

Use of alcohol and tobacco among university students of Occupational Therapy at a public university*

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Objective: outline the profile of alcohol and tobacco use and its associated factors among university students of Occupational Therapy. Method: cross-sectional study carried out with students over 18 years old, from the first to last period of Occupational Therapy course of a public university. The research instrument used was the questionnaire proposed by National Secretariat for Policy on Drugs for I National Survey on Use of Alcohol and Other Drugs among University Students of the 27 Brazilian Capitals. Statistical Package for the Social Science was used for statistical analysis. Results: the prevalence of "binge drinking in the year" was 61.5% and "binge drinking in the month" was 46.8%. The use in life of tobacco was 36% and in year 25,7%. Religion was significantly associated with "binge drinking in the year" and the use in life and in year of tobacco. "Taking a ride with the driver of the time" and "Taking a ride with an alcoholic driver" were significantly associated with "binge drinking in the year" and "binge drinking in the month". Conclusion: results contribute to create actions to prevent alcohol and tobacco abuse, as well the inclusion or extension of the approach to the topic in course curriculum.

Descriptors: Students; Tobacco; Alcoholic Beverages; Public Policies; Prevention & Control.

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Uso de álcool e tabaco entre universitários de Terapia Ocupacional de uma universidade pública

Objetivo: traçar o perfil do uso de álcool e tabaco e seus fatores associados entre universitários de Terapia Ocupacional. Método: estudo transversal realizado com estudantes acima de 18 anos, do primeiro ao último período do curso de Terapia Ocupacional de uma universidade pública. O instrumento de pesquisa utilizado foi o questionário proposto pela Secretaria Nacional de Políticas sobre Drogas para o I Levantamento Nacional sobre o Uso de Álcool e Outras Drogas entre Universitários das 27 Capitais Brasileiras. Para análise estatística foi utilizado o *Statistical Package for the Social Science*. Resultados: a prevalência de "binge drinking no ano" foi 61,5% e de "binge drinking no mês" foi 46,8%. O uso na vida de tabaco foi de 36% e no ano de 25,7%. A Religião se mostrou significativamente associada ao "binge drinking no ano" e ao uso na vida e no ano de tabaco. "Pegar carona com o motorista da vez" e "Pegar carona com motorista alcoolizado", associaram-se significativamente às variáveis "binge drinking no ano" e "binge drinking no mês". Conclusão: os resultados contribuem para criar ações de prevenção ao uso indevido de álcool e tabaco, bem como inclusão ou ampliação da abordagem do tema no currículo do curso.

Descritores: Estudantes; Tabaco; Bebidas Alcoólicas; Políticas Públicas; Prevenção & Controle.

Uso de alcohol y tabaco entre universitarios de Terapia Ocupacional de una universidad pública

Objetivo: trazar el perfil del uso de alcohol y tabaco y sus factores asociados entre universitarios de Terapia Ocupacional. Método: estudio transversal realizado con estudiantes mayores de 18 años, del primero al último período del curso de Terapia Ocupacional de una universidad pública. Instrumento de investigación utilizado fue cuestionario propuesto por Secretaría Nacional de Políticas sobre Drogas para el I levantamiento nacional sobre el uso de alcohol y otras drogas entre universitarios de las 27 capitales brasileñas. Para análisis estadístico se utilizó el *Statistical Package for the Social Science*. Resultados: prevalencia de "binge drinking en año" fue 61,5% y de "binge drinking en mes" fue 46,8%. El uso en la vida de tabaco fue del 36% y en año del 25,7%. Religión se mostró significativamente asociada al "binge drinking en el año" y al uso en la vida y en año de tabaco. "Tomar carona con conductor de la vez" y "Tomar carona con conductor alcohólico", se asociaron significativamente a las variables "binge drinking en año" y "binge drinking en mes". Conclusión: resultados contribuyen a crear acciones de prevención al uso indebido de alcohol y tabaco, así como inclusión o ampliación del abordaje del tema en currículo del curso.

Descriptorios: Estudiantes; Tabaco; Bebidas Alcohólicas; Políticas Públicas; Prevención y Control.

Introduction

Throughout humanity's history, it is possible to observe the use of psychoactive substances (PASs) in different contexts (religious, leisure or therapeutic). This is an old practice, however, currently the use of PAS has become a clear problem due to the extent of its use and the important consequences it causes for public health⁽¹⁾.

The misuse and uncontrolled use of PASs has been increasing and the increase in the consumption of these substances occurs mainly among young people⁽²⁾. With this, there is a special concern with a large part that composes this population: university students⁽³⁾. According to the Anísio Teixeira National Institute of Studies and Educational Statistics - Inep, in 2016, this population was composed of more than eight million university students enrolled in the undergraduate courses offered by the Institutions of Higher Education (HEI) in Brazil⁽⁴⁾.

In view of the large number of university students in the country, it is also worth noting that they use more alcoholic beverages, marijuana, tranquilizers, inhalants, hallucinogens and amphetamines when compared to the general Brazilian population of the same age group⁽⁵⁾.

Among the many PASs consumed, not only by university students, but throughout society, alcohol and tobacco deserve attention because they are licit substances, but can cause damage to health as much as other substances⁽⁶⁾.

In its initial phase, alcohol can cause feelings of euphoria, disinhibition, sociability, pleasure and joy. Subsequently, it may cause decreased self-criticism, psychomotor retardation, reduced reflexes, drowsiness and impairments in reasoning and concentration ability. In very high doses, the use of alcohol generates vomits and respiratory insufficiency, being able to arrive at the anesthesia, coma and even death⁽⁷⁾.

In general, college students are increasingly consuming various types of alcoholic beverages, such as spirits, beers, ice drinks and wine⁽⁸⁾. In this context, it is worth mentioning an important pattern of use among university students: binge drinking or episodic heavy drinking, which is characterized by the consumption of five or more doses for men and four or more doses for women of alcoholic beverages in a single occasion of consumption. According to the I National Survey on the Use of Alcohol and Other Drugs among University Students of the 27 Brazilian Capitals, 25% of Brazilian university students reported at least one occurrence of binge drinking in the 30 days prior to the interview, and about 33% reported having done so use of alcohol in this pattern in the last 12 months⁽⁹⁾.

The use of tobacco in an active and even passive way is considered a risk factor for the development of several diseases, such as cancer, lung diseases and cardiovascular diseases, being the greatest cause of

preventable deaths⁽¹⁰⁻¹¹⁾. According to the World Health Organization (WHO), its use leads to the deaths of more than seven million people each year. Even knowing of all the diseases that can be triggered by tobacco use, by 2015, there were 1.1 billion smokers worldwide⁽¹²⁾. In Brazil, in 2016, the total percentage of smokers aged 18 years or over was 10.2%⁽¹³⁾.

Thus, researches are important tools to better understand the patterns of alcohol and tobacco consumption, providing subsidies for the development of prevention strategies and, consequently, reducing the problems caused by their misuse and related disorders⁽¹⁴⁾.

In view of this, the objective of this study was to trace the profile of alcohol use and its associated factors among university students of the Occupational Therapy course of a public university.

Method

This is a cross-sectional, quantitative study. The population was composed of undergraduate students from the first to the last period of the Occupational Therapy course of a public university, with active enrollment in the second half of 2016 and over 18 years, totaling 130 students.

The instrument used was the questionnaire proposed by the National Secretariat for Drug Policy (SENAD) for the First National Survey on the Use of Alcohol and Other Drugs among University Students of the 27 Brazilian Capitals held in 2009. The research instrument is divided into sections with the purpose of collecting socioeconomic and demographic data, academic information, general activities, satisfaction and academic performance, general consumption of drugs, consumption of tobacco and derivatives, consumption of alcohol, details of the consumption of other drugs and general behavior by means of 72 questions⁽¹³⁾.

In the section on "general drug use", the identification of the use of PASs was made according to the classification of the World Health Organization: use in life, ie "At least once in life" in the last 12 months ("less than once in the 12 months prior to the interview") and in the last 30 days ("At least once in the 30 days prior to the interview"). In the section "alcohol consumption", it was possible to identify the occurrence of binge drinking in the year and month.

Initially, a pilot study was carried out with the students of the first period of the university's Nursing course in order to train the researchers and verify the duration of the entire collection procedure. Only those older than 18 who were present in the classroom at the time of application and who agreed to participate in the study by signing the Free and Informed Consent Term (FICT), answered the instrument. Subsequently,

data collection was started in the Occupational Therapy course, which was held from September 2016 to July 2017, by means of a census, in the classroom, at a scheduled time with the responsible teachers. To do this, the researchers provided two or more envelopes, one to put the signed FICTs and the other to store the questionnaires.

Statistical Package for Social Science (SPSS), version 22, was used to analyze the data. The chi-square test was used to verify the association between the outcome variables ("binge drinking in the year", "binge (age, marital status, socioeconomic status, religion, "living with the parents", "living with tobacco and derivatives" and "use in the year of tobacco and derivatives") with socioeconomic and demographic variables" "Living with friends"), "Participation in academic projects", "Attendance at classes", "Attending the Academic Center (AC), Academic Directory (AD). Only for the outcome variables "binge drinking in the year" and "binge drinking in the month", was found the association with the independent variables: "He drove under the effect of alcohol"; "He was the driver of the time"; "Take a ride with an alcoholic driver" and "Take a ride with a driver of the time", assuming significance level $p \leq 0.05$. The prevalence ratios (PR) and their confidence intervals (CI) were also calculated. Finally, a multivariate analysis was performed through multiple logistic regression in which only the variables associated with the outcome were included with a significance level $p \leq 0.1$.

This study was approved (No. 1,566,208) by the Research Ethics Committee (REC) of the Health Sciences Center (HSC) of the Federal University of Espírito Santo (UFES), and is conducted in accordance with Resolution 466/2012 of the National Health Council. The questionnaires were anonymous and self-filled. The application was made only after the signing of the FICT by all students present in the classroom on the day of application of the instrument, above 18 years and who agreed to participate.

Results

Of the 130 students enrolled in the course, 111 (85.4%) answered the questionnaire. The socioeconomic and demographic profile of the population in question is shown in Table 1, observing that the majority were female (83.8%), were between 18 and 24 years old (83.8%), were single (88.3%) belonged to the economic class B1/B2 (50.4%) and was predominantly composed of Evangelical/Protestant (36%), followed by Catholics (35.1%).

Table 2 shows the patterns of alcohol and tobacco use observed in the study population: 85.6% of university students reported having used alcohol in

their lives and 75.7% reported use in the year. The prevalence of alcohol use in the last 30 days prior to the survey was 62.3%.

The majority (61.5%) reported drinking in binge in the 12 months prior to the survey and 46.8% reported drinking in binge in the last 30 days preceding the survey.

Regarding the use of tobacco and derivatives, 40 students (36%) reported having ever made use of life, 26 (25.7%) reported use in the year and 19 (20.9%), use in the month.

Table 1 - Socioeconomic and demographic profile of university students of Occupational Therapy at a public university, Vitória, ES, Brazil, 2017

Category	N	%
Sex		
Female	93	83.8
Male	18	16.2
Total	111	100
Age group (in years)		
18 to 24	93	83.8
25 to 34	12	10.8
35 or more	6	5.4
Total	111	100
Marital status		
Single	98	88.3
Married/"Live together"	9	8.1
Separated/Divorced	4	3.6
Total	111	100
Socio-economic class		
A1/A2	1	0.9
B1/B2	56	50.4
C1/C2	44	39.6
D/E	10	9
Total	111	100
Religion		
Evangelical/Protestant	40	36.4
Catholic	39	35.5
Not religious	25	22.7
Others	6	5.4
Total	110	100

Table 2 - Alcohol and tobacco use patterns and derivatives among university students of Occupational Therapy of a public university. Vitória, ES, Brazil, 2017

Characteristics	N	%
Use of alcohol during life		
Yes	95	85.6
No	16	14.4
Total	111	100
Use of alcohol during the year		
Yes	81	75.7
No	26	24.3
Total	107	100

(to be continued...)

Table 2 – continuation

Characteristics	N	%
Use of alcohol during the month		
Yes	66	62.3
No	40	37.7
Total	106	100
Binge drinking during the year		
Yes	67	61.5
No	42	38.5
Total	109	100
Binge drinking during the month		
Yes	58	53.2
No	51	46.8
Total	109	100
Use of tobacco and derivatives during life		
Yes	40	36
No	71	64
Total	111	100
Use of tobacco and derivatives during the year		
Yes	26	25.7
No	75	74.3
Total	101	100
Use of tobacco and derivatives during the month		
Yes	19	79.1
No	72	20.9
Total	91	100

In Table 3, it is possible to observe the result of the bivariate analysis for the variables "binge drinking in the year" and "binge drinking in the month". Table 4 shows the results of the bivariate analysis for the variables "use in the life of tobacco and derivatives" and "use in the year of tobacco and derivatives". The variables associated with outcomes at a significance level of less than or equal to 10% and that were included in the multivariate analysis can be observed in table 5, presenting only the results for the variables that remained significantly associated ($p \leq 0.05$).

Regarding the socioeconomic and demographic variables, in the bivariate analysis, religion was associated with the outcome variable "binge drinking in the year", an association that was maintained after the multivariate analysis.

The variable "attendance to classes" was associated with the performance of "binge drinking in the year" after inclusion in the multivariate analysis ($p \leq 0.1$).

"Taking a ride with an alcoholic driver" and "taking a ride with a driver of the time" were associated with binge drinking in the year and month in the bivariate analysis and were associated with multivariate analysis.

Religion was also associated with "use in the year of tobacco and derivatives" in the bivariate analysis, which was also maintained after the multivariate analysis. After inclusion in the regression model ($p \leq 0.1$), the religion had a significant association with the "use in the life of tobacco and derivatives".

Table 3 - Factors associated with binge drinking (in the year and month) among university students of Occupational Therapy of a public university through bivariate analysis. Vitoria, ES, Brazil, 2017

	Binge during the year			Binge during the month		
	N (%)	p - value	PR(CI)	N (%)	p - value	PR(CI)
Socioeconomic and demographic characteristics						
Sex						
Female	54 (59.3)	0.305	1.781 (0.585 - 5.422)	41 (45.1)	0.415	1.524 (0.551 - 4.216)
Male	13 (72.2)		1	10 (55.6)		1
Total	67 (61.5)			51 (46.8)		
Age group						
18 to 24	59 (64.8)	0.104	2.305 (0.827 - 6.420)	45 (49.5)	0.211	1.957 (0.676 - 5.662)
Over 25	8 (44.4)		1	6 (33.3)		1
Total	67 (61.5)			51 (46.8)		
Marital status						
Single Separated, Widow	65 (64.4)	0.053	5.417 (1.039 - 28.241)	50 (49.5)	0.065	6.863 (0.814 - 57.824)
Married, live together	2 (25)		1	1 (12.5)		1
Total	67 (61.5)			51 (46.8)		
Socioeconomic class						
A/B/C	62 (62)	0.731	1.305 (0.330 - 5.164)	47 (47)	1	1.108 (0.281 - 4.372)
D/E	5 (55.6)		1	4 (44.4)		1
Total	67 (61.5)			51 (46.8)		
Religion						
Has a religion	46 (54.1)	0.003	0.168 (0.047-0.608)	36 (42.4)	0.081	0.441 (0.174-1.119)
Does not have a religion	21 (87.5)		1	15 (62.5)		1
Total	67 (61.5)			51 (46.8)		
Yes	49 (60.5)	0.722	0.851 (0.349 - 2.076)	37 (45.7)	0.693	0.841 (0.356 - 1.988)
No	18 (64.3)		1	14 (50.0)		1
Total	67 (61.5)			51 (46.8)		

(to be continued...)

Table 3 – continuation

	Binge during the year			Binge during the month		
	N (%)	p – value	PR(CI)	N (%)	p – value	PR(CI)
Socioeconomic and demographic characteristics						
Live with friends						
Yes	3 (75.0)	1	1.922 (0.193 – 19.109)	2 (50.0)	1	1.143 (0.155 – 8.420)
No	64 (61.0)		1	49 (46.7)		1
Total	67 (61.5)			51 (46.8)		
Information pertaining to the University						
Participates in academic projects						
Yes	20 (69.0)	0.333	1.560 (0.632 – 3.853)	16 (55.2)	0.291	1.582 (0.673 – 3.720)
No	47 (58.8)		1	35 (43.8)		1
Total	67 (61.5)			51 (46.8)		
Attendance to classes						
Sometimes I am absent	65 (64.4)	0.053	5.417 (0.768 - 8.624)	49 (48.5)	0.279	2.827 (0.544 - 14.678)
I am never absent	2 (25)		1	2 (25)		1
Total	67 (61.5)			51 (46.8)		
Attend AC, AD and Guild						
Yes	4 (80.0)	0.647	2.603 (0.281 – 24.120)	2 (40.0)	1	0.748 (0.120 – 4.666)
No	63 (60.6)		1	49 (47.1)		
Total	67 (61.5)			51 (46.8)		
Risky behaviours						
Driving under the influence of alcohol						
Yes	2 (100)	0.522	1.646 (1.414 - 1.917)	2 (100)	0.217	2.184 (1.777 - 2.684)
No	65 (60.7)		1	49 (45.8)		1
Total	67 (61.5)			51 (46.8)		
Was the designated driver						
Yes	10 (83.3)	0.124	3.509 (0.729 - 16.884)	8 (66.7)	0.143	2.512 (0.709 - 8.902)
No	57 (58.8)		1	43 (44.3)		1
Total	67 (61.5)			51 (46.8)		
Catching a ride with drunk driver						
Yes	21 (91.3)	0.001	9.130 (2.015 - 41.373)	20 (87)	0	11.828 (3.253 - 43.005)
No	46 (53.5)		1	31 (36)		1
Total	67 (61.5)			51 (46.8)		
Catching a ride with the designated driver						
Yes	28 (84.8)	0.001	5.313 (1.854 - 15.221)	22 (67.7)	0.006	3.241 (1.373 - 7.653)
No	39 (51.3)		1	29 (38.2)		1
Total	67 (61.5)			51 (46.8)		

“Living with parents, stepfathers or other relatives” presented a significant association with the “use in the life of tobacco and derivatives” in the bivariate analysis. However, the association was not maintained after the multivariate analysis.

“Participation in academic projects” was associated with two variables that were analyzed in the bivariate analysis “use in the life of tobacco and derivatives” and “use in the year of tobacco and derivatives”, but after the multivariate analysis the association did not.

Table 4 - Factors associated with the use (in the life and year) of tobacco and derivatives among university students of Occupational Therapy of a public university through bivariate analysis. Vitoria, ES, Brazil, 2017

Variable	Use of Tobacco and its derivatives during life			Use of Tobacco and its derivatives during the year		
	N (%)	p – value	PR(CI)	N (%)	p – value	PR(CI)
Socioeconomic and demographic characteristics						
Sex						
Female	33 (35.5)	0.783	1.157 (0.410 - 3.268)	23 (27.1)	0.756	0.622 (0.162 - 2.384)
Male	7 (38.9)		1	3 (18.8)		1
Total	40 (36)			26 (25.7)		
Age group						
18 to 24	31 (33.3)	0.178	0.5 (0.18 - 1.386)	22 (25.9)	1	1.048 (0.306 - 3.589)
Over 25	9 (50)		1	4 (25)		1
Total	40 (36)			26 (25.7)		

(to be continued...)

Table 4 – continuation

Variable	Use of Tobacco and its derivatives during life			Use of Tobacco and its derivatives during the year		
	N (%)	p - value	PR(CI)	N (%)	p - value	PR(CI)
Marital status						
Single Separated, Widow	36 (35.3)	0.72	0.682 (0.172 - 2.7)	26 (28.3)	0.107	0.717 (0.631 - 0.816)
Married, live together	4 (44.4)		1	0 (0)		1
Total	40 (36)			26 (25.7)		
Socioeconomic class						
A/B/C	26 (35.6)	0.745	0.831 (0.220 - 3.138)	23 (24.7)	0.421	0.548 (0.121 - 2.471)
D/E	4 (40)		1	3 (37.5)		1
Total	40 (36)			26 (25.7)		
Religion						
Has a religion	27 (31.4)	0.059	0.422 (0.171 - 1.047)	15 (19.5)	0.01	0.286 (0.107 - 0.763)
Does not have a religion	13 (52)		1	11 (45.8)		1
Total	40 (36)			26 (25.7)		
Yes						
No	25 (30.5)	0.041	0.409 (0.172 - 0.974)	16 (21.6)	0.117	0.469 (0.180 - 1.222)
Total	15 (51.7)		1	10 (37)		1
Live with friends						
Yes	3 (75.0)	0.132	5.676 (0.570 - 56.495)	3 (75)	0.051	9.652 (0.957 - 97.341)
No	37 (34.6)		1	23 (23.7)		1
Total	40 (36)			26 (25.7)		
Information pertaining to the University						
Participates in academic projects						
Yes	15 (51.7)	0.041	2.443 (1.027 - 5.813)	12 (41.4)	0.023	2.924 (1.140 - 7.499)
No	25 (30.5)		1	14 (19.4)		1
Total	40 (36)			26 (25.7)		
Attendance to classes						
Sometimes I am absent	3 (37.5)	1	1.070 (0.242 - 4.734)	2 (25)	1	0.958 (0.181 - 5.072)
I am never absent	37 (35.9)		1	24 (25.8)		1
Total	40 (36)			26 (25.7)		
Attend AC, AD and Guild						
Yes	19 (47.5)	0.059	2.154 (0.965 - 4.809)	12 (31.6)	0.297	1.615 (0.653 - 3.997)
No	21 (29.6)		1	14 (22.2)		1
Total	40 (36)			26 (25.7)		

Table 5 - Factors associated with the performance of binge drinking (in the year and month) and the use (in the life and year) of tobacco and derivatives among university students of Occupational Therapy of a public university through multivariate analysis. Vitoria, ES, Brazil, 2017

Variables*	Binge during the year			Binge during the month		
	N (%)	p - value	PR(CI)	N (%)	p - value	PR(CI)
Religion						
Has a religion	46 (54.1)	0.002	0.062 (0.011 - 0.354)			
Doesn't have a religion	21 (87.5)		1		†	
Total	67 (61.5)					
Catching a ride with a drunk driver						
Yes	21 (91.3)	0.009	9.736 (1.785 - 53.108)	20 (87)	0.001	10.215 (2.712 - 38.477)
No	46 (53.5)		1	31 (36)		1
Total	67 (61.5)			51 (46.8)		
Catching a ride with the designated driver						
Yes	28 (84.8)	0.001	6.642 (2.085 - 21.164)	22 (67.7)	0.018	3.203 (1.216 - 8.433)
No	39 (51.3)		1	29 (38.2)		1
Total	67 (61.5)			51 (46.8)		
Attendance to classes						
Sometimes absent	65 (64.4)	0.01	31.145 (2.265 - 428.177)			
Never absent	2 (25)		1		†	
Total	67 (61.5)					
Use of Tobacco and its derivatives during life						
Use of Tobacco and its derivatives during the year						
Religion						
Yes	27 (31.4)	0.049	0.389 (0.152 - 0.997)	15 (19.5)	0.004	0.185 (0.059 - 0.574)
No	13 (52)		1	11 (45.8)		1
Total	40 (36)			26 (25.7)		

*Only variables that presented association less than or equal to 5% in the logistic regression model; †Variables not included in the logistic regression model or that did not have a significant association with the corresponding outcome variable in the logistic regression model

Discussion

The predominance of the female, from the age group of 18 to 24 years, of the economic class B1/B2 and of single students corroborates the majority of the studies carried out in courses of the health area⁽¹⁵⁻²²⁾.

Although the percentage found for Evangelicals/ Protestants and Catholics has been very close, the predominance of the Evangelical/Protestant religion differs from most studies conducted with university students in which the predominant religion is the Catholic religion, as shown by the a university campus in the area of Biological Sciences and Health in Minas Gerais⁽²³⁾.

Regarding the patterns of alcohol use by the studied population, the data found in this study corroborate those found in research conducted at UFES^(19-22,24-25). Data also found in the I National Survey on the Use of Alcohol and Other Drugs among University Students of the 27 Brazilian Capitals, in which it was observed that 86.2% of college students had ever used alcohol and 72% in the year⁽¹³⁾. The prevalence of alcohol use in the last 30 days prior to the study corroborates a study also conducted at UFES among university pharmacists⁽²²⁾.

The results found to drink in binge in the 12 months and in the last 30 days that preceded the research were superior to those of the national reference study (I National Survey on the Use of Alcohol, Tobacco and Other Drugs among University Students of the 27 Brazilian Capitals), which showed that 33.3% of Brazilian university students reported at least one drinking occasion in the last 12 months and 25% reported having used alcohol in that pattern in the 30 days prior to the interview⁽¹³⁾, showing, thus, how worrisome are the data found in this study and the importance of working with the subject among university students.

In relation to the patterns of use of tobacco and derivatives, in a study carried out with dental students of a private university in Curitiba, the use in reported life was slightly higher than that found in this study: 51.74% of the students reported having tobacco product, at least once⁽²⁶⁾. In a study carried out among students of the Nursing course of the University of Passo Fundo, the value found for use in life also showed a little higher, in which 48.9% of the students reported having already made use in the life of tobacco. In the same study, in relation to use in the year (29.7%) and in the month (20%), the results found were similar to those found in this study⁽²⁷⁾. The results of the National Survey on the Use of Alcohol, Tobacco, and Other Drugs among University Students of the 27 Brazilian Capitals were also corroborated by these findings, in which: in the lifetime of 46.7%, use in the year of 27.8% and use in the month of 21.6%⁽¹³⁾.

The association found between religion and the variable binge drinking outcome in the year suggests that among college students surveyed who do not have a

religion there is a greater chance of finding students who drank heavy episodically in the last 12 months.

The association between alcohol use and religion can be found in some studies. Among the users of a clientele attended at the Family Health Clinic in Rio de Janeiro, individuals who reported low visits to churches/ temples (annual/never go) were approximately three times more likely to have higher alcohol consumption when compared to those who attended more frequent churches/temples (weekly or monthly)⁽²⁸⁾.

Similarly, in a study conducted with academics from a Higher Education Institution (HEI) in the city of Montes Claros, it was observed that the chance of practicing binge drinking was 4.3 times higher among students who did not have a religion or not manifested themselves as Catholics⁽²⁹⁾.

Also, in a study carried out with students from the health area of a public university in the north of Minas Gerais, the lack of a religious bond was a statistically associated variable to the practice of risk consumption of alcoholic beverages⁽²⁴⁾.

The relationship between alcohol consumption by university students and religious behavior is still a poorly researched, complex and difficult to measure subject, but it is an important topic. To better understand how religious aspects influence the use of PASs by university students, it is necessary to go beyond knowing aspects such as indices of use, religious affiliation and attendance at religious meetings/services⁽³⁰⁾.

The association found between the variable "attendance in class" and the achievement of "binge drinking in the year" after inclusion in the multivariate analysis suggests that among the students who are not attending classes, there is a greater chance of finding students who performed binge drinking in the last 12 months prior to the survey.

In a study carried out among university students, this association was also observed, showing that when there is abuse or dependence of psychoactive substances, the lack and delays in classes and low academic performance is highlighted⁽³¹⁾. At a higher education institution in Montes Claros, a survey conducted with academics regularly enrolled in undergraduate courses in Biological Sciences, Biomedicine, Nursing, Pharmacy and Psychology showed that the practice of binge drinking was greater among those who frequently did not attend academic activities⁽²⁹⁾.

Missing school/dropout is an important risk marker for the use of PASs. In a study carried out among adolescents, a dose-response effect gradient was also observed: the more students missed classes, the greater the risk of using PASs⁽³²⁾.

"Taking a ride with an alcoholic driver" and "taking a ride with a driver of the time" were associated with

drinking in binge in the year and month in the bivariate analysis and they remained in the multivariate analysis, suggesting that among the students that have already taken ride with a drunk driver or with the driver of the time, there is a greater chance of finding college students who drank heavy and episodic in the last month and the last year.

Although information on the association of alcohol consumption and driving may result in an accident, a study conducted in Brazil showed that the use of a ride with drivers who had consumed some amount of alcohol was usual for 45.2% of the interviewees. Among young people aged 18 to 24, the study showed that 66.1% reported using a ride in this condition⁽³³⁾.

When corroborating this finding, in a cross-sectional study conducted with female students from two universities in the Brazilian Northeast, the association between binge drinking and hitchhiking was also significant⁽³⁴⁾.

Other research conducted with college students showed that those who consumed binge drinking in the past three months were more likely to report consequences or problems associated with alcohol use, among them, hitchhiking with someone who consumed alcoholic beverages⁽³⁵⁾.

The association found between religion and the variables end use (in the life and the year) of tobacco and derivatives suggests that among college students surveyed who do not have religion, there is a greater chance of finding students who have already used in life and in the year of tobacco and derivatives. Although it is also a complex subject and difficult to measure, in the literature, the association of religion with the use of tobacco and derivatives can be observed in different studies carried out in different populations, as shown in a survey carried out among tobacco growers in the municipality of São Lourenço do Sul, where it was observed that participating in religious activities was a protective factor for smoking (PR: 0.69)⁽³⁶⁾.

Interviews with 383 people aged over 18 in the Paraisópolis favela in São Paulo showed that the highest religious frequency was associated with a lower prevalence of smoking⁽³⁷⁾. In a prospective multicenter study, designed to describe the evolution of risk factors for coronary heart disease in young adults and to identify associated habits, behaviors and lifestyles, it was observed that among smokers, those who attended fewer religious services reported smoking a greater number of cigarettes a day than the more frequent regulars⁽³⁸⁾. Among high school students in the state of Pernambuco, adolescents who considered themselves to be practicing a religion were less likely to report exposure to alcohol consumption (odds ratio, OR = 0.71, 95% CI: 0.60 to 0.83) and to smoking (OR = 0.61, 95% CI: 0.46 to 0.79)⁽³⁹⁾.

By adhering to a religious denomination and patterns of religiosity, there is a set of values, symbols, behaviors and social practices that includes, among other things, accepting or refusing to use tobacco or other PASs⁽⁴⁰⁾.

Living with parents, stepfathers or other relatives showed a significant association with the use of tobacco and derivatives in the bivariate analysis, suggesting that among college students living with parents, stepfathers or other relatives, there is less chance of finding students who have used tobacco and derivatives at some point in their lives. Despite the non-maintenance of the association after the multivariate analysis, studies point to such association. In a study carried out in a private university with students of the courses of the School of Health, it was observed that among the participants who never used tobacco products, 57% reported that the family had influence in the non-use and 43% indicated that the family had no influence on the non-use of tobacco products⁽⁴¹⁾. According to the National Survey of School Health (PeNSE), living with parents (father and/or mother) was a protective factor for smoking⁽³²⁾. The literature also points out the importance of the relationship between siblings, especially for girls, in the relationship with older sisters. The example of the sisters is as important as that of the parents, as they have a great responsibility for passing healthy models for these girls⁽⁴²⁾.

The role of the family is essential in health promotion, which is not the only influence for the development and/or protection of substance use, but it plays an important role⁽⁴³⁾.

In the bivariate analysis, "participation in academic projects" was associated with two variables: "use in the life of tobacco and derivatives" and "use in the year of tobacco and derivatives". However, after the multivariate analysis, the association was not maintained. Despite the lack of maintenance of the association, studies indicate that the overload of academic activities can lead to an excess of concern, a fact that contributes to the appearance of, among other things, sleep disorders, anxiety and stress⁽⁴⁴⁾, and stress is seen as a factor associated with smoking⁽⁴⁵⁾.

Conclusion

The results found give subsidies for the creation of actions, policies and programs to prevent alcohol and tobacco abuse among university students. A form of prevention, in addition to policies and programs, would be the inclusion and/or extension of the theme in the curriculum matrix. By knowing what factors are most strongly associated with the use of these PASs, it is possible to deepen the study and, more assertively, to elaborate and transmit information to university students, always aiming at the prevention and increase of knowledge of this population in relation to the use undue of PASs.

Because it is a cross-sectional approach, it is not possible to establish correlations between alcohol and tobacco consumption with the variables associated with them, and it is not possible to generalize the results for the entire population. In addition, further studies are needed to clearly understand the results and associations found in this work.

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