



Research Article

The Use of Tobacco, Alcohol and Psychoactive Substances by High School Students

Agnieszka Saracen^{1*}  and Zbigniew Kotwica²

¹Faculty of Medical Sciences and Health Sciences, Casimir Pulaski University, Radom, Poland

²Faculty of Medicine, Collegium Medicum, Cardinal Stefan Wyszyński University, Warsaw, Poland

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***Corresponding author:** Agnieszka Saracen, Ph.D, Professor, Faculty of Medical Sciences and Health Sciences, Casimir Pulaski University, Chrobrego 27, 26-600 Radom, Poland, E-mail: saracena@op.pl

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Abstract

Introduction: Tobacco smoking, alcohol, and drug intake are essential health and sociological problems in many countries. Despite many campaigns, the percentage of people using these stimulants does not diminish.

Aim: Evaluation of tobacco, alcohol, and drug use by the students of Polish high schools.

Materials and methods: The research was conducted on 3108 pupils of the first and last classes of 19 high schools in the Mazovian province. A specially prepared questionnaire was used. Class, a place of residence, origin, parents' education, tobacco, alcohol, and psychoactive drugs were analysed.

Results: From 3108(100%) respondents, 71.4% never smoked cigarettes, 17.1% smoked less, and 11.5% more than 1 packet daily. 10.4% smoked cigarettes longer than 1 year, boys more often and for longer. At 57.5% at least one parent smoked cigarettes. Place of residence, kind of school, class, and parents' education did not affect the frequency of smoking.

Of 3108 pupils, 33.7% did not drink alcohol, 30.5% less often than once in the quarter, 29.4% several times monthly, 6.4% several times weekly. Boys drank more often than girls. Class, the origin, and place of residence did not affect the frequency of alcohol consumption. Children of parents with a university education drank more often. 333(10.7%) used psychoactive drugs, 327(10.5%) marijuana, and 6(0.2%) amphetamine.

Conclusion: Despite indicators lower than in other countries of smoking tobacco, drinking alcohol, and holding drugs in Poland, these phenomena are a crucial health and population factor. Preventive and educational actions among pupils, as well as in their home environment, are necessary.

Introduction

Smoking and the use of psychoactive substances – alcohol and drugs are a significant health and sociological problem in most countries of the world [1-7]. Despite a widespread anti-smoking and anti-psychoactive drugs campaign, the percentage of people using stimulants is not decreasing [8-10]. Smoking is a major factor in worsening the health status of entire populations, by increasing the incidence of chronic respiratory diseases and cancer, and the use of psychoactive substances leads to significant mental disorders and an increase in injuries [1,10-12]. Alcohol and drugs are also factors that

significantly increase aggressive and risky behavior, increase the frequency of casual sexual contact, leading to unwanted pregnancies and the spread of sexually transmitted infectious diseases [1,2,12]. In Poland, as in other European countries, the problem of alcohol and drug use is growing, and smoking is also still popular. For these reasons, we decided to investigate the use of tobacco, alcohol, and other psychoactive substances by high school students in the biggest Polish Province, Mazovia [5,6,8,13].

Materials and methods

The study was conducted on a group of 3,108 adolescents

aged 15–19 years, students in the first and last grades of high schools in the Mazovian province. A total of 19 schools' students were analyzed. There were 1679 (54%) students in the first grades, and 1429 (46%) students in the last grades. There were 1694 (54.5%) boys and 1414 (45.5%) girls in the study group.

The research was carried out using the diagnostic survey method with research tools in the form of anonymous interviews and questionnaires, developed individually for this study. Students who agreed completed an anonymous questionnaire in which, in the first section, they provided their gender, age, background, parents' education, and place of residence – rural, small town, large city. In the second part, they answered questions about smoking, drinking alcohol, and taking psychotropic substances.

Approval No. 874/08 from the University Ethics Committee was obtained. Results were subjected to statistical analysis, and $p = 0.05$ was accepted as statistically significant.

Results

Of the 3108 (100%) respondents, 2217 (71.4%) had never smoked cigarettes, 533 (17.1%) smoked less than one pack a day, and 358 (11.5%) smoked more than one pack a day. 323 (10.4%) had been smoking cigarettes for more than 1 year. In the group of 1,694 (100%) boys, 66.4% did not smoke, 18.1% smoked up to 1 pack a day, and 15.5% smoked more than 1 pack a day. Among 1,414 (100%) girls, 77.2% did not smoke, 16% smoked up to 1 pack a day, and 6.8% smoked more than 1 pack a day. 12.5% of boys and 7.8% of girls had been smoking for more than 1 year. Boys smoked cigarettes significantly more often and for longer ($p = 0.00001$). In 57.5% of students, at least one parent smoked. Place of residence, type of school, grade (first or last), and parents' education did not influence the frequency of cigarette smoking. Of the 3,108 (100%) students, 33.7% did not drink alcohol at all, 30.5% drank no more than once a quarter, 29.4% drank several times a month, and 6.4% drank several times a week.

Of the 2,060 (100%) who consumed alcohol, 81.1% drank only beer, 7.5% drank low-alcohol beverages, and 11.4% drank strong alcohol. Among young people who drank alcohol, 259 (8.3%) had a family member who was addicted to alcohol. In the group of 1,694 (100%) boys, 29.9% did not drink, 26.1% drank rarely, once a quarter, 34.9% drank several times a month, and 9.1% drank several times a week. Among 1,414 (100%) girls, 38.3% did not consume alcohol, 35.7% drank once a quarter, 22.9% drank several times a month, and 3.1% drank several times a week. Boys consumed alcohol statistically more often than girls ($p = 0.00001$). Class, origin, and place of residence did not influence the frequency of alcohol consumption. Children of parents with higher education drank alcohol significantly more often ($p = 0.00001$) than children of parents with other types of education. An analysis of psychoactive substance use found that out of 3,108 (100%) people, 333 (10.7%) used drugs. 327 (10.5%) people smoked marijuana, and only 6 people (0.2%) used amphetamines. Significantly more often ($p = 0.00001$), children of parents with higher education used drugs – 20.4%

than those with secondary education – 11.8%, vocational education – 8.4% and primary education – 7.5%. Origin, sex, place of residence, and class did not influence drug use.

Table 1 shows the use of cigarettes, alcohol, and drugs by boys and girls.

Table 1: Cigarette smoking, the use of alcohol and drugs by males and females.

	Cigarettes		Alcohol		Psychoactive drugs		Total
	Yes	No	Yes	No	Yes	No	
Males	569 (33,6%)	1125 (66,4%)	1187 (70,1%)	507 (29,9%)	181 (10,7%)	1513 (89,3%)	1694 (100%)
Females	322 (22,8%)	1092 (77,2%)	872 (61,7%)	542 (38,3%)	152 (10,7%)	1262 (89,3%)	1414 (100%)

Discussion

Smoking, drinking alcohol, and using psychoactive substances play a significant role in shaping the health status of society. Health habits are formed in adolescence and then affect the entire individual's life [1,2,5,7,12]. The influence of the environment, especially the family and school environment, is also important, as it plays a decisive role in teaching pro-health attitudes [3,4,7–9].

This study revealed that almost 30% of students smoked cigarettes, more than 10% of them smoked more than one pack a day, and 10% of teenagers had been smoking for more than a year. Boys smoked cigarettes more often than girls, 34% compared to 27%. Compared to other studies [6,10,12,15], the percentage of smokers is similar, and therefore has not decreased, despite a widespread anti-smoking campaign in the media and a significant increase in the prices of tobacco products, both cigarettes and e-cigarettes. Since the percentage of smokers in the families of the surveyed students was almost 60%, and the family environment is one of the most important factors influencing the initiation of tobacco use [2,9,15], this indicates the need to intensify anti-smoking activities not only among young people, but also in their family environment.

Over 35% of students drank alcohol several times a month, and 6.5% several times a week. These results are similar to some European studies [5,8], but significantly lower than data from other countries [2,3,8,16]. Over 81% of young people who drink alcohol drink only beer, but 11.5% consume strong alcohol. Boys drink alcohol significantly more often than girls, as do children of parents with higher education. It should be noted that in over 8% of cases, one of the family members was addicted to alcohol. 10.7% of students had contact with psychoactive substances, mainly marijuana. Only 6 out of 3,108 students used amphetamines. As with the analysis of alcohol consumption, it was found that children of parents with higher education used drugs more often, and children of parents with primary education used drugs the least often. In Poland, the percentage of drug users is three times lower than in other European countries or the US [3,12,16].

Alcohol consumption and the use of psychoactive substances are important factors leading to aggression,

increasing vulnerability, and influencing the occurrence of risky sexual behavior [2,3,4,6,12]. Young people emphasize that drinking alcohol facilitates sexual contact and leads to more frequent intercourse with casual partners, which often takes place without any protection [3,4,8,12]. This is particularly important in the case of homosexual contacts and contacts with prostitutes, where the risk of infection with sexually transmitted diseases is particularly high, and where the use of psychoactive substances is significantly more common [17,18].

Conclusion

Studies reveal that despite extensive media campaigns, smoking and alcohol consumption among young people aged 15–19 is common. Efforts to educate young people should be intensified, but these efforts should also focus on the family environment, which young people often model themselves on. It is puzzling that children of parents with higher education use psychoactive substances more often than children of parents with lower levels of education. One of the factors contributing to this phenomenon is usually the better financial situation of this group of young people, but it cannot be ruled out that there is less control in these homes, resulting from greater trust in children.

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