

Factors associated with the use of psychoactive substances in students of a public university in the south of Maranhão

Fatores associados ao uso de substâncias psicoativas em estudantes de uma universidade pública do sul do Maranhão

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ABSTRACT: *Introduction:* The use of psychoactive substances (SPA) by humanity is extremely old and its consumption throughout history has broad purposes. In Brazil, its use was part of the culture of the ancient peoples in the performance of rituals and parties, being a known history since the times of Portuguese colonization. How drinking and using other drugs are part of Brazilian culture, translating it into a dynamic act that changes the exchange of time and space. *Objective:* Analyzing the factors associated with the “use of SPA in life” among university students in Maranhão. *Materials and methods:* This study describes it as quantitative, analytical and transversal. To test the final sample of 309 students, use the ASSIST questionnaire, suitable for the research in question, as a material for analysis or completion. After completing, a statistical analysis of these questionnaires was performed, using the square test in order to identify the associations between the use of the SPA and each factor studied. *Results:* The factors associated with the use of SPA, in decreasing order, were: being a practitioner of some religion, having a close person who uses SPA, having a religion. The most relevant factors that led to the use of illicit activities in the SPA, in decreasing order, were: having a religion, practicing a religion, sexual orientation. *Conclusion:* Check if the factors associated with the use of the SPA are multiple and wide, they can be social, psychological or even religious, for example, being or not practicing a religion, among other factors. Based on this diversity, and on the result obtained, most students consider that they are not able to think critically about the use of SPA, it is suggested the need for further research, verifying which more effective approaches about SPA should be developed.

Keywords: Illicit drugs; Alcoholism; Tobacco use disorder; Students; Universities; Protective factors; Risk factors.

RESUMO: *Introdução:* O uso de substâncias psicoativas (SPA) pela humanidade é extremamente antigo e seu consumo no decorrer da história possui amplas finalidades. No Brasil, o seu uso fez parte da cultura dos povos antigos na realização de rituais e festas, sendo um fenômeno conhecido desde os tempos da colonização portuguesa. O beber e a utilização de outras drogas fazem parte da cultura brasileira, traduzindo-se em um ato dinâmico que se modifica no intercurso do tempo e espaço. *Objetivo:* Analisar os fatores associados ao “uso de SPA na vida” dentre universitários no sul do Maranhão. *Materiais e métodos:* Esse estudo caracteriza-se como quantitativo, analítico e transversal. Para a obtenção da amostra final de 309 alunos, utilizou-se como material de análise o preenchimento de questionário ASSIST, devidamente adaptado para a pesquisa em questão. Após o preenchimento, realizou-se a análise estatística desses questionários através do teste *qui* quadrado a fim de identificar as associações existentes entre o uso de SPA e cada fator estudado. *Resultados:* Os fatores associados ao uso de SPA lícitas, em ordem decrescente, foram: ser praticante de alguma religião, possuir pessoa próxima que faz uso de SPA, possuir religião. Já os fatores de maior relevância que levaram ao uso das SPA ilícitas, em ordem decrescente, foram: possuir religião, ser praticante de alguma religião, orientação sexual. *Conclusão:* Verificou-se que os fatores associados ao uso de SPA são múltiplos e amplos, podendo ser sociais, psicológicos ou mesmo religiosos como, por exemplo, ser ou não praticante de uma religião, dentre outros fatores. Baseado nessa diversidade, e no resultado obtido de que grande parte dos estudantes consideraram não serem capazes de pensar criticamente a respeito das SPA, sugere-se a necessidade de pesquisas complementares, indicando que abordagens mais efetivas a respeito das SPA devem ser desenvolvidas.

Descritores: Drogas ilícitas; Alcoolismo; Tabagismo; Estudantes; Universidades; Fatores de proteção; Fatores de Risco.

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INTRODUCTION

The use of psychoactive substances (SPA) by humanity is an extremely old practice. These substances were and still are consumed for wide purposes, with therapeutic, religious, ostentation and the search for pleasure as examples. The customs related to SPA are diverse and have peculiarities according to the space and time analyzed, within the 20th century being the period in which this practice was disseminated through advertising and marketing, expanding the consumption of some of these substances worldwide^{1,2}.

In 2002, in a report on SPA, the World Health Organization showed that 8.9% of all diseases that plague humanity occur due to the use of drugs. Of this amount, tobacco accounts for 4.1% and alcohol for 4.0%, with 0.8% remaining in charge of illicit drugs³.

In relation to Brazil, SPAs were part of the culture of the people who already inhabited what would become the country, using them in rituals and parties. This phenomenon has been known since the times of Portuguese colonization, with records of a drink produced by the Indians through the fermentation of cassava, called "cauim", as well as the use of tobacco⁴.

The drinking and use of other SPA are part of Brazilian culture and history, being an act that cannot, therefore, be interpreted only by itself, being necessary to take into account the occasion when it occurs, the social, local customs and cultural, psychological and physical conditions of the user, the context and the environment in which the drug is used. As an example, the use of liquor at São João parties and wine at Christmas^{4,5}.

Another important factor to be considered in Brazil are the advertisements, mainly of alcoholic beverages, which relate it to moments of joy, many friends, desired sexual attributes, among other characteristics desired by a large part of the population, and which consequently influence the different layers of the Brazilian society, mainly, the young and adult public to the consumption^{4,6}.

If, on the one hand, alcohol consumption is encouraged by the media, on the other hand, it is combated by laws and health programs. This clash, which is often uneven, perpetuates an unfavorable reality for young people, and provides a paradoxical scenario of combat versus encouraging the use of alcoholic beverages^{7,8}, and the early use of SPA among young people favors future complications in these individuals^{3,9}.

This scenario also includes the conjuncture that in certain environments of society, such as those frequented by young people and adults, the consumption of certain SPA is accepted and even encouraged, resulting in an age group with a high tendency to use these drugs⁸. There are even studies that show other encouraging variables in these places, such as the posters of university parties

in Uberlândia-MG, where 93.3% had content related to the use of alcoholic beverages in 2005 and 80.0% also exhibited the same characteristics in 2007. The study concluded that the advertisements of parties extrapolated their role in promoting parties, starting to encourage alcohol consumption. In this way, the university students are perceived as great influences¹⁰.

According to data found by several authors¹¹⁻¹⁵, the use of SPA, in its majority, is consumed in greater quantity by college students compared to the general population¹⁶. One of the factors pointed out as the cause is that, when starting university, the new student has few behavioral resources and little experience¹⁷, often needing to make new friends and incorporate new habits^{18,19}, such as using alcoholic beverages^{17,19,20}. This scenario makes this period of academic life, especially in the beginning, extremely important with regard to the future involvement of the university student with the use of SPA^{18,21,22}.

Therefore, this is a group of notable interest, since it plays a very important role in the future and in the development of Brazilian society. Such students, by receiving part of the country's scientific investments, may also have the possibility to collaborate with new forms of action, with an opinion formation and influence different sectors of society, for those activities that they perform, they are used by those who demand a better study on the use of SPA^{16,23}.

Thus, the relevance of studies in this area is evident, as the use of SPA undergoes constant variation according to the place and period in which it is analyzed, being something dynamic and with several facets⁴. Most studies on the prevalence of SPA use among these students are concentrated in the southeast region, mainly in São Paulo, or in capitals, with little data on other regions, particularly in the interior of the country^{16,24}. Therefore, more epidemiological studies are needed to develop, through scientific bases, appropriate strategies to the new forms and factors that influences the use of these substances in students across the country^{4,23,25}. In view of this, the study at a Federal University in southern Maranhão, in the interior of the state, is extremely relevant and important.

The study in question aimed to analyze the factors associated with the use of SPA among university students at a Federal University in southern Maranhão.

MATERIAL AND METHODS

The present study is characterized by being quantitative, analytical and transversal. It was carried out at a federal university located in the southwest of Maranhão, in the interior of the state. With two campuses, one located in downtown and the other located in a suburb neighborhood, the university polarizes students from different places in Brazil.

The courses chosen to carry out the sample were

those in the areas of health, human, social and exact sciences, respectively: medicine, journalism, law school and food engineering. Of these courses, two are on the downtown campus, law and journalism, and two on the suburb campus, food engineering and medicine. The class periods for these courses are: integral food engineering and medicine, evening journalism and night law school.

The survey of the number of students was carried out by the university secretariat through its system in February 2018, with 293, 237, 363 and 167 students enrolled in medicine, journalism, law school and food engineering, respectively. The sample size was calculated with a 95% confidence level and a 5% margin of error. The population or size of the universe used was the sum of the number of students from the four courses mentioned above, that is, 1060 students. The sample obtained was 283 university students.

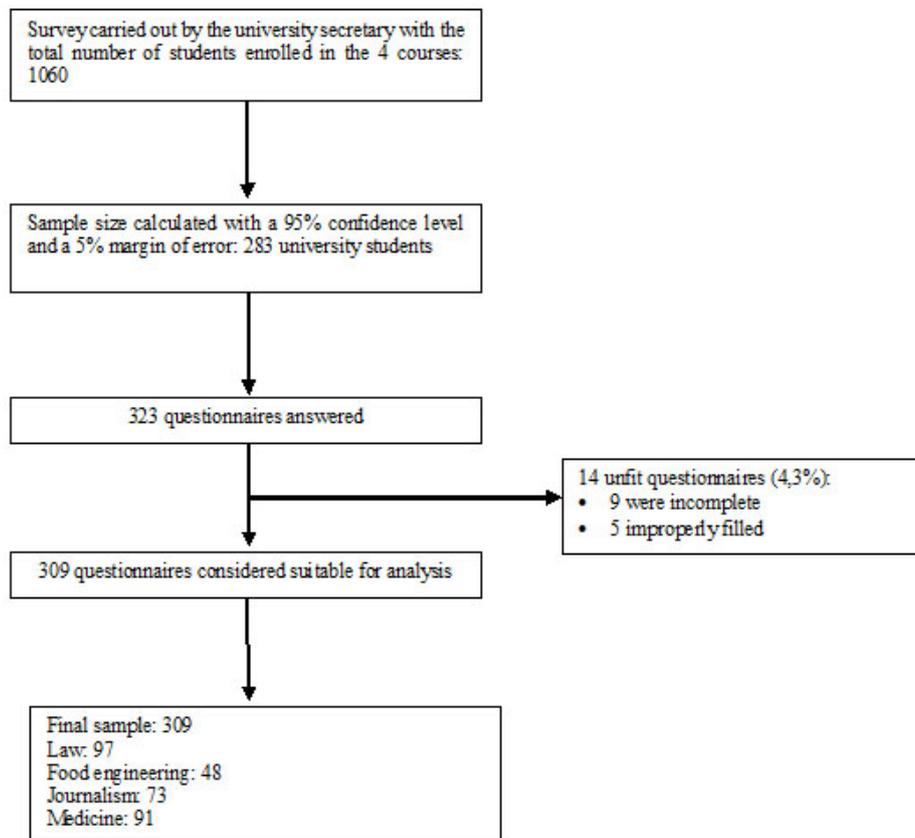
In proportion, the number of respondents in the different courses was proportional to the percentage that each course represents in the total

sample. Thus, medicine, journalism, law and food engineering represent, respectively, 27.6%; 22.4%; 34.2% and 15.8% of the total population. Converting this percentage to the sample obtained, there were 78, 63, 97 and 46 students as the minimum number to be interviewed for each course, following the same order.

The data collection was carried out from September 2018 to December of the same year. All questionnaires are anonymous and self-administered, and are carried out in person, after signing the Free and Informed Consent Form (ICF). The collection of the ICF was made separately from the questionnaires, to guarantee and preserve the anonymity of those involved in the research.

Three hundred and twenty-three questionnaires were answered, and only 14 of them were not considered suitable for analysis because they were filled in improperly or due to the lack of filling in all fields. This resulted in 309 questionnaires considered for carrying out the analysis, with more than 95% of the applied questionnaires being suitable for the research.

Flowchart 1. Description of the study sample. Imperatriz, Maranhão, Brasil, 2018, n=309



The questionnaire used is an adaptation of the ASSIST, a questionnaire used by the WHO, which analyzes the consumption of psychoactive drugs in life and in the last 3 months. ASSIST comes from the acronym Alcohol, Smoking and Substance Involvement Test. Along with this questionnaire; another one was also used, with questions addressing the socioeconomic, cultural and psychological aspects, as well as questions about the course taken at the university and about how the use of SPA by college students is carried out.

The research in question followed the rules of Resolution 466/12 of the National Health Council. To this end, it was approved by the Committee of the Federal University of Maranhão (UFMA) of São Luiz, through the *Plataforma Brasil*, under the register nº 2.891.982, CAE nº 94200618.8.0000.5087.

Statistical analysis was performed using the chi-square test using the Statistical Package for the Social Sciences - SPSS software, version 22.0, to study the associations between the use of SPA and each studied variable.

The variables studied were: enrolled course and period in which the student studied in 2018, sex, sexual orientation, age, income, religion, if you are a religion practitioner, place where you attended high school, if you live alone, marital status, economic problems, family relationship, social isolation, exercise, satisfactory sleep, feeling useful, seeing meaning in life, suicide history, if they are in the desired course, if it is the first university course, feels pressured by the university, feels pressured by relatives, have enough free time, if works, if participates in academic activities, if has a close person who makes use of it, previous education about SPA.

RESULTS

The female sex comprised 52.4% of the sample. The prevalent sexual orientation among all students was

heterosexual (85.4%). Of the interviewees: 42.4% have a stable relationship, aged between 20 and 24 years (53.4%), live with parents or family (64.1%), attended high school in a public school (61.2%), have the dream of attending another college (38.2%). The income indicated by the largest number of students was between 1 and 3 minimum wages per person of the family (50.2%), of which 80.0% of these university students have religion and, among these, only 56.3% are practitioners (Table 1).

Table 1. Religion and religious practice among the analyze university students. Imperatriz, Maranhão, Brasil, 2018, N=309

Religion	n	%
Catholic	127	41,1
Protestant	101	32,7
Spiritist	10	3,2
Another	9	2,9
Has no religion	57	18,4
Atheist	5	1,6
Total	309	100
Religious practice	n	%
Yes	174	56,3
No	135	43,7
Total	309	100

The prevalences on the use of SPA in life and in the last 3 months, when confronted, showed little variation, which may indicate a chronic use of these substances. The use of illicit SPA in life, on the other hand, had decreased rates, when compared with the general use of SPA among the analyzed students. These prevalences are described in Tables 2 and 3.

Table 2. Use of SPA in life, in the last 3 months and illicit SPA among students per enrolled course. Imperatriz, Maranhão, Brasil, 2018, N=309

Use of SPA in life	Law	Food engineering	Journalism	Medicine	Total
n	67	28	47	71	213
%	69,1	58,3	64,4	78,0	68,9
In the last 3 months					
n	59	25	39	67	190
%	60,8	52,1	53,4	73,6	61,5
Use of illicit SPA in life					
n	17	8	27	31	83
%	17,5	16,7	37,0	34,1	26,9
Total number of students per course					
n	97	48	73	91	309

Table 3. SPA used by university students. Imperatriz, Maranhão, Brasil, 2018, N=309

Used SPA	In life		In the last 3 months	
	n	%	n	%
Tobacco derivatives	80	37,6	75	39,5
Alcoholic beverages	208	97,7	183	96,3
Marijuana	65	30,5	64	33,7
Cocaine/ Crack	10	4,7	10	5,3
Amphetamines or ecstasy	14	6,6	14	7,4
Inhalants	22	10,3	22	11,6
Hypnotics/sedatives	17	8,0	17	8,9
Hallucinogens	16	7,5	16	8,4
Opioids/opiates	9	4,2	8	4,2
Total	213	100,0	190	100,0

The alleged reasons for making use of SPA in life by students, in decreasing order, were: Don't know how to opine (39.9%), fun (32.4%), stress relief (20.7%), socializing (16.9%), curiosity (11.7), search for pleasure (9.4%), to feel better (8.9%) and escape from problems (8.0%).

Tabela 4. Factors associated with the use of SPA in life among university students. Imperatriz, Maranhão, Brasil, 2018, N=309

Variable	p-value
Be a practitioner of some religion	0,000027
Having a close person who uses SPA	0,000034
Having religion *	0,000070
Do not live with relatives or family members	0,0033
Sexual orientation	0,0052
Believe that the college favors the use of SPA	0,012
Place where you attended high school	0,037
Have a good family relationship	0,046

p-value of significance (<0,05); *Only for protestant religion

Table 5. Factors associated with the use of illicit SPA in life among college students. Imperatriz, Maranhão, Brasil, 2018, N=309

Variable	p-value
Having religion*	0,000033
Be a practitioner of some religion	0,00038
Sexual orientation	0,00083
Do not live with relatives or family members	0,0011
Have a good family relationship	0,0016
Enrolled course	0,0045
Having economic problems	0,0077
Feeling pressured by family members	0,0081
Having a close person who uses SPA	0,0086
Personal history of suicide	0,026
Feeling useful	0,033

p-value of significance (<0,05); *Catholic and protestant

In addition, 38.2% of the students answered that they wanted to take another course and 68.3% of the interviewed students believed that the university favors the use of SPA. When asked if they received any kind of education regarding the use of SPA in elementary or high school, 78.0% said yes, however only 11.0% said that current education in Brazil teaches to think critically about the use of SPA.

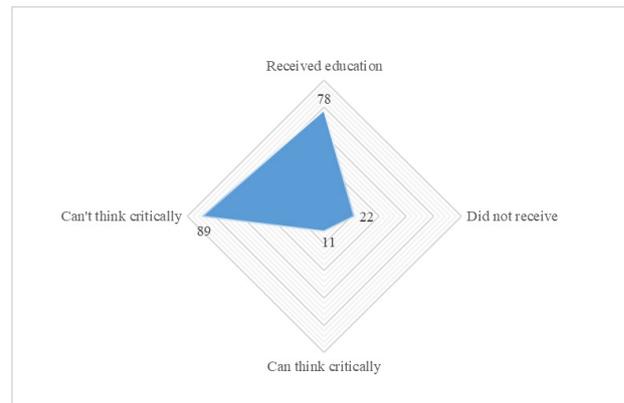


Figure 1. Percentage of university students who received some type of education on the use of SPA in primary and / or secondary education versus the opinion of the students themselves regarding the ability to think critically in relation to the use of SPA. Imperatriz, Maranhão, Brasil, 2018, N=309

Those responsible for providing education on the use of SPA were, in decreasing order: 28.2% primary or secondary school teachers, 21.6% health professionals, 17.0% did not declare, 14.9% by several professionals, 13.3% by police or PROERD and 5.0% by relatives. There was significance in the greater use of SPA in life (p-value 0.024) when the education was provided by teachers, health professionals, diverse professionals and police or PROERD in relation to those who did not declare the type of professional who taught the classes about use of SPA.

DISCUSSION

It is emphasized in the new studies in relation to SPA and in relation to the analysis of several factors associated with this practice, not only based on the effects of SPA on the CNS, as in the past, when it is not allowed to take into account the context in which conducts research²⁶, as recent analysis points to a total of combined and complex actions of social, neurobiological and psychological factors as causing problems and user dependence³.

The use of questionnaires to collect information about drug use, although often questioned, is still the most used method and proves to be effective, since it is low cost, ensures anonymity, has little rejection and is seen by students as a form of prevention and non-repression, therefore having great reliability in its results²⁷.

Due to the large number of possible variables, it was decided to use the “use in life” of SPA to analyze the factors associated with the use of SPA among university students. Thus, following the same pattern adopted by CEBRID, the agency that was responsible for national research on the use of SPA. In addition, this type of use makes it possible to measure the presence of SPA in an expanded way in this part of society^{1,27}.

The prevalence of “lifetime use” of legal drugs, such as alcoholic beverages and tobacco, found was 67.3% and 25.9%, respectively. The values of alcohol use are considered low in comparison with other surveys among college students, where this prevalence was above 80%^{1,5,12,13,18,24,25,27-30}, even below “use in life” in a study carried out in 2010 in the general population and Brazilian university students (74.6 and 86.2%)¹. Regarding the use of tobacco derivatives, low numbers were also found when compared to other universities, with percentages greater than 30%^{5,12,13,18,25,27,28}, being also lower than the use of the population in general and Brazilian college students (44.6 and 46.7%). However, there are also similar values found in other surveys, 27%(30) and 22,3%²⁹.

The “lifetime use” of illicit substances was 26.9%, similar to other studies carried out^{5,25,28}. Although marijuana has been the most widely used illicit SPA, or has been reported in other analyzes^{5,18,25}, the majority of studies examined or solvents such as illegal SPA are used among college students^{12,13,24,27,30}. The uses selected between 9.4-17.0% for marijuana and 11.9% -46.2% for solvents. The numbers of students analyzed in the current study are the ones that use the most in life when compared to the general population (22.8%) and the lowest ones are compared to Brazilian university students (48.7%)¹.

The results regarding the “lifetime use” of legal substances suggest the university itself as a non-influencing factor for the consumption of SPA, corroborating with other comparative analyzes^{12,27}. However, data from illicit SPAs indicate a certain influence of the faculty in the use

of drugs, as well as other surveys^{10,24,25,29}. The existing investigations regarding the university as influencing or not drug use are divergent²⁷.

Regarding gender, males had a higher prevalence of SPA use with 72.1%, against 66.2% for females, but without difference with a significant p-value (0.25), a value very close to that found by Lucas et al.²⁷. There was a p-value of relevance for the consumption of hallucinogens (0.024), ecstasy (0.017) and tobacco (0.020) in males. In the publication by Lemos et al.²⁴ there was also significantly greater use of tobacco in males. There was a higher use of sedatives in females (7.4% versus 3.4%), but there was no significant association (0.123), similarly to what was reported by Stempluk's research⁵. Unlike other researches that used ecstasy with greater prevalence among females^{5,27}.

The greater use among men in most drugs can be explained by several factors, among them cultural, such as the one pointed out by Rios and Dázio et al.^{9,31}. The diminished use of certain substances among women, such as alcohol, may be due to the social view that the attitude of using certain SPA is seen as something virile^{9,31}.

The decreasing order found in the current work, was similar to the order found in the medical school of Bahia: Fun, relax and stress²⁴. Stress was also identified as one of the main reasons at a university in Curitiba²⁸. The study by Kerr-Corrêa et al.¹³, is also noteworthy, in which 60% of the interviewees were unable to explain the reason for the use, a number close to that found in the present study.

The main cause of use was “Don't know how to opine”, a situation pointed out in the current study and in previous studies, raises the hypothesis that a portion of university students use drugs without critically reflecting on them.

Regarding the factors associated with the “use in life” of SPA, the following studies stand out with similar results:

- Being a practitioner of some religion was a protective factor for Silva et al.¹¹, contrary to the research carried out by Andrade et al.³² in high school students;

- Having a close person who uses a SPA has been documented as a risk factor in several jobs, and applies to family members, as well as close friends and colleagues^{27,28,33};

- Religion proved to be a protective factor for evangelicals in a similar way to the work of Silva et al.¹¹, as well as the higher incidence of alcohol use in Catholics was documented in the same study. Funai and Pillon³⁴ found greater use in university students who declare themselves to be spiritists, corroborating what was observed in the present study;

- Similarly to the analysis by Magliari et al.³⁵, the factor “not living with relatives or family members” was shown to be at risk for the use of SPA “in life”. Another study in which the percentage of the type of housing and the use of SPA among the university students raised was that of

Fiorini and Alves¹² and, although there was no analysis of the association between the two variables, a rate was found high “use in life” of SPA (88%). In addition, only 19% of those interviewed said they lived with parents/family;

- Sexual orientation was not reported in other studies, but in the present study, declaring yourself homosexual or bisexual was a risk factor for the use of SPA, unlike self-declared heterosexuals (p-value 0.0052);

- The place where high school took place, that is, the type of school attended by students in that period, presented itself as a risk factor (p-value 0.037), including in the study by Stronski et al.³⁶, attributing it greater use among students in private schools;

- Not having a good family relationship was considered a risk factor (p-value 0.046), which was also reported in the studies by Fischer and Vansan, as well as Stronki et al.^{36,37}, when the students reported the feeling that the family devalues them. Furthermore, it was indicated that the quality of family relationships has an impact on the use of SPA among students;

- The use of SPA in life was not related to the amount of exercises performed during the week (p-value 0.074), as reported by Magliari et al.³⁵. However, according to the study by Stronski et al.³⁶, attending sports clubs regularly was a protective factor against the use of illicit drugs, with the exception of marijuana. In the studies presented by Silva et al.¹¹, the results demonstrate the opposite, pointing out that the highest frequency in sports associations is observed in users of legal and illegal drugs;

- Having sufficient free time was not considered a risk factor for the use of SPA (p-value 0.72), as well as being male (p-value 0.25), contrary to the previously results found by Kerr-Corrêa et al.¹³ and Silva et al.^{11,13};

- There was no relationship between high family income and the use of SPA (p-value 0.25), differently from what was pointed out in the investigation carried out by Silva et al.¹¹. The disparity between the results may be due to the fact that some students do not feel good about writing about their income or their family, as similarly reported by Kerr-Corrêa et al.¹³.

In addition, the repetition of most of the factors present in both the “use in life” of licit and illicit SPA stands out, thus suggesting that the same factors may have implications for the use of different substances. It is also evident, in the use of illegal substances, the association with the history of suicide attempt (p-value 0.026), as reported by Ficher and Vansan³⁷ and by Moreira et al.³⁸.

There are several studies regarding the use of SPA, however the majority concentrate on courses in the biological/health areas and, mainly, on the medical course. There are few publications that represent the entire university population and only a few surveys allow a comparison between the different existing courses. Thus, the importance of having new research regarding the use of SPA involving university students from different courses is

seen, in order to represent the associated factors and use in this population as a whole in a reliable manner²⁵.

Other noteworthy points are also highlighted:

- Even if it is not the objective of the work, when confronting the use of SPA in life and the use in the last three months of tobacco and illicit SPA, very similar numbers are observed, suggesting a probable chronic use of these substances;

- The journalism course was the only one to have marijuana as the second most used substance (51.1%), surpassing tobacco. This result may be linked to the divergences between the policies to discourage tobacco cigarette smoking, resulting from the National Program for Tobacco Control, carried out by INCA, since 1986³⁹ and the current world policies that move towards regularization and legalization of marijuana⁴⁰ (which can be interpreted as an incentive to use this SPA at the expense of tobacco use).

Regarding the medical course, it was found that the factors “use in life” (p-value 0.037), use in the “last three months” (p-value 0.040) and “use of illicit SPA in life” (0.030) were the significant and demonstrated a close relationship with the periods studied. The other factors, verified in the other courses, were not relevant to the use of substances by these students.

This verified pattern was very similar to that reported by other studies^{13,35,41}, which also demonstrated that the use of drugs in medicine is all the greater the more advanced the periods are, with the proviso that in the present study it was observed higher than expected usage in the 1st period and in the most advanced periods, except in the 10th.

In the analysis referring to the use of illicit drugs, still by medical students, it was also verified in the current study the increase in consumption as the course progressed, mainly in relation to opioids, sedatives and hallucinogens, which was also reported by Kerr-Corrêa et al.^{11,13} and Silva et al.^{11,13}, regarding sedatives. Possible explanation for this phenomenon is the fact that these students, being at the end of the course, feel more pressured, their sleep rhythm is constantly modified and have easy access to medications while inside the hospital.

Based on the above, the medical course is suggested as a possible influence on the use of SPA. The present work corroborates with the thesis of a previous study³¹ which presents as a hypothesis of a favoring factor the greater contact with the suffering of others, common to these students. It should be noted that these students theoretically have greater knowledge about the use and effect of SPA and, even so, consume more than the other courses, which translates into a paradoxical behavior.

Finally, the importance of what the data related to the education provided by different professionals, from different areas of knowledge, which turn out to be ineffective methods for the development of critical thinking about the use of SPA, is highlighted, as evidenced by the majority of respondents.

Consequently, there is a criticism that training in relation to SPA is deficient, both from professionals who teach classes and from primary, secondary and tertiary education in Brazil. Even more worrying is the situation of courses in the health field, since many of these professionals will, in the future, deal with the use of SPA in their patients. As a final recommendation, it is suggested to carry out changes in university matrices with the implementation of more effective policies for guidance on the use of SPA, and the improvement of the ability to elaborate critical thoughts in their students is urgent and can also be achieved through scientific information and classes, as proposed by other researchers^{6,8,13}.

CONCLUSIONS

The main factors associated with the use of SPA among students, such as being a practitioner of some religion, having a close person who uses SPA, sexual

orientation, not living with relatives or family members, enrolled course, among others, demonstrated the relevance of several areas, from cultural, family, religious to social and educational, as influencing this consumption, presenting a vast conjuncture of multiple factors, both protective and risk.

Due to this multifactorial and complexibility, it was understood that there is a need for new research and analysis that will lead to the improvement of studies in this regard, improving the ability to act and identify these factors, in order to improve the tools that can stimulate critical thinking, since current policies have shown, in this respect, not to be fully effective, from the point of view of the interviewees.

It is also important to highlight the need to change Brazilian education on the use of SPA, because, only through education with training based on science and the development of critical sense, it is possible to reflect and understand reality, in order to act actively in your transformation.

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