Use of psychoactive substances among medical students at a university in the Brazilian semiarid region

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ABSTRACT

Study model: Observational, descriptive, and cross-sectional study. **Objective:** Evaluate the use of psychoactive substances among medical students at a public university in the Brazilian semiarid region. **Methodology:** Study conducted with 101 students using a questionnaire containing socio-demographic aspects and economic profile of the participants, and the questionnaire on screening of the use of alcohol and seven other psychoactive substances (ASSIST). **Results:** The profile of the participants was characterized by a predominance of males (52.5%), white ethnicity (44.6%), aged between 18 and 29 years (88.1%), single marital status (91.1%). There is a prevalence for the use of alcoholic beverages 80.2% (81), marijuana 32.67% (33), and tobacco derivatives 31.7% (32). Alcoholic beverages stand out mainly in the desire or craving 36.6% (37), among the other indicators/motivations. An association with the male gender was obtained for the use of alcohol (p = 0.025), tobacco (p = 0.001), marijuana (p = 0.016) and inhalants (p = 0.018); and over 30 years old for tobacco products (p = 0.034), marijuana (p = 0.005), cocaine/crack (p = 0.004), inhalants (p = 0.001), and hallucinogens (p = 0.012). **Conclusion:** There was a high prevalence rate in the use of alcoholic beverages among medical students in relation to other psychoactive substances consumed. It is necessary to develop strategies aimed at mental health and well-being for medical students. **Keywords:** Students, Medicine, Abuse of psychoactive substances, Mental health.

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INTRODUCTION

University admission is a goal planned by most young Brazilians in their pursuit of qualified professional training and entry into the job market. This moment is marked by situations typical of moving to adulthood: a greater sense of autonomy, new responsibilities, in addition to psychosocial instability¹. In some cases, there is a period of greater vulnerability for initiating and maintaining the consumption of psychoactive substances (PAS), such as alcohol, tobacco, and others²⁻³.

PAS or psychoactive drugs are substances capable of altering an individual's consciousness, mood, or thinking, resulting in physiological or behavioral changes^{1,3}. Globally, the use of PAS has increased, and it is estimated that around 35 million people suffer from disorders resulting from drug use⁴. In Brazil, an average of 35 million people under 30 years have problems related to the abusive use of PAS, of which a significant number of users began using it in their adolescence⁵.

The III National Survey on Drug Use found, among legal substances, the prevalence of 30.1% of alcoholic beverage use in the last 30 days in the Brazilian population (average of 46 million inhabitants) and 33.5% in the use of industrialized cigarettes (20.8 million inhabitants)⁵. Regarding illicit substances, 3.2% reported having used it in the last 12 months (4.9 million people), especially marijuana, in which 7.7% reported using it once in a lifetime, followed by powder cocaine, with 3.1%. It is also mentioned that 0.9% of the population surveyed (1.4 million people) use crack and similar products⁵.

Among undergraduate courses in the health area, medicine has aroused interest in studies and educational institutions regarding the problem of the growing use of PAS among students^{1,6-7}. Historically, as they experience a competitive course with high demand and performance, medical students are exposed to situations of stress and personal demands during the training process that can trigger mental health problems, including abuse and dependence on PAS^{3,6}.

A study carried out among students at a School of Medicine in the interior of São Paulo found a prevalence of alcohol use by 87.6%; and regarding the lifetime use of an illicit substance (marijuana and cocaine), 26.9% confirm having tried it⁷.

Moreover, alcohol is unanimously identified as the substance most consumed by medical students, followed by tobacco, marijuana, solvents, poppers, and anxiolytics³.

The inadequate sleep routine and neglect of food are also noteworthy, with high consumption of sugar, salt, and super-processed products as an option among these students, modifying the feeling of overload and stress⁸. A reality that reinforces, in part, the psychosocial vulnerability and precarious mental health of medical students in general⁹.

Another study carried out with in the interior of Paraná revealed that medical students in the last three years of the course had better lifestyle ratings than those in the first three⁸. Furthermore, the incidence of depressive and/or psychiatric symptoms reached 28.65% and 45.7% in a study at a federal institution in Amapá⁸, which are high levels compared to the national prevalence of depression¹⁰. The consumption of PAS increases the incidence of psychiatric disorders in general, even leading to an increased risk of suicide¹¹.

At the university level, it is necessary to expand initiatives aimed at the debate on the use of psychoactive substances in medical education^{8,12-13}, and the forms of prevention and intervention in this issue. The adoption of psychosocial and pedagogical support strategies among institutions is encouraged, considering the different scenarios and patterns of consumption by students in Brazilian regions.

Thus, the study aims to evaluate the use of psychoactive substances among medical students at a public university in the Brazilian semiarid region.

METHODOLOGY

It is a cross-sectional, descriptive study with a quantitative approach carried out from October 2019 to January 2020, with undergraduate medical students at the Federal Rural University of the Semiarid (UFERSA), located in the municipality of Mossoró in the interior of Rio Grande do Norte.

Study participants were medical students at the institution, with inclusion criteria: over 18 years old, regularly enrolled and willing to participate in the collection period. By adopting a sample size calculation with a margin of error of 5%, confidence level of 95% of a population of 133 students, we obtained a final sample of 101 participants.

We used two research instruments: a questionnaire containing questions about the socioeconomic and demographic profile of the participants and the questionnaire on screening for the use of alcohol and seven other psychoactive substances (ASSIST) elaborated by the World Health Organization (WHO)¹⁴.

The ASSIST¹⁴ questionnaire contains eight questions about the use of nine classes of psychoactive substances (tobacco derivatives, alcoholic beverages, marijuana, cocaine/crack, amphetamines/ecstasy, hypnotics/sedatives, inhalants, hallucinogens, and opiates). The questions address the frequency of use in life and the last three months, problems related to use, concern about use by people close to the user, impairment in performing expected tasks, unsuccessful attempts to stop or reduce use, feeling of compulsion and injecting use¹⁴.

Before data collection, contact was made with the Coordination and the course faculty, explaining the research objectives and the procedures for applying the questionnaires to the students. Upon acceptance to participate in the research, we carried out possible individual guidance on how to complete the instrument. The Consent Term was duly signed and the instrument filled out was deposited in a ballot box in a reserved room of the Department, respecting the precepts of confidentiality and individuality of the participants.

The data obtained were processed in Excel, version 2010, checking for possible typing errors and later exported and tabulated in the statistical software SPSS version 20.0. Simple and bivariate statistics of the chi-square type were used for data analysis, adopting a significance level of p<0.05.

The Research Ethics Committee (CEP) of the State University of Rio Grande do Norte (UERN) approved the research following the ethical principles and national and international standards for research involving human beings under No. 2511. 020, CAAE 79425717.7.0000.5294.

RESULTS

It is observed that most students were male (52.5%), aged between 18 and 29 years (88.1%), single marital status (91.1%), mixed ethnicity (47.5%), family income higher than R\$ 4,001 (44.6%), with admission to the course in 2016 (34.7%) (Table 1).

Table 1. Sociodemographic and economic profile of medical students. Mossoró, Rio Grande do Norte, 2020.

students. Mossoró, Rio Grande do Norte, 2020.							
Variables	N	%					
Gender							
Male	48	47.5					
Female	53	52.5					
Total	101	100					
Age							
Up to 18 years old	1	1					
19 to 29	89	88.1					
30 to 44	11	10.9					
Total	101	100					
Marital status							
Single	92	91.1					
Married	9	8.9					
Total	101	100					
Ethnic group							
White	45	44.6					
Black	6	5.9					
Brown	48	47.5					
I do not know	2	2					
Total	101	100					
Family income							
Less than R\$ 954,00	5	5					
Between R\$954,01 and R\$2.000,00	21	20.8					
Between R\$2.001,00 and R\$4.000,00	30	29.7					
Greater than R\$4.001,00	45	44.6					
Total	101	100					
Admission							
2016	35	34.7					
2017	31	30.6					
2018	30	29.7					
2019	5	5					
Total	101	100					

As for ASSIST, there was a high prevalence for the use of alcoholic beverages (80.20%), followed by marijuana (32.67%) and tobacco derivatives (31.70%). When comparing lifetime use to recent use, tobacco derivatives (18.80%) take the second position in consumption, overlapping marijuana (13.90%). Regarding the other questions (Table 2), alcoholic beverages also stand out in the desire or craving (36.6%), in the identification of problems (19.8%), negligence (14.9%), the concern of the others (18.9%), and attempt to reduce it (10.8%).

The main reasons are presented in Graph 1 about the motivation for using psychoactive substances among students, highlighting the feeling of freedom and/or curiosity (57.7%), followed by another (35.5%).

Table 2. Percentage of positive answers to each ASSIST questionnaire question by medical students. Mossoró, Rio Grande do Norte, 2020.

	Q1	Q2	Q3	Q4	Q5	Q6	Q7
Substance	Lifetime use	Use in the last 3 months	Desire or craving	Problems associated	Negligence	The concern of the others	Attempt to reduce it
Tobacco derivatives	31.7	18.8	7,9	3	2	10	8.9
Alcoholic beverages	80.2	69.3	36.6	19.8	14.9	18.9	10.8
Marijuana	32.7	13.9	12.9	4	3	4.9	2
Cocaine/Crack	7.9	4	1	1	3	1	4
Amphetamines/Ecstasy	16.8	5.9	8.9	2	1	3	4
Inhalants	17.82	3	6.9	0	0	3	2
Hypnotics/Sedatives	9.9	6.9	6.9	2	3	2	4
Hallucinogens	5.9	1	1	0	0	3	1
Opioids	2	1	1	1	1	1	2
Others	5.9	0	0	0	0	0	0

Q: Question

40,00%

Peeling of freedom Affective losses or family problems friends and colleagues

Other reasons

Graphic 1. Percentage of answers on the main reasons that led to the use of psychoactive substances among medical students. Mossoró, Rio Grande do Norte, 2020.

Concerning the distribution of lifetime use prevalence of psychoactive drugs about gender (Table 3), an association was observed between males and alcohol (p=0.025), tobacco (p=0.001), marijuana (p=0.016), and inhalants (p=0.018), whereas cocaine/crack, amphetamines/ecstasy, hallucinogens, and opiates did not show significant differences between genders.

It was identified that tobacco derivatives (p=0.034) and illicit drugs - marijuana (p=0.005), cocaine/crack (p=0.004), inhalants (p=0.001), and hallucinogens (p=0.012) had higher prevalence among students over 30 years old. Alcoholic beverages, amphetamines/ecstasy, hypnotics/sedatives and opioids did not show significant differences among age groups (Table 4).

Table 3. Association between lifetime use of psychoactive substances and the gender of medical students. Mossoró, Rio Grande do Norte, 2020.

	Male		Female		Χ²	Р
	N	%	N	%		
Have you ever smoked tobacco?						
Yes	6	12.5	26	49.1	15.55	< 0.001
No	42	87.5	27	50.9		
Total	48	100	53	100		
Have you ever drank alcohol?						
Yes	34	70.8	47	88.7	5.05	0.025
No	14	29.1	6	11.3		
Total	48	100	53	100		
Have you ever smoked marijuana?						
Yes	10	20.8	23	43.4	5.829	0.016
No	38	79.2	30	56.6		
Total	48	100		100		
Have you ever tried inhalants?						
Yes	4	8.3	14	26.4	5.623	0.018
No	44	91.7	39	73.6		
Total	48	100	53	100		

Table 4. Association between lifetime use of psychoactive drugs and age group among medical students. Mossoró, Rio Grande do Norte, 2020.

	Up to 29 years old		Over 30 years old		X²	Р
	N	%	N	%		
Have you ever smoked tobacco?						
Yes	25	27.8	7	63.6	5.823	0.034
No	65	72.9	4	36.4		
Total	90	100	11	100		
Have you ever smoked marijuana?						
Yes	25	27.8	8	72.7	9.003	0.005
No	65	72.2	3	27.3		
Total	90	100	11	100		
Have you ever tried cocaine/crack?						
Yes	4	4.4	4	36.4	13.693	0.004
No	86	95.6	7	63.6		
Total	90	100	11	100		
Have you ever used inhalants?						
Yes	12	13.3	6	54.5	11.367	0.001
No	78	86.7	5	45.5		
Total	90	100	11	100		
Have you ever used hallucinogens?						
Yes	6	6.7	4	36.4	9.69	0.012
No	84	93.3	7	63.6		
Total	90	100	11	100		

DISCUSSION

The profile of the students was characterized by the majority of men, brown and single, aged between 18 and 29 years old, and income above three minimum wages, with statistical proximity between the genders. Similar findings were found in other studies regarding age group^{7,15,17} and marital status^{2,15,16}, with differences related to the predominance of women^{2,7,15-17} and white ethnicity^{2,7}. The income element was different in the literature concerning the present study regarding type and stratification¹⁶⁻¹⁷.

There was a prevalence of alcohol consumption among the participants corroborating the average consumption in the Brazilian population⁵, and other studies carried out among university students in different areas^{2,7,19} and with medical students¹⁶⁻¹⁷, admitting a certain degree of variation according to the population surveyed. As it is considered a legal substance with great social acceptance, the consumption of alcoholic beverages stands out among young people^{6,2-3}, in part, due to the appeal of the media in advertising campaigns and frequent use in nightclubs, in addition to causing euphoria and disinhibition, inducing flirting¹². In the university environment, the organization of parties, "freshmen" and "chopadas" also encourage the use of alcoholic beverages¹⁸⁻¹⁹.

A study¹8 carried out with students of courses in health areas at a private university in southern Brazil showed that 2.8% of them had already tried to reduce their consumption of alcoholic beverages, without success. In the present study, values of 10.8% were found, regardless of success, concerning those who tried to reduce the use. This finding is worrying, as it can predict the abusive use or even lead to substance dependence²0.

It is known that the excessive consumption of alcoholic beverages among university students cause problems such as decreased learning performance due to damage to the brain hippocampus, which is responsible for the process of memory formation²¹. Also, the student gets absent from classes more often, having poor performance or difficulty carrying out tasks²².

In the present study, tobacco derivatives had a lower prevalence related to alcohol compared to studies carried out with university students¹⁻²

and medical students^{6,3,16}. From the new Brazilian government policies to prevent the use of tobacco derivatives, such as the prohibition of advertising campaigns in the media that encourage the use of cigarettes, ban on consumption in public places, and the adoption of health promotion strategies to stimulate physical activities, the aim is to reduce the number of smokers, especially among the young population².

As for the use of illegal substances, most participants reported having consumed it at some point in their lives; marijuana was the most used in life and recent use. In the university environment, marijuana and its derivatives are the most commonly used illicit substances^{1,6} considering it is cheap or even of natural origin, with medicinal properties associated with the sensation of relaxation. Such aspects lead to a frequency of use among students, especially with the false idea of not causing dependence or adverse effects²³⁻²⁴.

However, the abusive use of marijuana among students can cause, over the years, damage to memory, attention, and organization of complex information²³. A study identified that adolescents and young adults with early initiation of the substance had impaired cognitive performance due to the neurotoxic effects of the high consumption of marijuana in the human body²³⁻²⁴.

The inhalants are in the third position in the list of illegal substances among the students, and their use in the medical field is also common²⁶. There is a high prevalence of physicians who admit having already used hypnotics/sedatives without a prescription or adequate follow-up²⁵⁻²⁶. On the other hand, among illicit substances, the low frequency was reported for cocaine, which may be related to higher cost and access to points of sale, or even fear of admitting the use, given the stigma associated with this substance²⁷.

Most medical students use psychoactive substances before entering university; others start to try other types, some with higher consumption frequency, considering factors such as stress, personal demands, among others^{6,27}. The main reason for using it was the feeling of freedom and/or curiosity. Most university students start using psychoactive substances out of curiosity and keep this habit of forgetting about everyday problems and, in some cases, to control the effects of other substances, with the so-called polyuse^{2,28}.

The transition from adolescence to adulthood and the admission at the university is marked for discoveries and physical, psychological, and social changes²⁹. During this period, the university student ends up distancing from their family and sometimes adopts behaviors that can trigger health problems linked to mental disorders associated with substance abuse or dependence^{6,4}.

In general, students in medical courses, regardless of gender, experience stressful situations and demands in the training process, which can lead to greater substance use^{8,12,23}. The findings regarding the use of tobacco derivatives, alcohol, and marijuana related to gender pointed to the predominance of consumption among male students, in line with other studies^{1,3,6-7}; however, approximate frequencies were identified between the genders.

Recently, there has been an increase in the consumption of psychoactive substances among female medical students, reflecting the greater admission of women into higher education in the country³⁰ and in the medical profession³¹; besides dealing with training challenges, they suffer from prejudice in a profession historically marked by the male presence³¹.

Regarding age group, it is observed that the older the age, the greater the chances of students accessing or even having tried psychoactive substances, whether legal or illegal. In some situations, the experimentation starts in the pre-university period, usually between 16 and 18 years old, and during the medical course, the student uses it more frequently³².

Tobacco has the highest consumption among the legal substances in the adult age group. A study carried out in a city in southern Brazil analyzed the profile of tobacco consumption in individuals aged between 20-59 years and found a higher consumption among adults aged over 30 years old^{5,15}. In general, the search for new sensations, the feeling of independence with maturity - some of these students are in their second undergraduate course - and other factors can influence the frequency or even abuse of psychoactive substances in this group^{24,28,30}.

As limitations of the study, we can highlight the cross-sectional nature, in which the cause-effect is lost through single data collection and a high percentage of responses as other reasons among those that led to the initiation of psychoactive substances. However, the quality of the findings demonstrates the value of the investigation and points to new study designs to fund psychosocial support projects for medical students and others at the university above, the locus of this study.

CONCLUSION

The study results respond objectively by pointing out the high prevalence rate of alcohol use among medical students related to other substances that were less frequent, although consumption was identified for all, such as marijuana, highlighted among the illegal substances. The main reason was curiosity and/or a feeling of freedom, with greater use in life associated with males and those aged over thirty years.

In part, the findings reflect the greater use and abuse of legal and illegal psychoactive substances among Brazilian university students in different professional areas, with possible reflections on the training model and university life. Further research is necessary and the monitoring on the use of psychoactive substances among medical students in the Brazilian semiarid region. Moreover, actions and programs to monitor and promote mental health and quality of life in medical education and the academic community are essential.

REFERENCES

- Fernandes TF, Monteiro BMM, Silva JBM, Oliveira KM, Viana NAO, Gama CAP, et al. Uso de substâncias psicoativas entre universitários brasileiros: perfil epidemiológico, contextos de uso e limitações metodológicas dos estudos. Cad. saúde colet [on-line]. 2017; 25(4); 498-507.
- Barros MSMR, Costa LS. Perfil do consumo de álcool entre estudantes universitários. SMAD, Rev. Eletrônica Saúde Mental Álcool Drog [on-line]. 2019; 15(1); 4-13.
- 3. Candido FJ, Souza R, Stumpf MA, Fernandes LG, Veiga R, Santin M, et al. The use of drugs and medical students: a literature review. Rev. Assoc. Med. Bras [on-line]. 2018; 64(5); 462-468.
- United Nations Office on Drugs and Crime (UNDOC).
 World Drug Report, 2019. New York: UNODC; 2019.
- Bastos FIPM, Vasconcelos MTL, Boni RB, Reis NB, Coutinho CFS. III Levantamento Nacional sobre Uso de Drogas pela População Brasileira. Rio de Janeiro: ICICT/ FIOCRUZ; 2017.

- 6. Machado CS, Moura TM, Almeida RJ. Estudantes de medicina e as drogas: evidências de um grave problema. Rev. bras. educ. med. 2015; 39(1):159-167.
- 7. Zanetti ACG, Cumsille F, Mann R. A associação entre o uso de álcool, maconha e cocaína e as características sociodemográficas de universitários de Ribeirão Preto, Brasil. Texto Contexto Enferm [on-line]. 2019; 28(Spe): e110.
- 8. Bührer BE, Tomiyoshi AC, Furtado MD, Nishida FS. Análise da Qualidade e Estilo de Vida entre Acadêmicos de Medicina de uma Instituição do Norte do Paraná. Rev. bras. educ. med. 2019; 43(1):39-46.
- 9. Oliveira GS, Rocha CA, Santos BEF, Sena IS, Favaro L, Guerreiro MC. Prevalência e fatores associados à depressão em estudantes de Medicina da Universidade Federal do Amapá. Rev. Med. Saú. Bras. 2016; 5 (3):186-199.
- 10. Stopa SR, Malta DC, Oliveira MM, Lopes CS, Menezes PR, Kinoshita RT. Prevalência do autorrelato de depressão no Brasil: resultados da Pesquisa Nacional de Saúde, 2013. Rev Bras Epidemiol. 2015; 18(2):170–80.
- 11. Leite RT, Nogueira SO, Nascimento JP, Lima LS, Nóbrega TB, Virgínio MS, et al. The Use of Cannabis as a Predictor of Early Onset of Bipolar Disorder and Suicide Attempts. Neural Plast. 2015: 2015; 13 p.
- 12. Cardoso Filho FDAB, Magalhães JF, Silva KMLD, Pereira ISDSD. Perfil do estudante de Medicina da Universidade do Estado do Rio Grande do Norte (UERN), 2013. Rev. bras. educ. med. 2015; 39(1), 32-40.
- 13. Parente EA, Ferreira GE, Almeida BC, Alencar Filho JIP, Souza JN, Lima JWO, et al. Uso de Álcool entre Estudantes de Medicina um possível risco para futuros médicos? J. Health Biol. Sci. [Online]. 2017; 5(4); 311-319.
- 14. Henrique IFS, Micheli D, Lacerda RB, Lacerda LA, Formigoni MMLS. Validação da versão brasileira do teste de triagem do envolvimento com álcool, cigarro e outras substâncias (ASSIST). Rev. Assoc. Med. Bras, 2004; 50(2):199-206.
- 15. Silva EC, Tucci AM. Correlação entre ansiedade e consumo de álcool em estudantes universitários. Psicol. teor. Prat [on-line]. 2018; 20(2);107-119.
- 16. Gomes IP, Pereira RAC, Santos BF, Pinheiro MA, Alencar CH, Cavalcanti LPG. Fatores Associados à Manutenção do Vício de Fumar e do Consumo de Álcool entre Acadêmicos de Medicina em uma Capital do Nordeste do Brasil. Rev. bras. educ. med [on-line]. 2019; 43(1); 55-64.
- 17. Ramos LCS, Cunha RA. Perfil do consumo de álcool entre os estudantes de Medicina do Campus Lagarto da Universidade Federal de Sergipe. 2018. 41 f. Monografia (Graduação em Medicina) - Universidade Federal de Sergipe, Lagarto; 2018.
- 18. Dambrowski K, Sakae TM, Remor KVT. Prevalência do uso de substâncias psicoativas em estudantes dos cursos da área da saúde em uma universidade privada do sul do Brasil. Arq. Catarin Med [on-lne]. 2017; 46(4); 140-153.

- 19. Guerra FMRM, Costa CKF, Bertolini SMMG, Marcon SS, Parré JL. Consumo de tabaco entre universitários: uma revisão sistemática. J. res.: fundam. Care. 2017; 9(2):558-565.
- 20.Filho GJP, Sato LJ, Tuleski MJ, Takata SY, Ranzi CCC, Saruhashi SY, Spadoni B. Emprego do questionário de transtornos de uso de álcool em pronto-socorro. Rev Ass Med Brasil 2001; 47(1): 65-69.
- 21. Kerr DCR, Capaldi DM, Pears KC, Owen LD. Intergenerational influences on early alcohol use: Independence from the problem behavior pathway. Development and Psychopathology. 2012;24(3):889-906.
- 22. Neves KC, Teixeira MLO, Ferreira MA. Fatores e motivação para o consumo de bebidas alcoólicas na adolescência. Esc. Anna Nery [on-line]. 2015; 19(2): 286-291.
- 23. Rigoni MS, Oliveira MS, Andretta I. Consequências Neuropsicológicas do uso da maconha em adolescentes e adultos jovens. Ciencia & cognição. 2016; 8, 118-126.
- 24. Conceição MIG, Ventura CA. Percepção de riscos e benefícios associados ao uso de maconha entre estudantes de Brasília, Brasil. Texto contexto enferm [on-line]. 2019; 28(spe); e146.
- 25. Fernandes MA, Silva JS, Vilarinho JOV, Seabra LO, Feitosa CDA. Uso de substâncias psicoativas por profissionais de saúde: Revisão Integrativa. SMAD, Rev. Eletrônica Saúde Mental Álcool Drog [on-line]. 2017; 13(4); 221-231.
- 26. Centurião F, Bueno ML, Braga MCM, Oliveira PHM, Santos RVLQ, Hernadez DP. Benzodiazepínicos: seu uso pelos médicos residentes do hospital das clínicas de Teresópolis. Revista da JOPIC. 2018; 1(2):43-51.
- 27. Balthazar EB, Gaino LV, Almeida LY, Oliveira JL, Souza J. Fatores de risco para uso de substâncias: percepção de líderes estudantis. Rev Bras Enferm [on-line]. 2018; 71(Suppl 5; 2116-22.
- 28. Munhoz TN, Santos IS, Nunes BP, Mola CL, Silva ICM, Matijasevich A. Tendências de consumo abusivo de álcool nas capitais brasileiras entre os anos de 2006 a 2013: análise das informações do VIGITEL. Cad. Saúde Pública [on-line]. 2017; 33(7); e00104516.
- Peixoto YF, Souza AC. O uso de drogas entre universitários: uma revisão de literatura. Rev. Rede cuid. saúde. 2018; 12(2): 63-74.
- 30.Ricoldi A, Artes A. Mulheres no ensino superior brasileiro: espaço garantido e novos desafios. Ex aequo. 2016; (33):149-161.
- 31. Scheffer MC; Cassenote AJF. A feminização da medicina no Brasil. Rev Bioética. 2013; 21(2): 268-277.
- 32. Pereira DS, Souza RS, Buaiz V, Siqueira MM. Uso de substâncias psicoativas entre universitários de medicina da universidade federal do Espírito Santo. J Bras Psiquiatr. 2008; 57(3):188-195.

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