

PROFILE OF ALCOHOL AND DRUG USE IN ADOLESCENT PUPILS IN A BRAZILIAN STATE CAPITAL

Edson Arantes Faria Filho¹

This article describes and analyzes exposure of adolescent pupils to alcoholic beverages and illegal drugs based on data from the National Schoolchildren's Health Survey (PeNSE) 2012. We outline the profile of consumption of these substances in the city of Goiânia-GO, according to sex and type of school. The percentage of experimentation at an early age, current alcohol consumption and episodes of drunkenness were slightly higher among girls. In the private schools, the percentage of those who had tried alcohol was higher whereas in the public schools the percentage of drunken episodes was higher. There was a higher percentage of experimentation with illegal drugs among male students and those from public schools. These results produce evidence that can guide public policies aimed at adolescents.

Descriptors: Adolescent; Alcoholism; Street Drugs; School Health.

¹ MSc, Health Specialist, Secretaria Municipal de Saúde, Goiânia, GO, Brazil.

Correspondence

Edson Arantes Faria Filho
Secretaria Municipal de Saúde de Goiânia. Departamento de Vigilância Sanitária
Rua: Av. Universitária, nº 644
Bairro: Setor Leste Universitário
CEP: 74605-010, Goiânia, GO, Brasil
E-mail: edsarantes@ibest.com.br

PERFIL DO CONSUMO DE ÁLCOOL E DROGAS ILÍCITAS ENTRE ADOLESCENTES ESCOLARES DE UMA CAPITAL BRASILEIRA

Este artigo descreve e analisa a exposição de adolescentes escolares às bebidas alcoólicas e drogas ilícitas a partir dos dados da Pesquisa Nacional de Saúde do Escolar (PeNSE) 2012. Traçamos o perfil do consumo dessas substâncias na cidade de Goiânia-GO, conforme o sexo e tipo de escola. O percentual de experimentação precoce, consumo atual de bebidas alcoólicas e episódios de embriaguez foram ligeiramente maiores entre as meninas. Nas escolas privadas, o percentual de experimentação de bebidas alcoólicas foi maior e nas escolas públicas o de embriaguez foi maior. Os estudantes do sexo masculino e de escolas públicas apresentaram maior percentual de experimentação de drogas ilícitas. Esses resultados geram evidências para orientar as políticas públicas de saúde voltadas aos adolescentes.

Descritores: Adolescente; Alcoolismo; Drogas Ilícitas; Saúde Escolar.

PERFIL DE CONSUMO DE ALCOHOL Y DROGAS ILÍCITAS ENTRE ADOLESCENTES ESCOLARES DE UNA CAPITAL BRASILEÑA

Este artículo describe y analiza la exposición de adolescentes escolares a las bebidas alcohólicas y drogas ilegales a partir de los datos de la Investigación Nacional de Salud del Escolar (PeNSE) 2012. Delineamos el perfil de consumo de esas sustancias en la ciudad de Goiânia-GO, según el sexo y tipo de escuela. El porcentaje de consumo precoz, consumo actual de bebidas alcohólicas y episodios de embriaguez fueron ligeramente mayores entre las chicas. En los colegios privados, el porcentaje de consumo inicial de bebidas alcohólicas fue mayor y en los colegios públicos el de embriaguez fue mayor. Los estudiantes de sexo masculino y de colegios públicos presentaron mayor porcentaje de consumo inicial de drogas ilegales. Esos resultados generan evidencias para orientar las políticas públicas de salud centradas en los adolescentes.

Descriptorios: Adolescente; Alcoholismo; Drogas Ilícitas; Salud Escolar.

Introduction

Adolescence is the stage of life between childhood and adulthood, marked by a complex process of bio-psycho-social growth and development. It is a period of great change, of discoveries, disruptions and learning and is therefore a phase involving risks, fears, maturity and experimenting with adult behavior.

Drug use, ranging from legal drugs like alcohol and tobacco to illegal ones such as marijuana, cocaine or ecstasy, to mention just a few⁽¹⁾, used

recreationally or at parties, is added to the numerous discussions involving this phase of life. Use of such substances is known to be a factor that triggers accidents, violence, suicide, teenage pregnancy and sexually transmitted diseases.

The Children and Adolescents' Statute considers an adolescent to be an individual aged 12 to 18 years old⁽²⁾. In Brazil in 2011, there were around 78.5 million children, adolescents and young people, according to the National Household Survey (PNAD), conducted by the

Brazilian Institute of Geography and Statistics - *Instituto Brasileiro de Geografia e Estatística*⁽³⁾.

This figure corresponds to approximately 40.2% of the total population, with 15% in the 6 to 14-year-old age group and 5.4% aged from 15 to 17. According to the IBGE, the vast majority of these attend school: 97.2% and 83.7%, for the 6 to 14 and 15 to 17 age group, respectively⁽³⁾. The school must therefore be viewed as a privileged space in which to implement public policies such as those aimed at public health, targeting individuals in these age ranges.

Within this context, the Ministry of Health and the IBGE formed a partnership to conduct the second National Schoolchildren's Health Survey (PeNSE) in 2012, with the goal of describing the prevalence of risk and protection factors for chronic non-communicable diseases in adolescents, aiming to guide public health promoting policies for this age group⁽⁴⁾.

In this study, we present, interpret and analyze publicly available results from the PeNSE related to alcohol and drug consumption in the city of Goiânia-GO. This information may be of help when drawing up intervention proposals in the ambit of Public Health Care Policies for adolescents.

Material and Methods

This was a quantitative cross-sectional study using data from the National Schoolchildren's Health Survey, available for study on the Brazilian Institute of Geography and Statistics website⁽⁵⁾.

The sources of the secondary data, which were limited to aggregated statistics divulged in technical reports, were made available electronically in databases containing individual micro-data, bringing more flexibility to the descriptive analyses and exploring causal hypotheses⁽⁶⁾.

The second edition of the PeNSE, in 2012, investigated health risk and protection factors in adolescents in students in the 9th year of Elementary Education, with coverage increased from the 26 State capitals and the Federal District, investigated in 2009, to include a representation of the entire country and Regions, while maintaining the representativeness of the capitals and the FD⁽⁵⁾.

The research was conducted with a probabilistic sample using geographical stratification. The sample size was calculated to provide estimates of proportions (or prevalence) of certain characteristics of interest, in each of the geographical strata, with a maximum error of 0.03 in the absolute value of the 95% confidence level⁽⁴⁾.

The 9th year of Elementary Education was chosen as it contains pupils between the ages of 13 and 15, thus having the ability to complete the self-applied questionnaire and belonging to a vulnerable group, susceptible to exposure to diverse risk factors. Moreover, the World Health Organization – WHO, recommends this age group as a reference for studies of adolescent pupils⁽⁴⁾.

In this study, our analysis is limited to certain data referring to alcohol and drug consumption in the municipality of Goiânia, capital of the State of Goiás. A total of 3,044 pupils from the 77 schools investigated in the municipality responded to the questionnaire⁽⁴⁾.

These data, from which we constructed comparative tables, were obtained from the data bases linked to the IBGE Automatic Recovery System – SIDRA, available online⁽⁵⁾.

The objective of this data base is to store tables of data from IBGE surveys. They can be obtained by summing the sections contained in each questionnaire from each informant who participated in the research and is linked to units on a territorial level (State, municipality etc.) to a period of time and, often, to a set of classifications qualifying it⁽⁵⁾.

The following were selected from the PeNSE 2012 page of the IBGE website, in the cigarettes, alcohol and other drugs section: table 3702 – Percentage data on pupils in the 9th year of Elementary Education concerning the use of alcoholic beverages, by sex and type of school administration; and Table 3703 – Percentage of pupils in the 9th year of Elementary Education who have ever used illegal drugs, according to sex and type of school administration.

The variables analyzed were: 1) Current experimentation and consumption of alcoholic beverages, episodes of drunkenness; 2) Current experimentation and consumption of illegal drugs. The territorial unit selected was the municipal of Goiânia-GO

Results

Experimenting with alcohol among the pupils

In this research, experimenting with alcohol was classed as having tried at least one kind of alcoholic drink, such as beer, lager, wine, *cachaça*, *pinga* (spirits made from distilled sugar cane), vodka, alcopops, whisky etc. The prevalence of pupils who reported having tried alcohol at least once was 71.9%. This percentage was higher among the girls than the boys (Table 1). In private schools, the percentage of experimentation was higher than in public schools (Table 2).

Table 1 – Percentage of pupils in the 9th year of Elementary Education who had tried alcoholic beverages at least once, had consumed alcohol within the last 30 days and had suffered at least one episode of drunkenness, according to sex. Goiânia, GO, Brazil, 2012.

Variable	Male	Female
Tried alcohol	69.2	74.7
Current consumption	26.1	29.5
Drunkenness	25.3	27.5

Source: IBGE – Pesquisa Nacional de Saúde do Escolar.

Table 2 – Percentage of pupils in the 9th year of Elementary Education who had tried alcoholic beverages at least once, had consumed alcohol within the last 30 days and had suffered at least one episode of drunkenness, according to type of school. Goiânia, GO, Brazil, 2012.

Variable	Private	Public
Tried alcohol	77.2	69.3
Current consumption	28.5	27.4
Drunkenness	23	28

Source: IBGE – Pesquisa Nacional de Saúde do Escolar.

Current consumption of alcoholic beverages among the pupils

Recent consumption of alcoholic beverages among pupils in the 9th year of Elementary Education, classed as having consumed at least one glass or one shot of an alcoholic beverage within the last 30 days, was 27.8% overall, the percentage being higher among the girls than the boys (Table 1). In the public schools, the percentage was slightly lower than in the private schools (Table 2).

Episodes of drunkenness among the pupils

In order to assess episodes of drunkenness, the participants were asked to respond to the following question: “How many times have you drunk so much that you got really drunk?” Overall 26.4% of the pupils stated that they had had at least one episode of drunkenness. The proportion was higher among the girls than the boys (Table 1). In the public schools, the proportion was higher than in private schools (Table 2).

Use of illegal drugs among the pupils

Participants were asked whether they had ever taken any type of illegal drug, such as: marijuana, cocaine, crack, glue, solvents or ecstasy. Males predominated over females (Table 3) as did public schools compared to private (Table 4).

Table 3 – Percentage of pupils in the 9th year of Elementary Education who had tried an illegal drug according to sex. Goiânia, GO, Brazil, 2012.

Variable	Male	Female
Tried	10.7	8.8

Source: IBGE – Pesquisa Nacional de Saúde do Escolar.

Table 4 – Percentage of pupils in the 9th year of Elementary Education who had tried an illegal drug according to type of school. Goiânia, GO, Brazil, 2012.

Variable	Private	Public
Tried	10.9	7.6

Source: IBGE – Pesquisa Nacional de Saúde do Escolar.

Discussion

Use of alcoholic beverages according to sex and type of school

Using drugs in adolescence occurs due to various aspects: curiosity, lack of maturity or information, social-parental model, myths and expectations regarding their effects, industry and media pressure as well as other contexts⁽⁷⁾.

Alcoholic beverages are the most commonly used psychoactive substances among adolescents in Brazil and in the world. Their consumption has formed part of our culture for many years

and such behavior is widely socially accepted, even valued, in various socio-cultural aspects⁽⁸⁻⁹⁾.

The results of this research indicate high proportions of early alcohol use among adolescents. Considering that this study was conducted with individuals aged between 13 and 15 and that in Brazil it is illegal to sell alcoholic beverages to under-18s according to the Children and Adolescents' Statute⁽²⁾, such early use is improper.

Of the pupils who has consumed alcohol in the 30 days preceding the PeNSE questionnaire, the most common form of obtaining it was at parties, with friends or from markets, shops, bars and supermarkets, respectively. Other pupils who acquired alcohol to consume during the period in question had done so in their own home⁽⁴⁾.

A survey on drug use among individuals in the first and second grade in ten Brazilian capitals showed that adolescents began using drugs between the ages of 12.5 and 12.8 in the form of alcohol and tobacco. For other drugs, the age at which they began to be consumed was from 13.1 for the boys and 14.4 for the girls. Early initiation into such substances can have devastating consequences into adulthood for these adolescents. The earlier experimentation begins, the worse the consequences and greater the risk of developing alcohol abuse and dependency⁽⁷⁻¹⁰⁾.

Early consumption as also been detected in the city of Cajazeiras – PB, corroborating the data found. This fact should be taken into consideration when choosing the most appropriate moments to initiate preventative approaches⁽¹¹⁾.

Increased experimentation, current consumption and episodes of drunkenness among girls appears to be the result of changes in behavior over recent decades, when they began to have more freedom to go to places and parties that had previously been limited to male adolescents.

This change in alcohol consumption patterns in females is considered harmful due to women's physiology including lower serum levels of alcohol dehydrogenase enzyme, a higher percentage of body fat in relation to water and variations in the way alcohol is metabolized depending on the phase of the menstrual cycle. Such characteristics can result in addiction even at lower quantities and more harmful effects from alcohol, when compared with men⁽¹²⁾.

The higher prevalence of trying and currently consuming alcoholic beverages among pupils at private schools appears to be related to their higher acquisitive power both in terms of buying the alcohol and being able to attend parties and clubs, although it could be said that alcoholic drinks are accessible to all social classes. Corroborating this result is a study conducted in the city of Boa Vista, in 2008, which observed that pupils of private schools had contact with alcohol at an earlier age than those attending public schools⁽¹³⁾.

Although experimenting and currently consuming alcoholic beverages was shown to be higher in private schools, the prevalence of episodes of drunkenness was found to be greater among pupils at public schools. Further studies are needed to shed light on this fact.

Some studies have shown that boys show higher rates of "heavy drinking" than girls. Research indicates that adolescents of both sexes consume practically the same types of beverages, with the same frequency, although different quantities, and the boys appear to drink more than the girls⁽⁷⁻⁸⁾.

Use of illegal drugs

The term drugs, as used here, refers to illegal psychoactive substances (marijuana, cocaine, crack, heroine, LSD, ecstasy etc.) the use of which is automatically viewed as abuse and which are the targets of regimes to control and prohibit them. Use of such substances was also deemed high among the pupils from Goiânia, with higher prevalence of consumption among male pupils and pupils at public schools.

Increased experimentation with drugs among young people is becoming a serious problem in many countries. The most commonly consumed illegal drug in the United States is Marijuana. Use of Cannabis among young people may be an indication of psycho-social adjustments and an increased chance of addiction in adulthood⁽⁴⁾.

Many studies indicate other relationships between drug use and behavior that raises the risk of contracting HIV. Sexual practices are unprotected that majority of the time, as intoxication decreases vigilance and judgment, negatively

affecting the adoption of safer practices, such as using a condom⁽¹⁾.

Consuming psychoactive substances is a relatively frequent phenomenon, especially among young people. Many people experiment with such substances. Of these, a considerable number go on to be occasional users, mostly without harmful consequences. A small number of these occasional users develop risky patterns of use, and some of them become addicted⁽¹⁴⁾.

The PeNSE 2009 identified that of the pupils studies in the State Capitals ⁽¹⁵⁾, 8.7% had experimented with illegal drugs. In 2012, the proportion for this indicator, for adolescents in the 9th year of Elementary education in schools in the State Capitals was 9.9%, a slight increase compared to the results from three years before⁽⁴⁾. The evidence of this increase must not be neglected.

The PeNSE 2012 results also showed that, considering only those pupils who had used illegal drugs at least once, 34.5% had used marijuana and 6.4% had consumed crack in the 30 days preceding the research. Concerning the pupils from the 9th year of Elementary Education, 0.5% reported having used crack in that period⁽⁴⁾. When we consider the harm these two types of drugs can cause to health, it becomes clear that urgent measures need to be taken to reverse this situation.

Conclusion

The results of the research and the analysis reinforce the importance we should place on experimenting with alcohol and other drugs in adolescence. Increased consumption at increasingly early ages prove that our young people are exposed to countless health risk factors. The high percentages shown here allow us to discover the prevalence of some factors in this age group, strong evidence to guide the implementation of public policies to promote health and prevent substance abuse.

Characteristics concerning sex, age group and type of school also need to be taken into account when coming up with preventative and health promoting activities. This is a complex problems that should be dealt with in a complex way. Thinking of one single, absolute model to prevent psycho-active substance use in

adolescents remains a challenge facing the many existing models.

We are aware that effective results from any policy to prevent the use and abuse of psycho-active substances will only be observed in the mid-to long-term: however, educational interventions need to be continuously articulated between sectors, respecting the context and the peculiarities of each region and each group. Partnerships between different sectors of society such as health, education, social care, public safety, sport and leisure, among others, gain particular importance in facing this problem within the recommendations of the National Health Promotion Policy.

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