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Risk behaviours among young people

Healthy lifestyle and salubrious behaviours among adolescents are important modifiers of health state in the future. Drug taking is becoming one of major public health problems with its worldwide existing. Many teenagers in Poland are exposed to narcotics, especially at a friend's house, at parties and discos, and also at school. Nowadays there is a tremendous variety of drugs and teenagers obtain them without any problems. During the last 15 years situation with drug abuse has changed (1, 14). Then the most abused drugs were: heroin, marijuana, cocaine, amphetamine and its derivatives. Currently the most popular drugs among adolescents are cannabis, amphetamines and LSD. Statistics show there are 20,000 drug addicts in Poland, but probably the real number of them is higher (13). The use of marijuana has increased during last 10 years. Smoking is also an important and unfortunately overlooked problem in scholars. About 80% of lung cancers are attributed to carcinogens from cigarette smoke. Genetic alterations persist after the cessation of tobacco use (2, 9). Tobacco may promote atherosclerosis and heart diseases. Epidemiological studies revealed that 51% of men and 29% of women in 1999 in Poland smoked. About 16% of boys and 6% of girls aged 15 admitted to smoking (14). The boys smoked more for a longer period, but the increase in the number of smoking girls was observed throughout the studied time (14).

The aim of the study was to assess the prevalence of cigarette smoking and using psychoactive substances among secondary school students aged 16–19. We tried to evaluate connections between the frequency of drug use and smoking cigarettes and sociodemographic data.

MATERIALS AND METHODS

The examined group consisted of 422 secondary school students, aged 16–19 (149 boys and 273 girls). A survey was used as the main method of study in which respondents were asked to fill in the anonymous questionnaire. The questionnaires were completed in a classroom setting by secondary school students from 5 schools in Eastern Poland. The study applied the questionnaire of our own design that included 28 questions. The study was conducted from October 2004 to June 2005.

Chi-square test was used to study the significance of differences separately between the frequency of drug use and smoking in two groups. The groups were classified according to:

gender	boys/girls
place of residence	town/village

upbringing in full family	yes/no
relations with mother	good/bad
relations with father	good/bad

RESULTS

Out of 422 students, 21 (4.98%) reported to have used drugs. Eighteen (4.27%) of them were living in towns and three (0.71%) in villages. Our study shows that about 70% of adolescents admitted to smoking marijuana, 9% admitted to smoking marijuana and using speed ball. The prevalence of drug use was higher in adolescents who had bad relations with parents. The study revealed that adolescents who had bad relations with father, use drugs more frequently (41.1%) than other adolescents (26.6%). There were similar statistically significant correlations between relations with mother and drug use (27.6% adolescents, who had good relations with mother never use drugs and 45.5% who had bad relations). No significant differences were found between drug use in the groups classified according to upbringing in a full family or a broken home.

Table 1. The results of Pearson's chi-square tests. Differences between the frequency of drug use in two groups. The groups were classified according to: gender, place of residence, upbringing in full family, relations with parents

	Use of drugs			
	never	less than 3 times in life	rarer than once a month	more often than once a month
Gender	Pearson's chi-square = 13.5720, df = 3, $p < 0.01$			
male	N = 92 (61.7%)	N = 26 (17.4%)	N = 21 (14.1%)	N = 10 (6.7%)
female	N = 204 (76.1%)	N = 39 (14.6%)	N = 14 (5.2%)	N = 11 (4.1%)
Place of residence	Pearson's chi-square = 12.4354, df = 3, $p < 0.01$			
town	N = 197 (66.3%)	N = 51 (17.2%)	N = 31 (10.4%)	N = 18 (6.1%)
village	N = 98 (83.1%)	N = 13 (11.0%)	N = 4 (3.4%)	N = 3 (2.5%)
Upbringing in full family	Pearson's chi-square = 3.9551, df = 3, not significant			
yes	N = 267 (71.8%)	N = 55 (14.8%)	N = 33 (8.9%)	N = 17 (4.6%)
no	N = 27 (64.3%)	N = 9 (21.4%)	N = 2 (4.8%)	N = 4 (9.5%)
Relations with mother	Pearson's chi-square = 16.7228, df = 3, $p < 0.001$			
good relations	N = 275 (72.4%)	N = 61 (16.1%)	N = 30 (7.9%)	N = 14 (3.7%)
bad relations	N = 18 (54.5%)	N = 4 (12.1%)	N = 5 (15.2%)	N = 6 (18.2%)
Relations with father	Pearson's chi-square = 19.4418, df = 3, $p < 0.001$			
good relations	N = 245 (73.4%)	N = 53 (15.9%)	N = 26 (7.8%)	N = 10 (3.0%)
bad relations	N = 43 (58.9%)	N = 11 (15.1%)	N = 8 (11.0%)	N = 11 (15.1%)

As results revealed 41.7% pupils smoked cigarettes, (32.9% boys and 46.6% girls). Girls smoked more frequently than boys. The results obtained in this study revealed that teenagers residing in cities admitted to smoking more often 137 (46.1%) than those residing in villages 37 (31.4%). The study revealed that girls who had bad relations with father, smoked more frequently (58.8%) than

other girls (44.0%). No significant differences in the group of boys were found (32.8% boys, who had good relations with father and 31.8% who had bad relations admitted to smoking). There were no statistically significant correlations between relations with mother and smoking. No significant differences were found between smoking in the groups classified according to upbringing in a full family or a broken home.

Table 2. The results of chi-square tests. Differences between the frequency of smoking in two groups. The groups were classified according to: gender, place of residence, upbringing in full family, relations with parents

	Smoking	
	no	yes
Gender	Yates chi-square = 7.45; $p < 0.01$	
male	N = 100 (67.1%)	N = 49 (32.9%)
female	N = 143 (53.4%)	N = 125 (46.6%)
Place of residence	Yates chi-square = 7.57; $p < 0.01$	
town	N = 160 (53.9%)	N = 137 (46.1%)
village	N = 81 (68.6%)	N = 37 (31.4%)
Upbringing in full family	Yates chi-square = 3.36; not significant	
yes	N = 223 (59.9%)	N = 149 (40.1%)
no	N = 19 (45.2%)	N = 23 (54.8%)
Relations with mother	Pearson's chi-square = 9.36; not significant	
male, good relations	N = 91 (66.9%)	N = 45 (33.1%)
male, bad relations	N = 9 (69.2%)	N = 4 (30.8%)
female, good relations	N = 132 (54.1%)	N = 112 (45.9%)
female, bad relations	N = 8 (40.0%)	N = 12 (60.0%)
Relations with father	Pearson's chi-square = 13.51; $p < 0,01$	
male, good relations	N = 84 (67.2%)	N = 41 (32.8%)
male, bad relations	N = 15 (68.2%)	N = 7 (31.8%)
female, good relations	N = 117 (56.0%)	N = 92 (44.0%)
female, bad relations	N = 21 (41.2%)	N = 30 (58.8%)

DISCUSSION

Despite considerable advances in prevention, addictions still remain one of the major public health problems existing worldwide (1, 14, 13). In our study the use of psychoactive substances was more often present in the group of adolescents living in cities than in those residing in villages, but without statistical significances.

Most of adolescents who admitted to using drugs smoked marijuana, or smoked marijuana and used speed. These trends have also been observed by other authors. Kresanek et al. (4) came to the conclusion that currently the most abused drugs are cannabinoides and amphetamines. They explain this mechanism as a specific social trend because of their easy availability and low price. Marijuana is still considered an innocuous drug. The immediate effect of smoking marijuana is accelerated heart rate and minimal rise in blood pressure. The studies suggest that the regular use of marijuana is associated with diminished sperm motility, decreased circulating testosterone levels, irregular ovulation and decreased gonadotropin levels. The pulmonary effect of long-term using marijuana is bronchoconstriction and even neoplastic changes in the lungs. Using drugs also influences the immune

system (8). Boys admitted to using drugs more often than girls. The prevalence of risk behaviours was higher in adolescents living in towns. These results correspond with the studies by Makara-Studzińska (6) and Woynarowska et al. (11) carried out among young people (6). The collected results show that the problem of drug use exists. The frequency is higher in incomplete families, but the results were not significant. These findings are consistent with the report by Jędrzejczak et al. (3) who investigated 290 respondents randomly selected by e-mail questionnaire.

According to our data there is a high rate of smoking among adolescents in Lublin district especially in cities. These results correspond with the literature (4). The frequency of smoking among school students in big cities is high. The frequency of risky health behaviour in teenagers in our study was higher than showed the study of the school youth, carried out in Poland in 2002, as a part of HBSC study (Health Behaviour in School-aged Children; A WHO Cross-national Study), conducted in co-operation with the World Health Organization. The research from 2002 estimated that 7% of teenagers were regular smokers (5). Our results showed that girls smoked more frequently than boys. The increase in number of smoking girls was observed through the last years. Łepecka-Klusek et al. reported that 50.5% of schoolgirls smoked or were currently smoking cigarettes (9). Murray and Lopez (7) estimated that if the current trend continues, 250 million children living in 1996 will eventually be killed by tobacco and that 750 million children are exposed to passive smoking.

Efforts to control drug use in adolescents should target their parents, other family members and teachers. Parents should take great part in conveying pro-healthy lifestyle to their children.

CONCLUSIONS

1. A statistically relevant associations have been demonstrated between the place of residence and risk behaviours. Adolescents residing in towns admitted to smoking and drug use more often than those residing in villages.
2. Significant differences were found between the group of girls and the group of boys. Girls smoked more frequently than boys.
3. Boys are under a higher risk of drug use than girls.
4. No significant differences were found between drug use in the groups classified according to upbringing in a full family or a broken home.
5. No significant differences were found between smoking in the groups classified according to upbringing in a full family or a broken home and relations with mother.
6. Girls who had bad relations with father, smoked more frequently than other girls.
7. The prevalence of drug use was higher in adolescents who had bad relations with parents.

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SUMMARY

The aim of this study was the evaluation of the connections between risk behaviours among young people and sociodemographic data. The study was carried out in the group of 422 secondary school students, aged 16–19 (273 girls and 149 boys). A specially devised questionnaire was used to identify sociodemographic data and risk behaviours. Statistically relevant associations have been demonstrated between smoking, drug use and sociodemographic data. There were significant differences between the frequency of smoking and drug use in two groups. The groups were classified according to: gender, place of residence, relations with parents. No significant differences were found between risk behaviours in the groups classified according to upbringing in a full family or a broken home and smoking and relations with mother.

Ryzykowne zachowania wśród młodzieży

Celem badań była ocena związków pomiędzy zachowaniami ryzykownymi wśród młodzieży a danymi socjodemograficznymi. Badaniami objęto 422 uczniów szkół średnich w wieku od 16 do 19 roku życia (273 dziewcząt i 149 chłopców). W badaniach zastosowano własny protokół naukowo-badawczy do oceny danych socjodemograficznych i zachowań ryzykownych. W wyniku przeprowadzonych badań wykazano istotny statystycznie związek pomiędzy czynnikami socjodemograficznymi i paleniem papierosów oraz używaniem narkotyków. Wykazano istotne statystycznie różnice pomiędzy częstością palenia papierosów i używania narkotyków a płcią, miejscem zamieszkania, relacjami z rodzicami. Nie znaleziono istotnych statystycznie różnic w występowaniu zachowań ryzykownych a wychowywaniu w rodzinie pełnej lub niepełnej oraz pomiędzy paleniem papierosów a relacjami z matką.