

## SOCIO-DEMOGRAPHIC PROFILE AND THE LICIT AND ILLICIT DRUGS USE AMONG SECONDARY EDUCATION STUDENTS

*Thalita de Castro Figueiredo<sup>1</sup>*  
*Rivelilson Mendes de Freitas<sup>2</sup>*

This study aimed to determine the socio-demographic profile and the licit and illicit drugs use among students of public and private schools located in the city of Picos, Piauí. The study was performed using a semi-structured questionnaire applied to 2400 students. We found a student's profile aged from 14 to 18 years old (94.5%), predominantly female (56%), unmarried (95.5%) and white (45.7%). Regarding drugs consumption, the most commonly used are alcohol and tobacco for licit drugs and tranquilizers and marijuana for illicit drugs. A family relationship based on dialogue, a good school relationship and information on the use of these substances can contribute to reduced drug consumption.

Descriptors: Street Drugs; Education, Primary and Secondary; Alcoholic Drinking; Tobacco.

<sup>1</sup> Undergraduate student in Nursing, Universidade Federal do Piauí, Teresina, PI, Brazil.

<sup>2</sup> PhD, Adjunct Professor, Universidade Federal do Piauí, Teresina, PI, Brazil.

### Correspondence

Rivelilson Mendes de Freitas  
Av. Cícero Eduardo, s/n  
Bairro: Junco  
CEP: 64607-675, Picos, PI, Brasil  
E-mail: rivellison@pq.cnpq.br

## **PERFIL SOCIODEMOGRÁFICO E USO DE DROGAS LÍCITAS E ILÍCITAS ENTRE ESTUDANTES DO ENSINO MÉDIO**

O estudo teve como objetivo determinar o perfil sociodemográfico e o uso de drogas lícitas e ilícitas de escolares matriculados em instituições públicas e privadas de ensino médio, localizadas no município de Picos, Piauí. Foi realizado por intermédio de um questionário semiestruturado, aplicado a 2.400 estudantes. O perfil encontrado foi: idade entre 14 e 18 anos (94,5%), predomínio do sexo feminino (56%), estado civil solteiro (95,5%) e cor da pele branca (45,7%). Quanto ao consumo de drogas, as mais utilizadas são álcool e tabaco para as lícitas e tranquilizantes e maconha para as ilícitas. Um relacionamento familiar baseado no diálogo, um bom vínculo com a escola e informação sobre o uso dessas substâncias podem contribuir para menor consumo de drogas.

Descritores: Drogas Ilícitas; Ensino Fundamental e Médio; Consumo de Bebidas Alcoólicas; Tabaco.

## **PERFIL SOCIO-DEMOGRÁFICO Y USO DE DROGAS LÍCITAS E ILÍCITAS ENTRE ESTUDIANTES DE LA ENSEÑANZA MEDIA**

El estudio tuvo como objetivo determinar el perfil socio demográfico y el uso de drogas lícitas e ilícitas de escolares en instituciones públicas y privadas de enseñanza media localizadas en el municipio de Picos, Piauí. Fue realizado a través de un cuestionario semi-estructurado aplicado a 2.400 estudiantes. El perfil encontrado fue edad entre 14 a 18 años (94,5%), predominio del sexo femenino (56%), estado civil soltero (95,5%) y color de la piel blanca (45,7%). En cuanto al consumo de drogas, las más utilizadas son alcohol y tabaco para las lícitas y tranquilizantes y marihuana para las ilícitas. Una relación familiar basada en el diálogo, un buen vínculo con la escuela e información sobre el uso de esas substancias pueden aportar para menor consumo de drogas.

Descriptorios: Drogas Ilícitas; Educación Primária y Secundaria; Consumo de Bebidas Alcohólicas; Tabaco.

### **Introduction**

Psychoactive substances can be used at different periods and cultures, as well as for therapeutic, religious or recreational purposes. Since ancient times they are being used, showing that the production and use of drugs is part of the mankind history<sup>(1-2)</sup>. In recent decades, however, due to its high frequency, its use has been suggested as a worldwide public health problem, attracting the interest of several research groups<sup>(2)</sup>.

The increasing concern of society and research groups in preventing and combating the licit and illicit drugs use in Brazil may be reflected in the huge spread of drug use, the heinous crimes committed by their users and by age

increasingly earlier of people who become dependent on drugs, especially illicit, as well as those authorized<sup>(1)</sup>.

For a long time the drugs issue was referenced only when related to international security. They were sold in illegal market between countries, as mere merchandise. However, this same trade also is responsible for the financing of other transnational crimes. Therefore, the society, in general, needs to react to this phenomenon dramatically with a repressive policy strongly focused on reducing supply and availability of drugs<sup>(3)</sup>.

Based on these data, it is clear that the Brazilian legislation related to drugs has evolved from a focus totally

prohibitionist to a less repressive system with respect to drug users. Drugs cannot be referenced as mere goods sold between countries, it is necessary to highlight and to inform the general population on the health risks and quality of life for its use. Moreover, this social problem affects political, economic and cultural structures of several countries<sup>(3-4)</sup>.

Within this context, the secondary education is mostly attended by adolescents. This period of life is marked by great discoveries and transformations. In this same period the recommendations regarding drugs use are considered negative by the majority of young people seeking autonomy. Some of these adolescents are using drugs as an opportunity to escape from an adverse reality, and they can also be stimulated by classroom colleagues to try them just because of curiosity<sup>(1)</sup>.

At this stage it is common to observe that adolescents move away from family ties and try to be closer with other groups of adolescents. This social reorganization is often a matter of great concern among parents, educators and health professionals, since this approach can happen to a drug user group. Thus, the adolescent may become vulnerable and pressured to share this experience<sup>(5)</sup>.

The licit and illicit drugs consumption during secondary education can be related to many factors, including socioeconomic and cultural factors<sup>(6)</sup>. Besides these factors, it can be considered the free access to these substances, the absence of a solid family structure, an unsatisfactory relationship with parents, attention and behavior problems, drug use by other family members and their own processing stage of adolescence, suggesting that this may be a critical period for these substances use, reinforcing the need for studies among the 3rd grade of secondary education students from public and private schools to provide data that support readily identifying some parameters related to the use of licit and illegal drugs.

It is known that drugs impair social, professional and emotional performance. The use of these substances can cause several consequences such as reduced participation in academic activities and lower school performance. Moreover, it can be seen among the users of secondary education students a higher number of failures and inappropriate behavior within the family and society<sup>(7-8)</sup>. The damages caused to individuals can often be immeasurable and the treatment cost of these users to the health service are quite high<sup>(1)</sup>. All these factors show the need for prevention and combating the use of licit and illicit drugs, since they can produce significant social, cultural and economic consequences in the country in general.

The factors characterization and investigation associated with drug use among students of secondary education can be an important tool for public policy in seeking assistance for prevention, combating and treating psychoactive substances abuse<sup>(6)</sup>. Given this context, the present study aimed to determine the socio-demographic profile and factors associated with licit and illicit drugs use among the 3rd year of nighttime students of secondary education of public and private school in the city of Picos, Piauí.

## Material and Methods

This is a descriptive quantitative approach study with use of direct investigation technique<sup>(9-10)</sup>. For the research there were six public schools and four private schools of secondary education, nighttime period, in the city of Picos, Piauí. At first, we requested to all public and private schools of secondary education ( $n=22$ ) of the urban area to participate in the study, however, only ten schools (public and private) accepted voluntarily the invitation to participate.

Initially, all students of both genders and different age groups of the 3rd year of the nighttime period of secondary education of the ten public and private schools were invited to participate in the study. However, many students refused to participate in the study. Thus, the final study population consisted of 2400 students of the 3rd year of secondary education, nighttime period, of public schools ( $n=1200$ ) and private schools ( $n=1200$ ). The data were collected from August to November 2010 by students of the Nursing Course at the Federal University of Piauí, trained and under supervision.

To obtain information about drug use and other data, we used a self-administered anonymous questionnaire, composed of objective and subjective questions related to socio economic data (age group, gender, self-reported skin color, marital status, family income and type of housing); consumption of licit and illicit drug; medication use during self-medication, as well as the specific use of alcohol (alcoholism) through subjective questions about how the student considers have exceeded consumption alcohol at least once in life, and if he/she is a user and considers tobacco use at least once a day (smoking). The questionnaires were always applied at nighttime period (19pm), as previously scheduled with the school principal.

The questionnaires were applied collectively and kept unmarked for approximately 20 minutes before the students' academic activities. Only the students who were in the classroom participated in the survey, and those who refused to participate or did not hand in the Term of Free and Informed Consent (TFIC) signed by them or their guardian were excluded in the survey. The participation was anonymous and voluntaries. All the secondary education students invited to participate were informed about the objectives of this study. There was no nominal identification or moral risk for the students, because it was just statistics data.

The use of self-administered questionnaire, collectively, in the classroom, by being confidential and ensuring anonymity, constitutes a suitable procedure for obtaining information on private or illegal behavior. In the event of information bias, it can be assumed that the trend would be underreporting, since the information concerns illegal behavior<sup>(2)</sup>. The study was approved by the Ethics Committee of the Federal University of Piauí with Certificate of Presentation for Ethical Consideration (CAAE) number 0086.0.045.000-09, and meets the ethical principles contained in the Declaration of Helsinki.

For treatment of the data it was produced a Database using the software Microsoft Excel and the statistical

program SPSS version 15.0. For analysis and interpretation results of the secondary education schools, results from the literature and what was found in databases were used during this study. Descriptive statistics with use of absolute frequency and percentage was used to analyze the information.

## Results

From the 2400 students interviewed during the study, the majority is female (56%), and 94.5% are

from 14 to 18 years old. When asked about the skin color, 45.7% of them stated they were white and 24.2% stated they were pardo (Brazilian skin color category). Regarding marital status, 95.5% of them reported being single and only 3.8% reported having a stable marital status (Table 1).

It can be identified in public schools the prevalence of a family income of a minimum wage (59.5%), whereas in private schools, the studied variable had a prevalence between two to four minimum wages (47.6%) (Table 2).

Table 1 - Characterization of the socio-demographic profile of secondary education in public and private schools

Socioeconomic profile	Public schools		Private schools		Total	
	n	(%)	n	(%)	n	(%)
Gender						
Male	498	41.5	560	46.7	1058	44
Female	702	58.5	640	53.3	1342	56
Age group (age)						
14-18 years	1080	90	1188	99	2268	94.5
19-32 years	120	10	12	1	132	5.5
Skin color						
White	460	38.3	638	53.1	1098	45.7
Mulatto	268	22.3	180	15	448	18.6
Afro-Descendant	160	13.3	116	9.8	276	11.5
Pardo (Brazilian skin color category)	312	26.1	266	22.1	578	24.2
Marital status						
Single	1138	94.8	1156	96.7	2294	95.6
Married	48	04	44	3.3	92	3.8
Widow	14	1.2	00	00	14	0.6

Table 2 - Characterization of the economic profile regarding the family income in public and private secondary education schools

Socioeconomic profile	Public schools		Private schools		Total	
	n	(%)	n	(%)	n	(%)
Family income (wage)						
1 wage	714	59.5	108	9.3	822	34.2
2-4 wages	412	34.3	572	47.6	984	41.0
5-7 wages	42	3.5	272	22.6	314	13.0
8-10 wages	16	1.3	136	11.3	152	6.3
10-15 wages	04	0.3	86	7.1	90	3.7
>15 wages	12	1.1	26	2.1	38	1.8
Total	1200	100	1200	100	2400	100

Among secondary education students of public schools it was observed that among the factors that induce them the use of licit and illicit drugs, 41.5% use these substances mainly for fun, followed by colleague influence (38.5%) (Table 3). Likewise, the data in Table 3 calls attention to the study, because in private schools the first factor for these substances use is look for entertainment

(36.6%). However, the second factor is their own desire (23.4%) instead of the influence of friends as evidenced by the generic data. The results suggest that these secondary education students use substances because they really want and not because of the influence of friends, as it happen in public schools.

Table 3 - Identification of factors that induce licit and illicit drugs use in secondary education students of public and private schools

Parameters	Public schools		Private schools		Total	
	n	(%)	n	(%)	n	(%)
Participating Schools	06	60	04	40	10	100
Factors that lead to drug use						
Curiosity	44	9.3	86	13.8	130	11.8
Desire	36	7.6	146	23.4	182	16.6
Influence	182	38.5	92	14.7	274	25.0
Insomnia	14	3.1	70	11.5	84	7.9
Fun	196	41.5	228	36.6	424	38.7
Total	472	100	632	100	1094	100

As for illicit drugs, the most commonly used among students of private schools were tranquilizers (4.1%), marijuana (2.5%) and cocaine (2.5%). Among the students of public schools, there was similarity between the corresponding values regarding the use of cocaine, a lower consumption of tranquilizers (3.8%) and higher consumption of marijuana (3.8%) when compared to drugs used by secondary education students of private schools. In the public schools, crack use was higher among secondary education students, in private schools there was not verification on the consumption of this substance (Table 4).

As to possible drugs used by the students it was detected a high observation of licit drugs consumption

such as alcohol (82.2%) and tobacco (7.3%) among the students in public and private schools. Considering the results obtained among secondary education students from public and private schools it was verified that 80% and 83.9% of them use alcohol and 7.6% and 7.0% use tobacco, respectively (Table 4). However, the majority of the students of public and private schools have reported not using alcohol so frequent (82%) and that there was no exceeded in its use (87%) (Table 5). These two indexes were observed more frequent among public school students when compared to the study in teaching units of the private sector.

Table 4 - Identification of the main licit and illicit used drugs, at least once during their lives, among secondary education students of public and private institutions

Parameters	Public schools		Private schools		Total	
	n	(%)	n	(%)	n	(%)
Participating Schools	06	60	04	40	10	100
Main used drugs						
Crack	10	2.3	00	00	10	0.9
Cocaine	12	2.5	16	2.5	28	2.5
Marijuana	18	3.8	16	2.5	34	3.1
Alcohol	378	80.0	522	83.9	900	82.2
Tranquilizers	18	3.8	36	4.1	44	4.0
Tobacco	36	7.6	42	7.0	78	7.3
Total	472	100	632	100	1094	100

Table 5 - Alcohol analysis use in public and private secondary education institutions

Parameters	Public schools		Private schools		Total	
	n	(%)	n	(%)	n	(%)
Participating Schools	06	60	04	40	10	100
Frequent alcohol intake						
Yes	210	17.5	222	18.5	432	18
No	990	82.5	978	81.5	1968	82
Total	1200	100	1200	100	2400	100
Exceeded consumption						
Yes	130	10.8	200	15	310	13
No	1090	89.2	1000	85	2090	87
Total	1200	100	1200	100	2400	100

Complementing the study data regarding self-medication, the results show that 61% of the students do not use medication without prescription. According to the results, self-medication occurs most predominantly in private schools. Among the most widely used medication without prescription, self-medication was identified in 35.1%, 38.2% and 12.6% for analgesics, anti-inflammatories and vitamin complexes, respectively.

## Discussion

The data obtained in this study correlate with other studies that involve the use of licit and illicit drugs among students in the same school age group. Other available studies found similar results to ours for variables such as gender, age, skin color self-reported and marital status among secondary education students interviewed in the study<sup>(2, 11)</sup>. Regarding family income, there was disagreement between the results for public and private schools, showing that the students of public schools belong to different economic strata.

As evidenced in the data reported in Table 3, the most licit substances consumed by students of the 3rd year of the nighttime period of secondary education were alcohol, followed by tobacco. These results corroborate the results of several studies on the subject conducted in Palhoça, Santa Catarina, with 889 students from public and private schools<sup>(1)</sup> and in São José do Rio Preto, São Paulo, with 1035 public school students<sup>(6)</sup>. They are legally permitted substances, so this fact is not widely emphasized, since these substances are part of everyday life for many people. The data from this study not only corroborate with the available studies in the literature<sup>(1,3,6,8)</sup> but also extend the results found related to age, strengthening the need for the implementation of public health policies of psychopharmacological support and guidance to the students in the 3rd year of the nighttime period in public and private secondary education.

Nowadays, alcoholic beverages may be part of several social occasions, through a broad social and legal acceptance, sometimes being culturally valued in some situations<sup>(12)</sup>. In Brazil, alcohol is also the most widely used drug in any age group and an increased consumption among adolescents can be verified<sup>(13)</sup>. Furthermore, this same study has demonstrated a high consumption of alcohol and tobacco among students as it was also observed in our study, suggesting that adolescents can easily buy alcohol or cigarettes, either via market places as through their social and family groups (relatives and friends).

Excess of alcohol consumption by adolescents can cause several serious consequences for their health, reinforcing the literature data on the fact that this drug is socially accepted and can facilitate as a starter consumption and addiction to other classes of illicit drugs<sup>(14)</sup>. Even with the database in Table 3, it can be observed that in the context of illicit drugs, tranquilizers and marijuana are the most used drugs among students in public and private schools. However, these are still controversial issues on these results that need further investigation. While some

studies<sup>(1, 6)</sup> indicate marijuana just as the second most popular illicit substance by secondary education students, another report<sup>(5)</sup> indicates that marijuana is the most used drug. The I National Household Survey on the Use of Psychotropic Drugs performed by CEBRID also reported that marijuana is the most illicit drug used in Brazil<sup>(15)</sup>.

Marijuana is a serious public health problem. Its use can be considered the initial step for the consumption of other more toxic illicit drugs. Pointing to the need for prevention campaigns against its use, because in the study conducted in São José do Rio Preto<sup>(11)</sup> it was found that among the consumption of other illicit and licit drugs, it is the most common among those who have tried marijuana. Therefore, the use of this substance can strengthen the idea of progression as the use of other licit and illicit drugs. Moreover, marijuana has a lower commercial value, which makes it more accessible to young people, especially those from low income families<sup>(5)</sup>, as it can be seen in our data on socioeconomic family income.

Still relating to the use of licit and illicit substances it was observed, and it is noteworthy, that nighttime period, central focus of this study, is probably the most conducive period to students who use these substances to attend teaching units, as well it was evidenced by other studies in our country<sup>(1, 6, 16)</sup>.

A positive result for the data obtained with respect to self-medication suggests that secondary education students have some degree of knowledge about the risks of this practice, because most students do not use medications without medical prescription. However, the use of licit or illicit drugs goes beyond the culture of our society, suggesting that since childhood to old age, individuals can get in touch with some of these substances, even if they have not used or tried them<sup>(5)</sup>. Thus, the prevention of drug abuse is essential to avoid damage to health and to quality of life of secondary education students as well as to reduce a subsequent chemical and physical dependence.

According to several experts, one of the most effective ways to combat drug abuse is prevention<sup>(1, 3, 6, 8)</sup>. However, it should not be directed only to adolescents in a unique way, since other factors are also crucial for drug use. Therefore, it can be seen that for a result more relevant in combating the use of these substances, preventive measures should also involve people and environments close to adolescents as their friends, family, and leaders of the teaching units. A greater emphasis should be given to the last two years of secondary education, since in this period adolescents begin to form their opinions and ideas about several matters. Thus, it can be inferred that family relationships based on dialogue, a structured family, a good relationship with the school and relevant information provided to adolescents on the causes and consequences of using these substances can contribute to reduce drug consumption.

## Final Consideration

The present study presents limitations regarding the generalization of the results for all secondary education students from Brazil and for adolescents in general,

because it is on a specific location and for excluding the sample of adolescents from other periods and years of the secondary education, as well as those who have left or have finished their studies. The data collection has not been remade for students who missed the school the day in which the questionnaire was applied, so the result may be underestimate, since chronically absent students use drugs more frequently and use those considered more toxic.

Despite the limitations, this study reveals important data such as the profile of the students, which is female adolescents aged between 14 to 18 years old, with no stable marital status, skin color self-reported as white and family income between 1 to 4 minimum wages. Regarding the consumption, the most commonly used drugs are alcohol and tobacco for licit drugs and tranquilizers and marijuana for illicit drugs. The cited factors that induce the use of these substances were most often fun followed by the influence of friends during parties or celebrations. Most students of the 3rd year of the nighttime period of secondary education do not practice self-medication nor takes drugs regularly.

Summarizing, because it is a rather complex issue, further studies will be important to be multiplied to the existing results, contributing to society learning, in general, on the risks inherent the use of licit and illicit drugs.

## References

1. Sanceverino SL, Abreu JLC. Aspectos epidemiológicos do uso de drogas entre estudantes do ensino médio no Município de Palhoça 2003. *Ciênc Saúde Colet.* 2004; 9(4):1047-56.
2. Tavares BF, Béria JU, Lima MS. Fatores associados ao uso de drogas entre adolescentes escolares. *Rev Saúde Pública.* 2004;38(6):787-96.
3. Chagas FGL, Ventura, CAA. Cooperação internacional em prevenção abusivo de drogas no Brasil. *SMAD, Rev. Eletrônica Saúde Mental Álcool e Drog. (Ed. Port.)* 2010;6(1):1-20.
4. Ventura CAA, Brands B, Adlaf E, Giesbrecht N, Simich L, Wright, M da GM, et al. Laws and policies on illicit drugs in Brazil and the perspective of drug users' family members and acquaintances: a study in the City of Ribeirão Preto, São Paulo, Brazil. *Rev. Latino-Am. Enfermagem.* 2009;17:810-6.
5. Almeida AJ Filho, Ferreira MA, Gomes MLB, Silva RC, Santos TCF. Adolescente e drogas: conseqüências para a saúde. *Esc Anna Nery.* 2007;11(4):605-10.
6. Silva EF, Pavani RAB, Moraes MS, Chiaravalotti FC Neto. Prevalência do uso de drogas entre escolares do ensino médio do Município de São José do Rio Preto, São Paulo, Brasil. *Cad Saúde Pública.* 2006;22(6):1151-8.
7. Lemos KM, Neves NMBC, Kuwano AY, Tedesqui G, Bitencourt GV, Neves FBSC, et al. Uso de substâncias psicoativas entre estudantes de Medicina de Salvador (BA). *Rev Psiq Clin.* 2007;34(3):118-24.
8. Corradi-Webster CM, Esper LH, Pillon SC. A enfermagem e a prevenção do uso indevido de drogas entre adolescentes. *Acta Paul Enferm.* 2009;22(3):331-4.
9. Polit DF, Beck CT, Hungler BP. *Fundamentos de pesquisa em enfermagem: métodos, avaliação e utilização.* 5 ed. Porto Alegre: Artmed; 2004. 487 p.
10. Gil AC. *Como Elaborar Projetos de Pesquisa.* São Paulo: Atlas; 2006.
11. Pavani RAB, Silva EF, Moraes MS, Chiaravalotti FC Neto. Caracterização do consumo de maconha entre escolares do ensino médio de São José do Rio Preto, SP, Brasil, 2003. *Rev Bras Epidemiol.* 2007;10(2):157-67.
12. Matos AM, Carvalho RC, Costa COM, Gomes KEPS, Santos LM. Consumo freqüente de bebidas alcoólicas por adolescentes escolares: estudo de fatores associados. *Rev Bras Epidemiol.* 2010;13(2):302-13.
13. Vieira DL, Ribeiro M, Romano M, Laranjeira RR. Álcool e adolescentes: estudo para implementar políticas municipais. *Rev Saúde Pública.* 2007;41(3):396-403.
14. Cavalcante MBPT, Alves MDS, Barroso MGT. Adolescência, álcool e drogas: Uma revisão na perspectiva da promoção da saúde. *Esc Anna Nery.* 2008;12 (3):555-9.
15. Carlini EA, Galduróz JC, Noto AR, Nappo AS. *I Levantamento Domiciliar Sobre o Uso de Drogas Psicotrópicas no Brasil.* São Paulo: Centro Brasileiro de Informações sobre Drogas Psicotrópicas, Departamento de Psicobiologia, Escola Paulista de Medicina, Universidade Federal de São Paulo; 2001.
16. Martins RA, Parreira VG, Cruz LAN, Silva, IA. Expectativas sobre os efeitos do uso de álcool e padrão de beber em alunos de ensino médio. *SMAD, Rev. Eletrônica Saúde Mental Álcool e Drog. (Ed. Port.)* 2010;6(1):1-13.

