

Alcohol consumption among adolescents: attitudes, behaviors and associated factors

Consumo de bebida alcoólica entre adolescentes: atitudes, comportamentos e fatores associados

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Abstract *The scope of this paper is to assess the attitudes and behaviors regarding alcohol use and analyze associated factors among schoolchildren in public schools of Campina Grande in the state of Paraíba. A cross-sectional study was carried out involving 574 adolescents, with the application of a semi-structured questionnaire. The chi-square test and Fisher's exact test were used (5% level of significance). Among the adolescents 54.5% had drunk alcohol and 6.7% of them were heavy drinkers. The majority of them drank alcohol between 11 and 14 years of age (42.8%); 26.3% of the adolescents purchased alcoholic beverages; and beer was the most drink most consumed (43.8%). The risk of alcohol drinking was higher between 16 and 19 years of age (OR = 4.44; $p < 0.001$), among those without religious affiliation (OR = 4.36; $p = 0.002$), among those who worked (OR = 2.13; $p = 0.012$) and among those who had a fair to poor relationship with their father (OR = 2.18; $p = 0.010$). The results of this study underscore the complexity of this issue and the need to pay particular attention to the adolescent population. Public policies alone are not sufficient. Support from family, school and society is essential to curtail early alcohol use and its consequences.*

Key words Adolescent, Alcoholism, Risk factors, Students

Resumo *Avaliar as atitudes e os comportamentos relacionados ao uso do álcool e seus fatores associados entre escolares da rede pública de Campina Grande (PB). Foi um estudo transversal com 574 adolescentes entrevistados por meio de formulário semiestruturado. Os testes estatísticos foram o Qui-quadrado e o Exato de Fisher (significância de 5%). Dos adolescentes, 54,5% experimentou o álcool, destes, 6,7% faz uso pesado. A maioria experimentou o álcool na faixa etária de 11 a 14 anos (42,8%), 26,3% dos menores compraram bebidas e a cerveja foi o tipo mais consumido (43,8%). O risco de experimentar a bebida alcoólica foi maior entre adolescentes de 16 a 19 anos (OR = 4,44; $p < 0,001$), entre os que não tinham religião (OR = 4,36; $p = 0,002$), entre os que trabalhavam (OR = 2,13; $p = 0,012$) e os que tinham relacionamento regular/ruim com o pai (OR = 2,18; $p = 0,010$). Os resultados do presente estudo ressaltam a complexidade do tema e a necessidade de uma atenção especial para a população adolescente. As políticas públicas não são suficientes, o apoio de uma família, a escola e a sociedade são essenciais para combater o uso precoce de álcool e suas consequências.*

Palavras-chave Adolescente, Alcoolismo, fatores de risco, estudantes

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Introduction

Adolescence is marked by considerable existential conflicts as well as exposure and vulnerability to substance abuse. Young people have greater problems regarding alcohol intake. Moreover, early initiation in alcohol use is one of the most important predictors of future health, socio-cultural and economic problems¹. The following factors are considered facilitators of alcohol use among adolescents: lifestyle, high levels of stress and anxiety, low self-esteem, depressive symptoms, susceptibility to peer pressure and problems associated with school²⁻⁴.

Even in small amounts, alcohol use has a number of consequences, such as risky sexual behavior, increased suicide rate, violence, juvenile delinquency, familial conflicts, conflicts with friends, a greater risk of accidents and illicit drug use and is therefore considered a serious public health problem^{2,3,5-8}. Alcohol is the only psychotropic drug accepted and even encouraged by society⁹, which allows early contact (even prior to 11 years of age) and increases the risk of future dependence^{10,11}. In a study carried out in Australia, 19.2% of adolescents reported consuming one or more drinks in the previous three months¹². In Portugal, approximately 50% of adolescents report having experimented with alcohol¹³. In the United States, it is estimated that 4.6% of adolescents between 12 and 17 years of age have a dependence on alcohol¹⁴. Studies carried out in Brazil report prevalence values of alcohol experimentation ranging from 48.3 to 71.4% in adolescence, as well as a 27.3% frequency of regular use, 22.1% frequency of drunkenness at some time in life and 8.9% frequency of heavy use^{10,15}.

There are few alcohol prevention programs in Brazil and rules restricting the advertising of alcoholic beverages are questionable¹⁶. As in other countries, alcohol use among Brazilian adolescents is an under-explored issue that needs to be discussed. The determination of the epidemiological profile of alcohol use and analysis of behaviors, attitudes and associated factors could contribute toward a better understanding of this complex problem and guide the drafting of health programs aimed at the prevention and combating of alcohol use in adolescence.

The aim of the present study was to assess the association between attitudes and behaviors regarding alcohol use and analyze associated factors among adolescents at public schools in north-eastern Brazil.

Methods

A cross-sectional study was carried out involving 574 male and female adolescents between 10 and 19 years of age at public schools in the city of Campina Grande, state of Paraíba, Brazil. The participants were selected from a population of 11,228 students, with the sample corresponding to 5.11% of this population. Campina Grande had approximately 386 thousand inhabitants and is divided into six districts. It is an industrialized city with considerable cultural, social and economic disparities. Mean monthly income per capita is 110 US dollars and the human development index is 0.72¹⁷.

Two-stage sampling was performed to ensure representativity. Schools were randomly selected from each district of the city in the first stage and schoolchildren were randomly selected from each school in the second stage. The sample size was calculated based on a 5% margin of error, 95% confidence level and an expected prevalence value of 50%. A 1.3 correction factor was applied to compensate for the design effect. The minimal sample was estimated to be 496 schoolchildren, to which 20% was added to compensate for possible losses, totaling 596 schoolchildren.

Eligibility criteria

. Adolescents aged 10 to 19 years, enrolled in the schools selected for the study, who authorized (adults) or whose parents/guardians (minors) authorized their participation by signing a statement of informed consent.

Data acquisition

Data acquisition was carried out between August and December 2010 by three previously calibrated researchers using a self-administered semi-structured questionnaire previously used by the Brazilian Information Center on Psychotropic Drugs¹⁸. The questions addressed the use of alcohol (intake pattern, type of beverage, company, location of use and purchasing of alcoholic beverages) and associated factors (gender, age group, schooling, work, religion, practice of sports, relationship with parents and parents' profile). Alcohol intake was defined based on the following categories:

. *Use in lifetime*: use at least once in the individual's lifetime;

. *Use in previous year*: use at least once in the 12 months prior to the interview;

- . *Use in previous month*: use at least once in the 30 days prior to the interview;
- . *Frequent use*: use six or more times in the 30 days prior to the interview;
- . *Heavy use*: use 20 or more times in the 30 days prior to the interview.

Contact with the school was initially made to schedule the data acquisition procedure and deliver the statements of informed consent. The reliability of the responses was tested using the “face validation” method on 10% of the interviewees. For such, the researcher asked the respondents to explain what they understood by each question in their own words¹⁹. None of the interviewees exhibited any difficulty in answering the items on the questionnaire. Test-retest reliability was determined with a seven-day interval between applications of the questionnaire. Agreement between tests was 80%.

The administration of the questionnaire lasted a period of 10 minutes. After the questionnaires were returned to the researchers, an educational lecture was given on the consequences of alcohol use.

All data were analyzed using the Statistical Package for Social Sciences (SPSS for Windows, version 18.0, SPSS Inc, Chicago, IL, USA). The chi-squared test and Fisher’s exact test were used to determine associations between the variables and experience with alcohol, with the level of significance set to 5% ($p < 0.05$).

Ethical considerations

Authorization from the State of Paraíba Secretary of Education was obtained prior to the survey carried out at the schools. This study received approval from the Human Research Ethics Committee of the *Universidade Estadual da Paraíba* (Brazil), in compliance with Resolution 196/96²⁰ of the Brazilian National Health Council. Participants over 18 years of age and parents/guardians of participants under 18 years of age signed a statement of informed consent prior to the onset of the study. Anonymity was ensured in all cases.

Results

A total of 574 schoolchildren participated in the present study. Twenty-two individuals refused to participate, corresponding to a loss rate of 3.7%. Table 1 displays the characterization of the sample with regard to age, gender, schooling and al-

cohol use. The majority of the adolescents were between 13 to 15 years (53.8%), female (53.5%) and attended elementary school (87.6%). A total of 54.5% had experimented with alcohol, 6.7% of whom made heavy use of this substance. The largest portion of the sample began drinking be-

Table 1. Characterization of sample, distribution according to frequency of alcohol use and data related to first contact with alcohol, most frequent company and location of alcohol use. Campina Grande, PB, 2012.

Variable	N	%
Age group (years)		
10 to 12	161	28.0
13 to 15	309	53.8
16 to 18	100	17.4
More than 18	4	0.7
Gender		
Male	267	46.5
Female	307	53.5
Schooling		
Elementary school	503	87.6
High school	71	12.4
Have you ever had an alcohol beverage?		
Yes	313	54.5
No	261	45.5
Total	574	100.0
Frequency of alcohol use		
Use in lifetime	91	29.1
Use in previous year	117	37.4
Use in previous month	57	18.2
Frequent use	27	8.6
Heavy use	21	6.7
At what aged did you drink alcohol for the first time?		
5 to 7 years	10	3.2
8 to 10 years	40	12.8
11 to 14 years	134	42.8
15 to 19 years	30	9.6
Does not recall	99	31.6
Who offered you an alcoholic beverage for the first time?		
Family member	61	19.5
Purchased it alone	36	11.5
Friends	135	43.1
Others	7	2.2
Does not recall	74	23.6
Where do you drink most often?		
At home	66	21.1
At friends’ homes	126	40.3
Bar/Dance hall/Club	41	13.1
In more than one place	15	4.8
Don’t remember	68	20.7
Total	313	100.0

tween 11 and 14 years of age (42.8%). Friends offered alcoholic beverages the first time (43.1%) and were the most frequent form of company during alcohol consumption (40.3%).

A total of 26.3% had purchased alcoholic beverages personally. The most cited location of purchase was the supermarket (45.7%). Beer was the most often cited type of alcohol (43.8%) and 29.7% drank three or more glasses (Table 2).

In the bivariate analysis, experience with alcohol was associated with age group, religion, type of religion, schooling, scholastic delay, number of days absent from school and work (Table 3).

Significant associations were found between the use of alcoholic beverages and relationship with one's father, relationship with one's mother and relationship between parents (Table 4).

After the adjustment of the model, the risk of drinking was greater among those participants between 16 and 19 years of age, those without religion and those with a fair/poor relationship with their father (Table 5).

Discussion

Alcohol is the first psychotropic substance consumed by children and adolescents and abuse of this drug can have a negative effect on development¹⁰. High alcohol intake in this phase of life and the consequences of this practice constitute a phenomenon seen worldwide^{8,21}.

In the present study, 54.5% of the adolescents had contact with alcoholic beverages. Despite the high prevalence, this figure is lower than that found in the recent Brazilian National School Health Survey, which reports a prevalence value of 71.4% among adolescent schoolchildren¹⁰. Analyzing the frequency of use, 8.6% and 6.7% of those who had contact with alcohol made frequent and heavy use of this substance, respectively. The high consumption of alcohol among adolescents has been reported in a number of studies, with prevalence values ranging from 3.3% to 16.4%^{2,6,8,12,15,22,23}. Moreover, one cannot discount the possibility of the occurrence of information bias, as a stigma is attached to alcohol use due to the fact that it is illegal for minors. It is therefore possible that this practice was under-reported. However, the self-administered questionnaire with the assurance of anonymity may have minimized this possibility.

The lowest age reported regarding the first experimentation with alcohol was five years and the most common age range at which alcohol was first used was between 11 and 14 years. The increasingly earlier initiation into alcohol use has been described in previous studies^{8,10,13,23}. These findings underscore the need for educational and prevention programs in the school setting aimed at combating alcohol use beginning at an early age, as occurs with anti-smoking campaigns in schools.

The influence of friends was clearly expressed when the participants were asked who offered alcoholic beverages the first time and the location at which they drank with greater frequency. A possible explanation for this is the need for acceptance and the imitation of habits practiced by peers, which are common aspects of adolescence. Similar circumstances are reported in the literature^{4,24,25}.

In Brazil, the sale of alcoholic beverages to minors is prohibited by Article 243 of the Child and Adolescent Statute (Law 8.069/90²⁶) and article 63 of the Penal Misdemeanors Law. Moreover, prohibiting the sale of alcohol to minors is among the measures proposed by the World Health Organization for reducing alcohol con-

Table 2. Distribution of participants according to purchasing of alcoholic beverages, type of beverage and amount consumed. Campina Grande-PB, 2012.

Variable	n	%
Have you ever personally bought an alcoholic beverage?		
No	407	70.9
Tried but was not successful	16	2.8
Yes	151	26.3
Total	574	100.0
Where have you purchased alcoholic beverages?		
Supermarket	69	45.7
Bar/Club/Party	59	39.1
Others	17	11.3
Bar/Mini Mart	6	4.0
Total	151	100.0
What type of alcoholic beverage do you usually drink?		
Beer	137	43.8
Wine	65	20.8
Hard cider or sparkling white wine	26	8.3
Liqueur	7	2.2
Cachaça/Whiskey/Vodka/Brandy	28	8.9
Rum	2	0.6
More than one type of beverage	48	15.3
How many glasses did you have the last time you drank?		
Just a sip	83	26.5
Less than one glass	85	27.2
1 to 2 glasses	52	16.6
3 glasses	23	7.3
4 or more glasses	70	22.3
Total	313	100.0

Table 3. Bivariate analysis of socio-demographic variables, religion, practice of sports and experience with alcohol. Campina Grande-PB, 2012.

Variable	Experience with alcoholic beverages				Total		p-value	OR (95% CI)
	Yes		No					
	N	%	N	%	N	%		
Age group								
10 to 12	57	35.4	104	64.6	161	100.0	p ⁽¹⁾ < .001*	1.00
13 to 15	178	57.6	131	42.4	309	100.0		2.48 (1.67 to 3.68)
16 to 19	78	75.0	26	25.0	104	100.0		5.47 (3.16 to 9.48)
Gender								
Male	157	58.8	110	41.2	267	100.0	p ⁽¹⁾ = 0.055	1.38 (0.99 to 1.92)
Female	156	50.8	151	49.2	307	100.0		1.00
Do you have religion?								
Yes	203	50.4	200	49.6	403	100.0	p ⁽¹⁾ = .002*	1.00
No	110	64.3	61	35.7	171	100.0		1.78 (1.23 to 2.57)
Which religion?								
None	110	64.3	61	35.7	171	100.0	p ⁽¹⁾ < .001*	3.16 (0.89 to 11.21)
Catholic	127	57.5	94	42.5	221	100.0		2.36 (0.67 to 8.31)
Evangelist	72	42.1	99	57.9	171	100.0		1.27 (0.36 to 4.51)
Other	4	36.4	7	63.6	11	100.0		1.00
Schooling								
Elementary school	260	51.7	243	48.3	503	100.0	p ⁽¹⁾ < .001*	1.00
High school	53	74.6	18	25.4	71	100.0		2.75 (1.57 to 4.83)
Scholastic delay								
None	98	43.4	128	56.6	226	100.0	p ⁽¹⁾ < .001*	1.00
1 to 2 years	151	58.8	106	41.2	257	100.0		1.86 (1.30 to 2.67)
3 or more years	64	70.3	27	29.7	91	100.0		3.10 (1.84 to 5.21)
Number of absences from school in previous 30 days								
None	190	50.7	185	49.3	375	100.0	p ⁽¹⁾ = .010*	**
1 to 3	95	60.1	63	39.9	158	100.0		**
4 to 8	14	56.0	11	44.0	25	100.0		**
9 or more	14	87.5	2	12.5	16	100.0		**
Do you work?								
No	261	52.0	241	48.0	502	100.0	p ⁽²⁾ = .003*	**
Yes, formally	3	75.0	1	25.0	4	100.0		**
Yes, informally	49	72.1	19	27.9	68	100.0		**
Practice of sports								
Yes	191	56.8	145	43.2	336	100.0	p ⁽¹⁾ = 0.186	1.25 (0.90 to 1.75)
No	122	51.3	116	48.7	238	100.0		1.00
Total group	313	54.5	261	45.5	574	100.0		

*: Significant association to 5.0% level; **: Not possible to determine due to very low frequencies; ⁽¹⁾: Pearson's chi-squared test; ⁽²⁾: Fisher's exact test

sumption among this portion of the population²⁷. Nonetheless, 26.3% of the participants reported purchasing alcoholic beverages personally and 45.7% of these individuals bought the substance from supermarkets. The lack of monitoring the sale of alcoholic beverages to minors is a problem reported in other countries as well²⁸.

Beer was the most often cited type of alcoholic beverage (43.8%), as reported in previous studies involving this age group²⁹. In this respect,

it seems that adolescents are influenced by the media and tend to associate alcohol intake with pleasure²⁸. There is no rigorous control in Brazil regarding the times alcoholic beverages are advertised on television, which may contribute to this influence. Moreover, young people tend not to associate beer with alcoholism¹⁶.

Based on restrictive measures regarding the sale of alcohol to minors, there is a tendency toward binge drinking among adolescents, which

Table 4. Bivariate analysis of relationship with parents, relationship between parents, parents' profile and experience with alcohol. Campina Grande-PB, 2012.

Variable	Experience with alcoholic beverages				Total		p-value	OR (95% CI)
	Yes		No		N	%		
	N	%	N	%				
Relationship with father								
Good	254	51.3	241	48.7	495	100.0	p ⁽¹⁾ < .001*	**
Fair	49	73.1	18	26.9	67	100.0		**
Poor	10	83.3	2	16.7	12	100.0		**
Relationship with mother								
Good	277	52.6	250	47.4	527	100.0	p ⁽²⁾ = .003*	**
Fair	32	78.0	9	22.0	41	100.0		**
Poor	4	66.7	2	33.3	6	100.0		**
Relationship between parents								
Do not live together	74	64.9	40	35.1	114	100.0	p ⁽¹⁾ = .016*	2.59 (0.77 to 8.69)
Good	197	50.5	193	49.5	390	100.0		1.43 (0.45 to 4.58)
Fair	37	63.8	21	36.2	58	100.0		2.47 (0.70 to 8.75)
Poor	5	41.7	7	58.3	12	100.0		1.00
Father's profile								
Authoritarian	115	58.4	82	41.6	197	100.0	p ⁽¹⁾ = 0.086	1.69 (1.05 to 2.73)
Moderate	150	55.4	121	44.6	271	100.0		1.50 (0.95 to 2.35)
Liberal	48	45.3	58	54.7	106	100.0		1.00
Mother's profile								
Authoritarian	114	58.5	81	41.5	195	100.0	p ⁽¹⁾ = 0.397	1.29 (0.83 to 2.00)
Moderate	128	52.7	115	47.3	243	100.0		1.02 (0.67 to 1.55)
Liberal	71	52.2	65	47.8	136	100.0		1.00
Total group	313	54.5	261	45.5	574	100.0		

*: Significant association to 5.0% level; **: Not possible to determine due to very low frequencies; ⁽¹⁾: Pearson's chi-squared test; ⁽²⁾: Fisher's exact test

is characterized by four or more drinks for females and five or more drinks for males on a single occasion³⁰. In the United States, 90% of youths demonstrate this behavior³¹. A study carried out in Brazil reports that 11.37% of the schoolchildren surveyed exhibited this type of behavior once a week and 1.65% participated in binge drinking nearly every day²². In the present study, 22.3% of those who had experimented with alcohol exhibited this behavior. It should be stressed that binge drinking can lead to alcohol intoxication and an increase in the incidence of stroke³². This type of behavior has also been associated with an increase in violence, cigarette smoking, illicit drug use, traffic accidents, risky sexual behavior, depression and suicide^{30,31,33}.

The literature reports associations between alcohol intake and age group, gender, religion, level of schooling, scholastic problems (scholastic delay, number of absences from school in previous 30 days), financial autonomy, the practice

of sports and familial problems¹⁵. In the present study, however, the adjusted model revealed that only the following variables were associated with alcohol intake: age group, type of religion, work and relationship with one's father.

Students between 16 and 19 years of age were at greater risk for alcohol use (OR = 4.44; 95% CI: 2.81-7.86; p < 0.001), which corroborates findings reported in previous studies¹. It appears that familial monitoring is reduced with the increase in the age of adolescents and independence and increased confidence may be possible causes of a greater propensity toward drinking.

Based on findings reported in previous studies, greater alcohol consumption was expected among the male gender^{22,30,34}. However, this gender predilection was not found in the present study, which is in agreement with findings described in a previous study conducted in southern Brazil¹. Moreover, similarity in alcohol intake between genders is reported in a national

Table 5. Adjusted analysis of variables studied and alcohol use. Campina Grande-PB, 2012.

Variable	OR in bivariate analysis (95% CI)	Adjusted OR (95% CI)	p-value
Age group			
10 to 12	1.00	1.00	p < 0.001*
13 to 15	2.48 (1.67 to 3.68)	2.14 (1.42 to 3.22)	
16 to 19	5.47 (3.16 to 9.48)	4.44 (2.51 to 7.86)	
Religion			
None	3.16 (0.89 to 11.21)	4.36 (1.10 a17.09)	p = 0.002*
Catholic	2.36 (0.67 to 8.31)	3.44 (0.88 13.36)	
Evangelist	1.27 (0.36 to 4.51)	1.97 (0.51 to 7.71)	
Other	1.00	1.00	
N° of absences in 30 days			
None	1.00	1.00	p = 0.128
1 to 3	1.47 (1.00 to 2.14)	1.43 (0.95 to 2.15)	
4 or more	2.10 (1.05 to 4.17)	1.65 (0.78 to 3.47)	
Work			
Yes	2.40 (1.39 to 4.14)	2.13 (1.18 to 3.83)	p = 0.012*
No	1.00	1.00	
Relationship with father			
Good	1.00	1.00	p= 0.010*
Fair/poor	2.80 (1.64 to 4.79)	2.18 (1.21 to 3.94)	
Relationship with mother			
Good	1.00	1.00	p = 0.116
Fair/poor	2.95 (1.47 to 5.93)	1.86 (0.86 to 4.06)	

*: Significant at 5.0% level

survey³⁵. This may reflect greater permissiveness regarding alcohol use on the part of the female gender¹. On the other hand, one must bear in mind that adolescence is a difficult period of conflicts in which bio-psychosocial changes occur and youths are prone to having new experiences, regardless of gender³⁶.

It is believed that practicing a religion binds individuals to a group with shared values and norms, in which there is an explicit condemnation of drug use³⁷. In the present study, adolescents who reported having no religion were at greater risk for alcohol use (OR = 4.36; 95% CI: 1.10-17.09; p = 0.002). Although the participants were not asked whether they practiced their religion, it seems that belief in religious values alone may have had a positive influence over these adolescents. Previous studies report religious attitudes as a protective factor against alcohol use^{15,37,38}. In the present study, adolescents pertaining to an evangelist church had a lower risk of alcohol consumption (OR = 1.97; 95% CI: 0.51-7.71; p = 0.002). This is in agreement with a national study that reports that evangelist adolescents are more conservative and tend to drink less alcohol³⁹.

Authors report a higher level of schooling as a risk factor for alcohol use³⁹. However, despite the association between these variables in the bivariate analysis, level of schooling did not remain associated with alcohol use in the final model. It is therefore likely that the level of schooling is dependent upon age, which remained associated with alcohol use³⁹.

Regarding scholastic delays, studies indicate a weak association or an absence of an association between this variable and alcohol use^{1,34}. In agreement with such findings, no association was detected between scholastic delay and alcohol use in the present study. It is likely that the lack of scholastic yield is associated with the need to work, as the sample was composed exclusively of public school students, with a consequently less privileged socioeconomic status and possibly a need to work. Truancy on the part of adolescents who make use of alcohol has been reported in the literature^{1,5,10,15}. In the present study, however, the number of absences in the previous 30 days lost its significance in the model after controlling for confounding variables. Similar to what occurred regarding scholastic delays, it is likely that another aspect, such as having a job, may have influ-

enced this variable, as absence from school may reflect a necessity to work⁴⁰.

Adolescents who held jobs were at greater risk for alcohol use (OR = 2.13; 95% CI: 1.18-3.83; $p = 0.012$). Financial independence and increased contact with adults in the workplace are reported to be possible causal factors of alcohol intake among working adolescents^{15,22}. Moreover, the stress caused by labor activities as well as parties and leisure activities in the company of workmates may also play an important role.

As reported in previous studies^{1,41}, no association was found between the practice of sports and alcohol use. This is likely due to the negative effects alcohol can have on physical endurance and strength⁴².

Having a fair/poor relationship with one's father denoted a greater risk for alcohol use (OR = 2.18; 95% CI: 1.21-3.94; $p = 0.010$). Authoritarian parental attitudes and a poor relationship with one's father are reported to have a positive association with alcoholism in adolescence^{15,43,44}. Despite the importance of mothers in the nuclear family and the fact that they are very often responsible for transmitting societal values²², the influence of the relationship with one's mother lost its significance in the analysis in the present study. Studies report that a united family, the following of familial values, the discussion of problems at home and parental monitoring are protective factors against exposure to alcohol^{10,23,25,45}, suggesting that the family plays an important role in controlling substance abuse.

It should be stressed that alcohol is one of the most consumed drugs in the country and causes considerable harm to the Brazilian population. However, preventive measures have been inconsistent, which has allowed increasingly sophisticated advertising campaigns to promote the consumption of this substance⁴⁶.

The results of the present study underscore the complexity of this issue and the need to pay particular attention to the adolescent population. Prohibitive national measures in recent decades have had little effect. Public policies with preventive educational campaigns are needed, but alone are not sufficient. Therefore, complementary in-

terventions involving individuals and the environment in which they live are necessary⁴⁶. Support from one's family, school and society is essential to combating early alcohol use and its consequences. Considerable progress has been made in relation to tobacco use, as there has been a clear reduction in smoking over the years. Similar progress could be made in relation to alcohol use among adolescents. These issues merit deep reflection, as there has been an increase in alcohol use among youths over the years in Brazil, which has been associated with an increase in the prevalence of disease as well as traffic accidents, violence and a consequent increase in the risk of death^{46,47}.

Considering the few studies on this topic, there is a need for periodic population-based investigations in different regions of Brazil, which could increase the capacity for monitoring alcohol use and further contribute to the discussion on this issue³⁴. In this regard, the findings of the present study can contribute to outlining programs aimed at reducing alcohol consumption in adolescence, which is a vulnerable period of life with regard to experimentation with both licit and illicit drugs, especially alcohol and tobacco³⁶.

Despite the limitations imposed by the cross-sectional study design, which does not allow the determination of causality, the present study offers a representative profile of alcohol intake among adolescent schoolchildren in the city of Campina Grande in northeastern Brazil. Further studies are needed to broaden knowledge regarding this serious public health problem.

Conclusion

Based on the findings of the present study, the prevalence of experimentation with alcohol was high among the adolescents surveyed, with an early initiation into this practice. Age group, religion, work and the relationship with one's father were significantly associated with experimentation with alcoholic beverages. There is a need for educational and prevention programs aimed at combating the early use of alcohol and its consequences.

Collaborations

MA Clementino, GLA Ribeiro, NCM Gomes and Firmino RT participated in the literature review, methodology, analysis and discussion of the data and drafting the article; MBLD Smith participated in the analysis and discussion of data, drafting and correction of the article; AF Granville-Garcia devised directed and coordinated the study, participated in the analysis and discussion of data, drafting and correcting the article.

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Artigo apresentado em 18/08/2012

Aprovado em 21/10/2012

Versão final apresentada em 30/10/2012