

Association between the risk of alcohol use and unprotected sex in adolescents in a city in the southern region of Brazil

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Abstract *This paper aims to analyze alcohol abuse and unprotected sex and the association between them in students in a city in the southern region of Brazil. This is a cross-sectional study using a quantitative approach with 590 secondary school students from two public schools. Regarding alcohol use, 14% scored from eight to 40 in The Alcohol Use Disorders Identification Test (AUDIT), which means, at least, a risky drinking behavior, with higher rate among boys. Moreover, 31.1% indulged themselves in binge drinking, which means drinking six or more doses according to AUDIT; and even among those who are low-risk drinkers, 21.1% had this drinking pattern. Regarding sexual behavior, young boys started sexual life earlier and the kind of relationship more referred to by them is one with no commitment; boys have uncommitted relationships, while girls have more relationships with commitment. In relation to the results of the association between alcohol use and sexual intercourse, 47.3% stated alcohol use before having sex, and those who started sexual activity got more drunk and had higher scores in the AUDIT. New studies are recommended regarding the association between both behaviors in Brazil, considering that the causal relationship is not clear and shows several explanation models.*

Key words *Adolescent, Sexual behavior, Alcoholism, Risk-taking, Sexuality*

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Introduction

Health risk behaviors in adolescents have been highlighted as a priority in public health, and the school environment is the ideal space for prevention work. The most common risk behaviors among adolescents are legal and illegal drug use, involvement in violence, inadequate food intake, insufficient levels of physical activity and unprotected sexual behaviors¹.

The onset of adolescence happens with the physical changes of puberty. While directly related, puberty and adolescence are two different phenomena. The first involves unavoidable biological changes, whereas adolescence refers to psychological and social components; this means that adolescence begins in biology and ends in culture, at a time when adolescents achieve reasonable independence from their parents. In some simpler societies, this stage may be brief, but tends to last longer² in those perceived as technologically more advanced.

This stage is marked by the search for pleasure, which occurs through sexual maturation and search for drugs. This is because sexuality and drugs allow the teenager new sensations, an unrestricted, yet momentary pleasure³.

A neuroscience-based theory⁴ explains that there is a double-system model that would involve the development of risk behaviors in adolescents; the first system would be correlated to the socioemotional system and would indicate the need for a quick explosive increase in dopaminergic puberty-related activities, which would result in an increased search for sensations or rewards, since dopamine plays a critical role in reward circuits in the brain. However, this increase in the demand for immediate reward precedes the structural maturation of the second system, that of cognitive control, which unfolds throughout adolescence and allows advances in impulse control and self-regulation (control of the reward system itself). Hence the suggestion that this period would be the most vulnerable to risk behaviors.

Brazilian studies^{5,6} identify alcohol as the first (and widely used) drug among adolescents, besides being considered the substance with the highest association with risk behaviors, because it is a drug that decreases central nervous system's activities, leading to increased loquacity, disinhibition, decreased ability to plan and discern risks.

The use of alcohol directly affects cognition, mood and judgment and compromises the individual's insertion in the community and his/

her relationship with it. As an example, one can quote the case of an insecure adolescent who begins to make use of beer to ask a girl out or to talk with friends. If he succeeds, he will tend to repeat the same process in a new situation. In the future, if he cannot make use of the substance, he will probably feel insecure and prefer not to go out and run the risk of performing poorly. This creates a new addiction: the adolescent then needs the drug to establish social bonds⁷.

Another problem is that many adolescents use alcohol for recreation and do not create other forms of fun and relaxation, and, thus, struggle to keep affective relationships without this use⁷. According to Figueiró⁶, sexuality does not only include sex, but also affection, endearment, pleasure, love or mutual feeling of well-being, communication, touch and intimacy. Alcohol is usually used by them only to facilitate sexual intercourse, making affective relationships superficial and impairing the development of sexuality.

At present, an idealization regarding sexual performance is perceived, making it a factor of much insecurity at the onset of sexual life. As a result, the sexual relationship ends up becoming a performance and ceases to be the result of an intimate moment between two people who are fond of each other⁷. Thus, the use of alcohol before or during intercourse seems to act as a catalyst for feelings of fear and distress, due to the belief that, by reducing inhibition, it facilitates sexual performance and consequently increases pleasure⁹.

However, alcohol has not only the effect of decreasing inhibitions, but also leads to a loss of physical sensitivity, which may make sexual practices less enjoyable. In addition, adolescents thus cease to face naturally the anxiety and responsibility of approaching the partner and the decision-making process of sexual intercourse¹⁰.

Vieira and Diehl¹⁰ argue that the more the adolescent is numb from drug use, the less likely he/she will feel pleasure as his/her emotional and physical vulnerability increases. Considering that sexual activity is a meeting between people, it can happen to be a very bad experience, especially if it results in violence, unplanned pregnancy, STD/AIDS infection, abandonment and rejection.

Scholars¹¹ show two different models to explain the causal role of alcohol in sexual risk behaviors: the impairment model, which emphasizes the pharmacological effect of alcohol, and the expectation model, which highlights personal beliefs about this effect.

The first model¹² indicates that alcohol properties impair cognitive and perceptual processes,

producing effects such as limited attention and abstract thinking. A representation of this model is the theory of alcoholic myopia, which explains that the influence of alcohol on individual emotions is mediated by the effects on the attention system. Thus, intoxication reduces attention resources, which are directed to more relevant emotional events¹³.

The expectation model¹¹ emphasizes personal beliefs about the effects of alcohol consumption, rather than its pharmacological effect. People may, for example, believe that alcohol improves sexual experience or can be used as an excuse to justify inconsequential choices, such as having sex without a condom.

However, literature shows other theories, such as the reverse causal explanation¹⁴ and the third variable theory¹². The reverse causal explanation¹⁴ holds that the intention or desire to have sex precedes and causes drinking, not vice versa. Thus, people drink strategically to loosen up and facilitate intercourse.

Regarding the third variable theory, the individual's stable characteristics can make him/her drink and have risky sex. Such as, for example, a particular genetic basis makes one seek to satisfy sensations, has little impulse control or coping skills, or even has a way of dealing with negative feelings through avoidance. Another example of the third variable may be the lifestyle when the person lives in an environment where both behaviors are implicitly or explicitly encouraged. Perceptions of peer norms and conflicts in the family are variables that may explain the involvement in these two risk behaviors or in others more¹².

Thus, this study aims to correlate data of the survey on alcohol use and sexual behaviors answered in a same questionnaire by secondary school students from two schools in a city in Southern Brazil and find out whether the same adolescent who drinks also engages in unprotected sex practice.

Methods

This is an exploratory, cross-sectional study with a quantitative approach. Some 590 students from the first two years of secondary school in two public schools in the city of Curitiba, capital of the state of Paraná, participated in the research in 2012. Schools are identified with letters "A" and "B". Due to the non-completion of the questions related to their gender and age, 27 participants

were excluded, resulting in a group with 563 subjects.

The data collection instrument was organized in two parts. The first one consisted of sociodemographic variables, such as relationship type, classified as "Married/Common-Law Marriage", "Dating" and "Alone/Uncommitted relationship"; and the identification of alcoholic beverages users, through the instrument Alcohol Use Disorders Identification Test (AUDIT), proposed by Babor et al.¹⁵. The score of this test ranges from zero to 40, with the following classification: young students who score from zero to 7 have low-risk alcohol use; from 8 to 15 – risk use; from 16 to 19 – harmful use and from 20 to 40 – probable dependence. In its second part, the instrument was made up of questions about students' sexual behavior and built on the "Knowledge, attitudes and practices research in the Brazilian population aged 15 to 64 (PCAP)"¹⁶. PCAP¹⁶ is a population survey on knowledge, attitudes and practices related to HIV infection and aims to monitor and control the epidemic by subsidizing prevention actions and media campaigns in recent years in the country.

Data collected were entered in a spreadsheet and exported to a statistical analysis program – SPSS (Statistical Package for the Social Sciences)¹⁷. In this program, frequencies were calculated and parametric and non-parametric analyses were performed, depending on data characteristics. A significance level of 0.05 was used for these analyses. Partially completed questionnaires were not analyzed.

Girls represented 59.7% of the total group and, although they reached that level, no significant difference was observed between them and boys when comparing the two schools. Analysis of the socioeconomic level followed the *Critério Brasil*¹⁸ procedure, and 66.2% of students were classified in strata "B1" and "B2". In school "A", 11.0% of the students were in the lower strata (C1 to E) and in school "B", 31.7% of the students remained in the "A1" and "A2" strata, and these differences were significant ($\chi^2 = 12.714$, $p = 0.002$) (Table 1).

The mean age of participants was 15.21 years (SD = 0.85), with the youngest aged 13 years and the oldest, 17 years. Those in the third year were not included because the directors' offices of the schools understood that they should not be exposed to other subjects other than those focused on the entrance exam at the end of the school year.

The research was approved by the Research Ethics Committee of the Faculty of Philosophy

and Sciences of the São Paulo State University (UNIESP) (0208/2011). The Informed Consent Form (ICF) was delivered to the students one week prior the expected date of application of the questionnaire, when the procedures and objectives of the research were also explained. Thus, students whose parents or guardians signed the ICF participated in the research. The researcher visited classrooms for the application of the questionnaire, explained how to complete it before delivering it and answered students' questions, using an average of 10 minutes in each room.

Results

The results are shown in two parts: in the first are the characteristics of the general group of students and, in the second, those of the group that has already started the sexual life.

As to the beginning of the sexual life of the group studied, which was defined through answer "Yes" to the question: "Did you already have a sexual relationship?", 157 students (28.8%) answered affirmatively, and 18 (3.2%) left this question blank. Among those who reported having started their sexual life, boys predominated (39.5%) over girls (21.5%), and this difference was significant ($\chi^2 = 20.742$, $p = 0.001$). The comparison between students of school "A" (33.1%) and those of school "B" (24.2%) revealed a significant difference ($\chi^2 = 3.976$, $p = 0.028$).

Regarding the group's sexual orientation, there was a predominance of heterosexuals, who represented 96.8% of the participants. The others were divided into homosexuals (0.9%) and bisexuals (2.3%), with no significant difference between genders.

The mean age of the first sexual intercourse was 14.53 years (SD = 1.02) for girls and 14.13

(SD = 1.31) for boys. This difference between means is significant ($F_{1,149} = 5.808$, $p = 0.044$) and reveals that boys initiate sexually earlier than girls, as already pointed out above, since the percentage of boys (39.5%) who already started their sexual life is almost twice that of girls (21.5%).

The predominant affective relationship in the group is "Alone/Uncommitted relationship", with 77.5% of responses for this option, followed by "Dating" with 22.5% and "Married/Common-Law Marriage", with 0.7%. Among those who date, 26.0% are female and 17.3% are males ($\chi^2 = 5.594$, $p \leq 0.011$).

Regarding alcohol consumption, 14% of students scored from 8 to 40, indicating at least risk drinking, at an age when the use of this drug is prohibited by law. Among boys, 20.7% achieved this score, while among girls, 9.5% had this score ($\chi^2 = 14.040$, $p = 0.001$). However, detailing this percentage by AUDIT levels of classification (Tabela 2), it is verified that among the 11 students that reached the classification "Possible dependence", seven are female. It is also found that students who have already started sexual life have a higher AUDIT score, with an average of 6.18 points (SD = 6.61), compared to 1.60 (SD = 3.218) of those who have not yet had their first sexual intercourse ($T = 8.897$, $p = 0.001$).

Binge drinking, investigated by AUDIT through question number 3 ("How often do you take 'six or more doses' on one occasion?"), shows five choices of answers (never, less than once a month, monthly, weekly and every day or almost every day).

It was found that 31.1% (Graphic 1) of the students showed a pattern of binge drinking, with no difference between schools, but between gender, including 10.1% of boys displaying this behavior weekly ($\chi^2 = 18.876$, $p = 0.001$). Even among those with low-risk drinking, accord-

Table 1. Frequency and percentage of participants by gender and socioeconomic level of the group studied, by school.

| | School A | | School B | | P |
|---------------------|----------|------|----------|------|-------|
| | F | % | F | % | |
| Gender | | | | | |
| Female | 205 | 61.6 | 131 | 57.0 | |
| Male | 128 | 38.4 | 99 | 43.0 | |
| Socioeconomic level | | | | | |
| E + C1 | 32 | 11.0 | 8 | 3.7 | 0.002 |
| B1 + B2 | 196 | 67.4 | 141 | 64.7 | |
| A1 + A2 | 63 | 21.6 | 69 | 31.7 | 0.002 |

ing to AUDIT, 21.1% had binge behavior ($\chi^2 = 157.998$, $p = 0.001$). In addition, 57.7% of the adolescents who indulged in binge had sex, while among those who never did, only 15.9% started their sex life ($\chi^2 = 99.116$, $p = 0.001$).

Of the 157 students who reported having started their sex life, 148 answered the question about the type of affective relationship. As expected, by age, only four participants declared the option “Married/Stable Union” (three girls and one boy) and were therefore withdrawn from the following analyses, due to the small number of subjects in this category. Among the other participants, the most indicated type of relationship was “Uncommitted relationship”, with 60.8% of students, followed by “Dating”, with 39.2%. In the total group, a significant difference was observed in relation to gender, with 51.5% of the girls dating and 70.7% of the boys in the “Alone/Uncommitted relationship” category ($\chi^2 = 7.594$, $p = 0.005$).

Condom use data show that 81.0% of the students used it in the first sexual intercourse, with boys using less than girls (25.6% of girls against

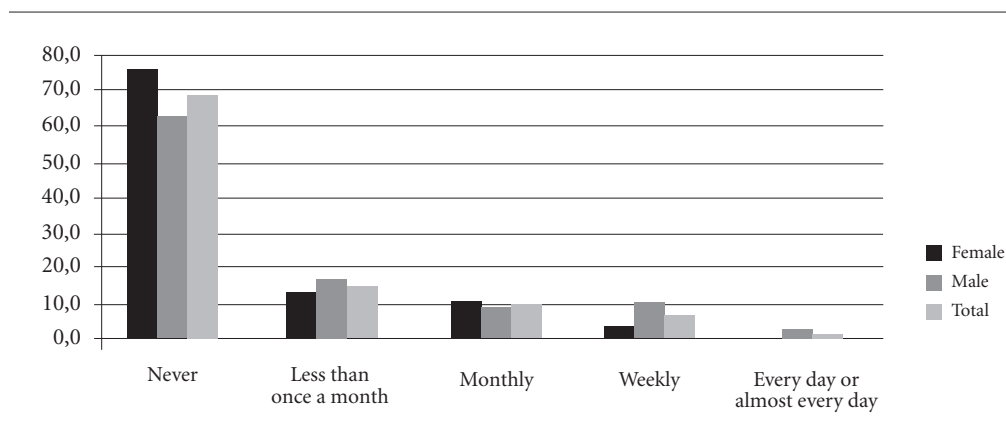
10.8% of boys), and this difference was significant ($\chi^2 = 5.179$, $p \leq 0.018$). Regarding the last sexual intercourse, condom use drops to 78.8%, with no significant difference by gender. Although there is no such difference, attention is drawn to the fact that 9.7% of girls and 25.9% of boys in the “Alone/Uncommitted relationship” category did not use a condom during their last sexual intercourse (Graphic 2).

Data on the average number of sexual relations that these students have per month were also collected. This information meets the concern of school principals and coordinators about the number of condoms they need to make available to students per month. Data show that they have 3.33 relationships per month ($SD = 4.76$), with no significant difference by gender, but by type of relationship, with those who are dating reporting 5.96 ($SD = 6.22$) sexual intercourses/month and those who are alone or have a uncommitted relationship, only 1.65 ($SD = 2.34$) ($F_{1,134} = 32.691$, $p = 0.001$).

Investigating the relationship between sexual life and alcohol consumption, it was found

Table 2. Frequency and percentage of the classification in the AUDIT test by gender.

| | Female | | Male | | Total | |
|---------------------------------------|--------|------|------|------|-------|------|
| | f | % | F | % | F | % |
| Low risk (0 to 7 points) | 304 | 90.5 | 180 | 79.3 | 484 | 86.0 |
| Risk use (8 to 15 points) | 24 | 7.1 | 34 | 15.0 | 58 | 10.3 |
| Harmful use (16 to 19 points) | 1 | 0.3 | 9 | 4.0 | 10 | 1.8 |
| Possible dependence (20 to 40 points) | 7 | 2.1 | 4 | 1.8 | 11 | 2.0 |



Graphic 1. Proportion of binge drinking by gender.

that five students (3.4%) always use alcohol before sexual intercourse; seven (4.7%), “Often”; 26 (17.6%), “Sometimes”; 32 (21.6%), “Rarely”; and 76 (51.4%), “Never”; two students left this question blank. Due to the low number of students who marked the “Always” and “Often” options, they were condensed into a single category, namely, “Always/Often”. Data on gender and type of relationship were crossed, and no difference was found for the first variable (gender), but 100% (26 students) of those who answered “Alone/Uncommitted relationship” pointed out that they “Sometimes” use alcohol before sexual intercourse ($\chi^2 = 21.476$, $p = 0.001$).

Condom use among students who drink alcoholic beverages is differentiated in the “Always/Often” category, with only 41.7% of them using condoms at the first sexual intercourse ($\chi^2 = 14.084$, $p = 0.003$). In the other categories, this use is practically equal to that of those who do not use alcohol (Graphic 3).

Discussion

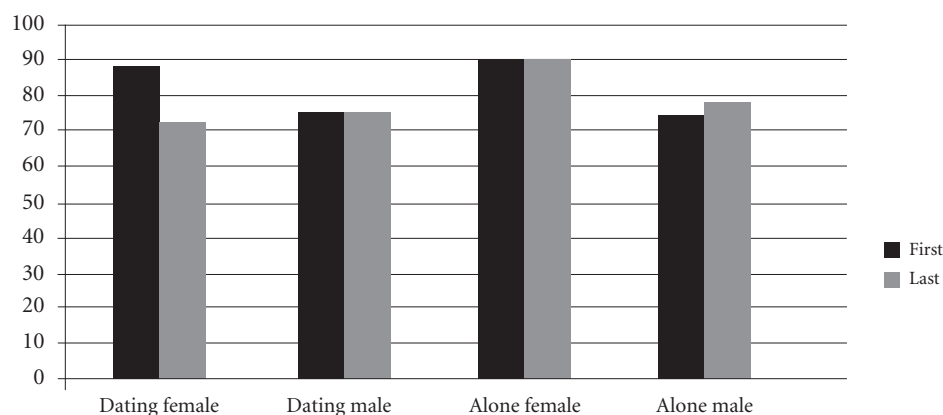
Results indicated that more than 25% of the students investigated had sexual intercourse and, in this situation, boys prevail. The second edition of the National Survey of School Health (PeNSE)¹⁹ – carried out in partnership between the Ministry of Health (MS) and the Brazilian Institute of Geography and Statistics (IBGE) – with 9th grade

primary school students in public and private schools in the Federal District and in the capitals of Brazilian states showed similar results: 28.7% of schoolchildren already had sexual intercourse, with a higher percentage among boys (40.1%).

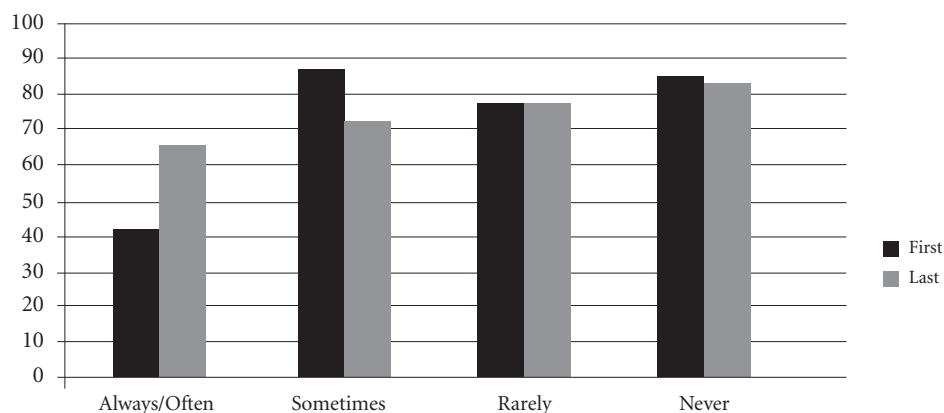
These scholars^{20,21} affirm that the diversity of current threats and little expectations for the future make adolescents bold. That is, when there are expectations for the future, there is a tendency to inhibit certain current behaviors²⁰. In a study with university students²², the mean age of sexual initiation is above the average age of young people in the general Brazilian population, suggesting that the level of schooling is likely to influence young people’s sexual behavior.

In this study, the mean age of the first sexual intercourse was 14.53 years for girls and 14.13 years for boys, that is, boys initiate sexual activity earlier than girls do. Other studies have also indicated early initiation for boys^{19,23,24}. In this study, the difference in the mean age of the first intercourse for boys and girls is less than 1 year, which allows us to hypothesize that initiation is taking place between these two groups, that is, girls a year younger than boys, which corroborates a study²¹, which shows that girls generally prefer a partner a little older than them.

Regarding sex protection, 81% used a condom in the first intercourse, and boys used it less than the girls, but in the latter intercourse, use fell for both sexes (78.8%), with no significant difference between them. In the PENSE survey¹⁹,



Graphic 2. Proportion of condom use by type of relationship and gender in the first and last sexual intercourse.



Graphic 3. Proportion of condom use by category of alcohol use before the first and last sexual intercourse.

the share of adolescents who did not use a condom in the last sexual relation was 24.77%, and the highest prevalence of unprotected sex in the last intercourse was found in boys (7.9% versus 4.8% among girls).

In this study, the most indicated relationship was the uncommitted relationship, and the greater proportion of those who are in this kind of relationship are boys, while girls date more. In the Brêtas et al. study²³, with 920 adolescents between 12 and 19 years old, for 70% of the boys and 17% of the girls, the first sexual intercourse was with friends, 28% of boys and 79% of girls had the first sexual experience with boyfriends and for 1% of boys this occurred with sex workers.

In another study²⁵, conducted with 691 adolescents between 12 and 19 years of age in the city of Porto Alegre, 78% of the girls reported exclusively fixed partners in sexual intercourse last year, while boys reported only 45%. The study also found that the first sexual intercourse occurred in general among boys older than girls and among people who already had some affective bond. Most of the girls indicated a boyfriend (89.9%), while among the boys this response was chosen by only 43.4%.

According to Rieth²⁶, generally, young women link sex with love, with the right person and in a dating context; on the other hand, boys seek to affirm their masculinity through the experience of sexuality, not assuming affective commitment, like that of a boyfriend, however, peer control

is more intense on them. The use of condoms among young men is greater when it comes to a casual partner, when they engage in an uncommitted relationship, for example, in view of the moral value associated with a young woman, when she is considered a risk for contracting diseases. In the context of dating, non-use among young men and women is explained by prior knowledge, trust in the partner and, especially for young women, a proof of fidelity. However, in this study, 24.9% of the boys and 9.7% of the girls who reported being alone or in an uncommitted relationship did not use a condom in the last relationship, a situation for which the justification of trust in the partner does not apply, since exposure to risk is unrelated to being a known person or not.

Regarding drinking behavior, 14% scored between 8 and 40 in the AUDIT test. In the study by Martins et al.²⁷, the same instrument was applied to 1,227 students from two public schools in a city in the state of São Paulo and identified 218 students (17.8%) as positive (score equal to or greater than 8), that is, an even higher proportion.

Detailing this data from the present study, it is verified that 10.3% made a risky use of alcohol, which is disturbing, taking into account what is affirmed by Furtado and Yosetake²⁸, for whom even young people who score between 8 and 15 and are not showing current problems are running the risk of having health problems, suffering

or causing injuries, having legal or social problems, violence and poor performance at work in the near future.

The harmful use was 1.8%, which already allows to diagnose these adolescents as having a dysfunctional or maladaptive drinking pattern, which can cause a wide variety of problems, although they do not yet satisfy the addiction criteria²⁹. Young men often begin drinking in adolescence, but it takes some time to develop addiction, which usually only happens in adulthood. However, in this study, 11 youngsters (2%) evidenced this condition, characterized by physiological, cognitive and behavioral signs and symptoms, which demonstrate that the main priority in the individual's life becomes the use of alcohol while other activities sit in the backstage³⁰.

Thus, experts indicate that prevention work may be distinct for adolescents who do not use alcohol or with a low risk use and those who adopt a risk-prone and/or harmful use. Silva and Miguel³¹ say that most of the problems associated with alcohol consumption are not caused by people diagnosed with alcohol dependence, but by a larger group of individuals who make harmful use of alcohol and thus place others and themselves at risk.

Based on this finding, the possibility of interventions focused on reducing the alcohol consumption of this public was discussed. A technique developed for this purpose was the brief intervention that, in general, aims to promote a fast, economic and effective service, based on the cognitive model of dependence. It aims to promote knowledge about the possible consequences of this drinking pattern, increase self-efficacy and motivation to curb consumption through certain strategies³¹.

The PeNSE³² survey also investigated the use of alcoholic beverages and results evidenced that 71.4% of schoolchildren have already tried them in their lifetime, with female and private school participants having a significantly greater pattern in this aspect. In addition, this research shows that the capital in which the adolescents show a higher pattern of experimentation is the same as this study. Consumption during the last 30 days³², considered as regular consumption of alcoholic beverage, was 27.3% for the capital cities and the Federal District, and there was no significant difference between genders. However, when evaluated, episodes of drunkenness are significantly more frequent among boys (23.3%) than among girls, showing that around one in five schoolchildren were already intoxicated (22.1%).

In this research, the result for drunkenness episodes was 31.1% and boys again prevailed in this behavior; even adolescents with low risk use showed a binge drinking percentage of 21.1%. This typical pattern of drinking among young people, commonly referred to as binge or drunk drinking, is identified as drinking a quantity of 5 doses for men and 4 doses for women in a single occasion³³, but in the AUDIT instrument, identification is given with a greater number of doses (6 or more), regardless of gender.

As for the result of the gender variable, of the 10 identified with harmful use, only one was a girl; however, of the 11 identified with possible dependence, seven were girls. This may occur because women have a slower alcohol metabolism, making them more susceptible to harm, even by ingesting lower levels of alcohol and for shorter periods^{34,35}.

The study by Strauch et al.³⁶ conducted with 1,056 adolescents from the city of Pelotas found a significant relationship between risk behaviors such as drinking and having sex or drinking and smoking. The PeNSE¹⁹ research identified that the combined use of psychoactive substances increased the likelihood of sexual intercourse, with or without a condom, with greater intensity for the former.

In this study, 47.3% of adolescents who started sexual life said that they had used alcohol before having sex, and among those who responded that they used it often, only 41.7% used it in the first sexual intercourse. Of those who stayed or are alone, 100% pointed out that they "sometimes" use alcohol before sexual intercourse ($\chi^2 = 21.476$, $p = 0.001$). Therefore, single teenagers are likely to attend parties and friends' gatherings and, in these contexts, ingest high doses of alcohol and have sex. Data also showed that students who have already started sexual activity also have a higher score in the AUDIT, indicating a higher risk of these adolescents suffering consequences for their behaviors.

In a national study³⁷ with 17,371 students from 27 Brazilian capitals, it was found that, for adolescents who had had intercourse in the month prior to the survey, the likelihood of also using illegal drugs in the same period was twice as high and that the propensity to use alcohol was about 70% higher. Alcohol, tobacco and illegal drugs abuse were more prevalent among participants who had recently had unprotected sex compared to those who had used condoms.

The result of this study indicated that 57.7% of the adolescents who indulged in binge drink-

ing had already had sexual intercourse, while among those who never did, only 15.9% had already started sexual life. These data go in the same direction as a study³³ with 4,071 university students in New Zealand that found high prevalence of binge drinking – five doses for men and four for women – and high prevalence of risky or unwanted sex experiences attributed to the respondent's own drinking or consumption of other drugs. Women had more reports of unwanted sexual advances due to consumption by other people and men, more reports of unsafe sex. It should be noted, however, that high levels of alcohol consumption and sexual behaviors in a single population may only coincide and not have a causal relationship between them.

Final considerations

Despite the importance of the data presented and the implications for prevention among adolescents, some limitations should be mentioned: since a self-report questionnaire was used, questions were subject to interpretation by the participants and, due to prejudice and taboos in relation to the behaviors surveyed, there may have been a bias in the information provided by adolescents.

As for the results that stood out in this study, one of them was about binge drinking. Even low-risk drinkers have evidenced this pattern of use, which is becoming a cultural behavior at festive

and fun times. This type of drinking affects decisions, judgment and discernment, improperly increasing exposure to risks. Thus, there is a need for further study and development of projects that inform and sensitize parents, educators and health professionals about this way of drinking and its consequences.

It is also considered important that adolescents who make harmful use and/or show potentially addictive dependence be identified and that prevention programs be developed, such as the already mentioned brief intervention model. Regarding sexual initiation, it is essential to carry out more research addressing sexual relations among single young people, since this study showed a possible lower use of condoms for this part of the population, especially among boys. The context (and culture) of casual sexual intercourse with little affective and intimate involvement, as well as anxiety about performance considered necessary in the situation, may be obstacles to the use of condoms among adolescents and young people. Further studies investigating the relationship between alcohol use and unprotected sexual intercourse are required, since there are diverse factors that interfere in this interrelationship. Adolescence is a moment of absolute search for pleasure, in which individuals, inserted in a culture that values intense, unrestricted and immediate pleasure, have less internal resources to assess risks. Based on this fact, public policies must occur uninterruptedly in order to minimize the risks of these habitual behaviors and change the way people think.

Collaborations

L Dallo worked on data collection and RA Martins in the statistical analysis. Both made the construction of the manuscript: theoretical conception, discussion of the data and final revision of the article.

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