

Family and the protection from use of tobacco, alcohol, and drugs in adolescents, National School

Família e proteção ao uso de tabaco, álcool e drogas em adolescentes, Pesquisa Nacional de Saúde dos Escolares

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Abstract

This study evaluates the relation between the use of tobacco, alcoholic beverages and illicit drugs and family protective factors. Data from the National School Health Survey (PeNSE) were analyzed in a sample of 60,973 students at the freshman year of high school, from public and private schools of Brazilian state capitals. Most adolescents lived with both their parents and about a third lived in households only with their mothers. Half the parents or responsible parties are aware of what adolescents do in their free time. Living with both parents is a protective factor for smoking, drinking, and drug use. Family supervision is also important for the prevention of such behavior. Sharing a meal with parents or responsible parties most days of the week and the fact that the parents know what the adolescents have done in their free time in the past 30 days are also protective factors. Students that miss classes without telling their parents have higher chances of using tobacco, alcohol, and drugs. The family plays an essential role to prevent tobacco, alcohol, and drug use, and to promote health among teenagers.

Keywords: family; adolescent; tobacco; alcohol; drugs; risk factor.

Resumo

O estudo avalia a associação entre o consumo de tabaco, bebidas alcoólicas e drogas ilícitas e os fatores de proteção familiar. Foram analisados dados referentes da Pesquisa Nacional de Saúde do Escolar (PeNSE), em uma amostra de 60.973 escolares do nono ano do Ensino Fundamental de escolas públicas e privadas das 26 capitais dos estados brasileiros e Distrito Federal. A maioria dos adolescentes vive com o pai e a mãe e cerca de um terço reside em lares apenas com a presença da mãe. Metade dos pais ou responsáveis sabe o que os adolescentes fazem no tempo livre. Residir com ambos os pais tem efeito protetor nos hábitos de fumar, beber e usar drogas. Além disto, a supervisão familiar também é importante na prevenção destes hábitos. Práticas como fazer pelo menos uma refeição com pais ou responsáveis, na maioria dos dias da semana, e o fato de os pais ou responsáveis saberem o que os adolescentes fazem no tempo livre nos últimos 30 dias tem efeito protetor. Os alunos que faltam às aulas sem avisar aos pais têm maior chance de fumar, beber e experimentar drogas. O papel da família é essencial na prevenção de riscos, tais como: tabaco, álcool e drogas e na promoção à saúde dos adolescentes.

Palavras-chave: família; adolescente; fumo; álcool; drogas; fatores de risco.

Introduction

Adolescence is a phase of life characterized by important biological, cognitive, emotional and social changes. This phase is an important moment for the adoption of new practices and behaviors, to gain autonomy and to be exposed to situations with present and future risks to health. The exposure to behavioral risk factors such as smoking, alcohol consumption, drug use, inadequate eating habits, sedentary lifestyle, among others, is very common during adolescence^{1,2}.

Because adolescents are going through constant changes, the family is an important balance point, for it is strategic for the survival of individuals and protection of its members, as well as the transmission of social and cultural principles^{3,4}. The family provides basic functions, such as physical and psychological care, and is also a role model for attitudes and behaviors^{3,4}.

In adolescence, conflicts between parents and children usually increase. Adolescents tend to have a more active role in familial decision making, which leads to change in family and power relations⁵.

Families have been going through cultural and historical changes, including in its composition and shape. In the west, single-parent families, in which the mother or the father becomes the head of the family alone, are prevalent⁶. Another change is a result of the decreasing family size in Brazil due to the reduction in fertility rates. In the 1970s, each woman had approximately 5 children; in 2001, this number decreased to 2.3 children and, in 2008, to 1.9⁶.

The active participation of the family and parents in these times of change helps to minimize possible behaviors that lead the adolescents to risky situations. It is important to study the conditions related to the family that may positively support adolescents in this moment. Parental monitoring and supervision is an

important protective factor: they should know about their children's lives, what they do in their free time, where they go, who they are friends with etc. Protective actions from parents are strengthened by affection, open conversation and listening to the adolescents^{4,7,8}.

A study conducted in 2002 in Pelotas, Rio Grande do Sul, with 960 adolescents aged between 15 and 18 years and living in the urban zone of the city showed that the presence of the father, mother or both in the household seems to have a protective effect as to tobacco use. It may also have the same effect as to illicit drugs; however, no association with alcohol consumption was identified⁹.

Studies show that families are reference for the children, adolescents and youngsters, and parental attitudes such as smoking and drinking influence children's behavior. Thus, the family may have protective or risk-related influences on the children⁷⁻⁹.

This paper analyzes the association between alcohol consumption, tobacco and drug use by adolescents in the Brazilian capitals, according to sociodemographic and family-related variables: presence of father and/or mother in the household, information the parents have on their children's free time, absence in classes without the parents' consent, and meals without the presence of parents.

Methods

This study was conducted with scholars in the freshman year of high school, in public and private institutions of all Brazilian state capitals and the Federal District. The School census 2007 was used to select schools and groups. The student sample was made of groups in two stages: selection of schools and students of the chosen groups in the sample of schools^{1,2}.

Twenty-seven geographic strata corresponding to the state capitals and the Federal District were included. Two strata per administration were selected:

private and public schools (federal, state or municipal)².

The sample was calculated to provide proportion estimates (or prevalence) of some characteristics of interest in each geographic stratum, with absolute maximum error of 3% and 95% confidence interval.

For this research, 1,453 schools and 2,175 groups of the freshman year of high school were selected. These groups were comprised of 68,735 current students and 63,411 who were present on the day of data collection, accounting for 7.7% of losses in this stage. Those who refused to participate and those who did not fill out the variable "gender" were excluded from the sample (501 students). So, data related to 60,973 students were analyzed, with a non-response rate of 11.3%^{1,2}.

The study consisted of a self-reported questionnaire given to students in their classrooms on a Personal Digital Assistant (PDA). The questionnaire was previously tested and was comprised of topics about sociodemographic characteristics, eating habits, body image, physical activity, smoking habit, alcohol consumption and drug use, oral health, sexual behavior, exposure to violence, perception of the student about the family and general aspects of the questionnaire. The collected data were confidential and non-identified. Survey methodology was described by Malta et al.¹.

The Statute of the Child and Adolescent ensures the autonomy of the adolescent to take initiative, as well as to answer a questionnaire that does not offer any health risk and aims at financing health protection policies for this age group. Because of that, the adolescent's autonomy to decide whether or not to take part in the study was considered. The participation was voluntary, and students could choose not to participate, not to answer any question or the whole questionnaire.

The study was performed by teams from the Brazilian Institute of Geography

and Statistics (IBGE) from March to June 2009. The information from the PDA was inserted into a database using the Statistical Package for the Social Sciences (SPSS) for analysis. More details are found in a previous publication^{1,2}.

Sociodemographic variables regarded were: sex, age, ethnicity or color and school administration (public or private). Family variables described relations such as:

- Living with the parents – percentage of students who live with their father and/or mother, or without a parent;
- Information the parents have about their children's free time – percentage of parents who are aware of what their children do in the free time, according to teenagers' reports as to the 30 days prior to the research (they always know, most of the times, and they sometimes/rarely/never know);
- Absence in classes without parents' consent – percentage of students who miss school without parental authorization in the 30 days prior to the research (they never missed; once or twice; three or more times);
- Have meals with the parents – percentage of students who have a mother or a responsible party who is present for lunch or dinner, mostly during the week (five or more times a week, one to four times a week, rarely/never).

These variables were independent.

The World Health Organization (WHO)⁵ defines as regular (or usual) tobacco use the habit of smoking at least one day in the 30 days prior to the study, regardless of frequency and intensity; as for alcohol, the regular consumption (or usual) is considered when drinking at least one day in the 30 days prior to the research. Experimenting drugs is defined as trying it at least once. For responses were included tobacco, alcohol and drugs.

At first, a descriptive analysis of demographic and family variables

by gender and administration was conducted. Afterwards, the univariate analysis between explicative variables and closures (tobacco, alcohol and drug use) was performed with Pearson's chi-square test with significance level set at 0.005. At last, there was a multivariate analysis for each closure (tobacco, alcohol, drugs) according to the model of independent variables associated with the closures at $p < 0.20$, calculating the adjusted *Odds Ratio* (OR) and 95%CI.

This study was approved by the National Ethics Committee of the Ministry of Health, amendment n° 005/2009, registration n° 11,537, of the National Ethics Committee in Research of the Ministry of Health (CONEP/MS), on June 10, 2009.

Results

Approximately two thirds of the students (71.5%) who went to the freshman year of high school are aged ≤ 14 years, and the ones from private schools are younger. The distribution of students according to skin color shows high percentages of white (40.1%) and brown (39.5%) individuals; black people represent 12.9% of the students. White students are prevalent in private schools, while black and brown students are prevalent in public schools (Table 1).

Most students live with their mother and/or father (58.3%), 31.9% live only with their mother, 4.6% live only with their father, and 5.2% do not live with a parent (Table 1).

In Brazilian capitals, 55.8% of the students declared that their parents or responsible parties are aware of their free time activities. Parents are more aware of girls' activities (59.7%) than boys' (51.4%). Parents of private school students know more about how their children spend time (67.4%) when compared to parents of public school students (52.7%), as demonstrated in Table 1.

PeNSE showed that 18.5% of the students in Brazilian capitals miss classes

Table 1. Estimated population distribution by age, ethnicity/color, living with father or mother, and selected variables related to family context, according to sex and administration of students from the Brazilian states and Federal District

Tabela 1. Distribuição populacional estimada da população de estudo por idade, raça/cor e residir com pai e ou mãe, e variáveis selecionadas relacionadas ao contexto familiar, segundo sexo e dependência administrativa de escolares do conjunto das capitais dos estados brasileiros e Distrito Federal

Variables	Total % (CI)	Sex		Administration	
		Female % (CI)	Male % (CI)	Public % (CI)	Private % (CI)
Age in years					
<13	0.7 (0.6-0.8)	0.8 (0.7-0.9)	0.6 (0.5-0.7)	0.6 (0.5-0.7)	1.0 (0.8-1.2)
13	23.7 (23.1-24.4)	26.7 (25.8-27.6)	20.5 (19.6-21.3)	21.2 (20.5-21.9)	33.4 (32.1-34.7)
14	47.1 (46.4-47.8)	48.2 (47.2-49.2)	45.8 (44.8-46.9)	45.4 (44.6-46.3)	53.4 (52.0-54.8)
15	18.2 (17.7-18.8)	15.9 (15.3-16.6)	20.8 (20.0-21.6)	20.6 (20.0-21.3)	9.1 (8.4-9.9)
16 and more	10.2 (9.8-10.6)	8.3 (7.9-8.8)	12.3 (11.7-12.9)	12.1 (11.6-12.6)	3.1 (2.7-3.5)
Color or ethnicity					
White	40.1 (39.4-40.9)	38.8 (37.8-39.8)	41.6 (40.6-42.7)	35.0 (34.2-35.8)	59.7 (58.3-61.0)
Black	12.9 (12.4-13.3)	11.0 (10.5-11.6)	14.9 (14.2-15.7)	14.7 (14.1-15.2)	6.1 (5.5-6.7)
Brown	39.138.4-39.8)	42.3 (41.3-43.2)	35.7 (34.7-36.7)	42.9 (42.0-43.7)	25.1 (24.0-26.2)
Yellow	3.7 (3.5-4.0)	4.0 (3.7-4.4)	3.4 (3.1-3.8)	3.3 (3.1-3.6)	5.3 (4.6-5.9)
Indigenous	4.1 (3.8-4.3)	3.9 (3.5-4.2)	4.3 (3.9-4.7)	4.2 (3.9-4.5)	3.9 (3.4-4.4)
Presence of parents in the household					
Mother and father	58.3 (57.7- 59.0)	56.4 (55.5-57.4)	60.5 (59.5-61.5)	56.3 (55.5-57.1)	66.0 (64.7- 67.2)
Only the mother	31.9 (31.2 -32.5)	33.9 (33.0-34.8)	29.6 (28.6-30.5)	33.3 (32.6-34.1)	26.4 (25.2-27.6)
Only the father	4.6 (4.3 -4.8)	3.8 (3.5-4.2)	5.4 (4.9-5.8)	4.7 (4.4-5.1)	3.9 (3.4-4.5)
No parents	5.2 (4.9 -5.5)	5.8 (5.4-6.2)	4.6 (4.2-5.1)	5.6 (5.3-6.0)	3.7 (3.3- 4.2)
Having meals with parents					
Five or more times a week	62.6 (61.9-63.3)	63.2 (62.2-64.2)	62.1 (61.2-63)	61.9 (61.1-62.7)	65.2 (63.9-66.5)
One to four days	14.1 (13.2-14.5)	12.8 (12.2-13.4)	15.5 (14.7-16.2)	13.5 (13-14.1)	16.1 (15.1-17)
Rarely/Never	23.3 (22.8-23.9)	25.1 (24.3-25.9)	21.4 (20.5-22.2)	24.6 (23.9-25.3)	18.7 (17.7-19.7)
Parents are aware of children's free time activities					
Always/most of the time	55.8 (55.1-56.5)	59.7 (58.7-60.6)	51.4 (50.4-52.5)	52.7 (51.9-53.9)	67.4 (66.6-68.6)
Sometimes/rarely/never	44.2 (43.5-44.9)	40.3 (39.4-41.3)	48.6 (47.5-49.3)	52.7 (51.9-53.5)	67.4 (66.1-68.6)
Missing classes without parental consent					
Never	81.5 (81-82.2)	82.9 (82.2-80.6)	80.0 (79.1-80.8)	79.3 (78.8-80.0)	89.9 (89-90.7)
Once or twice	13.6 (13.1-14.1)	12.6 (12-13.3)	14.7 (13.9-15.5)	15.3 (14.7-15.9)	7.3 (6.6-8.1)
Three times or more	4.9 (4.6-5.2)	4.4 (4.1-4.8)	5.4 (4.9-5.9)	5.4 (5.1-5.8)	2.8 (2.4-3.2)

Source: PeNSE, 2009.

without parental consent. This behavior is more common among boys and students from public schools (Table 1). It also showed that 62.6% of the adolescents usually have at least one meal a day, for five or more days of the week, with one of the responsible parties. There is no difference according to gender. Private school students have more meals with their parents (65.2%) than public school students (61.9%), as demonstrated in Table 2.

Table 2 shows the distribution of students according to self-reported regular tobacco use, sociodemographic and family variables. Tobacco use rate is 6.3% and increases with age; there is no difference among genders; brown students and those enrolled in public schools presented less chances of using tobacco. After control by all variables in this model, family variables remained independently associated and showed higher chances of tobacco use for students who: do not live

Table 2. Prevalence and association of regular tobacco use with sociodemographic characteristics and family context among students from Brazilian state capitals and the Federal District

Tabela 2. Prevalência e associação do fumo regular com características sociodemográficas e do contexto familiar entre escolares das capitais dos estados brasileiros e Distrito Federal

Variables	Regular smoking				
	% 95%CI	OR 95%CI	P	Adjusted OR*	P
Total	6.3 (6.0-6.7)		0.000		0.000
Age in years					
<13	2.7 (1.5-4.9)	0.8 (0.4-1.5)		0.8 (0.4-1.6)	1.0
13	3.5 (2.9-4.1)	1.0			
14	4.8 (4.3-5.3)	1.4 (1.1-1.7)		1.3 (1.1-1.6)	
15	9.6 (8.7-10.7)	3.0 (2.4-3.7)		2.4 (1.9-3.0)	
16 and more	14.4 (13.0-15.9)	4.7 (3.7-5.8)		3.2 (2.5-4.0)	
Sex			0.76		NS
Female	6.3 (5.8-6.8)	0.9 (0.9-1.1)			
Male	6.4 (5.9-6.9)	1.0			
Color or ethnicity			0.070		0.016
White	6.3 (5.7-6.9)	1.0		1.0	
Black	7.2 (6.3-8.2)	1.2 (1.0-1.4)		0.8 (0.7-1.0)	
Brown	6.0 (5.5-6.5)	0.9 (0.8-1.1)		0.8 (0.7-0.9)	
Yellow	6.1 (4.5-8.3)	0.9 (0.7-1.4)		0.8 (0.6-1.2)	
Indigenous	7.7 (6.3-9.4)	1.2 (1.0-1.6)		1.0 (0.8-1.3)	
School administration			0.020		0.060
Public	6.6 (6.2-7.0)	1.3 (1.1-1.5)		0.8 (0.7-0.9)	
Private	5.3 (4.7-6.0)	1.0		1.0	
Family composition			0.000		0.000
Living with both parents	4.8 (4.4-5.3)	1.0		1.0 1.5 (1.3-1.9)	
Living only with the mother	8.0 (7.3-8.7)	1.7 (1.5-1.9)			
Living only with the father	9.2 (7.5-11.2)	2.0 (1.6-2.5)		1.8 (1.4-2.4)	
Living with none of the parents	9.6 (8.0-11.5)	2.0 (1.7-2.6)		1.6 (1.2-2.0)	
Having meals with the mother or responsible party			0.000		0.010
Five times a week or more	5.2 (4.7-5.6)	1.0		1.0 1.1 (0.9-1.3)	
At least one Day	6.1 (5.5-6.9)	1.2 (1.0-1.4)			
Rarely/Never	9.1 (8.3-10.0)	1.8 (1.6-2.1)		1.6 (1.4-1.9)	
Parents or responsible parties knowing about free time activities			0.000		0.000
Always/most of the time	4.2 (3.8-4.6)	1.0		1.0	
Sometimes/rarely/never	8.8 (8.2-9.4)	2.2 (1.9-2.5)		1.9 (1.7-2.2)	
Missing classes without parental consent			0.000		0.000
Never	4.3 (3.9-4.6)	1.0		1.0	
Once or twice	11.8 (10.5-13.1)	3.0 (2.6-3.4)		2.7 (2.3-3.2)	
Three times or more	23.8 (21.1-26.7)	7.0 (5.9-8.3)		5.4 (4.4-6.6)	

Source: PeNSE, 2009.

with the father and/or mother; do not have meals with the mother or responsible party during the week; have parents or responsible parties who are not aware of their free time activities; and miss classes without parental consent.

Table 3 presents the distribution of students according to the self-reported regular alcohol consumption and selected variables. Regular alcohol consumption rate is 27.3% and, after the adjustments of other variables, it is demonstrated

Table 3. Prevalence and association of regular alcohol use with sociodemographic characteristics and family context among students from Brazilian state capitals and the Federal District

Tabela 3. Prevalência e associação do álcool regular com características sociodemográficas e do contexto familiar entre escolares das capitais dos estados brasileiros e do Distrito Federal

Variables	Regular alcohol consumption				
	%	OR	p	Adjusted OR*	p
	95%CI	95%CI			
Total	27.3 (26.7-28.0)				
Age in years			0.000		0.000
<13	13.9 (10.0-19.1)	0.6 (0.4-0.9)		0.7 (0.4-1.0)	
13	20.4 (19.2-21.6)	1.0		1.0	
14	24.6 (23.7-25.5)	1.3 (1.2-1.4)		1.3 (1.2-1.4)	
15	35.9 (34.3-37.4)	2.2 (2.0-2.4)		2.2 (1.9-2.4)	
16 and more	42.3 (40.3-44.3)	2.8 (2.6-3.2)		2.6 (2.3-2.9)	
Sex			0.013		0.000
Female	28.1 (27.2-29.0)	1.1 (1.0-1.2)		1.3 (1.2-1.4)	
Male	26.5 (25.6-27.4)	1.0		1.0	
Color or ethnicity			0.000		0.000
White	27.9 (26.8-29.0)	1.0		1.0	
Black	30.1 (28.3-31.9)	1.1 (1.0-1.2)		0.9 (0.8-1.1)	
Brown	25.7 (24.7-26.6)	0.9 (0.8-1.0)		0.8 (0.7-0.9)	
Yellow	28.6 (25.4-32.0)	1.0 (0.9-1.2)		0.9 (0.8-1.1)	
Indigenous	29.9 (27.1-32.9)	1.1 (1.0-1.3)		0.9 (0.8-1.2)	
School administration			0.000		0.000
Public	26.8 (26.1-27.5)	0.9 (0.8-0.9)		0.6 (0.6-0.7)	
Private	29.5 (28.2-30.8)	1.0		1.0	
Family composition			0.006		0.006
Living with both parents	25.3 (24.4-26.1)	1.0		1.0	
Living only with the mother	29.8 (28.7-31.0)	1.2 (1.1-1.3)		1.2 (1.0-1.3)	
Living only with the father	31.0 (28.1-34.1)	1.3 (1.1-1.5)		1.3 (1.1-1.6)	
Living with none of the parents	32.4 (29.8-35.0)	1.1 (1.0-1.3)		1.1 (1.0-1.3)	
Having meals with the mother or responsible party			0.000		0.006
Five times a week or more	24.7 (23.9-25.6)	1.0		1.0	
At least one Day	30 (28.6-31.5)	1.3 (1.1-1.4)		1.3 (1.2-1.4)	
Rarely/Never	31.2 (29.9-32.5)	1.3 (1.2-1.5)		1.4 (1.3-1.5)	
Parents or responsible parties knowing about free time activities			0.000		0.000
Always/most of the time	23.2 (22.4-24.0)	1.0		1.0	
Sometimes/rarely/never	32.6 (31.6-33.6)	1.6 (1.5-1.7)		1.6 (1.5-1.7)	
Missing classes without parental consent			0.000		0.000
Never	23.5 (22.9-24.2)	1.0		1.0	
Once or twice	41.1 (39.1-43.1)	2.3 (2.0-2.5)		2.1 (1.9-2.3)	
Three times or more	52.3 (49.1-55.5)	3.6 (3.1-4.0)		2.8 (2.4-3.3)	

Source: PeNSE, 2009.

that consumption is higher among older adolescents and girls. Brown students presented less chances of use, as well as those who go to the public schools. Family variables remained independently associated and showed higher

chances of alcohol consumption among students who: do not live with the father and/or mother; do not have meals with the mother or responsible party during the week; have parents or responsible parties who are not aware of their free

time activities; and miss classes without parental consent.

Table 4 presents the distribution of students according to drug experimenting reports and selected variables. Experimenting drugs at least once counted

for 8.6% of the cases and, after the adjustments of other variables, it was demonstrated that consumption is higher among older male adolescents and those who go to public schools. There was no difference as to ethnicity or color. Family variables

Table 4. Prevalence and association of regular drug use with sociodemographic characteristics and family context among students from Brazilian state capitals and the Federal District

Tabela 4. Prevalência e associação da experimentação de drogas com características sociodemográficas e do contexto familiar entre escolares das capitais dos estados brasileiros e Distrito Federal

Variables	Experimenting drugs				
	% 95%CI	OR 95%CI	p	Adjusted OR*	p
Total	8.6 (8.3-9.1)		0.000		0.000
Age in years					
<13	6.1 (3.3-10.8)	1.2 (0.6-2.3)		1.2 (0.6-2.4)	
13	5.1 (4.5-5.9)	1.0		1.0	
14	6.9 (6.4-7.4)	1.4 (1.2-1.6)		1.3 (1.1-1.5)	
15	12.5 (11.5-13.6)	2.7 (2.2-3.1)		2.1 (1.8-2.6)	
16 and more	18.7 (17.1-20.4)	4.3 (3.6-5.1)		2.9 (2.4-3.6)	
Sex			0.000		0.000
Female	6.9 (6.5-7.4)	0.6 (0.6-0.7)		0.7 (0.6-0.8)	
Male	10.6 (10.0-11.3)	1.0		1.0	
Color or ethnicity			0.007		0.133
White	8.6 (7.9-9.3)	1.0		1.0	
Black	10 (8.9-11.2)	1.2 (1.1-1.4)		0.9 (0.7-1.0)	
Brown	8.3 (7.7-8.9)	1.0 (0.9-1.1)		0.8 (0.7-1.0)	
Yellow	8.7 (6.9-10.8)	1.0 (0.8-1.3)		0.9 (0.7-1.2)	
Indigenous	9.7 (8.0-11.8)	1.1 (0.9-1.5)		0.9 (0.7-1.2)	
School administration			0.001		0.038
Public	9.0 (8.5-9.5)	1.2 (1.1-1.4)		0.9 (0.8-0.99)	
Private	7.6 (6.9-8.3)	1.0		1.0	
Family composition			0.000		0.000
Living with both parents	7.2 (6.7-7.7)	1.0		1.0	
Living only with the mother	10.2 (9.5-11.0)	1.5 (1.3-1.6)		1.3 (1.2-1.5)	
Living only with the father	13.2 (11.2-15.5)	2 (1.6-2.4)		1.9 (1.5-2.3)	
Living with none of the parents	11.9 (10.1-13.8)	1.7 (1.4-2.0)		1.3 (1.0-1.6)	
Having meals with the mother or responsible party			0.000		0.000
Five times a week or more	7.0 (6.5-7.5)	1.0		1.0	
At least one Day	9.9 (9.0-10.9)	1.4 (1.2-1.6)		1.5 (1.3-1.6)	
Rarely/Never	11.7 (10.8-12.7)	1.7 (1.5-1.9)		1.6 (1.4-1.8)	
Parents or responsible parties knowing about free time activities			0.000		0.000
Always/most of the time	6.5 (6.0-7.0)	1.0		1.0	
Sometimes/rarely/never	11.3 (10.7-12.0)	1.8 (1.6-2.0)		1.7 (1.5-1.8)	
Missing classes without parental consent			0.000		0.000
Never	6.6 (6.2-7.0)	1.0		1.0	
Once or twice	13.5 (12.2-14.8)	2.2 (1.9-2.5)		1.9 (1.6-2.1)	
Three times or more	29.2 (26.4-32.2)	5.8 (5.0-6.8)		4.3 (3.7-5.2)	

Fonte: PeNSE, 2009.

remained independently associated, and the students who had more chances to experiment drugs were those who: do not live with the father and/or mother; do not have meals with their mothers or responsible parties during the week; have parents or responsible parties who are not aware of their free time activities; and miss classes without parental consent.

Discussion

PeNSE data show that couple-families are prevalent, but approximately one third of the adolescents live only with their mother. Half the parents or responsible parties know about the adolescent's free time activities. Usually, alcohol consumption, tobacco and drug use increase with age. Girls aged 13 to 15 years are more prone to illegally consuming alcohol, while boys are more prone to using drugs; brown students have less chances of using tobacco and consuming alcohol. Studying in a public school was less associated with alcohol consumption and tobacco/drug use. Family variables presented an independent association with alcohol consumption and tobacco/drug use. Students who miss classes without parental consent are more prone to smoking, drinking and experimenting drugs - the more days absent from school, the higher the chances to use. Living with both parents has a protective effect on smoking, drinking and drug-related habits. Besides, family supervision is important to prevent these habits. Family routines, such as having at least one meal with parents or responsible parties five or more times a week, and the fact that parents or responsible parties know about the adolescent's free time activities in the past 30 days has a protection effect on the adolescent.

PeNSE pointed out a great percentage of single parent families, which has been demonstrated by other population studies that show changes in the family composition, with an increased proportion of households formed by "non-families";

that is, an increasing proportion of young adults who live by themselves, elderly (widowers) and new family shapes.

There are also more "blended families" formed by marriages that gather children from different families or resulting from ruptures in marital unions⁹. Also, break-ups and divorces; the proportion of mature couples with no children and the multiplication of groups that differ from typical family structures has increased, especially in families with only one parent or those headed by single women⁶.

The increasing number of single-parent families is associated with women, who became the heads of families in one out of four households in Brazil¹⁰. The increased number of single-parent families changes the traditional family structure, which may result in more social vulnerability, income reduction and role overload to keep the family functions, especially affecting the low-income population³.

PeNSE data reflect the changes regarding family structure in Brazil, which is different from Spain, for example. A study with adolescents in this country showed that 86.7% of them lived with their parents⁴. Family structure pointed out at PeNSE is close to the data in the study *Health Behavior in School-Aged Children*, in the United States, where 60% of the children live with both parents⁵.

Carvalho and Almeida³ consider that the family is a space to produce and transmit cultural subjects and practices, and stands for the "mediation between individual and society". It is also responsible for satisfying the basic needs of its members, balancing their everyday demand and providing resources for survival.

Adolescence is a difficult period that brings about conflicts. In this transition, family bonding and communication between parents and children, besides interaction and dialogue based on democratic and emotional principles, tend to help overcome problems⁴.

Studies point out that adolescents raised by both parents are more protected

against drugs than those who are raised by single-parent families^{7,11}.

Some studies from the United States also demonstrate that the presence of both parents is a protective factor against tobacco, alcohol and illicit drug use¹². Data from PeNSE confirm these literature findings. Besides, family supervision also protects the children against the use of such substances. Literature suggests that knowing about children's free time activities is described as a protective factor as well. Parents taking an interest in their children's daily lives, the places they go to, free time activities and friendships influence risk behavior in adolescence, like alcohol and drugs consumption¹³.

The most significant monitoring factor was to know if the student misses classes without parental consent. PeNSE revealed that 18.5% of the students reported missing school under these circumstances. This seems to indicate an extreme conduct, when the student no longer shares daily activities with the parents, or even omit important facts, like missing school. A dose-response gradient is observed: if the student is absent for one or two days, the risk of regularly smoking is 2.7 times higher; if the person is absent for three or more days, this risk is 5.4 times higher. It is similar with alcohol and drugs. These results show the importance of parental control over their children's free time activities and school performance.

Literature describes that monitoring actions tend to change according to gender, being more frequent among girls; this was also identified by PeNSE^{14-16,7}.

According to the authors, when adolescents do not feel protected by the family, they can be involved with other adolescents who consume substances, especially to try and compensate for the void left by the family¹⁷. Studies show that both female and male adolescents who are dependent on alcohol come from families with distant relations, who do not plan group activities¹⁷.

Family bonding and group activities have a protective effect to prevent alcohol

consumption and drug use⁷. Therefore, PeNSE included a factor that indirectly attempts to measure family environment: "having meals with the parents." According to literature findings, family activities, like talking, going out and having meals together reduce risky conducts, such as smoking. A positive relationship with the parents is important and reduces some risks, such as: juvenile delinquency, depression and psychosomatic symptoms⁵.

A study from Spain with 13 to 14-year-old students showed that 58% of the parents regularly have meals with their children⁴. In Brazil, PeNSE found that 62.6% of the children reported having meals with the mother or responsible party. These activities reduce risk conducts and have a protective effect. Adolescents who do not have this habit present more chances of smoking, drinking and using drugs.

PeNSE worked with self-report survey, which may be limiting due to measurement errors caused by sub-reports or difficulty to understand the questions. On the other hand, this survey conducted with students from the freshman year of high school aimed to minimize this influence, in order for the students to acquire greater reading skills and to understand the questionnaire.

Previous pilot studies showed good comprehension of the questionnaire. Using a PDA and a self-report survey may give more privacy and favor the reliability of the responses. Another limitation is related to the cross-sectional design of the study, which can measure exposure and closure at the same time. Temporality between both aspects cannot be assured, thus being subjected to reverse causality¹⁸. Therefore, it is not possible to confirm that the studied variables (family supervision) are protective factors as to tobacco and drug use and to alcohol consumption.

Data from this study enables many interpretations on the complex relationship between parents, family and adolescents for the adoption of risk behaviors. There are situations and variables other than

those included in this study and may act as risk or protection factors, such as: relationship with colleagues and friends; socioeconomic conditions; parents schooling; drinking and smoking habits of parents and relatives; and other factors that were not analyzed in this study.

Conclusion

The teenage population should be given special attention because of the vulnerability to experimenting alcohol, tobacco and other drugs. Habits acquired in this phase of life tend to continue in the adult life, besides increasing the vulnerability of these adolescents to different risk-related situations, especially being involved with accidents and violent scenarios^{5,18-21}.

It is important to analyze the family role in this phase of life. Family may have different roles: it could induce to tobacco, alcohol and drug use (and abuse), or serve as an institution that protects the adolescents' health by supporting and guiding them¹⁹.

Family unit is essential for the development and health promotion of this age group. Even if the family is not the only influence for the development and/or protection as to the use of these substances, it has an important role that should be encouraged and analyzed. This study identifies the protective effect of parental supervision as to the prevention of harmful behaviors, reinforcing the importance of a structured family bonding in the life of adolescents in order to prevent alcohol, drug and tobacco use.

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