

## USE OF PSYCHOTROPIC DRUGS AMONG HEALTH STUDENTS AT A PUBLIC UNIVERSITY IN GOIÂNIA – GOIÁS: REFLECTIONS FOR PUBLIC HEALTH MANAGEMENT



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### ABSTRACT

Mental health is global well-being, which allows people to manage thoughts, emotions, behaviors, and interactions with others, and with social, cultural, economic, and political factors. On the contrary, mental disorder is a clinical disorder, with broad problems and with several symptoms, in all areas of life, which generates a biological and psychological alteration, capable of generating family, social and occupational problems that are often necessary for the use of psychotropic drugs. Thus, the objective of this study was to identify

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the use of psychotropic drugs in health students. A descriptive study with a quantitative approach was carried out at a public university in the state of Goiás (GO), with students who answered the *Self Report Questionnaire-20* questionnaire and a form with sociodemographic questions, physical health and habits. The sample was composed of 105 academics, most of whom were female, aged between 17 and 23 years, formed by a heterosexual and Christian majority. Represented by most of the physiotherapy course, followed by the Physical Education and Biomedicine course. The prevalence of Common Mental Disorder in the sample group was 71.43%. And the most used psychotropic drugs were: antidepressants, mood stabilizers, anxiolytics and antipsychotics. It is important to have public policies that subsidize actions for prevention and care for the mental health of students and reduce the use of psychotropic drugs.

**Keywords:** Students. Psychotropic. Mental disorders. Mental health.

## INTRODUCTION

Mental health is global well-being, which allows people to cope well not only with individual aspects, such as the ability to manage thoughts, emotions, behaviors, and interactions with others, but also with social, cultural, economic, and political factors. On the contrary, Mental Disorder (MD) is a clinical disorder, with a multifactorial cause that generates a biological and psychological alteration, capable of generating family, social, and occupational problems (WHO, 2022).

Common mental disorders (CMD) are so named because they are very prevalent in the population, highlighting anxiety and depression. However, this health situation does not meet sufficient formal criteria for diagnoses of depression and/or anxiety according to the classifications of the DSM-V (*Diagnostic and Statistical Manual of Mental Disorders* – 5th edition) and ICD-11 (International Classification of Diseases – 11th revision). However, they have an impact on mood and feelings, and symptoms can vary in severity and duration, causing significant functional disability, bringing psychosocial damage to the individual, as well as high social and economic cost (WHO, 2019).

Before the COVID-19 pandemic, in 2019, 301 million people in the world were living with anxiety disorder and 280 million with depressive disorders. In 2020, 193 million people worldwide had major depressive disorder, and 298 million people developed anxiety disorder. After the pandemic period, it is estimated that there are 246 million with major depressive disorder and 374 million with anxiety disorder. The pandemic brought several factors that led to the increase in these numbers: the constant fear of acquiring the virus, the loss of close people, social distancing, financial difficulties, paralysis of learning in colleges and schools. With the withdrawal from face-to-face academic activities, the difficulty in concentrating, and the uncertainty of the future generated a great mental illness in students (TEIXEIRA *et al.*, 2021).

The academic environment as a place that subjects students to constant stress, competitiveness, high workload, sleep restriction, intimidation from colleagues and teachers, factors that have a negative impact on quality of life, implying eating habits, sleep and physical activity, which are important activities for mental health. Hopelessness and dissatisfaction with academic performance are factors associated with symptoms of anxiety and depression (GUEDES *et al.*, 2019).

In addition to dealing with the factors listed above, health students are in constant contact with patients and their illnesses, with death and the responsibility of diagnosing and

treating a person, being more likely to develop mental disorders. This entails a very great emotional weight, in which often the academic who has just entered the university is not prepared. And one of the consequences of this situation is the increase in the use of psychotropic drugs in this population (TOVANI, SANTI, TRINDADE, 2021).

Although psychotropic drugs are used by the general population, it was found that there is a greater use among university students. In Brazil, the prevalence of drug use among young people has increased more and more, and this increase is greater in the university environment, where the use of psychotropic drugs is widespread. The increase in excessive consumption of psychotropic drugs has been worrying the general population and health professionals, due to the damage to physical and mental health (RIBEIRO *et al.*, 2020). In view of the above, the objective of this study was to identify the prevalence of psychotropic drug use among university students in the health area.

## **METHODOLOGY**

This is a descriptive – exploratory research, with a quantitative approach. Students from the Physical Therapy, Physical Education and Biomedicine courses of a public university in Goiânia - Goiás participated in the study. The inclusion criteria were students of both sexes duly enrolled and who agreed to participate in the research by signing the Informed Consent Form (ICF). Academics who were not present in the classroom on the day of the research and those under 16 years of age were excluded.

For data collection, a questionnaire containing sociodemographic questions, physical health, habits and psychotropic medications was used. In addition, the Brazilian version of the *Self-Reporting Questionnaire 20* (SRQ-20) was applied, which consists of 20 questions, with a dichotomous scale (yes/no) for each question. Each affirmative answer (yes) is worth one point. People who answer "yes" to eight or more questions on the SRQ-20 experience symptoms that are considered CMD.

The data were collected by the researchers in the classroom, previously requested from the teacher. The collection took place from March to June 2023. Next, the data were organized in Excel tables, where the categorical variables presented by absolute and percentage frequency were analyzed.

This research was carried out in accordance with the rules of Resolution No. 674 of May 6, 2022 of the National Health Council (CNS), after being approved by the Research

Ethics Committee (CEP) of the Pontifical Catholic University of Goiás (PUC Goiás) under opinion number 5.767.964.

## RESULTS

### SOCIODEMOGRAPHIC CHARACTERISTICS OF THE STUDENTS

Females are predominant, representing 75.2% of the sample. Most people are between 17 and 23 years old (74.3%), 73.3% of whom are heterosexual, single marital status (95.2%) and with an approximate family income of up to 2 minimum wages (33.3%). The black/brown color represents 50.5% of the student population. The sample is composed mostly of Physical Therapy students (68.6%), attending the 1st academic year (34.3%), has a pet (71.4%), does not have children (93.3%), lives with 4 or more people (45.7%), does not receive a financial aid grant (81.9%), and is Christian (70.5%) (Chart 1).

Chart 1 – Sociodemographic characteristics of the students (N=105)

Variables analyzed	Number	Frequency (%)
<b>Age group (years)</b>		
Between 17 and 23	78	74,3
Between 24 and 30	21	20,0
Between 31 and 37	3	2,9
Between 38 and 44	1	0,9
Over 45	2	1,9
<b>Sex</b>		
Female	79	75,2
Male	26	24,8
<b>Sexual orientation</b>		
LGBTQIAP+	28	26,7
Heterossexual	77	73,3
<b>Marital status</b>		
Single and alone	50	47,6
Single but dating	50	47,6
Married	3	2,9
Divorced	2	1,9
<b>Approximate family income range</b>		
Up to 2 minimum wages (up to R\$2,200)	35	33,3
From 2 to 4 minimum wages	31	29,5
From 4 to 10 minimum wages	34	32,4
From 10 to 20 minimum wages	5	4,8
<b>Skin color</b>		
White/Yellow	51	48,6
Black/brown	53	50,6
Other	1	0,9
<b>Course</b>		

Physiotherapy	72	68,6
Physical education	25	23,8
Biomedicine	8	7,6
<b>Pet Owner</b>		
Yes	75	71,4
No	30	28,6
<b>Has children</b>		
Yes	7	6,7
No	98	93,3
<b>People who live in the residence</b>		
Just me	15	14,3
2	20	19,0
3	22	21,0
4 or more	48	45,7
<b>Academic Year</b>		
1°	36	34,3
2°	14	13,3
3°	15	14,3
4°	13	12,4
5°	27	25,7
<b>Financial Aid Scholarship</b>		
Yes	19	18,1
No	86	81,9
<b>Religion</b>		
Christianity	74	70,5
Buddhism	1	0,9
Candomblé	1	0,9
Umbanda	3	2,9
No	18	17,2
Other	8	7,6

Source: Authors, 2024

## PHYSICAL HEALTH AND LIFESTYLE HABITS OF STUDENTS

When surveyed about health and lifestyle habits, most students 39% practice physical activity five times a week. The use of illicit drugs is low, with 7.6% of people reporting having used them at least once in their lives. Smoking is also low, with 11.4% of people reporting currently smoking. Most students sleep 5 to 8 hours a night (76.2%). Alcohol consumption is moderate, with most people reporting drinking alcohol only 1 or 3 times per month (35.2%). A third of the people 34.3% have a family member diagnosed with depression and/or anxiety. Most people 60.0% have a good or perfect family relationship, 21.0% have already attempted suicide, 22.4% have been diagnosed with depression or anxiety after entering college. The most common health problems are psychiatric disorder (29.5%), rhinitis (25.7%), and hypertension (0.9%) (Chart 2).

Chart 2 – Health and Habits of the students (N=105)

Variables analyzed	Number	Frequency (%)
Frequency of physical activity		

I don't practice physical activity	29	27,6
4 or 5 times a week	41	39
3 times a week	21	20,0
2 times a week	7	6,7
1 time per week	7	6,7
<b>Illicit drug use</b>		
Yes	8	7,6
No	82	78,1
I've already used it	15	14,3
<b>Smoker</b>		
Yes	12	11,4
No	91	86,7
Former smoker	2	1,9
<b>Hours you sleep per day</b>		
3-5 hours	19	18,1
5-8 hours	80	76,2
8 hours or more	6	5,7
<b>Frequency of alcohol intake</b>		
I don't drink alcohol	34	32,4
1 or 2 times a week	27	25,7
3 or 4 times a week	7	6,7
1 or 3 times a month	37	35,2
<b>Family member diagnosed with depression and/or anxiety</b>		
Yes	78	74,3
No	27	25,7
<b>Family relationship</b>		
Perfect	17	16,3
Good	63	60,0
Regular	20	19,0
Spacious	4	3,8
Bad	1	0,9
<b>Suicide attempt</b>		
Yes	22	21,0
No	83	79,0
<b>Diagnosis of depression and/or anxiety after entering college</b>		
Yes	34	32,4
No	71	67,6
<b>Health problems</b>		
Hypertension	1	0,9
Diabetes	2	1,9
Rhinitis	27	25,7
Psychiatric disorder (depression, anxiety, OCD, panic disorder...)	31	29,5
I don't have a disease	33	31,4
Other diseases	11	10,6

Source: Authors, 2024

## USE OF PSYCHOTROPIC DRUGS BY STUDENTS

The study showed that most students (91.4%) do not use psychotropic medications to enhance their studies, but 3.8% use it at least once a week, 2.9% use it for final exams and 1.9% use it at least once a month. The most commonly used drugs for this purpose are: Venvanse® (3.8%), Ritalin® or Concerta® (1.9%). Only 10.5% of



the students who use these drugs get the prescription through a doctor, 2.9% get it through a family member or friend and 1% get the drug through a friend without knowing the origin. Most students (70.5%) do not use psychiatric medications for the treatment of mental disorders. The psychotropic medications most used by the students in the last 7 days were antidepressants (8.6%), mood stabilizers (6.6%), anxiolytics (5.7%) and antipsychotics (3.8%) (Chart 3).

Chart 3 – Use of psychotropic medications by students (N=105)

Variables analyzed	Number	Frequency (%)
<b>Frequency of drug use to enhance studies</b>		
I do not use medication to enhance the study	96	91,4
Use for final exams	3	2,9
I use it at least once a month	2	1,9
I use it at least once a week	4	3,8
<b>What is this medicine</b>		
Ritalina or concerta	2	1,9
Venvanse	4	3,8
Other	2	1,9
None	97	92,4
<b>Access to Recipe</b>		
I do not use medication to enhance the study	90	85,7
I regularly go to the doctor's office	11	10,5
Through a family member, friend or acquaintance doctor (but outside the office)	3	2,9
A friend can do it and I don't know where it comes from	1	0,9
<b>Psychiatric medications used in the last 7 days</b>		
I did not use medication for the treatment of mental disorders	74	70,5
Antidepressivos (sertralina, amitriptilina, fluoxetina, venlafaxina, bupropiona, citalopram...)	10	9,5
Antipsychotics (risperidone, quetiapine, haloperidol...)	4	3,8
Anxiolytics (diazepam, alprazolam, midazolam...)	6	5,7
Mood stabilizer/antiepileptic (lithium, depakene, torval, gabapentin, topiramate, phenobarbital, pregabalin...)	7	6,7
Other	4	3,8

Source: Authors, 2024

## DISCUSSION

In this survey, a clear predominance of female students was identified (75.2%), which has already been seen in other studies carried out with students in the health area (Mariuzzo, 2023; Melo, 2023). The most prevalent age group of the students who participated in the survey is 18 to 23 years old (74.3%), which is in line with what is



expected because this is the most common age group to start a higher education course (INEP, 2022).

A study carried out by Wilkon, Rufato, da Silva (2021), with 200 students from the Nursing, Pharmacy, Nutrition and Psychology courses shows that 46.8% use psychotropic medications, with the highest prevalence being in young people aged 18 to 24 years, which is in accordance with the present study carried out with 105 students from the Physiotherapy courses, Physical Education and Biomedicine, as 29.5% use some psychotropic medication and the highest prevalence is in students aged between 18 and 23 years.

The use of psychotropic medications improves cognitive performance through increased concentration, memory, and increased alertness (LUNA *et al.*, 2018). In the present study, the use of psychotropic drugs is made by 8.6% of the students, with Venvanse® being the most used (50%). Most students (73.3%) who use these drugs get the prescription at the doctor's office, which contradicts most studies available in the literature ( BRU, 2024; BAUCHROWITZ *et al.*, 2019)

Depression is one of the most prevalent mental disorders in the general population, so the most used class of psychotropic medications are antidepressants. Current research has shown that 60% of psychotropic medications used by students are antidepressants (SANTOS *et al.*, 2019; BRU, 2024).

According to the study carried out by Gotardo *et al* (2022), with the courses of Agronomy, Civil Engineering, Pharmacy, Accounting, Nursing, Pedagogy, with 587 students participating, 15.8% use some type of psychotropic drug and it was observed that in the nursing course, compared to the other courses, there was a higher prevalence in the use of these drugs 28.6%. Another study by Pires *et al* (2018) shows that of 187 medical students who participated in the study, 52.94% use psychoactive medications. These results are in agreement with what was found in the present study, although the other study had a higher prevalence, where 29.5% use some psychotropic medication, this shows that students in the health area are more susceptible to the use of psychotropic medications.

A study carried out by Alves *et al* (2020), outside the academic environment on the use of psychotropic drugs, with primary health care patients, shows that the prevalence of use was 25.8%, and another study by Treichel and Campos (2022), with users of psychosocial care centers shows that the prevalence of psychotropic use was 30%. The

results of these studies are in accordance with the result obtained in the present study, where 29.5% of the students use some psychotropic medication.

In Brazil, in addition to illicit substances, there is a wide consumption of legal drugs, such as tobacco and alcohol. The beginning of this consumption usually occurs in the age group of 12 to 24 years, a period in which the entry into universities usually occurs (BRASIL, 2021). The present study is in agreement with this data because it shows that 7.6% of the students use illicit drugs, 14.3% have already used them, 67.6% of the students use alcoholic beverages and 11.4% smoke.

## **CONCLUSION**

The study showed that approximately 70% of the students use medication to treat mental disorders, with antidepressants being the most consumed. The study has a limitation on the sample size, but these results are in agreement with research carried out in Brazil. Suggesting that there is a need to implement public policies with psychological care to reduce psychosocial suffering and thus reduce the use of psychotropic drugs, which can ensure a better quality of life in this group.

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