

Use of psychotropic drugs by students from the health area: a comparative and qualitative analysis

Uso de psicotrpicos por acadêmicos da área da saúde: uma análise comparativa e qualitativa

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ABSTRACT

Introduction: The use of psychotropic substances is highly prevalent among students in the health area. This situation reveals an inversion of values, in which future professionals who will give advice on drug use and abuse make inadequate consumption of drugs.

Objective: This research aims to collect and comparatively analyze the profile of psychotropic substance use by health students, as well as analyze the subjective significance of drug use by health students.

Methods: This is a cross-sectional study, with a quantitative sample of 745 students, aged 15 to 70 years, from the Psychology, Medicine, Nursing, Nutrition and Physiotherapy courses. A questionnaire adapted from the "I National Survey on the Use of Alcohol and Other Drugs by University Students in the 27 Brazilian Capitals" was used for data collection. Regarding the qualitative work, a focal group was carried out, whose participants comprised ten students, of which three were Psychology students, three were Physiotherapy students, one was a medical student and one a Nursing student.

Results: The study results showed that the psychotropic substances most often used by the participants were: Alcohol, Tobacco and Marijuana, in addition to Tranquilizers and Anxiolytics. Furthermore, in comparison with the other courses, Psychology students were the ones who used the most drugs in general, followed by Nutrition and Medicine. Moreover, drug use was perceived as a means of escape from psychological distress, as well as a way to maximize pleasure. For university students, the use of psychotropic drugs is seen as a combination of interpersonal relationships, being also influenced by the desire to improve academic performance.

Conclusion: The study data disclosed a high consumption of psychotropic drugs by university students in the health area, a condition associated to psychological distress and which reveals a demand for support and assistance in terms of substance dependence. It is important that further research on the subject be carried out, so that effective public policies can be implemented.

Keywords: Psychotropic Substance Use; University Students; Health Courses.

RESUMO

Introdução: O consumo inadequado de psicotrpicos é bastante prevalente entre universitários da área da saúde. Essa situação reflete uma inversão de valores, em que os futuros profissionais orientadores sobre o consumo de drogas fazem seu uso indevido.

Objetivo: Esta pesquisa visa realizar um estudo epidemiológico descritivo do perfil de consumo de drogas por acadêmicos da área da saúde, bem como analisar o significado subjetivo do uso de drogas para os universitários.

Método: Trata-se de um estudo transversal, cuja amostra quantitativa foi de 745 estudantes, de 15 a 70 anos, dos cursos de Psicologia, Medicina, Enfermagem, Nutrição e Fisioterapia. Empregou-se, para a coleta de dados, o questionário adaptado do I levantamento nacional sobre o uso de álcool, tabaco e outras drogas entre universitários das 27 capitais brasileiras. No que diz respeito ao trabalho qualitativo, foi realizado um grupo focal cujos participantes foram dez estudantes, sendo três de Psicologia, três de Fisioterapia, um de Medicina e um de Enfermagem.

Resultado: Os resultados da pesquisa apontam que as substâncias psicotrpicas mais utilizadas pelos participantes foram: álcool, tabaco e maconha, além de tranquilizantes e ansiolíticos. Ademais, em comparação com outros cursos, Psicologia liderou o uso de drogas em geral, seguido de Nutrição e Medicina. Além disso, percebeu-se o uso de drogas como meio de fuga em relação ao sofrimento psíquico, bem como forma de maximização do prazer. Para os universitários, o uso de psicotrpicos é tido como amálgama das relações interpessoais, sendo influenciado também pelo desejo de melhora no desempenho acadêmico.

Conclusão: Os dados da pesquisa revelaram um alto consumo de psicotrpicos entre universitários da saúde, condição atrelada a sofrimento psíquico e que revela uma demanda por aporte e auxílio em termos de dependência a substâncias. É importante que novas pesquisas a respeito do tema sejam realizadas, para que efetivas políticas públicas possam ser implementadas.

Palavras-chave: Uso de Psicotrpicos; Estudantes Universitários; Cursos da Área da Saúde.

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INTRODUCTION

Inappropriate drug use by university students is quite prevalent in today's society¹⁻³, mainly by students of Medicine and other health areas⁴⁻⁶, such as Psychology, Physiotherapy, and Nutrition, among others. Although it is a serious public health problem, the use of psychotropic drugs is still a neglected issue and does not have a specific focus for action.

The consumption of psychotropic drugs is understood as an ancient practice, since, in all civilizations and times, psychoactive substances were consumed by humans as a means of affecting their existence^{7,8}. However, an alarming increase in the frequency of use and abuse of drugs in contemporary times has been observed⁹.

In the current contemporary scenario, exteriority has become the current value: external signs, such as consumer goods and social status, have become the markers of each person's role¹⁰. In this context, the destinies of desire have taken on an exhibitionist and self-centered direction^{10,11}. Marked by the search for the enhancement of one's own image and by the demand for performance, the search for immediate and continuous satisfaction of desires have become the predominant values^{10,12}.

In this context, drug use has become one of the main tactics to avoid direct contact with reality and with the suffering inherent to the human condition^{10,13}. The use of psychotropic drugs represents a response to the uneasiness, an attempt by the subject to control their affections^{9,8}. When using drugs, the subject is dominated by the principle of pleasure, and seeks to make a change of reality, which becomes, at the same time, rejected and recreated, destroyed and preserved⁹. Despite seeking to break up with the symptoms, drug users generally maintain a link with reality: they do not radically repudiate it, they simply takes on a position of omnipotence, in which they have control over the attainment of *jouissance* and the avoidance of uneasiness⁹.

Although drugs are consumed by the overall population, a more elevated use of psychotropic drugs is observed among university students¹⁻³. These, being mostly young, have the following profile: a phase of exploration of one's identity, especially in amorous relationships and at work; transition between adolescence and adulthood; emotional and educational status instability; the young individual's distancing from family values; participating in a time of possibilities, and opportunity to transform their lives¹⁴.

Youth is characterized by subjective processes that aim to suppress the flaws that are inherent to the social structure, by assigning people a place in harmony with their condition of desiring¹⁵. During this period, the social cycle is a factor that exerts great influence on the psychological development of

young people, who, aiming at obtaining support and complicity from their peers, tend to manifest a desire to experience different states of consciousness induced by psychotropic drugs. That is, the age group of college students is a contributing variable for the misperception of drug use¹⁴. In addition to the social cycle, factors such as biological/hereditary¹⁶ transformations, hormonal¹⁷, sexual and neurological¹⁸ features also influence the use of psychoactive substances.

Among the multifactorial variables that influence the exacerbated consumption of drugs are psychiatric comorbidities¹⁹, such as depression and anxiety, very common in courses in the health area²⁰. Moreover, the handling of psychotropic drugs is related to a predisposition to chemical dependence^{1,21,12} and risk behaviors, such as multiple sexual partners and physical violence^{1,22}. It is understood that drug use results from different reasons and generates different significations for each user²³. In the case of university students from the health area, easy access to and coexistence with several substances, as well as stressful work and study conditions⁶ are variables that corroborate the elevated use of psychotropic drugs by this population.

It is understood that, although humans have a protagonist role in the construction of themselves, an individual does not exist outside the sociocultural field^{24,25}. In the case of today's society, which lies on a capitalist production model, in which there is a compulsion to work and a renunciation of instinct, satisfaction rests on its pride for what has already been successfully achieved²⁶. This structure is perceived by university students from the health area as the individual academic performance takes on a leading role in the students' lives: in this context, drug use has the role of improving academic performance, as well as acting as a means to maximize pleasure and escape from psychological suffering²⁷. Psychotropic drugs serve as 'worry dampeners', allowing people to move away from the pressures of reality, finding refuge in a world of their own, with better conditions of sensitivity^{24,27}. However, although the drugs, as an object of *jouissance*, momentarily alleviate the psychological suffering, the repressed emotions always return, revealing a "depressed" subjectivity due to the excess of objects²⁷.

Considering this information, it is clear that a high consumption of psychotropic drugs by the young population, especially university students in the health area, is a public health issue that requires in-depth studies. These students will be the future professionals responsible for spreading information related to the effects of drugs and chemical dependence^{4,6}. They will be seen as a role model for their patients and will play a significant role when caring for them. Thus, the constant use of psychotropic drugs by these university students reflects a means of reversion of values, in which professionals

responsible for providing embracement and advice on the use of psychoactive substances use them inappropriately, that is, a break in the model⁶.

Among the severe problems generated by drug use, the Brazilian Report on Drugs (RBSD, *Relatório Brasileiro Sobre Drogas*) points out that the use of psychotropic drugs is often associated with severe problems such as accidents, violence, development or worsening of diseases, decline in academic and work activities, and can lead to family and social conflicts²⁸. Therefore, the increase in the rate of drug consumption contributes to the rise in public and social expenditures with medical treatments, interventions in cases of violence and other consequences.

According to the RBSD²⁸, the psychoactive substances most commonly used in Brazil are: Alcohol (74.6%), Tobacco (44.0%), Marijuana (8.8%), Solvents (6.1%), Benzodiazepines (5.6%), Orexigenic (4.1%), and Stimulant drugs (3.2%). These are also the most addictive drugs, respectively showing in percentage values, 12.3%, 10.1%, 1.2%, 0.5%, 0.2% and 0.2% for chemical dependence. These data reflect the severe consequences that the abusive use of drugs generates in the Brazilian population. Among them, the loss of productivity and labor work force, the users' vulnerability to violence²⁹ and propensity to biological and mental illness³⁰.

It is observed that the use of psychotropic drugs by university students from the health area is a relevant topic for the control and investigation of health factors in the Brazilian population. There are currently several articles and studies on the use of psychotropic drugs by medical students^{2,4,5}. However, there is a scarcity of studies investigating the use of drugs by students from other courses in the health area, as well as a gap of a decade or more regarding studies and comparative analysis in this topic. Among the few studies on drug use by students from different courses in the health area, the greatest concentration of comparative analysis research has lost its incidence over the years, with a gap of a decade or more^{2,6}.

Objective

Based on the lack of recent research on the use of psychotropic drugs by university students from different health areas, this study aimed to analyze the prevalence of psychotropic drug use by university students from the following health courses: Medicine, Nursing, Psychology, Nutrition and Physiotherapy, as well as understand the subjective signification of drug use for university students in the aforementioned courses.

METHOD

A cross-sectional analytical study was carried out with the triangulation of quantitative and qualitative methods. The

study consisted of two stages: (i) application of a quantitative questionnaire; (ii) conducting a focal group. The first stage involved 745 volunteer students from all shifts attending the courses of Medicine, Psychology, Nursing, Nutrition and Physiotherapy at *Centro Universitário de Brasília* (UnICEUB), a private university in Brasília, Federal District, Brazil. Through the sample calculation in research³¹, a total of 169, 222, 166, 114 and 73 participants was obtained for each course, respectively. The students who participated in the study were aged between 15 and 70 years, of which 572 were females (78.04%) and 161, males (21.96%). Fourteen individuals did not report their gender.

For data collection, an adapted self-administered questionnaire including 71 objective questions was applied. This instrument was previously validated and used in a survey by the National Department of Policies on Drugs for the 1st National Survey on the Use of Alcohol and Other Drugs among university students in the 27 Brazilian capitals¹. This article focuses on the results that are pertinent to question 26 of the questionnaire, which aimed to gather information about the use of drugs during one's lifetime, in the last 12 months and in the last 30 days of the following substances: Alcohol, Tobacco, Marijuana, Hallucinogens, Cocaine, Amphetamines, Anticholinergics, Organic Solvents, Tranquilizers, Anxiolytics, Opiates, Sedatives and Barbiturates.

The project was submitted to the Ethics Committee and approved at the 15th Ordinary Meeting of CEP-UnICEUB, on 08/24/2018, under Opinion n. 2.830.452/18. After its approval, invitations to participate were made to students from the aforementioned health courses. Data were collected during the second semester of 2018 and the first semester of 2019. The questionnaire was administered in the classrooms by the examiners, who provided orientation on how to fill out the questionnaire and reinforced the confidentiality and benefits of the project. All volunteer participants were instructed to complete the Free and Informed Consent form before answering the questionnaires. Computation and quantitative cross-sectional analysis with data crossing was performed by the ESTAT statistical group.

The qualitative stage was carried out with ten students: three from Psychology, one from Medicine, one from Nursing and three from the Physiotherapy courses. The aim of this stage of the research was to perform an analysis of the subjects' subjectivity, to verify how the participants assessed the experience of drug use, and what their opinions, feelings and significations were associated to this topic.

To carry out the focal group, a script with 5 topics was created, and among the guiding questions were the interpretation of what a drug is and the subjective signification

of its use. Experiences, motivations, apprehensions, as well as risk and protection factors, construction of identity, benefits and harms of psychotropic drug use, the iatrogenics of each course and also prejudices about the topic were raised. Therefore, we aimed at assessing the signification of drug use for students, with the moderator encouraging the statements and expressing the topics through the use of stimuli and open questions.

This article focuses on understanding the results of the bivariate descriptive analysis of the data and the analysis of drug use signification by university students. In the quantitative part, the percentages of lifetime use, use in the last year and in the last month for each drug were calculated, in addition to the prevalence of this use by the categories of Gender/Sex, School Years and Course in the Health Area. To represent these values, tables with all percentages were used and, for discussion criteria, results of UniCEUB students were compared with data from the National Secretariat of Policies on Drugs¹.

In the qualitative part, for a better understanding of the research participants' subjectivity, a discourse analysis was developed, based on the Psychoanalytic Theory. The discourse consists of a practice of language and expression, and its analysis seeks to broaden the understanding of how humans signify what is around them and themselves. Therefore, the Discourse Analysis considers that, when communicating something, the person promotes a signification of what is said. Therefore, it is up to the researcher to unveil the signification used by the subject in his speech.

RESULTS

Bivariate descriptive analysis

Based on the table above, it can be observed that the drugs most often used during the lifetime of students in the health area of UniCEUB were: Alcohol (90.16%), Tobacco (45.19%), Marijuana (39.56%), Inhalants and Solvents (17.05%) and Tranquilizers (14.57%). In the last 12 months before the questionnaire was applied, the most consumed substances were: Alcohol (78.60%), Tobacco (32.89%), Marijuana (27.52%), Tranquilizers (11.71%) and Ecstasy (9.98%). In relation to the last 30 days, the highest consumption comprised: Alcohol (64.63%), Tobacco (29.59%), Marijuana (23.11%), Tranquilizers (11.41%) and Ecstasy (7.69 %) (Table 1).

Apparent differences in the use of psychoactive substances were observed according to the student's gender/sex. Men consumed more alcohol during their lifetime and in the last 30 days than women. However, there is little difference regarding the measures of use in the last 12 months. The use of tobacco by male university students was higher, both for use during one's lifetime, and use in the last 12 months and in the last 30 days (Table 2).

The most commonly used drugs during one's lifetime by men were: Alcohol (93.12%), Tobacco (52.79%), Marijuana (48.75%), Inhalants (21.73%), Ecstasy (22.78%) and Hallucinogens (21.51%). Among women, the most often used drugs were: Alcohol (89.43%), Tobacco and its derivatives (42.90%), Marijuana (36.87%), Tranquilizers (16.54%) and Inhalants (14.89%). Regarding the use in the last 12 months, the most consumed drugs by men were: Alcohol (79.22%), Tobacco and its derivatives (44.77%), Marijuana (36.36%), Ecstasy (15.12%), Hallucinogens (13.22%) and Inhalants (9.52%). Women, in the last 12 months, consumed more: Alcohol (78.31%), Tobacco (29.09%), Marijuana (25%), Tranquilizers (13.25%), Ecstasy (8.82%) and Hallucinogens (6.54%) (Table 2).

Regarding consumption in the last 30 days, the substances most often consumed by male students were: Alcohol (67.10%), Tobacco (36.36%), Marijuana (30%), Ecstasy (12.17%), Hallucinogens (8.77%) and Opioids (7.01%). Among women, the most often reported were:

Table 1. Use of Psychotropic Substances- General.

	Lifetime use (%)	Use in the last 12 months (%)	Use in the last 30 days (%)
Alcohol	90.16	78.60	64.63
Tobacco products	45.19	32.89	29.59
Marijuana and derivatives	39.56	27.52	23.11
Inhalants and solvents	17.05	6.37	4.44
Tranquilizers and anxiolytics	14.57	11.71	11.41
Hallucinogens	13.15	7.83	4.08
Ecstasy	12.51	9.98	7.69
Opioids	10.80	7.71	6.12
Synthetic drugs	4.38	3.06	2.48
Codeine and derivatives	4.38	2.33	2.21
Cocaine	3.52	1.37	0.91
Amphetamines	3.00	2.64	2.64
Anabolic steroids	2.58	1.12	1.12
Ayahuasca tea	2.73	1.88	1.88
Sedatives and barbiturates	2.72	2.14	1.90
Ketamine	1.14	1.14	1.14
Anticholinergics	0.95	0.95	0.95
Heroin	0.56	0.56	0.56
Crack	0.37	0.37	0.37
Merla	0.36	0.36	0.36

Alcohol (63.65%), Tobacco (27.19%), Marijuana (21.02%), Tranquilizers (12.79%), Ecstasy (6.60%), Opioids (5.98%), and Inhalants (4.14%). Moreover, it was found that the overall use of drugs was significantly higher among males, except for the use of tranquilizers and opioids used during one's lifetime and in the last 12 months, which was higher in the female sex/gender (Table 2).

Based on Table 3, it can be observed that alcohol consumption among university students in the health area was higher among students in the 1st (78.9%), 2nd (86.24%) and 3rd (78.80%) university years, that is, at the beginning of the course. Students consumed less alcohol in the "other years" category (71.43%), followed by the 6th (76.92%) and 5th years (68.18%) of the course. The use of tobacco was higher among university students from other university years (50%), followed by the 5th (45.45%) and the 2nd years (38.04%) (Table 3).

Marijuana use was the highest in the 5th year (45.45%) of university, followed by the 2nd year (35.48%). Students at the beginning and at the end of the course were the ones who used the drug less often, with 18.18% of the 6th-year university

students and 29.85% of the 1st-year students had the same rate. The consumption of tranquilizers and anxiolytics was higher in the 5th year (26.67%), followed by the rate of the other years (25%). Students in the 3rd (8.22%) and 4th years (8.49%) were the ones who showed the least use of Anxiolytics and Tranquilizers. The consumption of Ecstasy was higher among students in the 5th year (18.52%) and in the 3rd year of university (12.59%), being lower among students in the 1st (7.41%) and 4th years (7.41 %) of the course (Table 3).

From the table above, it can be observed that the drugs most often used by university students from the health area during their lifetime were: Alcohol, Tobacco, Marijuana, Inhalants, Hallucinogens, Tranquilizers and Anxiolytics. Among the UniCEUB courses, the one with the highest rate of alcohol consumption during one's lifetime was Psychology (94.71%), followed by Nutrition (92.62%) and Medicine (92.45%). The areas with the lowest use of alcohol were Physiotherapy (82.43%) and Nursing (83.12%). There was a high percentage of consumption of this substance by university students from all courses (Table 4).

Table 2. Use of Psychotropic Substances by Gender/Sex.

	Lifetime use(%)		Use in the last 12 months (%)		Use in the last 30 days (%)	
	♀	♂	♀	♂	♀	♂
Alcohol	89.43	93.12	78.31	79.22	63.65	67.10
Tobacco products	42.90	52.79	29.08	44.77	27.19	36.36
Marijuana and derivatives	36.87	48.75	25.00	36.36	21.02	30.00
Inhalants and solvents	14.89	21.73	5.22	9.52	4.14	5.04
Trnaquilizers and anxiolytics	16.54	8.22	13.25	6.95	12.79	6.95
Hallucinogens	10.57	21.51	6.54	13.22	2.88	8.77
Ecstasy	9.54	22.78	8.82	15.12	6.60	12.17
Opioids	11.64	6.91	7.88	7.62	5.98	7.01
Synthetic drugs	3.78	6.83	3.03	3.41	1.98	4.42

Table 3. Use of Psychotropic Substances by Course Year.

	Lifetime use (%)						
	1st year	2nd year	3rd year	4th year	5th year	6th year	Others
Alcohol	78.90	86.24	78.80	75.40	68.18	76.92	71.43
Tobacco products	29.85	38.04	32.50	31.53	45.45	18.18	50.00
Marijuana and derivatives	23.00	35.48	28.40	26.61	34.38	18.18	28.57
Inhalants and solvents	4.62	6.82	6.08	7.89	6.67	15.38	12.50
Trnaquilizers and anxiolytics	15.05	9.52	8.22	8.49	26.67	-	25.00
Hallucinogens	4.79	11.90	8.90	7.41	10.71	-	25.00
Ecstasy	7.41	12.05	12.59	7.41	18.52	7.69	15.50
Opioids	8.06	3.53	8.45	4.63	23.33	8.33	14.29

Regarding the consumption of tobacco during one's lifetime, students in the Nutrition course were the ones who used it the most, followed by students in Psychology (47.58%), Physiotherapy (41.89%), Medicine (39.87%) and Nursing (38.85%). Regarding the use of Marijuana during one's lifetime, the highest rates were found in the courses of Nutrition (46.34%) and Psychology (46.26%), which were very similar. University students in the Nursing course (29.30%) were those who used this substance the least (Table 4).

Other high consumption drugs, hallucinogens, were more often used during one's lifetime by students of Physiotherapy (18.31%) and Psychology (15.18%) at UniCEUB. In addition to this psychotropic drug, the use of tranquilizers and anxiolytics showed to be common among students from health courses. Nursing (21.52%) and Psychology (17.49%) students were the ones who most often used these drugs, while Physiotherapy students showed the lowest consumption rate of this substance (5.56%).

Moreover, the psychotropic drugs most often used by students from health courses at UniCEUB in the last

month were: Alcohol, Tobacco and Marijuana, Tranquilizers and Anxiolytics. Medical students (69.22%) consumed more alcohol in the last 30 days, followed by Psychology (68.01%), Nutrition (65.80%) and Physiotherapy (62.86%) students.

Regarding the use of Tobacco, Physiotherapy students (35.08%) were the ones who consumed the most in the last 30 days, followed by Nutrition students (34.26%). The university students who used tobacco the least were those in the Nursing course (26.31%). Regarding Marijuana use in the last 30 days, Psychology students (30.52%) used it the most often, followed by Physiotherapy students (24.08%). Medicine (16.40%) was the course with the lowest percentage of consumption of this drug. Finally, the use of tranquilizers and anxiolytics in the last 30 days was more prevalent among nursing (14.15%) followed by Psychology students (13.64%).

As a comparison criterion, the data on the consumption of psychotropic drugs by university students from the health area courses at UniCEUB were contrasted with drug consumption rates by university students in Brazil¹.

Table 4. Use of Psychotropic Substances by Health Course.

	Nutrition		Physiotherapy		Nursing		Psychology		Medicine	
	Lifetime	Month	Lifetime	Month	Lifetime	Month	Lifetime	Month	Lifetime	Month
Alcohol	92.62	65.80	82.43	62.86	83.12	54.22	94.71	68.01	92.45	69.22
Tobacco products	52.72	34.26	41.89	35.08	38.85	26.31	47.58	61.60	39.87	23.02
Marijuana and derivatives	46.34	22.43	38.89	24.08	29.30	18.02	46.26	30.52	35.22	16.40
Inhalants and solvents	20.33	3.77	17.81	1.96	10.13	5.71	18.50	4.44	18.99	4.96
Tranquilizers and anxiolytics	13.93	8.50	5.56	10.00	21.52	14.15	17.49	13.64	8.77	8.77
Hallucinogens	14.05	3.77	18.31	8.16	13.29	4.95	15.18	4.57	7.05	0.93
Ecstasy	15.83	7.62	14.08	14.26	8.23	6.73	14.86	8.04	14.86	5.26
Opioids	8.20	4.67	13.70	9.61	20.51	11.54	8.11	5.37	5.70	1.85
Synthetic drugs	5.83	4.08	6.94	6.25	3.23	1.09	5.33	1.76	1.90	0.92
Codeine and derivatives	1.03	1.03	12.68	9.80	6.37	3.45	4.07	0.65	1.90	0.93
Cocaine	1.64	0.96	4.11	2.00	5.70	2.83	4.87	-	0.63	-
Amphetamines	5.79	3.88	1.39	2.04	4.49	3.12	3.12	3.12	0.92	0.92
Anabolic steroids	3.28	1.92	4.17	2.00	1.90	-	17.49	1.16	3.16	0.91
Ayahuasca tea	2.50	1.96	2.82	2.08	3.77	3.00	2.68	1.16	1.92	1.85
Sedatives and barbiturates	2.46	1.90	2.08	2.08	5.73	5.15	2.68	0.60	0.63	0.92
Ketamine	0.95	0.95	2.08	2.08	1.27	2.04	1.18	1.18	0.64	-
Anticholinergics	1.92	1.92	2.04	2.04	1.90	2.06	0.45	-	-	-
Heroin	0.96	0.96	2.04	2.04	-	-	0.59	0.59	-	-
Crack	0.95	0.95	2.08	2.08	-	-	0.45	-	-	-
Merla	0.95	0.95	2.00	2.00	-	-	-	-	-	-

Read "lifetime" as lifetime psychotropic use and "month" as psychotropic use in the last 30 days.

Comparison of UniCEUB (Table 4) X Universities in the 27 Brazilian capitals

When comparing the lifetime use of psychotropic drugs by students from health courses at UniCEUB (Table 4) with the data from the "I National Survey on the use of Alcohol, Tobacco and other drugs by university students in 27 Brazilian capitals"¹, we observed that Alcohol, Ecstasy, Marijuana and Hallucinogens were most often consumed by students from UniCEUB health courses.

The average lifetime use of alcohol among university students in the 27 capitals was 86.2%¹, whereas the rate of consumption of this drug by university students in the Nutrition, Physiotherapy, Nursing, Psychology and Medicine courses at UniCEUB was higher than the national average. As for tobacco, its consumption was 46.7% among university students in the 27 capitals¹, showing the average consumption among students of Nutrition and Psychology at UniCEUB was higher than the Brazilian average. The use of Marijuana was more prevalent among university students in all courses from the health area at UniCEUB. The consumption of Marijuana was 26.1% in the study used for comparison¹.

Regarding the use of Ecstasy and Hallucinogens in one's lifetime, while the average use of Brazilian university students is 7.5% and 7.6%, respectively¹, the use by students from the health area of UniCEUB was significantly higher, except for the rate of hallucinogen use by medical students, which was within the average of Brazilian capitals. Additionally, it was observed that the consumption of Tranquilizers and Anxiolytics was higher by students from the courses of Nutrition, Nursing and Psychology at UniCEUB during one's lifetime. In the 27 Brazilian capitals, the consumption rate of these substances was 12.40%¹.

When comparing the rates of drug use in the last month by health students at UniCEUB with data from the 27 capitals¹, it was observed that the use of Alcohol, Tobacco, Marijuana, Anxiolytics and Tranquilizers was higher among UniCEUB students. Alcohol consumption by university students in Brazil was 60.5%. The only UniCEUB course of which rate of use of this substance was lower in the last 30 days was the Nursing course.

Regarding the use of Tobacco, Marijuana, Tranquilizers and Anxiolytics by university students in the last 30 days, it was found that university students from the health area at UniCEUB used these substances more often than university students in 27 capitals¹. Across the Brazilian territory, the consumption rate of Tobacco was 21.6%, that of Marijuana was 9.1% and that of Tranquilizers and Anxiolytics was 5.8%.

Focal group

Drug use as an escape from human suffering: a silent call for help

For Psychoanalysis, suffering is understood as what torments the human being, generates anguish and frustration. Represented by the absence, suffering is inherent to human beings³² and, as a way of dealing with it, people develop forms of psychological relief, forging objects of jouissance, which seek to replace the absence. Among the mechanisms to relieve suffering, there is the search for unrestricted satisfaction and the escape from unhappiness²⁴. The abuse and use of psychoactive substances are understood both as a way to maximize pleasure and as an escape from psychological distress. By changing the chemistry of the body, generating pleasurable sensations and modifying the conditions of sensitivity, drugs allow the subject to move away from the pressures of reality, finding refuge in a world of their own, which can be perceived in the following speeches by the participants:

"Reality is horrible, drugs help me cope [...] they help me face reality. (P2); Marijuana improved my performance, my anxiety and depression [...] it helps me [...] I use it daily [...] for me, it helps a lot. (P3); The effect of (tobacco) wakes me up [...] even though my blood pressure goes down. (P1)."

When analyzing these reports, it is clear that the use of drugs serves not only as a means of keeping the subjects away from suffering, but it also has a lethargic effect, resulting in an apathy that makes the person feel the illusion that the anxiety has been eliminated. However, although the drugs take on the function of encouragement when facing uneasiness, that which was repressed always returns, disclosing a "depressed" subjectivity due to the excess of objects of jouissance, which also suppresses desire and hope, since the absence is not fact fulfilled²⁷.

In the case of university students from the health area, it was observed that the uneasiness experienced by them is linked to an intense demand for excellent academic performance. Thus, the consumption of psychotropic drugs serves as a means to alleviate suffering, as well as improve academic performance:

"In the health area (the use of substances) is higher than in other courses [...] probably because we deal with lives and it is a mechanism to relieve stress. (E1). It is very difficult for you to remain in Medicine without medication, it is very heavy. (F1). Medicine is by far the health course in which the most students use psychotropic drugs, they use many medicines to study. (F1)."

Based on these statements, it is clear that the students spoke openly about their personal experiences in relation to drug use. They reported that in the medical course, the demand for academic excellence is even greater than in other courses from the health area, and that a greater use of psychotropic drugs by

these students is very likely. They also pointed out that students in courses from the health area tend to use more substances than others, due to the easy access to drugs, the pressure of dealing with other human beings in their future work area and the exhausting and stressful rhythm of these courses. It is also observed that, although the participants reported their personal experiences in relation to the use of psychoactive substances, they did not disclose an explicit suffering, did not cry or show any emotion when talking about the topic during the focal group meeting. It is understood that there was a rationalization of suffering as a defensive mechanism, from which the individual avoids getting in touch with suffering and the failure when dealing with reality.

The use of psychotropic drugs by health students: from narcissistic satisfaction to the need for social inclusion

For Psychoanalysis, although human beings have a protagonist role in the construction of themselves, the subjects' constitution is permeated by the sociocultural context^{24,25}. In this case, the constitution of the current society is based on a capitalist mode of production, in which the current values are linked to the development of individual competences, aiming to attain successful positions²⁶. This system lies on the compulsion to work and a renunciation of instinct, which inevitably leads to "frustration".

Enclosed in this model, people's satisfaction tends to be narcissistic in nature, based on pride in what has already been successfully achieved²⁶. This issue is perceived in the students' reports, as they show great concern in showing a good academic performance, that is, they see academic approval as something they should be proud of, which makes this search for good grades a motivator for use of drugs.

Despite the constant avoidance of suffering through the use of psychotropic drugs, it is necessary for the individual to deal with a certain amount of suffering and frustration to build one's maturity and subjectivity. There is a difference between creative suffering and pathogenic suffering, in which the first one develops creative and critical strategies to deal with pain, while the pathogenic type is characterized by suffering that generates a solution that is unfavorable to health, in which the subject has exhausted their defensive resources, and is already in the process of getting ill³³.

"You have to be well to transmit improvement to the patient. (F3). I'm kind of disappointed in myself, because (using psychotropic drugs) is not what I recommend to others [...], but at the same time, without them I can't be well and keep my performance in the university (P1)."

It is observed that, especially in courses from the health area, in which future professionals will be responsible for

spreading information related to the effects of drug addiction and chemical dependence, the handling of psychotropic drugs is disturbingly prevalent^{4,6}. This situation reflects a break in the models, in which the professionals responsible for embracement and advising on the use and abuse of these substances, inappropriately use them^{26,34}.

In addition to escape from suffering, drug use is closely linked to the stage of development in which most university students are. Youth is a life phase characterized by subjective processes that aim to suppress the flaws inherent to the social structure in assigning people a place in harmony with their condition of desiring¹⁵. Consequently, the social cycle becomes very important for the psychological development of young individuals. During leisure time, it is common for university students to carry out group activities with friends³⁸. During these activities, most of the time is spent going to bars or parties, where the use of alcohol and other drugs is frequent. Thus, students influence each other in terms of using psychotropic drugs, which can be seen in the following statements:

"Drug use is directly related to the social context. (P1) Drugs positively affect socialization [...] people feel more comfortable and put up with other people, even those they do not like. (P2) For every 10 friends, 8 use something [...] it is very rare for someone to have never used drugs. If you do not use it, you are seen as a square, boring... they won't accept you if you do not use them (E1)."

Based on the focal group, drugs are perceived as an amalgamation of the interpersonal relationships of university students, acting as a facilitator of social interaction. In addition to the fact that the students declared that the use of psychotropic drugs provides a feeling of belonging, they pointed out that not using psychotropic drugs can play a role in group exclusion.

Significance of the use of psychotropic drugs for university students from the health area

Regarding the university students' understanding of what drugs would be, although all the participants were from courses in the health area, they demonstrated they had little knowledge of the scientific nature of the pharmacological effect of drugs. The speeches showed it to be lay, without the in-depth knowledge of the epidemiology and impact of hallucinogenic, anabolic, tranquilizer, and anxiolytic drugs and the function of each psychotropic drug.

Although they did not delve into this technician view, the subjective aspect of drug use was highlighted. They emphasized the inevitability and imprisonment of psychotropic drugs, and proposed a dual concept about drugs, which can be

used recreationally or medically, in a beneficial or harmful way. These issues can be observed in the following statements:

"A drug is everything that alters your system, alters your way of thinking, speaking and acting. (E1). Psychotropic drugs represent a necessity, an escape, death, depression, happiness, something fleeting, useless, destructive. (P2) I think no one is 'normal' [...] no one is free of some substance use. (P3) Substance use has two sides [...] (P3) Addiction is all excess, it is the failure to stop [...] sometimes you are not addicted, but your body is. (P3)."

Regarding the consumption of illicit drugs, university students relativized their effects when comparing them to legal drugs. They denied a direct association between legality and severity of psychoactive substances. Moreover, they verified how easy it is to have access to illicit psychotropic drugs. They added the ineffectiveness of the war on drugs and current public policies in Brazil, declaring the need for illicit drugs to stop being stigmatized, which can be observed in the following statements:

"(The user) can get drugs anywhere [...] it is very accessible. (P2) In Brazil, as we prohibit everything, we do not know what we are ingesting (when drugs are illegally obtained). (P1) [...] (Drug use) is a public health problem and is treated as a matter of violence. (P3) The first thing (which we must do regarding the management of psychotropic drugs) is to discard prejudice [...]. (P3)."

In opposition to the easy access to drugs, it was observed that one of the main mechanisms arousing the curiosity of young individuals regarding drug experimentation is the taboo. The participants reported that the topic of drug use is little discussed in the family, school and university environments in a broad, neutral and non-stigmatizing way. They revealed that the instructions given to them are generally one of repression and denial regarding the use of psychotropic drugs. However, as they did not talk about the topic, did not know the effects of psychotropic drugs, this context would eventually strengthen a behavior of rebellion and curiosity.

CONCLUSION

As noted above, the research aimed to analyze the prevalence of psychotropic drug use by university students from the health area, as well as to understand the subjective signification of drug use by these students. Regarding the first objective, it was observed that the psychotropic drugs most often consumed by Psychology, Medicine, Nutrition, Nursing and Physiotherapy university students were: Alcohol, Tobacco and Marijuana, Tranquilizers and Anxiolytics. It was found that, compared to the other courses, Psychology students were

the ones that most often used drugs in general, followed by Nutrition and Medicine students. In addition, nursing students were the ones that most often used Ecstasy alone. Nutrition were the ones that most often used tobacco during one's lifetime and in the last year, ranking second in the last month, behind Physiotherapy students.

The focal group showed, as the driving force of the high rate of drug use, that psychotropic drugs are seen as a means of escape from suffering and maximization of pleasure, as well as an amalgamation of social relationships and a means of seeking an academic performance of excellence among university students from the health area. Regarding this last issue, the university students considered that the use of psychotropic drugs would be even greater among medical students, since the latter would be more pressured to show an excellent performance. This hypothesis was not corroborated, since Medicine was the third course with the highest rate of drug use. However, medical students were the ones who consumed the most alcohol in the last month, which may be related to the stressful environment inherent to the academic scenario of this course.

In general, the study data disclosed a high rate of drug use among university students from the health area, a condition that reveals the psychological suffering of users and reflects a subversion of roles, in which future health-promoting professionals make exaggerated use of psychotropic drugs. It was also identified a silent demand from university students for support and assistance regarding drug addiction, accompanied by specific demands for training centered on human care, which justifies the specific demand for action on this population. A marked need for new epidemiological and analytical research on the subject is emphasized, aiming to make up for the scarcity of recent studies, but mainly to allow the investigation of preventive public policies regarding the compromising use of psychotropic substances by university students from the health area.

Based on the assessed data, it can be stated that the main objective of the research was achieved. The study contributes to the debate of the subject, identifies the population at risk for the use of psychotropic drugs in the health area, and analyzes the influence of recreational or addictive drug use on the quality of life and productivity of students. However, there are limitations that deserve to be highlighted, as they indicate issues that can be better developed in future studies. Among these limitations is the difficulty of generalizing the observed results. The research was conducted at a single university. Thus, although the sample of participants was significant within the institution where the research was carried out, the rates of psychotropic drug use could be different according to the sociocultural context and the university the students from the health area attend.

In addition, it was observed that, compared to the national average¹, the overall use of drugs, especially Alcohol, Tobacco, Marijuana, Tranquilizers and Anxiolytics, was higher among university students from the health area of the university where the research was conducted. It is possible that this significant difference is due to the temporal disparity in which the studies were carried out. As mentioned above, there is a time gap between comparative research and the present study.

AUTHORS' CONTRIBUTION

João Borges Esteves Tovani and Luísa Jobim Santi carried out a literature review on the use of psychotropic drugs by university students from the health area, as well as applied the questionnaires and analyzed the data obtained by the research. Moreover, together with Eliana Villar Trindade, they conducted a focal group and analyzed the data obtained through this meeting. Eliana Villar Trindade oriented the other researchers during the data collection and analysis process and collaborated with the manuscript writing.

CONFLICTS OF INTEREST

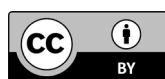
The authors declare no conflicts of interest.

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REFERENCES

- Andrade AG, Duarte PCAV, Oliveira LG. I levantamento nacional sobre o uso de álcool, tabaco e outras drogas entre universitários das 27 capitais brasileiras. Brasília: Secretaria Nacional de Políticas sobre Drogas; 2010.
- Chiapetti N, Serbena CA. Uso de álcool, tabaco e drogas por estudantes da área da saúde de uma universidade de Curitiba. *Psicol Reflex Crit*. 2007;20:303-13.
- Coutinho MPL, Araújo LF, Gonties B. Uso da maconha e suas representações sociais: estudo comparativo entre universitários. *Psicol Estud*. 2004;9(3):469-77.
- Kerr-Corrêa F, Andrade AG, Bassit AZ, Boccuto NMVF. Uso de álcool e drogas por estudantes de Medicina da Unesp. *Rev Bras Psiquiatr*. 1999;21(2):95-100.
- Machado CS, Moura TM, Almeida RJ. Estudantes de Medicina e as drogas: evidências de um grave problema. *Rev Bras Educ Med*. 2015;39(1):159-67.
- Lucas ACS, Parente RCP, Picanço NS, Conceição DA, Costa KRC, Magalhães IRS, et al. Uso de psicotrópicos entre universitários da área de saúde da Universidade Federal do Amazonas, Brasil. *Cad Saude Publica*. 2006;22(3):663-71.
- Gellis A. Diagnósticos e psicotrópicos – uma resposta pela psicanálise. *Psicol USP*. 2000;11(1):107-18.
- Ribeiro CT. Que lugar para as drogas no sujeito? Que lugar para o sujeito nas drogas? Uma leitura psicanalítica do fenômeno do uso de drogas na contemporaneidade. *Ágora (Rio J)*. 2009;12(2):333-46.
- Serreti MAT. Toxicomania: um estudo psicanalítico. *Mosaico (Belo Horizonte)*. 2012;5(2):46-60.
- Pelegri MRF. O abuso de medicamentos psicotrópicos na contemporaneidade. *Psicol Ciênc Prof*. 2003;23(1):38-41.
- Machado PA, Macedo MMK. Impasses no adolescer: narrativas contemporâneas sobre desamparo e drogadição. *Athena Digital: Revista de Pensamento e Investigação Social*. 2019;19(1):118-37.
- Dockhorn CNBF. O sujeito psíquico e a condição de servidão ao objeto-droga: do rigor da psicanálise à pesquisa na escuta [tese]. Porto Alegre: Pontifícia Universidade Católica do Rio Grande do Sul; 2014.
- Canabarro RCS. Toxicomanias e psicanálise: algumas considerações [dissertação]. Porto Alegre: Universidade Federal do Rio Grande do Sul; 2011.
- Alves TCTF. Depressão e ansiedade entre estudantes da área de saúde. *Revista de Medicina*. 2014;93(3):101-5.
- Rosa MD. Adolescência: da cena familiar à cena social. *Psicol USP*. 2002;13(2):222-41.
- Huizink AC, Levalahti E, Korhonen T, Dick DM, Pulkkinen L, Rose RJ, et al. Tobacco, cannabis, and other illicit drug use among Finnish adolescent twins: causal relationship or correlated liabilities? *J Stud Alcohol Drugs*. 2010;71:5-14.
- Lopez HH. Cannabinoid-hormone interactions in the regulation of motivational processes. *Horm Behav*. 2010;58(1):100-10.
- Urban NB, Kegeles LS, Slifstein M, Xu X, Martinez D, Sakr E, et al. Sex differences in striatal dopamine release in young adults after oral alcohol challenge: a positron emission tomography imaging study with [(1)(1)C] raclopride. *Biol Psychiatry*. 2010;68(8):689-96.
- Nicastri S. Drogas: classificação e efeitos no organismo. In: Secretaria Nacional Antidrogas. Prevenção ao uso indevido de drogas: curso de capacitação para conselheiros municipais. Brasília: Secretaria Nacional Antidrogas; 2008.
- Mesquita EA, Nunes AJ, Cohen C. Avaliação das atitudes dos estudantes de Medicina frente ao abuso de drogas por colegas do meio acadêmico. *Rev Psiquiatr Clín*. 2008;35(1):8-12.
- Pillon SC, O'Brien B, Piedra KAC. A relação entre o uso de drogas e comportamentos de risco entre universitários brasileiros. *Rev Lat Am Enfermagem*. 2005;13(2):1169-76.
- Arnett JJ. The developmental context of substance use in emerging adulthood. *J Drug Issues*. 2005;35:235-54.
- Fidalgo TM, Silveira DX. Uso indevido de drogas entre médicos: problema ainda negligenciado. *J Bras Psiquiatr*. 2008;57(4):267-9.
- Plastino CA. Dependência, subjetividade e narcisismo na sociedade contemporânea. *Transgressões*. Rio de Janeiro: Contracapa Livraria. 2002, 103-111.
- Lacan J. O estágio do espelho como fundador da função do eu. In: Lacan J. *Escritos*. Rio de Janeiro: Jorge Zahar; 1998.
- Freud S. O futuro de uma ilusão. Edição standart brasileira das obras psicológicas completas de Sigmund Freud. Rio de Janeiro: Imago, 1931. v. XXI.
- Leão Y. Resistência e psicanálise. *Revista Subjetividades*. 1975;8(3):755-77.
- Claro HG, Oliveira MAF, Titus J, Fernandes IFA, Pinto PH, Tarifa RR. Uso de drogas, saúde mental e problemas relacionados ao crime e à violência: estudo transversal. *Rev Lat Am Enfermagem*. 2015;23(6):1173-80.
- Eckschmidt F, Andrade AG, Oliveira LG. Comparação do uso de drogas entre universitários brasileiros, norte-americanos e jovens da população geral brasileira. *J Bras Psiquiatr*. 2013;62(3):199-207.
- Wagner GA, Andrade AG. Uso de álcool, tabaco e outras drogas entre estudantes universitários brasileiros. *Rev Psiquiatr Clín*. 2008;35(supl 1):48-54.
- Miot HA. Tamanho da amostra em estudos clínicos e experimentais. *J Vasc Bras*. 2011;10:275-8.
- Turato E. Métodos qualitativos e quantitativos na área da saúde: definições, diferenças e seus objetivos de pesquisa. Campinas: Laboratório de Pesquisa Clínico-Qualitativa da Faculdade de Ciências Médicas, Universidade Estadual de Campinas; 2005.
- Dejours C. Uma nova visão do sofrimento humano nas organizações. In: Chanlat J. *O indivíduo na organização*. São Paulo: Atlas; 1996.
- Tockus D, Gonçalves OS. Detecção do uso de drogas de abuso por estudantes de medicina de uma universidade privada. *J Bras Psiquiatr*. 2008;57(3):184-7.



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