Esc Anna Nery 2020;24(2):e20190284

Alcohol, tobacco and marijuana use: repercussions on students' quality of life

Uso de álcool, tabaco e maconha: repercussões na qualidade de vida de estudantes

Uso de alcohol, tabaco y marihuana: repercusiones en la calidad de vida de los estudiantes

Angelica Martins de Souza Gonçalves[1]
Mônika Wernet[1]
Carolina dos Santos Cardoso da Costa[1]
Fernando José Guedes da Silva Júnior[2]
Adaene Alves Machado de Moura[3]
Sandra Cristina Pillon[3]

1. Universidade Federal de São Carlos, Departamento de Enfermagem. São Carlos, SP, Brasil.

2. Universidade Federal do Piauí, Departamento de Enfermagem. Teresina, PI, Brasil.

3. Universidade de São Paulo, Escola de Enfermagem. Ribeirão Preto, SP, Brasil.

ABSTRACT

Objective: To analyze the use of alcohol, tobacco and marijuana and their repercussions on the quality of life of high school adolescents. **Method:** Analytical study with sample of 169 high school students. We applied a questionnaire containing sociodemographic evaluation, screening test of the involvement with alcohol, cigarette and other substances, and Quality of life assessment scale. Data were analyzed using descriptive and inferential statistics. **Results:** The main results showed that in the last three months, tobacco use was associated with poor / very poor quality of life, no use with very good / good quality of life and health satisfaction. Students who did not use alcohol consider their quality of life to be very satisfactory or satisfactory in relation to the environment. **Conclusion and implications for practice:** The hypothesis of the relationship between psychoactive substance use and aspects of quality of life was confirmed.

Keywords: Quality of Life; Street Drugs; Mental Health; Public Health; Students.

RESUMO

Objetivo: analisar o uso de álcool, tabaco e maconha e suas repercussões na qualidade de vida de adolescentes que cursam o ensino médio. **Método:** Estudo analítico, com amostra de 169 estudantes de Ensino Médio. Foi aplicado um questionário contendo avaliação sociodemográfica, Teste de triagem do envolvimento com álcool, cigarro e outras substâncias e Escala de avaliação da qualidade de vida. Os dados foram analisados por meio de estatísticas descritivas e inferenciais. **Resultados:** Os principais resultados mostraram que nos últimos três meses o uso de tabaco foi associado a uma qualidade de vida considerada ruim/muito ruim, o não uso com qualidade de vida muito boa/boa e satisfação com a saúde. Os estudantes que não usaram álcool consideram sua qualidade de vida muito satisfatória ou satisfatória em relação ao ambiente. **Conclusão e implicações para a prática:** Foi confirmada a hipótese da relação entre uso de substâncias psicoativas e aspectos da qualidade de vida.

Palavras-chave: Qualidade de Vida; Drogas Ilícitas; Saúde Mental; Saúde Pública; Estudantes.

RESUMEN

Objetivo: analizar el consumo de alcohol, tabaco y marihuana y sus repercusiones en la calidad de vida de los adolescentes de Enseñanza Media. **Método**: estudio analítico con muestra de 169 estudiantes de Enseñanza Media. Se aplicó un cuestionario que contenía una evaluación sociodemográfica, una prueba de selección de la participación en el alcohol, el cigarrillo y otras sustancias y la escala de evaluación de la calidad de vida. Los datos fueron analizados por medio de estadísticas descriptivas e inferenciales. **Resultados:** Los principales resultados mostraron que en los últimos tres meses el uso de tabaco tuvo asociación con una calidad de vida considerada mala / muy mala y el no uso con calidad de vida muy buena / buena y satisfacción con la salud. Los estudiantes que no usaron alcohol consideran su calidad de vida muy satisfactoria o satisfactoria en relación al ambiente. **Conclusión e implicaciones para la práctica:** Se confirmó la hipótesis de la relación entre uso de sustancias psicoactivas y aspectos de la calidad de vida.

Palabras clave: Calidad de Vida; Drogas Ilícitas; Salud Mental; Salud Pública; Estudiantes.

Corresponding author:
Angelica Martins de Souza Gonçalves
E-mail: angelica_enf@yahoo.com.br

Submitted on 10/01/2019.
Accepted on 01/06/2020.

DOI: 10.1590/2177-9465-EAN-2019-0284

INTRODUCTION

Quality of Life (QOL) refers to the perception of life and satisfaction with life. It is articulated with objectives and expectations projected in the particularities of a socioeconomic and cultural context.[1,2] Its thematization in adolescence has indications of expansion and deepening,[3] especially from cuttings, one of which is the use of psychoactive substances (PAS).

In Brazil, the early experimentation and use of PAS is a very common fact in the lives of adolescents, in which tobacco and alcohol are prominent.[4,5] And in terms of illicit substances, marijuana use is prevalent among adolescents. By the age of 15, when most of this group is in high school, most have at least experimented with both licit and illicit drugs.[6]

The discussion about QOL and use of PAS in adolescence is relevant, especially, given the need for adolescents to deal with typical desires, curiosities and pleasures to the phase, among them the use of PAS,[7] useful for educators and health professionals to implement specific actions for this audience. More recent Brazilian studies on QOL explore it in terms of eating habits, oral health, sports practices, as well as in the context of disabilities and chronic illness.[1,3] Excluding these last two, in the midst of the results, the use of psychoactive substances is recurrent.

The relationship between these two constructs, however, needs to be better known in the scientific field. In this sense, the hypothesis raised in the present study is that the use of PAS interferes with QOL. The aim of the study was to analyze the use of alcohol, tobacco and marijuana and their repercussions on the QOL of high school adolescents.

METHOD

Analytical study conducted at a state elementary and high school in a city in the interior of Sao Paulo State, Brazil, whose criterion of choice was to be located in a region of high social vulnerability, according to the Paulista Social Vulnerability Index.[8] Data were collected in October 2017. A simple random sample was made up of 169 (72.2%) students. The inclusion criterion was to be regularly enrolled in any high school grades. As an exclusion criterion, it was adopted not to be present in the classroom after two consecutive searches.

Data collection took place in the classroom with permission of the school board and consent of the acting teacher. The self-applied research questionnaire consisted of three parts: (I) Sociodemographic information (age, gender, religion, education, family income and occupation); (II) The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST); and (III) The World Health Organization Quality of Life (WHOQOL-bref).

ASSIST is an instrument recommended by the World Health Organization (WHO), validated and widely used in Brazil to screening the use of alcohol, tobacco and marijuana, based on scores of eight items that evaluates the frequency of use, use-related problems, concern about use by close people, impaired performance of tasks, unsuccessful attempts to cease or reduce use, feeling of compulsion and injectable use. ASSIST scores range from 0 to 8, with the total sum ranging from 0 to 39. The sum of response scores classifies the use of each substance as low risk (results less than three or less than 10, in the case of alcohol); abusive use (results between 4 and 26 or 11 and 26 for alcohol) and probable dependence (above 27 points).[9]

WHOQOL-BREF is an abbreviated version of the WHOQOL-100, an instrument developed by WHO and has validation for the Brazilian context. The instrument assesses QOL and consists of 26 items splif in four domains: physical (7 items), psychological (6 items), social (3 items) and environmental (8 items). Among them, one item refers to the assessment of QOL and another to satisfaction with health. The response scale assumes values between 1 and 5, with the smallest ones indicating worse quality of life and the bigger ones the better (except for items 3, 4 and 26).[10] It is considered an easy-to-apply tool for assessing and monitoring health problems.[11]

Data were compiled using Microsoft Excel 2000 and transferred to SPSS - version 22.0, license number 10250887, after double checking. Descriptive statistics were calculated for the socio-demographic data (absolute and percentage frequencies and measures of central tendency and dispersion). At the time of data collection, the school had 234 students enrolled in high school. Through sample calculation, performed by simple random sampling (considering a sampling error of 3% and a confidence level of 95%), a total of 175 students were estimated to be interviewed. Due to the losses (two refusals and four returned blank), the sample consisted of 169 students. To verify normality, the Shapiro-Wilk, Kolmogorov-Smirnov and Anderson-Darling tests were applied. Pearson's chi-square test was used for categorical variables. Confidence intervals were considered with 95% of reliability.[12]

This study has already been approved by the Research Ethics Committee of the Federal University of São Carlos, CAAE 29286614.3.0000.5504. The recommendations of Resolutions no. 466/2012 and 510/2016 of the National Health Council were met. To adolescents under 18 years of age, their respective legal representatives agreed to their participation.

RESULTS

Regarding socio-demographic characteristics, slightly more than half of the adolescents were male, aged 15 to 18 years old, professed a religion (76.3%), a minority studied and worked (24.7%), the prevalent family income was up to three minimum wages (46.5%).

Regarding the association between sociodemographic profile and the use of PAS in the last three months, female adolescents stood out in relation to alcohol and tobacco use. Regarding work and consumption behavior of PAS, a significant relationship was observed between students who work and use alcohol ($p = 0.019$) (Table 1).

Regarding substance use, alcohol, tobacco and marijuana were the most used, respectively, in the last three months and in life. Results differed among adolescents in the last three months for concomitant alcohol and tobacco use; alcohol and marijuana;

and tobacco and marijuana. Although no statistically significant values were observed, the prevalence is high for concomitant substance use in life (Figure 1).

It was also observed over the past three months that tobacco use was associated with poor / very poor quality of life. Conversely, students who did not use this substance considered their quality of life very good / good (p-value = 0.007). In addition, it was noted that use of alcoholic beverages (p-value = 0.044) and tobacco (p-value = 0.001) is associated with the health satisfaction of those who considered their quality of life as "indifferent". However,

Table 1. Socioeconomic information and substance use in the last three months (n = 169), Brazil, 2017.

		Total	Alcohol [n (%)]		Tobacco [n (%)]		Marijuana [n (%)]	
			Yes	No	Yes	No	Yes	No
Gender	Female	81 (47.9)	48 (59.3)[a]	33 (40.7)	21 (25.9)	60 (74.1)	18 (22.2)	63 (77.8)
	Male	88 (52.1)	33 (37.5)	55 (62.5)	16 (18.4)	71 (81.6)	18 (20.7)	69 (79.3)
Age group	15-16	97 (57.4)	45 (46.4)	52 (53.6)	21 (21.6)	76 (78.4)	20 (20.8)	76 (79.2)
	17-18	72 (42.6)	36 (50.0)	36 (50.0)	16 (22.5)	55 (77.5)	16 (22.2)	56 (77.8)
Religion	Catholic	62 (36.7)	35 (56.5)	27 (43.5)	14 (22.6)	48 (77.4)	11 (18.0)	50 (82.0)
	Evangelical	60 (35.5)	23 (38.3)	37 (61.7)	14 (23.3)	46 (76.7)	13 (21.7)	47 (78.3)
	Spiritist	7 (4.1)	3 (42.9)	4 (57.1)	1 (16.7)	5 (83.3)	2 (28.6)	5 (71.4)
	Atheist	10 (5.9)	5 (50.0)	5 (50.0)	3 (30.0)	7 (70.0)	3 (30.0)	7 (70.0)
	Agnostic	21 (12.4)	11 (52.4)	10 (47.6)	3 (14.3)	18 (85.7)	5 (23.8)	16 (76.2)
	Other	9 (5.3)	4 (44.4)	5 (55.6)	2 (22.2)	7 (77.8)	2 (22.2)	7 (77.8)
Family income (Minimum wages)*	≤ 1 MW	59 (37.1)	27 (45.8)	32 (54.2)	16 (27.1)	43 (72.9)	13 (22.0)	46 (78.0)
	2 to 3 MW	74 (46.5)	38 (51.4)	36 (48.6)	16 (21.6)	58 (78.4)	17 (23.0)	57 (77.0)
	≥ 3 MW	26 (16.4)	12 (46.2)	14 (53.8)	3 (12.0)	22 (88.0)	3 (12.0)	22 (88.0)
Work and study	Yes	41 (24.7)	26 (63.4)[b]	5 (36.6)	13 (32.5)	27 (67.5)	11 (26.8)	30 (73.2)
	No	125 (75.3)	53 (42.4)	72 (57.6)	23 (18.4)	101 (81.6)	24 (19.2)	101 (80.8)
Preventive program	Yes	55 (32.5)	28 (50.9)	27 (49.1)	13 (23.6)	42 (76.4)	9 (16.4)	46 (83.6)
	No	90 (53.3)	41 (45.6)	49 (54.4)	19 (21.3)	70 (78.7)	22 (24.4)	68 (75.6)
	Do not remember	24(14.2)	12 (50.0)	12 (50.0)	5 (20.8)	19 (79.2)	5 (21.7)	18 (78.3)

Note: Chi-square test [a] p≤ 0.05; [b] value of p = 0.019; * Minimum Wage (MW) considered value: R $ (BRL) 937.00.

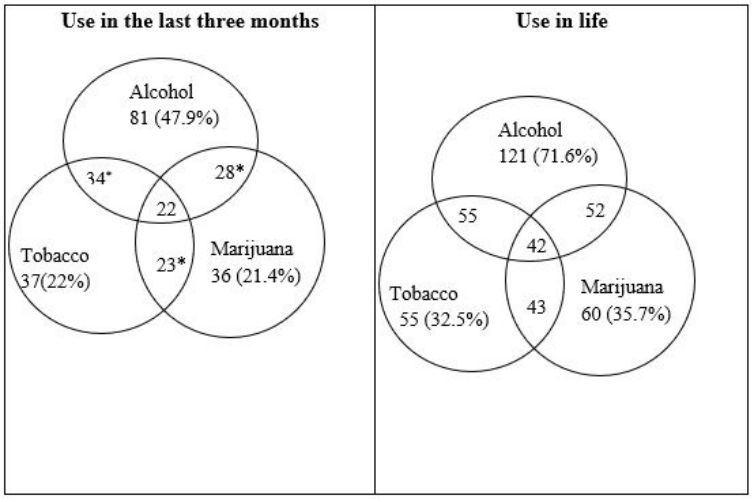

Figure 1. Intersection between alcohol, tobacco and marijuana use, Brazil, 2017.
* p-value < 0.05

Table 2. Alcohol, tobacco and marijuana use in the last three months, health satisfaction and quality of life (n = 169), Brazil, 2017.

		Alcohol [n (%)]		Tobacco [n (%)]		Marijuana [n (%)]	
		Yes	No	Yes	No	Yes	No
Satisfaction with health	VS	57 (43.5)	74 (56.5)	22 (16.8)	109 (83.2)[b]	25 (19.2)	105 (80.8)
	I	14 (73.7)[a]	5 (26.3)	10 (55.6)[b]	8 (44.4)	8 (42.1)	11 (57.9)
	VD	10 (52.6)	9 (47.4)	5 (26.3)	14 (73.7)	3 (15.8)	16 (84.2)
Quality of life	VG	52 (43.7)	67 (56.3)	21 (17.6)	98 (82.4)[c]	25 (21.2)	93 (78.8)
	I	19 (57.6)	14 (42.4)	8 (24.2)	25 (75.8)	5 (15.2)	28 (84.8)
	VB	10 (62.5)	6 (37.5)	8 (53.3)[a]	7 (46.7)	6 (37.5)	10 (62.5)

Note: Chi-square test. Value of [a] p= 0.044/ ;[b] p ≤ 0.001/ ;[c] p = 0.007. VS = Very Satisfied. I = Indifferent, VD = Very Dissatisfied. VG = Very good. VB = Very Bad.

Table 3. Alcohol, tobacco and marijuana use and quality of life aspects, n = 169, Brazil, 2017.

Domain		Alcohol [n (%)]		Tobacco [n (%)]		Marijuana [n (%)]	
		Yes	No	Yes	No	Yes	No
Physical	VG	21 (25.9)	32 (36.4)	8 (21.6)	45 (34.4)	6 (16.7)	46 (34.8)
	I	24 (29.6)	24 (27.3)	12 (32.4)	36 (27.5)	11 (30.6)	37 (28.0)
	VB	36 (44.4)	32(36.4)	17 (45.9)	50 (38.2)	19 (52.8)	49 (37.1)
Psychological	VG	17 (21.0)	26 (29.5)	12 (32.4)	31 (23.7)	10 (27.8)	33 (25.0)
	I	25 (30.9)	34 (38.6)	9 (24.3)	49 (37.4)	15 (41.7)	43 (32.6)
	VB	39 (48.1)	28 (31.8)	16 (43.2)	51 (38.9)	11 (30.6)	56 (42.4)
Social	VG	14 (17.3)	17 (19.3)	5 (13.5)	26 (19.8)	2 (5.6)	29 (22.0)
	I	38 (46.9)	42 (47.7)	19 (51.4)	60 (45.8)	23 (63.9)[a]	56 (42.4)
	VB	29 (35.8)	29 (33.0)	13 (35.1)	45 (34.4)	11 (30.6)	47 (35.6)
Environmental	VG	15 (18.5)	32 (36.4)[b]	9 (24.3)	37 (28.2)	8 (22.2)	39 (29.5)
	I	34 (42.0)	28 (31.8)	10 (27.0)	52 (39.7)	12 (33.3)	49 (37.1)
	VB	32 (39.5)	28 (31.8)	18 (48.6)	42 (32.1)	16 (44.4)	44 (33.3)

Note: VG = Very good / good; VB = Very bad / bad; I - Indifferent ;[a] Value of p = 0.029 ;[b] Value of p = 0.035

it was observed that not using tobacco was also related to a health satisfaction considered as "satisfied / very satisfied" (p-value = 0.001) (Table 2).

It can also be observed that marijuana use in the last three months was indifferent to the students' social life. Students who did not use alcohol during this period considered their quality of life very satisfactory or satisfactory in relation to the environment (Table 3).

DISCUSSION

Knowledge about risk patterns is useful when planning interventions to prevent the initiation of psychoactive substance (PAS) use, with consequences for the QOL of adolescents.[13] Study conducted in 2013 with 2185 students from 16 public schools in n three Brazilian cities, mentioned alcohol as the most used drug among adolescents,[10] similar to the findings of another study conducted in the state of Mato Grosso / Brazil with students on drug use.[14] The results of our study corroborate these findings.

Consuming alcohol before the age of 15 has been associated with impairment of physical and mental health, social, family and school problems, as well as increasing the chances of developing alcohol use disorder.[15] Early exposure to alcohol increases the chances of excessive consumption throughout life.[16]

Such early consumption of alcohol and other drugs among adolescents is often related to socialization and acceptance issues. Current literature shows that adolescents' social relationships are important for maintaining a positive quality of life[11].

In this context, it is important to highlight the trend of increased alcohol consumption by young women[17], an aspect reinforced by the findings. A study of adolescents conducted in England, aiming at analyzing the prevalence of alcohol consumption and associating it with age at onset and the social and health consequences, has similar results in relation to this study: there

was an association between alcohol consumption in the last three months and females, and those who used alcohol in the last trimester were more likely to report a lower quality of life and social harm.[15]

A nationwide study conducted in schools in 2009 indicated earlier initiation of experimentation of PAS among girls, prevalence between 12 and 13 years for alcohol and 13 and 14 years for illicit drugs, in contrast with the age of 14 and 15 years, among boys. Girls consume alcohol, especially at parties or at home, while boys consume more in out-of-home environments such as parties.[6]

Social acceptance of alcohol use contributes to greater exposure among adolescents. The socialization spaces of the adolescent population have been especially the family, which is fundamental in the relationship with this determinant.[6]

Tobacco was in this study as the second most consumed PAS. This is a product that is easily accessible to many adolescents, and when it starts at this stage of life, use tends to continue into adulthood.[18]

A retrospective study conducted in Bahia / Brazil among adolescents and young people aged 12 to 24 years attended at CAPSad between 2003 and 2008, found that among adolescents who started the use of PAS until 14 years old, there was a predominance of tobacco and marijuana consumption. Already those who started use after 14 years, crack cocaine was the prevalent PAS of consumption.[19]

Marijuana as a first illicit drug of choice among adolescents was observed, while curiosity and the circle of friends were highlighted as influencing factors.[14] A national study aimed at analyzing adolescents' social representations of QOL emphasized the need for adolescents to deal with typical desires, curiosities and pleasures at this stage of the life cycle, as well as the use of marijuana.[7]

Marijuana is a commonly thematic substance in the context of PAS use and abuse in adolescence and has influenced QOL. The result of a descriptive study with adolescents from three public schools in the state of Bahia, identified the relationship of QOL to healthy behaviors and sports practices, but also with the experimentation of marijuana.[7] A worse QOL in women using psychoactive substances was also reported in a study with drug users in the city of Porto Alegre, Brazil.[1] The same study also showed that PAS users had lower results in almost all domains and overall WHOQOL-Bref score, compared to a sample of non-users[1]. This relationship between worse perception of QOL and use of PAS is in line with the findings of our study.

Outstandingly, the perception of QOL by adolescents is complex and is related to several factors: social, family, emotional and their attitudes towards adverse events, where they are inserted. Generally, adolescents associate QOL only with physical health, highlighting their representations as physical activities and healthy eating habits.[7]

Thus, it is important to reflect on the biopsychosocial factors, and the social environments in which these individuals are inserted, rethinking the directions for effective preventive actions, as well as health promotion in search of a QOL considered better, within the particularities of each individual, regardless of whether users of PAS or not.[7] Still, it has been a great challenge for Public Health to prevent the early start of the use of these substances, with the need for public policies and therapeutic strategies that take the particularity of this situation, growing in Brazil.[19] Findings of the present study reinforce the importance of valuing school environments, both to make diagnoses, and to propose the development of preventive and health promotion actions for these adolescents.[7] Further studies on QOL and the use of PAS in adolescence are needed to densify determinants and their relationships, favoring directions for the elaboration of public policies for this age group.[20]

Still, in terms of prevention of experimentation and use of PAS, the adolescents living environment and the socialization established there has been gaining prominence. An integrative review[19] emphasized that having friends and mothers who smoke are predisposing factors to smoking, as well as curiosity and contact with family and friends who use alcohol are elements that can influence adolescents' decision to experiment and their initiation into use. Thus, the prevention of experimentation involves considering friends and family of the adolescent,[19] individuals who may be invited to occupy / integrate the school space and their discussions.

In the early stages of adolescence, the adolescent has low perception of the risks that the consumption of PAS brings, an aspect that makes him / her vulnerable.[19] Thus, thematizing health risk behaviors, that is, activities that can cause damage to mental and / or physical health, is urgent when the use of tobacco, alcohol and drugs is a priority theme[21] and needs to be expanded in school spaces as a dialogic and not normative process.

Furthermore, the literature shows that high levels of education provide positive health outcomes, with consequences for QOL.[22] Therefore, health education campaigns that address the risks and harms caused by the use of PAS are important and beneficial for young people and adolescents in the school environment,[23] although Brazilian schools have few systematized programs with this aim.[24]

However, it should be highlighted the study conducted with 807 adolescents in Brazil, which revealed that students from private schools had better QOL levels compared to those from public schools. In addition, adolescents with lower ownership of assets and those with older age also had poor QOL levels. Pointing out that, in general, there is an important social gradient that particularizes and makes some groups vulnerable.[25]

It was identified in the present study that there were few participants who had participated in lectures and / or courses on the theme of PAS. These data differ from the results found in a study conducted in the state of Mato Grosso, in which 85% of adolescents had participated in lectures at school on the topic of psychoactive substances.[14] Preventive lectures on drug use at school, both individually and in groups, are indicated. However, it is worth reflecting that for those adolescents who are already in use, a weak relationship with the school and

studies is affirmed, evidenced by dropout and / or low school engagement.[16,19] For these adolescents, the intervention needs to be differentiated to strengthen bonds and trust.

In any case, support for decision-making about the PAS in adolescence is critical for health and life, a duty that can be taken in the health-education partnership. The intersectoriality is highlighted in the approach of the situation of experimentation and use of PAS, with contributions to the reception of the adolescent.[16,19]

CONCLUSION

The substances most used by adolescents were alcohol and tobacco. As for alcohol, its use is significantly higher for female students and higher consumption among those female students who study and work.

Regarding QOL, tobacco use was higher among those who reported having a poor quality of life. And, those students who used alcohol and tobacco showed indifference regarding health satisfaction. Marijuana use, on the other hand, revealed indifference to social life. Thus, there is an association between substance misuse and QOL.

The strength of the present study focuses on the results and discussion raised, which point to specific aspects of quality of life that may be influenced by the use of alcohol, tobacco and marijuana. One is that the recent use of substances such as tobacco and alcohol, often considered innocuous and fun-related by adolescents, can interfere with both quality of life and health satisfaction. Another interesting fact is that not using these substances is associated with better levels of satisfaction with health and, in the case of alcohol specifically, greater satisfaction with the environment.

These findings allow a reflection on the best and most efficient strategy for working on aspects of adolescents' quality of life, especially in the health field. Such a strategy seems to be the focus of professional health actions to guide students on the relevance of abstinence of substance use during adolescence. This guideline is aimed at reducing the damage and risks associated with the use of licit and illicit substances, from a global perspective,[26] which may be of interest to new scientific productions, not only for health, but also for education.

This study has some limitations because it was developed in a local context, although its results are consistent with trends in the scientific literature. In addition, there is also the method-related issue, which does not allow inferring causality between the investigated variables and is limited to eventual associations.

FINANCIAL SUPPORT

Scientific Initiation Scholarship granted by the National Council for Scientific and Technological Development (CNPq), through the Institutional Program of Scientific Initiation Scholarships (PIBIC), to the author Carolina dos Santos Cardoso da Costa, for the realization of the article entitled "Alcohol, tobacco and marijuana use and their repercussions on the quality of life of high school students", in 2018.

AUTHORS' CONTRIBUTIONS

Conception of Study design. Data acquisition. Analysis and critical interpretation of results (4). Writing and critical review of the article. Approval of final version of published content. Responsibility for the accuracy or integrity of any part of the article: Angelica Martins de Souza Gonçalves. Mônika Wernet. Sandra Cristina Pillon. Data Acquisition. Analysis and critical interpretation of results (4). Writing and critical review of the article. Approval of final version of published content. Responsibility for the accuracy or integrity of any part of the article: Carolina dos Santos Cardoso Costa. Analysis and critical interpretation of results. Writing and critical review of the article. Approval of final version of published content. Responsibility for the accuracy or integrity of any part of the article: Fernando José Guedes da Silva Júnior. Adaene Alves Machado de Moura

ASSOCIATED EDITOR

Maria Catarina Salvador da Motta

REFERENCES

1. Moreira TC, Figueiró LR, Fernandes S, Justo FM, Dias IR, Barros HMT et al. Quality of life of users of psychoactive substances, relatives, and non-users assessed using the WHOQOL-BREF. Cien Saude Colet. 2013;18(7):1953-62. http://dx.doi.org/10.1590/S1413-81232013000700010. PMid:23827899.
2. Moura Jr LG, Oliveira RW, Gaviraghi JG, Crippa PS, Bianchi TB, Capra MT. Quality of life among military police officers: a comparison between chronic low back pain in Caxias do Sul, Brazil. Arq Ciênc Saúde. 2014;21(3):72-5.
3. Pinheiro BO, Andrade ALM, Micheli D. Relação entre os níveis de atividade física e qualidade de vida no uso de drogas em adolescentes. SMAD. 2016;12(3):178-87. http://dx.doi.org/10.11606/issn.1806-6976.v12i3p178-187.
4. Instituto Brasileiro de Geografia e Estatística. Aumenta acesso de jovens a álcool e drogas, revela IBGE [Internet]. Rio de Janeiro: IBGE; 2016 [citado 2019 Jan 5]. Disponível em: http://www.em.com.br/app/noticia/nacional/2016/08/26/interna_nacional,797707/aumenta-acesso-de-jovens-a-alcool-e-drogas-revela-ibge.shtml
5. Cardoso LRD, Malbergier A. Problemas escolares e o consumo de álcool e outras drogas entre adolescentes. Psicol Esc Educ. 2014;18(1):27-34. http://dx.doi.org/10.1590/S1413-85572014000100003.
6. Malta DC, Mascarenhas MDM, Porto DL, Duarte EA, Sardinha LM, Barreto SM et al. Prevalence of alcohol and drug consumption among adolescents: data analysis of the National Survey of School Health. Rev Bras Epidemiol. 2011;14(1, Suppl 1):136-46. http://dx.doi.org/10.1590/S1415-790X2011000500014. PMid:22002150.
7. Moreira RM, Boery EM, Oliveira DC, Sales ZN, Boery RNSO, Teixeira JRB et al. Representações Sociais de adolescentes sobre qualidade de vida: um estudo de base estrutural. Cien Saude Colet. 2015;20(1):49-56. http://dx.doi.org/10.1590/1413-81232014201.20342013. PMid:25650597.
8. Fundação SEADE. IPVS - Índice Paulista de Vulnerabilidade Social: Distribuição da População, segundo Grupos do Índice Paulista de Vulnerabilidade Social. São Paulo: Fundação SEADE; 2019 [citado 2019 Out 23]. Disponível em: http://www.iprs.seade.gov.br/ipvs2010/view/index.php
9. WHO ASSIST Working Group. The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST): development, reliability and feasibility. Addiction. 2002;97(9):1183-94. http://dx.doi.org/10.1046/j.1360-0443.2002.00185.x. PMid:12199834.
10. Baumann M, Chau K, Kabuth B, Chau N. Association between health-related quality of life and being an immigrant among adolescents, and

the role of socioeconomic and health-related difficulties. Int J Environ Res Public Health. 2014;11(2):1694-714. http://dx.doi.org/10.3390/ijerph110201694. PMid:24487457.

11. Moreira RM, Mascarenhas CHM, Boery EN, Sales ZN, Boery RNSO, Camargo CL. Avaliação psicométrica da qualidade de vida de adolescentes escolares. Adolesc Saude. 2016;11(4):15-22.
12. Siqueira AL, Tibúrcio JD. Estatística na área de saúde: conceitos, metodologia, aplicações e prática computacional. Belo Horizonte: Coopmed; 2011. 520 p.
13. Sanchez ZM, Sanudo A, Andreoni S, Schneider D, Pereira APD, Faggiano F. Efficacy evaluation of the school program Unplugged for drug use prevention among Brazilian adolescentes. BMC Public Health. 2016;16(1):1206. http://dx.doi.org/10.1186/s12889-016-3877-0. PMid:27899107.
14. Barros BA, Lemes AG, Bauer TX, Moura AAM, Carrijo MVN, Catunda MF et al. Desvelando o universo das drogas entre adolescentes. Interdisciplinar. Revista Eletrônica da UNIVAR. 2016;15(1):189-94.
15. Donoghue K, Rose H, Boniface S, Deluca P, Coulton S, Alam MF et al. Alcohol consumption, early-onset drinking, and health-related consequences in adolescents presenting at emergency departments in england. J Adolesc Health. 2017;60(4):438-46. http://dx.doi.org/10.1016/j.jadohealth.2016.11.017. PMid:28110867.
16. Moura LR, Torres LM, Cadete MMM, Cunha CF. Factors associated with health risk behaviors among Brazilian adolescents: an integrative review. Rev Esc Enferm USP. 2018;52:e03304. PMid:29668787.
17. Coutinho ESF, França-Santos D, Magliano ES, Bloch KV, Barufaldi LA, Cunha CF et al. ERICA: patterns of alcohol consumption in Brazilian adolescents. Rev Saude Publica. 2016;50(1, Suppl 1):8s. http://dx.doi.org/10.1590/s01518-8787.2016050006684. PMid:26910550.
18. Lee L, Shearston JA, Weitzman M. New alternative tobacco products–a threat to adolescent health. Pediatr Rev. 2016;37(7):310-2. http://dx.doi.org/10.1542/pir.2015-0146. PMid:27368364.
19. Silva CC, Costa COM, Carvalho RC, Amaral MTR, Cruz NLA, Silva MR. Iniciação e consumo de substâncias psicoativas entre adolescentes e adultos jovens de Centro de Atenção Psicossocial Antidrogas/CAPS-AD. Cien Saude Colet. 2014;19(3):737-45. http://dx.doi.org/10.1590/1413-81232014193.15922013. PMid:24714889.
20. Silveira MF, Almeida JC, Freire RS, Ferreira RC, Martins AEBL, Marcopito LF. Qualidade de vida entre adolescentes: estudo seccional empregando o SF-12. Cien Saude Colet. 2013;18(7):2007-15. http://dx.doi.org/10.1590/S1413-81232013000700016. PMid:23827905.
21. Kann L, McManus T, Harris WA, Shanklin SL, Flint KH, Hawkins J et al. Youth risk behavior surveillance: Unites States, 2015. MMWR Surveill Summ. 2016;65(6):1-174. http://dx.doi.org/10.15585/mmwr.ss6506a1. PMid:27280474.
22. Ward JL, Viner RM. Secondary education and health outcomes in young people from the cape area panel study (CAPS). PLoS One. 2016;11(6):e0156883. http://dx.doi.org/10.1371/journal.pone.0156883. PMid:27280408.
23. Bowden JA, Delfabbro P, Room R, Miller C, Wilson C. Prevalence, perceptions and predictors of alcohol consumption and abstinence among South Australian school students: a cross-sectional analysis. BMC Public Health. 2017;17(1):549. http://dx.doi.org/10.1186/s12889-017-4475-5. PMid:28592268.
24. Adade M, Monteiro S. Educação sobre drogas: uma proposta orientada pela redução de danos. Educ Pesqui. 2013;40(1):215-30. http://dx.doi.org/10.1590/S1517-97022013005000009.
25. Agathao BT, Reichenheim ME, Moraes CL. Qualidade de vida relacionada à saúde de adolescentes escolares. Cien Saude Colet. 2018;23(2):659-68. http://dx.doi.org/10.1590/1413-81232018232.27572016. PMid:29412423.
26. World Health Organization. Indicators, global database [Internet]. 2017 [cited 2019 Jan 29]. Avaliable from: https://unstats.un.org/sdgs/indicators/database/?indicator=3.7.2