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Illicit drug use and Romanian adolescents. Parental protective factors

Nielegalne zażywanie narkotyków a młodociani Rumuni. Rodzicielskie czynniki ochronne

Abstract

The present study used the „CORT 2004 Questionnaire Regarding Risk Behavior for Health in Young People" for an epidemiological survey on 2908 high school students of the urban area of Timis County, western Romania. The aim of this study is to analyze the magnitude of the illicit drug use of Romanian adolescents and to delineate the parental protective factors inside the family.

Keywords:

adolescence, illicit drugs, protective factors, parents

1. Introduction

Substance abuse is caused by a number of personal, familial, genetic, and social factors rather than by any other cause. Often parents are unaware that substance abuse and illicit drug consumption are happening under their own roof.

The wellbeing of our youth demands special care and attention in our societies. The ongoing researches and efforts are made to inform and educate young population, as well as to reduce all types of dangerous behaviors. We shall keep in mind that: "Individuals who begin using drugs as juveniles are at greater risk of becoming addicted compared to those who

begin drug use as an adult due to the immaturity of the teenage brain, particularly of that part of the brain that controls impulses" (*WebMDnewsleter*, 2012).

2. Methodology

The study included 2908 high school students within Timis County (Romania), from grades 9 to 12, participants in the survey in early 2005. They answered a 126-item questionnaire (CORT Inventory) covering risk behaviors for health such as: relation with family members and peers, nutrition habits, smoking cigarettes, alcohol consumption, aggressiveness, substance use, sexual behaviors, self-medication, health education (Vlaicu, B., 2007, pp. 7–10).

The design of CORT Inventory was based on following Romanian and international studies: The American study *Monitoring the Future,* The European study *ESPAD 1999 (The European School Survey project on Alcohol and other Drugs),* the American study *YRBSS (Youth Risk Behaviour Surveillance System),* the Timis County *CAST* study *(Use of Alcohol, Stupefiants and Tobacco),* the national Romanian study *The Maturity of teenage students.*

The rate of the students answer was 76.2%, the response of the classes (the primary sampling unity) was 97.9%, and the response rate resulted was 74.6%. Data processing was realized in the program EpiInfo version 6.04d, 2001 and the program SPSS, version 12.00. The chi square test was used for comparing frequency's distribution. Also a correction factor was applied, the factor that made allowances to the sampling probability and to the participation rate (Ursoniu, S. et. al., 2009, pp. 564–565).

3. Results and discussions

3.1. Sample description

Demographic characteristics of the sample are shown in Table 1 (Barbat, C., 2010, 85–90).

Table 1. Demographic characteristics of the sample (n = 2908)

Age (years)	
Mean	16.79
SD	1.19
Range	14–19
Sex, n (%)	
Male	1410 (48.5)
Female	1498 (51.5)
Residence area ,n (%)	
Cities	2372 (81.6)
Towns	404 (13.9)
Villages	132 (4.5)
School profile, n (%)	
Theoretical	1026 (35.3)
Industrial	1124 (38.6)
Vocational	662 (22.8)
Confessional	96 (3.3)
*Grade**, n (%)	
9th	924 (31.8)
10th	782 (26.9)
11th	743 (25.5)
12th	459 (15.8)
Ethnicity, n (%)	
Romanian	2684 (92.3)
Hungarian	99 (3.4)
Serbian	55 (1.9)
German	23 (0.8)
Ukrainian	15 (0.5)
Bulgarian	9 (0.3)
Croatian	8 (0.3)
Other	15 (0.5)

3.2. Prevalence of any illicit drug use

The concept of any illicit drug includes in our study marijuana or hashish, amphetamines, LSD, cocaine, heroin, ecstasy, hallucinogenic mushrooms (Barbat C. et. al., 2009, 31): „Illicit drugs consumption amongst the students in Timis County, Romania is a reality, and the percent of 5.3% students which consumed illicit drugs and 4.5% which still consumed drugs at the time of the

study - although ones of the smaller in Europe - must be taken into account by the structures involved in the comunitary intervention, both preventive and therapeutically" (Ibidem, p. 34).

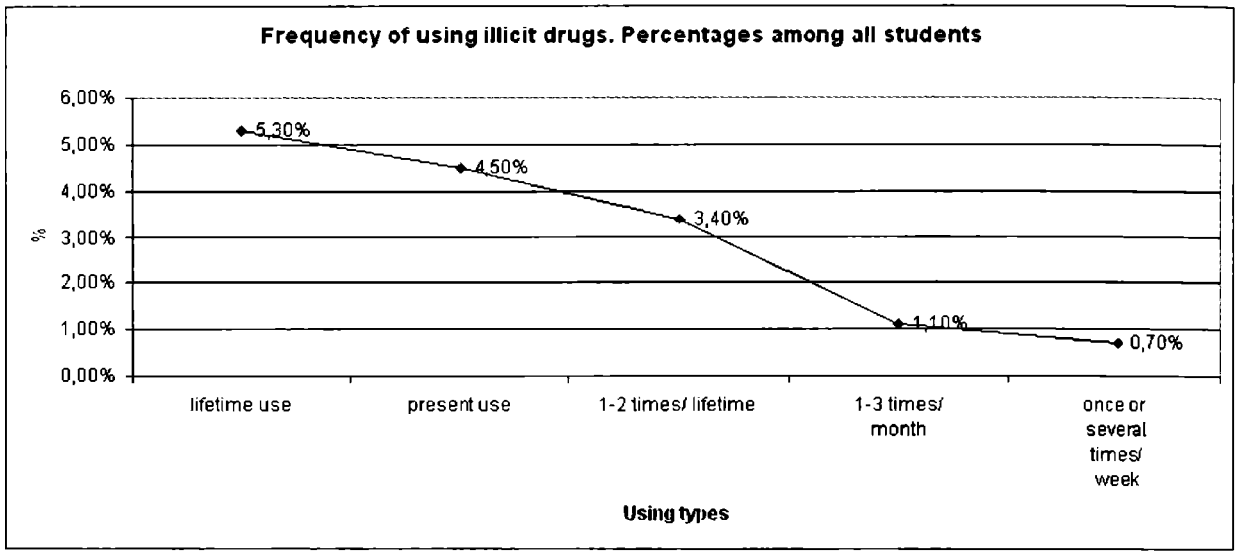

Figure 1. Frequency of using any illicit drugs

At the time of the study the percent of consumers of any illicit drugs (4.5%) was higher than the reported Romanian average (2%) for experimental use (1–2 times/lifetime) within the ESPAD 2003 survey, with a higher prevalence in boys (5.2% vs. 3.4%). Comparing the Romanian data with other European countries, we have noticed that: "The highest prevalence rates of any illicit drugs use are reported from the Czech Republic (44%), Switzerland (41%) Ireland and the Isle of Man (40% each). Other countries with high proportions include France, the United Kingdom (38% each), Belgium (33%), Germany (30%), the Netherlands, Slovenia (29% each), Italy (28%), Greenland and the Slovak Republic (27% each)." (ESPAD Report 2003, p. 165)

In fact many of the Romanian students (3.4%) have tried a drug only once or twice (experimental use). According to the ESPAD 2003, similar percents were found in Cyprus and Turkey (2%), Greece (3%), Norway and Switzerland (4%). Poland reported 6%. (The researchers note that using the term "lifetime" to describe the prevalence of substance use in our study does not necessarily indicate the persistence of these disorders in the long term.)

3.3. Types of consumed drugs

Compiling a top of illicit substances consumed by the total consumers number who responded the questionnaire (151), we can see on the first place

the cannabinoids derivates (91.3%, 138 students), followed on the second place by ecstasy (10.0%, 15 students), on the third place by LSD (8.6%, 13 students), and then cocaine (7.9%, 12 students), tranquilizers or sedatives (7.3%, 11 students), alcohol mixed with tranquilizers (5%, 8 students) and organic solvents (4.6%, 7 students). 5 students declared to have consumed hallucinogen mushrooms, 3 students declared to have consumed amphetamines and also a number of 3 students declared to have consumed anabolic steroids. The majority of illicit drugs consumers have recourse to marijuana (85 boys and 53 girls, Figure 2) (Barbat C. et. al., 2009, 32).

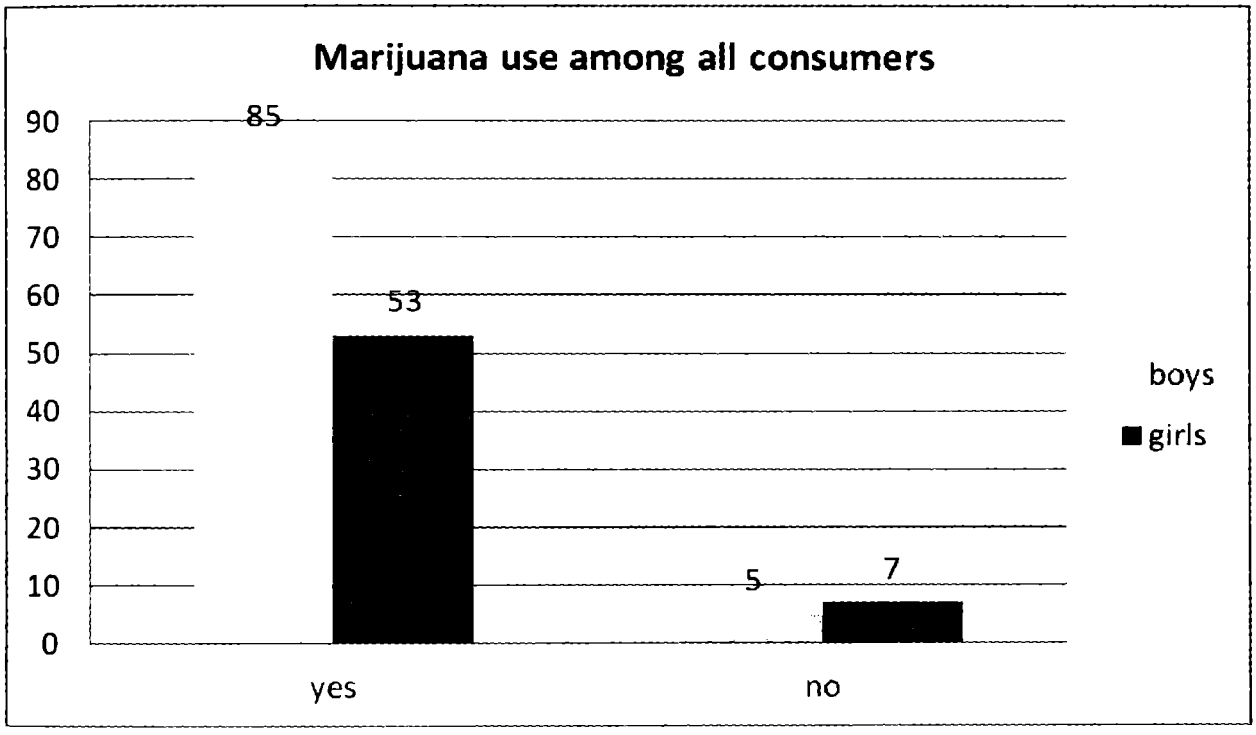

Figure 2. Frequency of using marjuana

3.4. Parental protective factors

Analyzing the parental behavior, we have noticed some parental habits that might prevent the illicit drug consumption of adolescents (Figure 3, Table 2) (Barbat, C., 2010, 156–157).

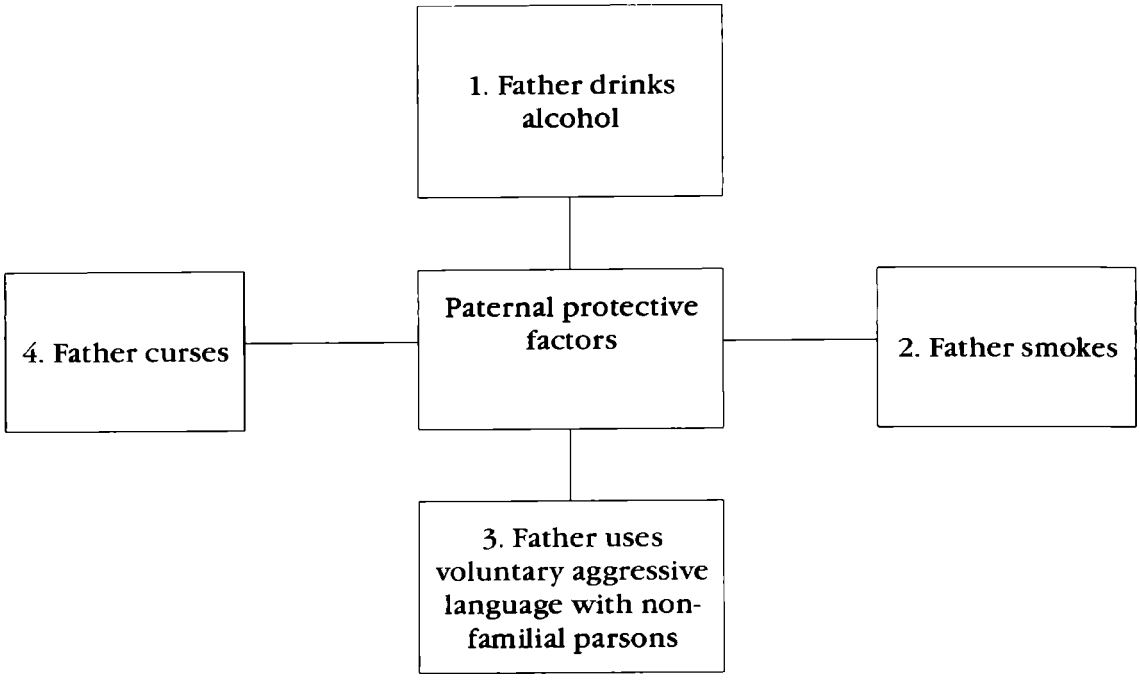

Figure 3. Adolescents drug use: paternal protective factors

Paternal behaviors that might protect adolescents from experiencing and/or consuming illicit substances can be summarized in Figure 3:

- Father drinks alcohol (OR = 0,347; 95%CI: 0,301–0,401);
- Father smokes (OR = 0,461; 95%CI: 0,407–0,522);
- Father uses voluntary agressive language with non-familial persons (OR = 0,556; 95%CI: 0,435–0,710);
- Father curses (OR = 0,811; 95%CI: 0,674–0,977).

Table 2. Adolescents drug use: maternal protective factors

The mother:	OR	95%CI
Smokes	0,339	0,298–0,385
Drinks alcohol	0,449	0,368–0,548
Uses aggressive language with non-familial persons	0,263	0,169–0,407
Curses	0,588	0,454–0,761
Has manifested indifference to her child	0,506	0,331–0,773
Uses sedatives without medical recommendation	0,523	0,337–0,813

Uses an aggressive language when speaking with the adolescent	0,804	0,630–1,025

According to the statistical findings, the above mentioned maternal behaviors (Table 2) might function as protective behaviors especially when taking into consideration girls' drug use.

Parents can also protect the adolescents from taking drugs by setting familial behavioral rules (Wald = 4,401; OR = 0,529; 95% CI: 0,292–0,959; $p \leq 0,036$). According to the same ESPAD Report 2003: „In 30 of the 31 reporting countries, adolescents used substantially and significantly more tobacco, alcohol and cannabis when their parents did not know where they spent Saturday nights" (Ibidem, p. 197).

Authors like Anderson et al. (1990) explained the complexity of the community interventions and the role of good parenting in preventing substance use and abuse: "There is an emerging evidence base for interventions that tackle particular risk and protective factors [...]. Significant reductions in tobacco and cannabis use occurred amongst students followed up at Years 9 and 10. However, training for community leaders and the use of mass media was less effective when not teamed with school-based and parenting programs." (Anderson et al., 1990, p. 447).

As Kung and Farell (2000) also underlined: "Parents also exert an important influence on drug use among adolescents. Several distinct parental influences have been identified in the substance use literature, including bonding or attachment [...] parent-child conflict, and parenting practices." (http://link.springer.com/article/10.1023%2FA%3A1009427010950?LI=true).

Using an entire body of researches, Catford (2001) is putting once more into discussion five familial aspects that can prevent substance use by teenagers and adolescents (Table 3).

Table 3. Adolescents drug use: parental protective factors (Catford, J., 2001)

A sense of connectedness to family
Feeling loved and respected
Proactive problem solving and minimal conflict during infancy
Warm relationship with at least one parent
Absence of divorce during adolescence

4. Discussions and conclusions

Regarding the parental factors that can prevent the illicit drug exposure in adolescence, our results add new epidemiological evidence to an already abundant body of literature on a possible causual association linking the use of illicit drugs and familial behaviors. But it is necessary to adopt a multidimensional perspective when analyzing the influences of parental behaviors. Considering the statistical data, our results are somehow limited. In the same time they clearly indicate some future research directions.

Obviously, maternal and paternal protective factors can interfere with children's self-esteem and personality trait's expressions such as depression and inhibition. Depression and inhibition were largely studied in analyzing the link between personality and drug use in adolescence.It seems that particular levels of these personality features can help teenagers to avoid drug use. In this sense we found some scientifical supports:

A 2007 research studying Spanish adolescents concluded that: "Results showed a significant mediational effect of self-esteem on the relation between family functioning and adolescent substance use. Moreover, results showed, on the one hand, a protection effect of family and academic self-esteem in the face of substance use and, on the other hand, a risk effect of social and physical self-esteem" (Musitu, G., Jimenez, T.I., Murgui, S., 2007).

One year later, Kendler et. al. found that: „[...] initiation and early patterns of use are strongly influenced by social and familial `environmental factors while later levels of use are strongly influenced by genetic factors." (Kendler et al., 2008).

As it has been shown by a French team research: "The prevention of both alcohol and illicit drug abuse requires strategies that target early adolescence and take into account the highly differential influence that population-based factors may exert by stage of substance use" (Swendsen, J., et al., 2012).

Studying the familial preventive factors, added to the personality typology of the drugs consuming adolescents, upholds once more the necessity of qualitative, interdisciplinary and longitudinal empirical researches. In consequence, a proper education for health will demand as a sine-qua-non condition that the school physician, the psychologist, the social worker and the family members work together.

Limitations

The survey was designed as a descriptive needs assessment and not for testing causal hypotheses, prevention needs or appropriate service delivery approaches for high-schools and communities. The findings reported here cannot be relevant for adolescents not attending scholar institutions. In the same time, some errors based on self reported behaviors might have been generated (Caraion-Buzdea, C. et. al., 2010).

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