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SCHOOL ADOLESCENTS: ASSOCIATION BETWEEN THE BULLYING EXPERIENCE AND THE ALCOHOL/DRUG CONSUMPTION[1]

Rosana Santos Mota[2], Nadirlene Pereira Gomes[3], Luana Moura Campos[4], Kátia Cordélia Cunha Cordeiro[5], Cristiane Nazaré Pamplona de Souza[6], Climene Laura de Camargo[7]

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[2] Ph.D. Student in Postgraduate Program in Nursing UFBA. Nurse at the University Hospital Professor Edgar Santos. Salvador, Bahia, Brazil. E-mail: rosana17santos@yahoo.com.br

[3] Ph.D. in Nursing. Professor UFBA Nursing School. Salvador, Bahia, Brazil. E-mail: nadirlenegomes@hotmail.com

[4] Master's Degree Student Postgraduate Program in Nursing UFBA. Salvador, Bahia, Brazil. E-mail: lmc_luana@hotmail.com

[5] Master's Degree Student Postgraduate Program in Nursing UFBA. Salvador, Bahia, Brazil. E-mail: katiaccc@yahoo.com.br

[6] M.Sc. in Mathematics. UFBA. Salvador, Bahia, Brazil. E-mail: cpamplonasouza@gmail.com

[7] Ph.D. in Nursing. Professor UFBA Nursing School. Salvador, Bahia, Brazil. E-mail: climenecamargo@hotmail.com

ABSTRACT

Objective: to estimate the prevalence of high risk for the adolescents' experience of bullying and their association with alcohol/drug use.

Method: cross-sectional study carried out at a public school in Salvador, Bahia, Brazil. The data collection was carried out through a standardized form with 239 adolescents between October/2014 and January/2015. The data were processed in the Stata Program version 12.

Results: the study showed a high prevalence of high risk for direct aggression (45.61%), relational (43.5%) and victimization (55.23%). A statistically significant association was identified between the high risk for direct aggression and the consumption of alcoholic beverages, as well as between the relational bullying and marijuana consumption.

Conclusion: the interrelation between school violence and the consumption of alcohol and other drugs stands out, which demands the development of educational actions, in the school context, to prevent and deal with these issues.

DESCRIPTORS: Adolescent. Bullying. Alcoholism. Drug users. Nursing Research.

ADOLESCENTES ESCOLARES: ASSOCIAÇÃO ENTRE VIVÊNCIA DE *BULLYING* E CONSUMO DE ÁLCOOL/DROGAS

RESUMO

Objetivo: estimar a prevalência de alto risco para a vivência de *bullying* por adolescentes escolares e sua associação com o uso de álcool/drogas.

Método: estudo transversal realizado em uma escola pública de Salvador, Bahia, Brasil. A coleta dos dados ocorreu por meio de um formulário padronizado, com 239 adolescentes, entre outubro/2014 e janeiro/2015. Os dados foram processados no Programa *Stata* versão12.

Resultados: o estudo revelou elevada prevalência de alto risco para agressão direta (45,61%), relacional (43,5%) e vitimização (55,23%). Foi identificada associação estatisticamente significante entre o alto risco para agressão direta e o consumo de bebidas alcoólicas, bem como entre o *bullying* relacional e o consumo de maconha.

Conclusão: destaca-se a inter-relação entre a violência escolar e o consumo de álcool e outras drogas, o que demanda o desenvolvimento de ações educativas, no âmbito escolar, para prevenção e enfretamento desses agravos.

DESCRITORES: Adolescente. Bullying. Alcoolismo. Usuários de drogas. Pesquisa em Enfermagem.

ADOLESCENTES ESCOLARES: ASOCIACIÓN ENTRE VIVENCIA DE BULLYING Y CONSUMO DE ALCOHOL/DROGAS

RESUMEN

Objetivo: estimar la prevalencia de alto riesgo para la vivencia de bullying de los adolescentes escolares y su asociación con el uso de alcohol / drogas.

Método: estudio transversal realizado en una escuela pública de Salvador, Bahia, Brasil. La recopilación de los datos ocurrió por medio de un formulario estandarizado, con 239 adolescentes, entre octubre/2014 y enero/2015. Los datos se procesaron en el programa Stata versión12.

Resultados: el estudio mostró una alta elevada prevalencia de alto riesgo para agresión directa (45,61%), relacional (43,5%) y victimización (55,23%). Se identificó una asociación estadísticamente significativa entre el alto riesgo para agresión directa y el consumo de bebidas alcohólicas, así como entre el bullying relacional y el consumo de marihuana.

Conclusión: se destaca la interrelación entre la violencia escolar y el consumo de alcohol y otras drogas, lo que demanda el desarrollo de acciones educativas, en el contexto escolar, para prevención y tratar estos temas.

DESCRIPTORES: Adolescente. Acoso escolar. Alcoholismo. Consumidores de drogas. Investigación en Enfermería.

INTRODUCTION

School violence has been a global problem with individual and collective damages, especially in the health field. In adolescence, the experience of bullying is common, either as a perpetrator or as a victim, which may be related to the experience of other damages present at this stage.[1-3]

The term bullying, also known as school violence or systematic intimidation, is characterized by an imbalance of forces, in which there is an intention to repeatedly and consistently harm and humiliate. Among the main classifications, these stand out: the direct bullying, which includes physical and verbal acts of aggression; the indirect, characterized by the social exclusion of others; and, victimization, which is related to aggressive actions of which the participants have been targets.[4] It should be highlighted that in adolescence, the victim has few resources to avoid and/or defend themselves against the aggression.[5]

The phenomenon manifests itself in different forms: verbal, through insults, pejorative nicknames, cursing and humiliating comments; physical, such as spitting and hitting; or cyber bullying, which occurs through virtual environments. Bullying practices may also include attitudes such as gossip and social exclusion.[2,6]

National and international studies point to the physical and mental illness of adolescents who experience bullying. Among the health problems are: headache, eating disorders, epigastric pain, sleep disorder, anxiety, depression, negative self-esteem and suicide attempt.[1,3-4,7-9] Added to this scenario is the low school performance.[3] A North-American study also considers that the adolescent who is involved with bullying has potential for other health risk behaviors, for example, the use of cigarettes.[10] Faced with such problems, which may even remain in adulthood, the financial costs to the social and health sectors must be considered.[4,11]

Considering all this context of violence among adolescents, the Health in School Program (HSP) is an important strategy to deal with the phenomenon, based on the articulation between education and health professionals, especially nurses. In this sense, it should be highlighted the incentive to the culture of peace and the preventive actions against the consumption of alcohol and other drugs.[12] For that, studies that address the interface between bullying and drugs are essential.

Based on the assumption that the experience of bullying affects the physical, psychological and social health of adolescents and that it can be interrelated with other diseases, it is questioned: is there an association between the experience of bullying by adolescents and alcohol and drug use? In this perspective, the objective is to estimate the prevalence of high risk for the school adolescents' experience of bullying and its association with alcohol/drug use.

METHOD

This is a cross-sectional cutout from the project "University and public school: looking for strategies to face the factors that interfere in the teaching/learning process", under the financing of the Foundation for Research Support of the State of Bahia (FAPESB - *Fundação de Amparo à Pesquisa do Estado da Bahia*).

The data collection was carried out between October 2014 and January 2015, in a public school located in a peripheral neighborhood of the city of Salvador, Bahia, Brazil. The intended population consisted of 276 students of the school day shift. However, due to the students' absences, 239 adolescents participated in the study. This sample is significant for the desired population, since, in view of the stratified sample plan, proportional to the number of

students per class, 210 members are sufficient, with a maximum error of 2.35%. As inclusion criteria were defined: belong to the age group classified as adolescence by the Ministry of Health (10 to 19 years old) and be regularly enrolled in school. All the students who during two contact attempts were not found in the school environment were excluded.

The data were collected through a standardized form. The high risk for bullying was adopted as a dependent variable (high risk for direct aggression, high risk for relational aggression, high risk for victimization). This classification was established through the Peer Victimization and Aggression Scale (EVAP - *Escala de Vitimização e Agressão entre Pares*). These are forms of direct aggression: physical (pushing, kicking, punching), verbal (provoking, threatening, cursing) and retaliation actions against attacks. It is considered as relational aggression the behavior that impairs the victim's relationship with a group of equals, such as: excluding, nicknaming, encouraging fighting and depreciating. The victimization relates to aggressive actions in which participants were targeted.

These items were evaluated based on five points, measuring the frequency of the behaviors studied (never, almost never, sometimes, always and almost always, scored from 1 to 5 respectively) of the 18 items contained in the instrument. The sum of the scores was grouped having as cutoff point the 40th and 60th percentiles. These percentiles allowed to categorize the dimensions into three levels: low risk (dimension n≤ than the value of the 40th percentile); medium risk (dimension n≥ than the 40th percentile and < than the 60th percentile); high risk (dimension n>= than the value of the 60th percentile),[13] the latter being chosen as a parameter for this study, considering it with a greater probability for the consumption of alcohol and drugs. The independent variables were alcohol and marijuana use in the last 30 days; the sociodemographic aspects (gender, age, race, school grade, religion, family life, work) and sexual activity.

The data were analyzed and presented in a descriptive way (tables of absolute and relative simple frequencies). The amplitude of the association between the exposure factors and the dependent variable was expressed in the prevalence ratio (PR) and respective 95% confidence intervals (95% CI) for the statistical inference. In order to obtain the independent effect of the risk factors, the multivariate analysis was performed with the support of the logistic regression technique, and Odds ratios (ORs) and their respective 95% confidence intervals were calculated, with adjustment for co-variables, using the backward method. This last analysis was used for the variables that were associated with the bivariate model. To compare the proportions of marijuana use (Table 3), according to the high risk for the bullying experience, the Fisher's exact test was used, considering the predetermined level of significance of $p<0.05$. This technique was used in view of the small event count observed in each group.

The study was approved by the Research Ethics Committee of the Nursing School of the Federal University of Bahia, under the co-substantiated opinion No. 384208, CAAE: 19576913.4.000.5531. In addition, the students who voluntarily participated in the research agreed with the Free and Informed Consent Term, as well as the Free and Informed Consent Term was signed by their legal representative.

RESULTS

The prevalence of adolescents with high risk for direct aggression was 45.61%. The majority were male (59.63%); aged under 15 years old (57.80%); self-declared black (77.98%); without religion (60.55%); attended the 6th or 7th year of elementary school (67.89); did not live with the nuclear family, composed of the father and mother (56.88%) and said they did not contribute financially to the family's support (97.25%). Regarding the sexual profile, 59.63% had already started sexual activities.

The high risk for the practice of relational aggression had a prevalence of 43.51% among the adolescents of the school studied. The students involved in this type of violence were mostly men (60.58%); aged under 15 years old (61.54%); self-declared black (80,77%); who pronounced not to congregate in any religion (59,62); who attended the 6th or 7th year of elementary school (68.27%); who did not cohabit with both parents (54.81%) and who reported not contributing financially to the family's support (94.23%). Among the adolescents at high risk for relational aggression, 57.69% had already had their first sexual intercourse.

The prevalence of high risk for victimization was 55.23%. Among these adolescents, the predominance was of women (55.45%). The majority were under 15 years old (59.85%); self-declared black (75.76%); reported not belonging to any religion (54.55%); attended the 6th or 7th year of elementary school (68.18%); did not live with the father and the mother simultaneously (59.09%); did not contribute financially to the support of the family (96.26%); had started sexual activities (64.39%) and almost 2% had made someone pregnant or had been pregnant.

The results of the bivariate analysis (Table 1) indicated a positive and statistically significant association between the high risk for direct aggression and alcohol consumption (PR=2.26 and 95% CI: 1.25–4.11), as well as a borderline association between bullying and not affirming to belong to any religion (RP=1.73 and 95% CI: 1.03-2.98). Other factors associated with bullying of the direct type, but without statistical significance, are: male gender (RP=1.50 and 95% CI: 0.91-2.54), black race (RP=1.15 and 95% CI: 0 , 63-2.11), do not live with both parents (PR=1.13 and 95% CI: 0.67-1.88), do not work (PR = 2.31 and 95% CI: 0.59-8 , 95) and having started sexual activities (PR=1.36 and 95% CI: 0.80-2.32).

Based on the results of the multivariate analysis (Table 1), in the initial model with all the co-variables, the only exposure factor that remained significantly and independently associated with the high risk for relational aggression was alcohol consumption (PR=2.28 and 95% CI: 1.19- 4.35), being maintained in the final model (PR=2.13 and 95% CI: 1.17-3.90).

Table 1 - Association between the experience of bullying (direct) by adolescents and sociodemographic, sexual and alcohol consumption variables. Salvador, BA, Brazil, 2015 (n= 239)

Variables	n	Prevalence of high risk for direct aggression	Prevalence ratio CI (95%)	Initial model OR 95% CI	Final model OR 95% CI
Alcohol					
No	178	40.45	1		
Yes	61	60.66	2.26 (1.25 – 4.11)	2.28 (1.19 – 4.35)	2.13 (1.17 – 3.90)
Gender					
Man	129	50.39	1.50 (0.91 – 2.54)	1.58 (0.90 – 2.75)	--------
Woman	110	40.00	1		
Age (years)					
10 to 14	143	44.06	0.85 (0.50 – 1.43)	0.83 (0.47 - 1.43)	--------
15 to 19	96	47.92	1		
Race					
Not black	56	42.86	1		
Black	183	46.45	1.15 (0.63 – 2.11)	1.21 (0.64 – 2.29)	--------
Grade					
6/7 year	155	47.74	0.78 (0.45 – 1.33)	0.83 (0.43 – 1.60)	--------
8/9 year	84	41.67	1		
Religion					
Yes	112	38.39	1		
No	127	51.97	1.73 (1.03 – 2.98)	1.63 (0.95 – 2.73)	--------
Family life					
Parents	107	43.93	1		
Others	132	46.97	1.13 (0.67 – 1.88)	1.04 (0.60 – 1.81)	--------
Work					
Yes	11	27.27	1		
No	228	46.47	2.31 (0.59 – 8.95)	3.46 (0.82 – 14.56)	--------
Sexual intercourse					
No	152	42.76	1		--------
Yes	87	50.57	1.36 (0.80 – 2.32)	1.02 (0.52 – 2.01)	

* OR: *Odds ratios*; Logistic regression. CI: Confidence Interval of 95%

Regarding the relational aggression, the bivariate analysis (Table 2) showed a positive association between the high risk for relational aggression and the co-variables: alcohol consumption (PR=1.63 and 95% CI: 0.90-2.91), male gender (PR=1.60 and 95% CI: 0.95–2.69), lower age group (PR=1.13 and 95% CI: 0.67-1.91), black race (PR=1.52 and 95% CI: 0.82 -2.83), lower schooling (PR=1, 53 and 95% CI: 0.82 – 2.85), not having a religion (PR=1.58 and 95% CI: 0.94–2.66) and have already started sexual activities (RP=1.56 and 95% CI: 0.92-2.66).

Regarding the high risk of victimization, a positive association between this condition and the consumption of alcoholic beverages (PR=1.23 and 95% CI: 0.68-2.21) was observed, as well as not living

with both parents (PR=1.41 and 95% CI: 0.84-2.36). The high prevalence of alcohol consumption in the last month of this study (59.02%) stands out among adolescents at high risk for victimization.

Table 2 - Association between the experience of bullying (relational and victimization) by adolescents and sociodemographic, sexual and alcohol consumption variables. Salvador, BA, Brazil, 2015. (n=239)

Variables	total n.	Prevalence of high risk for relational aggression	Prevalence ratio (PR) CI (95%)	Prevalence of high risk for victimization	Prevalence ratio (PR) CI (95%)
Alcohol					
No	178	40.45	1	53.93	1
Yes	61	52.46	1.63 (0.90 – 2.91)	59.02	1.23 (0.68 – 2.21)
Gender					
Man	129	48.84	1.60 (0.95 – 2.69)	55.04	1.01 (0.60 – 1.69)
Woman	110	37.27	1	55.45	1
Age					
10 to 14 years old	143	44.76	1.13 (0.67 – 1.91)	55.24	1.00 (0.59 – 1.68)
15 to 19 years old	96	41.67	1	55.21	1
Race					
Not black	56	35.71	1	57.14	1
Black	183	45.90	1.52 (0.82 – 2.83)	54.64	0.90 (0.49 – 1.65)
Grade					
6/7 year	155	45.81	1.53 (0.82 – 2.85)	58.06	0.72 (0.42 – 1.23)
8/9 year	84	39.29	1	50.00	1
Religion					
Yes	112	37.50	1	53.57	1
No	127	48.82	1.58 (0.94 – 2.66)	56.69	1.13 (0.68 – 1.8)
Family life					
Parents	107	43.93	1	50.47	1
Others	132	43.18	0.97 (0.58 – 1.62)	59.09	1.41 (0.84 – 2.36)
Work					
Yes	11	54.55	1	63.64	1
No	228	42.98	0.62 (0.18- 2.11)	54.82	0.83 (0.44 – 1.56)
Sexual intercourse					
No	152	39.47	1	55.92	1
Yes	87	50.57	1.56 (0.92 – 2.66)	54.02	0.96 (0.73 – 1.25)

*CI: Confidence Interval of 95%

The research has identified (Table 3) association between the marijuana use and the high risk for relational aggression. All the adolescents who reported using the substance were at high risk for such violence. Although not statistically significant, 75% of those who used the drug in the last month of this survey had a high risk for direct aggression. The same percentage was identified between the marijuana use and the high risk for victimization.

Table 3 - Association between the marijuana use by adolescents according to manifestations of violence. Salvador, BA, Brazil, 2015. (n= 239)

	Marijuana Consumption		
	Yes n=4 (%)	No n=235 (%)	p – value
Direct aggression			0.33
Yes	3 (75.00)	106 (45.11)	
No	1 (25.00)	129 (54.89)	
Relational aggression			0.03
Yes	4 (100.00)	135 (57.45)	
No	0	100 (42.55)	
Victimization			0.63
Yes	3 (75.00)	129 (54.89)	
No	1 (25.00)	106 (45.11)	

*Fisher's exact test. Significance level p≤0.05.

DISCUSSION

The analysis of the data collected allowed to know the prevalence and profile of the adolescents with high risk for direct aggression, relational aggression and victimization; as well as identifying the association between these types of violence and the alcohol/drug use. It should be highlighted that the only drug mentioned, with the exception of alcohol, was marijuana.

It reveals that the percentage of involvement of adolescents in bullying was higher than 40%, a much higher proportion than that presented in a cross-sectional study with data from the National School Health Survey, which brought together 109,104 participants from the ninth grade of public and private schools, whose percentage was 20.8%.[14] It is also higher than a research with students from Europe and North America, in which one-third of students in this age group practice bullying.[15]

Regarding the victimization (55.23%), the prevalence was lower than the one presented in a study on the theme, carried out in the countryside of Bahia, Brazil, which indicated a percentage of around 76.5% in a sample of 68 students.[16] At the international level, the proportion was close to that of a research carried out in England with 6,208 adolescents (54%),[6] and was higher than the prevalence identified in children and adolescents in the United Kingdom (25%) and in the United States (36%).[7]

Regarding the gender, the study points to the predominance of the adolescent women as a victim, while the profile of the aggressor being mostly of men. As well as this finding, a survey conducted in Santa Catarina, Brazil, with 409 children and adolescents, showed that the majority that declared themselves victims was female. In contrast, there was a predominance of the male gender in acts of bullying.[2] Another population-based investigation, built with students from the country's public and private school system, also found that boys are associated with the aggressor's profile.[14] A study carried out in Rio Grande do Sul, Brazil, with 1,230 adolescents from the public school system, pointed out that boys are more than twice as likely to be aggressors as girls.[17] At the International level, a research conducted in Mexico with 2,347 young students, aged from 10 to 27 years old, also points to the greater involvement of boys in situations of aggression between peers.[18]

The fact that men are the most involved in perpetrating bullying may be related to gender inequality, which forms the male identity, which imposes the stereotype of aggressive, fearless and virile man.[17] Such behavior is perceived in a study with 337 adolescents from Florianópolis, Brazil, which reveals the aggressive students' desire to be physically stronger.[19] In this sense, the cultural influence in bullying acts of boys is considered, making them believe, for example, that if they stop fighting, they will be humiliated in front of their colleagues.[17]

The uneven construction of gender also imposes on men the early initiation of their sexual and reproductive activities. This initiation happens due to the boy's need, still in his teens, to assert his virility to society.[20] This essential affirmation of masculinity represents another way to ensure the male identity required socially for boys, especially in this stage of life. The search for belonging to a group can explain the association found between the practice of bullying and the sexual activities already started among the male adolescents of this study.[17,21]

Another point that draws attention is that, although they have already started sexual activities, those involved in bullying are usually adolescents up to 15 years old, who attend the first years of elementary school. This age group may be associated with immaturity in establishing interpersonal relationships, propitiating conflicts. A study conducted in three islands of the Pacific, with 4,122 students, also identified that the youngest adolescents, up to the age of 14, are the most involved in a bullying situation.[22] A quantitative research carried out with 1,230 school children in Rio Grande do Sul, Brazil, also identified that students aged from 13 to 14 years old are more likely to practice aggression among peers.[17]

The age profile of these adolescents may justify the need not to work to contribute to the family's livelihood. However, the proportion of relational bullying and victimization experiences were higher among adolescents who reported working. To perform a paid activity, at this stage of life in the Brazilian society, is related to the low socioeconomic conditions experienced by adolescents. A research with a similar public corroborates the association between low socioeconomic conditions and the experience of bullying. [23]

Not living with both parents provides a greater chance of experiencing bullying. A similar study was carried out in São Luís, Maranhão, Brazil, which warns about the greater risk of aggression and victimization among adolescents with families in which the maternal or paternal figures are missing or absent.[24] It is important to mention that the family characteristics can be predictive of transgressive behavior. In this context, adolescents who experi-

ence violence in the family can reproduce it in other spaces, for example, the school.

In this sense, international studies indicate the relationship between the experience and the reproduction of violence.[6,11] National and international researches shows that many adolescents experience a family day-to-day permeated by hostility, exposing them to unequal power relations in which violence is used as a form of discipline and conflict resolution. It is important to observe the fact that adolescents exposed to domestic or family violence tend to present serious social, physical and mental health problems. This scenario favors the reproduction of such behaviors by the adolescents, who project the same behaviors in the school environment, with colleagues and teachers.[6-7,9,16,24]

As well as "not living with both parents", a directly proportional relationship between bullying and not having a religion was identified, so that non-religious adolescents are more vulnerable to this practice. A similar result was found in a study with adolescents from all the Brazilian states.[12]

The study also points to the greater exposure of black students to experiencing bullying. Although black people are the majority in the city where the study was conducted, this population continues to be the most vulnerable to experience the problem even in populations with varied racial characteristics, as indicated by a national survey with students of the private and public system of Brazil.[25]

A cross-sectional study that analyzed data from the National School Health Survey (PeNSE), conducted by IBGE, in partnership with the Ministry of Health, showed that in the sample of students studied in 2012, the experience of bullying was reported by a fifth of the students, predominating in boys of the black race.[26] There was also the warning about the similarity between the profile of the direct and the relational aggressor. This similarity comes from a set of characteristics of the individual who practices bullying, regardless of the form of aggression. Other studies also corroborate the fact that male and black adolescents are the main ones involved in the practice of bullying.[14,26]

It should be highlighted that the institutional racism experienced by the black population in societies is one of the main factors that interfere both in the violence experienced and in the violence practiced by black adolescents, in addition to contributing to increase the vulnerability of these adolescents to the consumption of alcohol and drugs.[15]

In addition to these characteristics, the study also points to the association between the high risk for direct aggression and the alcohol consumption. A survey involving 109,104 adolescent students from Brazilian schools evidenced the association between the ingestion of alcoholic beverage by this public with the aggression among the peers.[14] A cohort study, conducted in European countries with 18,558 participants, adds that the experience of bullying has been associated with alcohol intake, even in adulthood.[11] This consumption can be a precipitating and/or intensifying element of violence among adolescents.[12] This happens because the consumption of these substances can act as a stimulus for adolescents to take a more aggressive and more involved behavior in situations of violence, making them more socially uninhibited.

However, the relational type aggression seemed to be related to the use of marijuana. This substance has a Central Nervous System (CNS) depressant effect and it is also associated with depressive disorders in young people in the United States of America,[27] which may inhibit direct aggression. However, they tend to contribute to attitudes that undermine the victim's relationships with other peers, through provocation, depreciation, exclusion, among others.

It should also be highlighted the association between the victims of bullying with the consumption of alcoholic beverages and marijuana. Similarly, a study involving 36,687 adolescents from Chilean schools confirms the relationship between the victimization and the increased risk of alcohol and marijuana use[10] A Brazilian research conducted with high school students in Cuiabá, Mato Grosso, revealed that of the adolescents who are victims of bullying, 44.1% consume alcohol and 5.5%, other drugs. Among those who suffered and also exercised violence, there was a prevalence of consumption of 57.4% for alcohol and 11.4% for drugs.[28]

This context of vulnerability to the experience of bullying, as well as its association with alcohol and marijuana consumption, points to the need for strategies to deal with this problem, considering the repercussions of these problems on adolescents' health and quality of life. Recognizing these problems, the Brazilian government has been implementing public policies. On November 6, 2015, the Law No. 3,185 was sanctioned, establishing a Program to Fight the Systematic Intimidation (bullying) with subsidies to support actions of the Ministry of Education and State and Municipal Secretariats of Education, as well as those of other organs of interest throughout the national territory.[29] Regarding the drug consumption, the Ministry of Health

has released the manual "Basic Guidelines for the Comprehensive Care to the Adolescents' Health in Schools and Basic Health Units", which establishes health surveillance actions to identify substances abuse and other risk factors and health protection regarding adolescents.[30]

In the context of these policies, spaces of reflection about the care in the school scope are necessary in order to prevent bullying among adolescents. These educational scenarios should involve not only students and teachers, but also family members, since school violence and the use of alcohol and/or marijuana may reflect a behavior learned in the domestic environment. It should be emphasized that the promotion of these health education actions should not be restricted to the responsibility of the school sector, so that the interface with health professionals will certainly increase the chances of facing the problem. In this sense, some public regulations have already been established in an attempt to favor the approximation of health with the school environment, such as the Health in School Program (HSP), created in 2007, to promote health and the culture of peace.[31]

CONCLUSION

The study identified a high prevalence of high risk for direct aggression (45.61%), relational aggression (43.5%) and victimization (55.23%). The research points to a statistically significant association between the high risk for direct aggression and the consumption of alcoholic beverages. An association between the bullying (relational and victimization) and the alcohol intake was also identified in the last month of the study. Regarding the marijuana consumption, there was an association with statistical significance with bullying of the relational type.

Although the research results do not indicate a causal relationship due to the limitation of the study design, there must be strategies for coping with violence in the school environment, as well as regarding adolescents' consumption of alcohol and other drugs. For the prevention of bullying, it is necessary to train teachers and the pedagogical teams to implement the actions of discussion, prevention, orientation and solution of the problem, as foreseen in legislation. Regarding the consumption of alcohol and other drugs, it is emphasized the importance of identifying the pattern of consumption in order to program actions to reduce damages, as well as strategies to prevent the consumption.

It is important to emphasize that the actions to prevent and deal with these diseases must be articulated between the health and education sectors. In this sense, the strengthening of the HSP is a unique possibility for this, being the professionals of the Family Health Strategy, as the nurse, potential mobilizing agents for the development of health education actions in the school environment for prevention and reduction of violence and alcohol/drug use.

Based on the scientific evidences of the study, the findings may subsidize health and education professionals in the process of identifying groups of adolescents that are vulnerable to experiencing bullying, as well as those who are already involved in it, whether as a victim or as a bully. Also, to draw up strategies to confront this problem from the elaboration of care plan that contemplates the particularities of each group. From this perspective, it is suggested to the exposed group a care plan focused on preventive actions, contemplating the risks to other injuries, such as the use of alcohol and other drugs; and for the second group, actions that favor the breakdown of school violence, recognition of the demands of adolescents and the search for strategies that assure a healthy adolescence for school children.

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Correspondence**:** Rosana Santos Mota
Universidade Federal da Bahia
Campus Universitário do Canela
Rua Basílio da Gama, s/n, 3º andar
40110-060 - Canela. Salvador, Bahia, Brazil
E-mail: rosana17santos@yahoo.com.br

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