol Problems in Poland (PARPA), the number of adolescents drinking alcohol increases each year, while the number of teetotallers number decreases [29]. At the same time, the age of alcohol initiation decreases. If this trend persists remains, there will be a lot of young alcoholics in Poland, because the earlier initiation occurs the faster alcoholism becomes. According to Grant [7], early alcohol

initiation is one of the strongest predictors for alcohol abuse and dependence in the post-adolescence period. He indicates that the age of alcohol initiation is more important that family alcoholism. Evidence suggest that young men aged 18-24 are the most intensive alcohol consumers among the population [20]. Research has shown that alcohol consumption increases with age and reaches its peak between 18 and 21 [25, 10]. In this age group, the number of non-drinkers decreases and the number of intensive drinkers increases [5, 6]. Also we know that for most of young people alcohol consumption patterns focus around the holiday periods [25, 18, 17, 32].

This alarming situation was the basis for the project and conducting a research programme concerning this problem in the rural area. We aimed to study alcohol consumption by young people from the rural area, learning in the various types of schools with reference to their drinking frequency, age of alcohol initiation and preferences in liquors.

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#### MATERIALS AND METHODS

We studied 5,000 persons from the rural area aged 14-24. They studied in various types of schools: secondary, technical, vocational and high schools. We randomly chose 500 respondents (250 girls and 250 boys) from each type of school. Research was conducted in Lublin province: district towns, villages, communes. The group was representative for the young rural population from the Lublin province who were studying.

We used a creening questionnaire which included AU-DIT (the Alcohol Use Disorders Identification Test). AU-DIT was developed by the WHO to identify hazardous and harmful alcohol consumption [26]. In the tests, a score of eight and above (questionnaire has 10 items) was sensitive for predicting harm related to alcohol and current trouble drinking [1]. Additionally we used five questions about the context concerning alcohol consumption and we gathered socio-demographic data.

We compared three age groups to facilitate analysis (14-17 years old, 18-21, 22-24). The questionnaire was partially categorised. It contained both closed questions with limited number of answers number and half-open questions, that enabled respondents to use their own answers. The test consisted of 16 questions and 20 minutes was allowed to fill it. Each person was given the questionnaire in his/her school and she/he was asked to fill in it in the presence of the investigator. It was anomymous.

#### **DATA ANALYSIS**

Several measures were compared. The first 4 questions assessed social context concerning usual drinking. Using AUDIT, the following measures were tested:

- (a) Drinking frequency;
- (b) Number of drinks consumed in the typical circumstances:
- (c) Drinking frequency during holiday time (WHO definition);
- (d) Drinking problems and consequences (AUDIT questions 4-10).

One more question were added to AUDIT to determine how many alcohol units were drunk by one person; we asked about their "usual drinking amount". Interpreting answers "a bottle" and "a glass" as one unit, we calculated typical average weekly alcohol consumption (sum of items (a) and (b) and "usual drinking amount").

The results were subjected to statistical analysis. Comparative analyses of qualitative and quantitative data were conducted using programme "Statistica 5.0 PL". Level of significancy p<0.05 was assumed as statistically significant.

#### RESULTS

**Sociodemographic data.** The majority of the group (87%) had both parents. In 48.9% of families alcohol problems

were present. In most of cases, the fathers abused alcohol. In respondents' opinions – the atmosphere in their homes was unpleasant (above a half of group) and in 25% cases – it was very unpleasant. Most of respondents described their fathers as aggressive (53%) and quickly aroused to anger (38%).

**Alcohol initiation age.** Pupils of the vocational schools started drinking at the earliest age (64% in a primary school) and 14% before 10 years old). The situation among pupils of a technical school was slightly better: 54% drank alcohol in primary school and 10% before the age of 10, 36% started drinking after the age of 16. Similar results were obtained in the group of pupils of a secondary school (58% and 36% respectively).

Additionaly, the alcohol initiation age was compared between pupils of both sexes. In vocational schools, 78% girls and 97% boys started drinking at the age of 11-15; this difference was more distinct (44% and 72% respectively) in technical and secondary schools. It was noticed that there was no girls in technical and secondary schools, drank alcohol before the age of 11.

**Alcohol consumption patterns.** In the whole group, more than 60% of respondents usually drank beer. It was the most popular drink across all age groups. Friday and Saturday nights were the most common opportunities for intensive drinking (89%); young people drank in both-sex groups (65%), and in discos (53%).

Most of the respondents (65%) reached above the limited AUDIT score that predicts hazardous and harmful alcohol consumption. Their average AUDIT score of 11.2 was also more than a crucial score, and the average consumption of alcohol was 26 units/week for the whole group. There were differences between age groups.

In the 16-17 group, there were about equal results of "low" and "high" AUDIT score (53%, Tab. 1) and their average AUDIT score was 8. On average, their alcohol consumption was 11 units/week. They prefered beer and wine, drank mostly on Saturday nights, at friends' homes (73%). They consumed 1-5 drinks during one meeting, 2-4 times a month or less (66%).

The 18-21 group: 75% of them had a high AUDIT score (Tab. 1) and their average AUDIT score was 14.6. An average weekly alcohol consumption was 45 units. They drank beer and vodka, on Friday (52%) and Saturday (45%) nights in pubs (52%). They consumed 5-10 drinks during one session, 2-4 times a week or more.

The 22-24 group: 68% of them had a high AUDIT score, and an average AUDIT score was 9.7; average weekly consumption – 16 units. They preffered beer and vodka, drank most often on Fridays (72%) in pubs (61%). The majority of them consumed 1-6 drinks at one session, 2-4 or more times a week.

In comparison with 16-17 group, the number of 18-21s with "high" AUDIT results increased from 47% to 75%.

This is the same as in the group of 22-24, indicating that at the age of 18-24, alcohol consumption among 75% of these individuals was hazardous and harmful. Comparisons of average AUDIT results among the age groups were different: average "high" results increased between the ages of 16-21 and decreased in 22-24 group. In all groups, average AUDIT results were on the critical level or above. In the most of the measures related to drinking, 18-21s referred to the highest level of negative consequences. These results are according to earlier studies [25, 10].

The group of 16-17s consumed the least amount of alcohol and generally did not take part in revelries too often, although most of them drank in harmful way. The group of 18-21s drank more alcohol many more occasions, they regularly took part in revelries, both at Friday and Saturday nights, and as a result they consumed more than twice the earlier recommended weekly benchmarks, and drank 4 times more alcohol than the younger age group. In the group of 22 year-old alcohol consumption decreased again.

Next, we divided the whole group into subgroups in relation to results, obtained from AUDIT. We looked for differences between persons with high results (hazardous drinking style) and persons with low results in AUDIT (Fig. 1).

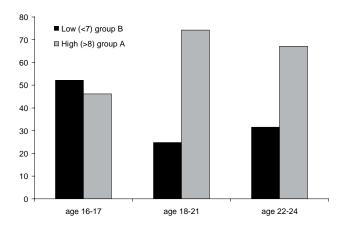


Figure 1. Level of AUDIT results according to age.

**Description of persons with hazardous alcohol consumption (group A).** The majority of young people in the group of hazardous alcohol consumption began drinking alcohol very early. The alcohol initiation age was before the age of 10 years old; in group B it was after the age of 16. Subgroup A most often drank vodka, while those in group B drank beer. The reasons for initiation were curiosity and peerpressure (group A). People in group A said

Table 1. Differences regarding alcohol consumption according to AUDIT in the group of young people coming from the country.

		High AUDIT results	Low AUDIT results	Test χ <sup>2</sup>	
		%	%	$\chi^2$	p
Did your father abuse alcohol?	Yes	60.0	12.5	23.696	0.000***
	No	36.0	84.38		
	I don't know	4.0	3.13		
Has anyone told you that you drink too much?	Yes	69.0	0.0	84.613	0.000***
	No	31.0	100.00		
When did you start to drink alcohol?	I don't drink	0.0	9.38	98.884	0.000***
	Before 10	60.0	0.0		
	11-15	39.0	31.25		
	After 16	1.0	59.38		
What kind of alcohol did you drink?	Beer	43.0	75.86	23.718	0.000***
	Wine	26.0	20.69		
	Vodka	31.0	3.45		
What was the most important reason of drinking alcohol for first time?	Curiosity	41.0	37.50	30.958	0.000***
	Friends	46.0	43.75		
	Example of parents	1.0	9.38		
	Problems	7.0	0.0		
	Publicity	4.0	0.0		
	I don't drink	1.0	9.38		
Have you ever blacked-out after a party?	Yes	45.0	0.0	44.916	0.000***
	No	55.0	100.0		
Are you dependent on alcohol?	Yes	45.0	0.0	44.916	0.000***
	No	55.0	100.0		
Have you ever drunk alcohol because of hangover?	Yes	45.0	0.0	44.916	0.000***
	No	55.0	100.0		

that other people had often told them that they drank too much and were too aggressive towards family and friends.

Boys abusing alcohol more often had contact with alcohol in their environment. In the group of boys with high scores, their fathers significantly more often abused alcohol. In group A, some symptoms of social misadaptation dominated: escapes from home, rows and scenes with parents and friends, truancy, problems with the law.

There were significantly more boys smoking cigarettes in group A. They started smoking in the age of 11-15, while boys in group B started smoking later. Thinking about suicide occurred significantly more often in boys abusing alcohol in a hazardous way. Their style of alcohol consumption had symptoms of alcohol dependence. Among boys with hazardous drinking there were such symptoms as blacking-out after a party, drinking being chippy and problems with controlling the drinking of alcohol. These persons drank alcohol to improve their morning well-being (Tab. 1).

## **DISCUSSION**

The presented results indicate that antialcohol prophylaxis should be started in the first years of children's education. This approach seems to be justified, as more than half of studied persons started drinking in primary school. According to the literature, preadolescents who drink alcohol will consume it more and more [16]. As some epidemiological analyses have shown, people with alcohol initiation in the age of 14 and younger, abuse alcohol four times more often than those who started drinking at the age of 20 or later [8]. Moreover, alcohol drinking at an early age is often preceded by using drugs [3, 21, 22, 28]. Some researches think that alcohol consumption is a "gate" to the use of proscribed substances [13, 12]. Numerous studies have identified social and environmental factors that can influence youth drinking habits [9, 14, 24, 30]. To a great extent, families are responsible for young people drinking, because alcohol consumption is an element of their everyday life. Dependence on alcohol existing in one of the family members is a factor facilitating early alcohol initiation among the others. The probability of alcohol problems among close relatives of alcoholics is 2-7 times more than in others [19]. Our results confirm this conclusion. There are other family problems that can influence youth drinking. These are: divorce, conflicts and weak family bonds [9].

This study shows differences in patterns concerning drinking frequency and alcohol initiation among adolescents of both sexes. These results confirm data in the literature [3, 28]. It is related to common behaviour patterns (different for both sexes), also observable in adults. In most countries, boys more often say about drinking alcohol more than 40 times a life. As far as this coefficient is concerned, Polish boys who were studying were on the seventh place (35%) among 26 countries taking part in this research. Polish girls who were studying were on the tenth place in this ranking (18%). In almost half of the European

countries, an increase of students drinking three or more times during the last thirty days before the test was noticed. The largest dynamics of this increase was observable in Poland, Slovenia, Ireland, Denmark and Great Britain [2]. Among environmental factors favourable for adolescents drinking, there are access of alcohol [9]. In Poland, only people above 18 can buy alcohol, and adolescents who are studying informed about much earlier alcohol initiation, they therefore had no problems in obtaining alcohol. These results are consistent with research by Foster et al. [4], which confirmed that young people can buy alcohol without their age being checked. Additionally, Wagenaar et al. [31] report that young people often obtain alcohol from "suppliers" in their own environment, such as parents, friends, co-workers, and even strangers. It seems to be the same in Poland. Limits concerning the age at which alcohol can be bought are different in the European Union. In most European countries, the age limit for purchasing alcohol is 18, in the USA and Lituania – 21, and in Germany, Austria, Belgium, France, Hungary, Switzerland – 16. There are no limits in Greece and Portugal [11].

Our research indicates that youth in the country prefer beer. This tendency is consistent with a general increase in beer consumption by Polish youth: during four years there was a 60% increase in the number of pupils drinking at least one litre of beer on the last occasion [2].

It is most surprising is that rural youth consumes relatively little vodka. This is consistent with European research. Hibell [11] reports that Polish boys are in the 27<sup>th</sup> position (13%) and girls in the last, 30<sup>th</sup> position (4%) – as far as the quantity of vodka consumed is concerned. Vodka has always been the Polish traditional alcohol drink.

As far as the frequency of getting drunk is concerned, rural youth achieved a result of three or more times during last thirty days. These data comply with the results of other researchers [27], where Polish youth is placed in the middle of the Table (10%). Polish boys take 8<sup>th</sup> place, together with boys from Norway and the Ukraine (14%), a little ahead of boys from the USA and the Sheep Islands (13%). Polish girls, of whom only in 6% get drunk, take 14<sup>th</sup> place, together with girls from Lithuania, Estonia, Slovakia and the Sheep Islands. In our country, more than four times lower girls get drunk than in Denmark, Great Britain and Ireland.

Taking these results into account, one can say that youth from the rural areas of Lublin province does not differ from all-Polish trends. Therefore, it is important to introduce preventive programms based not only on the school, but also on the family, as well as political strategies, which help to change a whole social and cultural environment where young people live – to diminsh alcohol consumption and problems related to it – for good [15]. A huge effect of group on individual in the adolescence should be taken to accout. As O'Maley *et al.* [21] indicate, most teenagers drink to experience the pleasant effects of alcohol, such as nice meeting with friends. Therefore, Paxton's [23]

proposal of introducing mutual-aid groups spreading a lifestyle without alcohol among contemporaries – seems to be especially important for preventive actions.

We entirely accept the limitations of our trial and do not maintain that these results can be generalized for all of young people living in rural areas in Poland. It should also be clear that this trial is not representative for all young people in the age group of 16-24 living in Poland.

We hope that our work will be a useful starting-point for future research on drinking patterns, the consequences of alcohol drinking and degree of harmful and hazardous drinking among youth from the rural areas.

### **CONCLUSIONS**

- 1. Young people from the rural area of Lublin province do not differ from all-Polish trends in relation nor to frequency neither alcohol initiation age.
- 2. Some changes in the model of alcohol consumption among Polish villagers were noted.
- 3. Restrictions regarding the age of buying alcohol are not complied with. Alcohol is sold to juveniles.
- 4. Youth in the age group of 17-18 is the most numerous group of people drinking in a hazardous way.
- 5. Alcoholism in the family was found in almost half of the studied group.
- 6. Our results indicate that antialcoholic prophylaxis should be initiated in the first years of children's education.
- 7. Prophylactic programmes should be based not only on the schooll but also on the family environment.

# REFERENCES

- Conigrave KM, Saunders JB, Reznik RB: Predictive capacity of the AUDIT questionnaire for alcohol-related harm. *Addiction* 1995, 90, 1479-1485.
- 2. Currie C: Health and Health Behaviour among Young People. International Report. WHO Regional Office for Europe, Copenhagen 2000
- 3. Epstein JA, Williams C, Botvin GJ: How universal are social influences to drink and problem behaviors for alcohol use? A test comparing urban African-American and Caribbean-American adolescents. *Addict Behav* 2002, **27(1)**, 75-86.
- 4. Forster JL, Murray DM, Wolfson M, Wagenaar AC: Commercial availability of alcohol to young people: Results of alcohol purchase attempts. *Prev Med* 1995, **24**, 342-347.
- Goddard E, Ikin C: Drinking in England and Wales in 1987. HMSO, London 1988.
- 6. Goddard E: Drinking in England and Wales in the Late 1980s. HMSO, London 1991.
- 7. Grant BF: The impact of family history of alcoholism on the relationship between age at onset of alcohol use and DSM-IV alcohol dependence. Results of National Longitudinal Alcohol Epidemiologic Survey. *Alcohol Health Res World* 1998, **22**, 144-148.
- 8. Grant BF, Dawson DA: Age of onset of alcohol use and its association with DSM-IV alcohol abuse and dependence. Results from the

- National Longitudinal Alcohol Epidemiologic Survey. *J Subst Abuse* 1997, **9**, 103-110.
- 9. Hawkins JD, Catalano RF, Miller JY: Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychol Bull* 1992, **112**, 64-105
- 10. Health Education Authority/MORI: *Today's Young Adults*. Health Education Authority, London 1992.
- 11. Hibell B: *The 1999 ESPAD Report: Alcohol and Other Drug Use Among Students in 30 European Countries*. Stockholm: The Swedish Council for Information on Alcohol and Other Drugs (CAN). The Pompidou Group at the Council of Europe 2000.
- 12. Kandel DB, Yamaguchi K: From beer to crack: Developmental patterns of drug involvement. *Am J Public Health* 1993, **83**, 851-855.
- 13. Kandel DB: Drug and drinking behaviour among youth. *Annu Rev Sociol* 1980, **6**, 235-285.
- 14. Komro KA, Hu FB, Flay BR: A public health perspective on urban adolescents. **In:** Walberg HJ, Reyes O, Weissberg RP (Eds): *Children and Youth: Interdisciplinary Perspectives*, 25-298. Sage Publications, Thousand Oaks, CA 1997.
- Komro KA, Toomey TL: Strategies to prevent underage drinking. Alcohol Res Health 2002, 26(1), 5-14.
- 16. Lundborg P: Young people and alcohol: an econometric analysis. *Addiction* 2002, **12**, 1573-1582.
- 17. Miller PM, Plant M: Drinking, smoking and illicit drug use among 15-16 year-olds in the United Kingdom. *Br Med J* 1996, **313**, 394-397.
- 18. Moore L, Smith C, Catford J: Binge drinking: prevalence patterns and policy. *Health Educ Res* 1994, **9**, 497-505.
- 19. National Institute on Alcohol Abuse and Alcoholism. *Ninth Special Report to the U.S. Congress on Alcohol and Health.* Washigton 1997
- 20. Office for National Statistics: Living in Britain: Results of the 1996 General Household Survey. The Stationery Office 1998.
- 21. O'Malley PM, Johnston LD, Bachman JG: Alcohol use among adolescents. *Alcohol Health Res World* 1998, **22**(2), 85-93.
- 22. Paschall MJ, Flewelling RL: Postsecondary education and heavy drinking by young adults: the moderating effect of race. *J Stud Alcohol* 2002, **63**, 447-455.
- 23. Paxton A: Reflections on alcohol and the young. *Alcohol Alcohol* 1999, **34**, 502-505.
- 24. Perry CL, Kelder SH, Komro KA: The social world of adolescents: Family, peers, school and the community. **In:** Millstein SG, Petersen AC, Nightingale EO (Eds): *Promoting the Health of Adolescents: New Directions fo the Twenty-First Century*, 73-96. Oxford University Press, New York 1993.
- 25. Plant MA, Bagnall G, Forster J, Sales J: Young people and drinking: results of an English national survey. *Alcohol Alcohol* 1990, **25**, 685-690
- 26. Saunders JB, Aasland OG, Babor TR, de la Feuente JR, Grant M: Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption II. *Addiction* 1993, **88**, 791-804.
- 27. Settertobulte W, Jensen BB, Hurrelman K: *Drinking among young European*. WHO Regional Office for Europe, Copenhagen 2001.
- 28. Spoth RL, Guyll M, Day SX: Universal family-focused interventions in alcohol-use disorder prevention: cost-effectiveness and cost-benefit analyses of two interventions. *J Stud Alcohol* 2002, **63**, 219-228.
- 29. Stępień E: Alkohol a polska młodzież. Raport 1994. PARPA, Warszawa 1995.
- 30. Wagenaar AC, Perry CL: Community strategies for the reduction of youth drinking: Theory and application. *J Res Adolesc* 1994, **4**, 319-345.
- 31. Wagenaar AC, Toomey TI, Murray DM: Sources of alcohol for underage drinkers. *J Stud Alcohol* 1996, **57**, 325-333.
- 32. Webb E, Ashton CH, Kelly P, Kamali F: Alcohol and drug use in United Kingdom students. *Lancet* 1996, **348**, 922-925.