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Associação da ansiedade e uso de ansiolíticos entre estudantes universitários da área da saúde

Anxiety and anxiolytics among students

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Abstract

The study aimed to analyze the association of anxiety and the use of anxiolytics among college students in the health area. This is a sectional study of the web-survey type, with a sample of 286 college students from some courses in the health area. Data collection occurred through electronic forms in Google forms sent by e-mail and Instagram social network. A higher frequency of clonazepam use (n= 31; 62%; p= 0.588) was associated with high trait anxiety. There was a preponderance of the use of the same drug (n= 30; 60%; p= 0.982) related to moderate state anxiety. These occurrences were more pronounced in female college students (42.3%) and those who attended public institutions (55.3%). Given this, it is concluded that higher education institutions should invest in awareness-raising actions on the use of anxiolytics and aimed at minimizing anxiety in this population.

Keywords: Anti-anxiety agents; Anxiety; College students; Education, higher; Mental health.

Resumo

O estudo objetivou analisar a associação da ansiedade e uso de ansiolíticos entre estudantes universitários da área saúde. Trata-se de um estudo seccional, do tipo web-survey, com amostra de 286 estudantes universitários de alguns cursos da área da saúde. A coleta de dados ocorreu por meio de formulários eletrônicos no Google forms enviados por e-mail e rede social Instagram. Percebeu-se uma frequência maior de uso de Clonazepam (n= 31; 62%; p= 0,588) associado à ansiedade traço alta. Assim como houve uma preponderância do uso do mesmo medicamento (n= 30; 60%; p= 0,982) relacionado à ansiedade estado moderada. Essas ocorrências foram mais acentuadas em estudantes universitárias do sexo feminino (42,3%) e que frequentavam instituições públicas (55,3%). Diante disso, conclui-se que as

instituições de ensino superior devem investir em ações de conscientização sobre o uso de ansiolíticos, e que visem a minimização da ansiedade dessa população.

Palavras-chave: *Ansiedade; Ansiolíticos; Estudantes universitários; Educação superior; Saúde mental*.

Entering university represents a period marked by maturational transformations (physiological, neurological and psychological) resulting from the transition from adolescence to adulthood (Silva & Costa, 2012). This transition is not always an easy moment, as it requires adaptation to a new social role (Ferreira et al., 2009). Therefore, it implies changes in several contexts in the student's life, such as interpersonal relationships (family and friends), perception of the world, creation of new bonds, and routine organization (Pereira & Ramos, 2021).

In addition, the academic universe is full of unknown norms, methodologies, groups and individuals, which demands the need for students to develop a university profile (Martincowski, 2013). Thus, the university environment can be experienced as stressful and can even influence the emergence of anxious symptoms and the academic performance of college students (Auerbach et al., 2016).

Worldwide, epidemiological studies have shown that anxiety is prevalent in higher education students (31%), with the percentage significantly higher than the nonuniversity population of the same age group (21.4%) (Auerbach et al., 2016; Auerbach et al., 2018). In Brazil, it is estimated that 37.75% of college students experience anxiety symptoms (Demenech et al., 2021). Specifically, regarding university students in the health area, Paixão et al. (2021) showed that 57.9% of students (nursing, speech therapy, medicine, physiotherapy, and occupational therapy courses) from a public Brazilian university in Alagoas present anxious symptoms.

Anxiety is defined as a mental state of restlessness and disorder characterized by the presence of nervousness, emotional reactivity or excitement that cause an unrealistic and unpleasant emotional state in the individual (Gama et al., 2021). In this sense, anxiety in college students seems to be associated with a number of demands characteristic of higher education. Such demands include the need for adaptation related to housing, social support, autonomy, and demands associated with the content covered in the subjects, among others (Balapala & Indla, 2017).

Notably, anxiety can be understood in two different ways, trait anxiety (TA) and state anxiety (SA). In the academic context, the term TA is understood as a stable personality trait (Machado et al., 2016), which predisposes the student to perceive the university as threatening and dangerous, causing anxiety levels disproportionate to the situation (Balapala & Indla, 2017). AE, on the other hand, is characterized as a transient emotional state (Machado et al., 2016) that generates high levels of nervousness, worry, and apprehension related to the excitement felt in this environment (Gama et al., 2021).

In general, these students often deal with stressful and exhausting events, which bring with them conflicts and require a greater effort of adjustment and adaptation, thus creating the need to develop strategies to overcome this situation (Rahmadiana et al., 2021). This leads the university student in the health area to look for a quick solution to deal with common problems in the academic routine (overload of curricular and extracurricular activities or difficulty in managing their time and establishing priorities), commonly making the use of psychotropic drugs, often indiscriminately, and this directly impacts the mental health of this individual (Marchi et al., 2013; Nogueira, et al. 2021; Peng et al., 2022).

Several studies investigating phenomena related to anxiety and the use of anxiolytics (Abreu et al., 2022; Bojanić et al., 2021; Tovani et al., 2021) have highlighted that psychotropic drugs can cause emotional distress associated with dependence in university students in the health area, in addition to other repercussions, such as reduced sleep, headache, learning difficulties, and changes in the academic performance of these individuals.

Given these facts, it is understood that the problem of increased prevalence of anxiety among college students in the health area associated with indiscriminate use of anxiolytics may have serious consequences on the mental health of these individuals. It is noteworthy, however, that there are still few empirical studies in the Brazilian context on the theme that is the central object of this research. Reflecting on this reality, we sought to analyze the association of anxiety and the use of anxiolytics among college students in the health area.

Method

This is a sectional study of the web-survey type, with a descriptive, comparative, correlational and predictive approach. For greater methodological rigor, this work follows the guidelines proposed by Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) (Cevallos et al. 2014). The research setting covered three geographic regions of Brazil (Northeast, Southeast, and South). Data collection was online and occurred between September and October 2021 with the participation of university health students in their respective residences.

Participants

The study included 286 higher education students, with a mean age of 23.3 years (±standard deviation - *SD* = 4.9), 222 women (77.9% of the sample), from 13

different undergraduate courses in health science areas (biology, biomedicine, physical education, nursing, pharmacy, physiotherapy, speech therapy, medicine, nutrition, dentistry, psychology, chiropractics, and occupational therapy). The participants were selected by convenience (nonprobability sampling) and by meeting the following criteria: (a) being undergraduate in the health area in Brazilian Higher Education Institutions (HEI), (b) being 18 years old or older, and (c) having access to the internet.

In the present study, the students are from different educational institutions, public, private, and community, and from some Brazilian states in the Northeast (Alagoas, Bahia, and Sergipe), Southeast (Minas Gerais, Rio de Janeiro, and São Paulo), and South (Paraná and Rio Grande do Sul) regions.

Instruments

Sociodemographic and clinical questionnaire: addressed questions such as age, ethnicity, gender, marital status, state, course, term, university, symptoms (physical and psychological) of anxiety, and history of anxiolytic medication use.

Anxiety Trait-State Inventory (IDATE): created by Spielberger et al. (1970) and validated in Brazil by Biaggio and Natalício (1979). The Cronbach's alpha coefficient of the instrument is 0.86 to 0.95 (Spielberger et al., 1980). It consists of two 40-item scales distributed in a four-point Likert format, ranging from "4-very much" to "1-absolutely not". The first scale evaluates the anxiety state (IDATE-E), and the second evaluates the anxiety trait (IDATE-T). Each evaluative part consists of 20 alternatives (Grös et al., 2007).

Procedures and ethics committee approval

After approval of the study by the Research Ethics Committee of Tiradentes University (CAAE no. 20058919.5.0000.5371), the study was publicized on the social network Instagram and via institutional e-mail linked to the participating universities. This invitation informed about the research and requested the participation of students who were undergraduate students in the health area. After accessing the research link via Google form, potential participants read the Informed Consent Form (ICF). If they agreed to the conditions of the study, they informed this agreement electronically and were then directed to a page containing the questionnaire and the inventory of this research, with an average duration of 20 minutes.

Data Analysis

The data obtained were organized in a Microsoft Excel spreadsheet through double typing and later validation to control for possible errors and later exported and analyzed in the software Statistical Package for the Social Sciences (SPSS) version 25.0 so that the sociodemographic and clinical profile data were characterized by absolute and relative percentage frequencies (descriptive statistics). The Kolmogorov–Smirnov test with Lilliefors correlation was used to verify the normality assumption.

Then, Fisher's exact test was performed in quadratic tables (rows and columns have the same number) and Pearson's chi-square test ($\chi 2$) in nonsquare tables (number of rows and columns differ), both aiming to evaluate the data distribution of the variables in relation to the symptomatic levels of anxiety through the scores of the IDATEs (IDATE-T and IDATE-E).

For the correlational analysis, Kendall's Tau-b test was used to assess the correlation of the scores (IDATE) between both indices, analyzing the strength of the

correlation with the variables age, period and medications used. Additionally, the agreement rate between IDATE-T and IDATE-E was verified through the Kappa (K) coefficient test. For all analyses, a 95% confidence interval and a significance level of $p < 0.05$ were adopted.

Results

Initially, a descriptive analysis was performed, indicating that the sample, shown in Table 1, was composed mostly of 245 female participants (*n* = 222; 77.9%), with a mean (± *SD*) age of 23.3 ± 4.9 years. Most were single (*n* = 267; 97.3%); enrolled in medical school (*n* = 126; 44.2%); studying the eighth period (*n* = 74; 26%); residing in the state of Sergipe (*n* = 166; 58.2%); self-reported white (*n* = 142; 49.8%); single (*n* = 260; 85.8%); and attending private HEIs (*n* = 229; 80.4%).

< Insert Table1>

Next, Kendall's Tau b Correlation test was used to analyze the correlations between the variables (age, period and number of medications) and the IDATE-E and IDATE-T scores (Table 2). The test revealed no correlation between IDATE-E variables and the number of medications (*p* = 0.081; *r* = 0.132). Additionally, no correlation was found between age and IDATE-E (*p* = 0.301; *r* = -0.044). For period and IDATE-T (*p* = 0.125; *r* = 0.066), no correlation was found. The same occurred between IDATE-E and the number of medications (*p* = 0.390; *r* = -0.065). In contrast, age influenced the presence of IDATE-T (*p* = 0.007; *r* = -0.114); however, the data allowed us to infer that this correlation was considered weak.

< Insert Table 2>

Regarding the comparisons of the means obtained by men and women regarding the use of anxiolytics, it was observed that women (42.3%) obtained significantly higher means than men (31.7%). Regarding the HEI, most participants who used anxiolytics attended public institutions (55.3%), followed by private (37.6%) and community institutions (22.2%). Continuing the analysis, we used the *K*-test to identify the concordance rate between IDATE-T and IDATE-E in college students in the health area. We observed a significant concordance rate (*p* = 0.003) but a weak concordance rate (*k* = 0.163)

Next, to obtain the association between the IDATE anxiety scores and the variable gender, the χ^2 test was used. Regarding male gender and IDATE-T, in predominance, they showed a moderate degree (57.1%), followed by high (42.9%) and mild (0%). In females, primacy exhibited high grade (51.8%), followed by moderate (47.7%) and mild (0.5%). For both analyses, a statistical significance $p = 0.379$ was found. In men, a higher prevalence of moderate anxiety was observed, and in women, a higher prevalence of high anxiety was observed (Table 3).

< Insert Table 3>

Regarding male gender and the IDATE-E, in preponderance, the respondents presented moderate degree (60.3%), followed by high (39.7%) and mild (0%). In the female sex, the prevalence was moderate (68%), followed by high (30.6%) and mild (1.4%). For these analyses, the statistical significance $p = 0.283$ was found. In both sexes, a higher prevalence of moderate anxiety was observed.

In general, the associations between the use of anxiolytics and IDATE were also verified by means of the χ^2 test. Regarding the use of anxiolytics and IDATE-T, there was a predominance of high grade (58.8%), followed by moderate grade (40.4%) and mild grade (0.9%). A statistical significance of $p = 0.019$ was observed. Such data showed that the degree of anxiety directly influenced the use of anxiolytics, with high anxiety being more prevalent among the participants.

Additionally, in general, regarding the use of anxiolytics and the IDATE-E, there was a prevalence of moderate (60.5%), followed by high (37.7%), and mild (1.8%). The statistical significance of the analysis was $p = 0.187$. It was observed before these data that moderate anxiety was more prevalent among participants.

Then, it was observed that 21 medications were used by the participants in the period of data collection of this study (see Table 3). The benzodiazepine anxiolytics BDZs (diazepam and clonazepam) were the most consumed, followed by antidepressants, of the selective serotonin reuptake inhibitor classes SSRIs

(escitalopram, citalopram, and fluoxetine) and tricyclic antidepressants TADs (aconipriline).

In the present study (see Table 3), we also performed the χ^2 test to analyze the relationship between the types of anxiolytics and the IDATE, verifying significant differences between the levels of anxiety, with $\chi^2 = 0.019$ ($p < 0.05$). Regarding the use of anxiolytics and IDATE-T, we noticed a higher frequency of clonazepam (n = 31; 62%; p = 0.588) and fluoxetine (n = 11; 55%; p = 0.818) use associated with high anxiety. To analyze the use of anxiolytics with IDATE-E, we found a higher prevalence of clonazepam use related to moderate (n = 30; 60%; p = 0.982) and high (n = 19; 38%; p = 0.982) anxiety among participants.

To evaluate the associations between the type of HEI and IDATE scores, the χ^2 and Fisher's exact tests were used. Participants attending community (100%) and public (59.6%) HEIs had high levels of IDATE-T. On the other hand, those from private institutions had moderate anxiety (53.7%). Regarding HEIs and IDATE-E, it was found that participants regardless of the HEI [private (67.2%), public (63.8%), and community (55.6%)] they were linked showed anxiety to a moderate degree.

Finally, we used χ^2 and Fisher's exact test to verify the associations between the self-reported symptoms and the IDATE scores. Regarding the symptoms and the IDATE-T, the prevalence of the subsequent physical (tremors, sleepiness, tachycardia, shortness of breath, and stomach pains) and psychological (insomnia, anxiety, disappointment, social phobia, panic, and sadness) symptoms was noted. Regarding the symptoms and the IDATE-E, we observed a predominance of the following physical symptoms: tremors, dizziness, headache, self-injury, drowsiness, tachycardia, and shortness of breath; and psychological symptoms: insomnia, anxiety, depression,

disappointment, and stress. A statistical significance of p = 1.000 was found for the analyses.

Discussion

When analyzing the associations between anxiety and the use of anxiolytics in college students in the health area, it was found that a relationship occurred between anxiety and the HEIs attended by the participants. A higher prevalence was observed in levels of TA (community and public - high grade) compared to levels of EA (private and public - moderate grade) of the participants. Additionally, it was shown that the variable age directly influences the emergence of AT. Unlike our findings, Nazir et al. (2021) found that only students from private HEIs had a higher percentage of TA (42.88%) and AE (50.15%), using a significance level of p <0.001. It is also noteworthy that the authors did not analyze the relationship between age and anxiety.

Regarding the IDATE and the gender variable, it was noticed that women show a higher prevalence of AT (51.8%), while men show a higher prevalence of AE (60.3%). Nazir et al. (2021) showed that female college students had a higher mean score on the IDATE-T (M = 48.45; SD = ± 12.79; p <0.001) than male students who had a higher mean score on the IDATE-E (M = 41.85; SD = ± 8.91; p <0.001).

In fact, the literature shows that the manifestations of TA in college students are due to a greater presence of traits of their personalities in anxiety, as well as a more stable tendency to experience fear, worry and anxiety in many everyday situations. The occurrence of AE in male college students, on the other hand, is related to transient anxiety that changes based on stimuli emerging from their experiences, as well as negative emotional states (fear, nervousness, and discomfort) being experienced temporarily from situations perceived as dangerous (Bados et al., 2010; Deer et al., 2018; Thomas & Cassady, 2021; Williams & Crawford, 2016).

Regarding the use of anxiolytics, it was observed that 42.3% of women made use of these drugs, and the percentage was lower in men (31.7%). Such results suggest, therefore, a greater propensity of college women to seek psychotropic drugs. Aquino et al. (2010) found similar results, evidencing a higher consumption in female students (66.5%). In turn, the findings may be explained in part by women's greater exposure to medicalization at all stages of their lives, greater demand for medical care, and educational campaigns more targeted to them (Forster et al., 2019).

The present study also explored differences between the associations of self-reported symptoms (physical and psychological) of anxiety and consumption of anxiolytics among college students in health courses. The findings indicated that the presence of tachycardia, headache, anxiety symptoms, depression, and insomnia were determinants of anxiolytic use among these individuals. Similarly, Bojanić et al. (2021) pointed to the same factors and warned that these college students are often unaware of the adverse effects (fatigue, drowsiness, loss of motor coordination, reduced reflexes, attention, and concentration) of the medications used. Furthermore, it is important to point out that there is a danger of the improper consumption of these psychotropic drugs causing intoxication in these individuals (Jia et al., 2018).

Regarding the indiscriminate and inappropriate use of anxiolytic medications, some studies point out that anxiolytic use is prevalent among young adults in the 18-25 age group (Brandt et al., 2021; Nida, 2019). Specifically, Brandt et al. (2014) warned that 37% of college students misuse anxiolytics. In light of this, several authors have been calling attention to the high morbidity and mortality rates of individuals who misuse prescription medications are becoming a reality in the college population (Monnat & Chandler, 2015; Forster et al., 2018).

Vera et al. (2021) support this argument by considering the university as a critical location for anxiolytic use and the development of problematic consumption patterns. According to Fond et al. (2019), 20% of university students in health-related courses make daily use of anxiolytics. Additionally, according to these authors, students were dealing more frequently with various problematic situations, such as anxiety before exams, difficulties coping with academic responsibilities and fulfilling internship activities.

In this study, we considered all psychiatric drugs classified as antidepressants, antipsychotics, BZDs, barbiturates, and other sedative-hypnotic medications as anxiolytics, which have action on mild to severe anxiety symptoms, except anesthetics and analgesics. Additionally, the results show that there was a stronger association between moderate to high anxiety and the use of anxiolytics from the class of BZDs and SSRI antidepressants, with the drugs most consumed by the participants.

It is noteworthy that BZDs produce several side effects, especially those associated with the mechanism of their therapeutic effect, including drowsiness, dizziness, lack of concentration and coordination (Ganson et al., 2021). Given the effects of BZDs, it becomes relevant to mention that these drugs can cause tolerance, dependence, and withdrawal symptoms; as a consequence, they are currently considered drugs of great abuse. Consequently, pure BZDs are controlled substances that require prescription retention (Morris et al., 2021).

Regarding the main outcome of the study, it was found that many college students with anxiety use anxiolytics (in prevalence, there is the use of the drug clonazepam associated with high AT and moderate AE among participants) as a way to cope with adverse events that are part of the academic routine (Fond et al., 2019). From this perspective, the literature draws attention to the misuse of medications

throughout undergraduate studies, given that being a health care student is often related to greater knowledge about medications, and this fact may contribute to the increase in self-medication (Felitti et al., 2019; Pakdaman et al., 2021).

That said, it becomes crucial to add that if anxiety is not treated properly (without psychological follow-up) and only the use of anxiolytics is made, this can lead to various adverse reactions or addiction among college students and consequently worsen the physical and mental health of this population (Morcerf & Acero, 2021).

Conclusion

The findings of this study showed that the consumption of anxiolytic drugs was associated with moderate AE and high AT among college health students. Thus, these results contribute to knowledge in the area by showing the association and the importance of working with IDATE in this population.

Furthermore, this research can contribute to the practice of the area of health psychology, expanding the attention to the university context, since from this investigation, it was found that the prevalence of consumption of psychotropic drugs among HEI students was higher than expected, considering the context (university) and the phase of the life cycle of this population (young adult). It was also observed that the application of a questionnaire was a very useful tool to know the physical and psychological symptoms presented and the medications used by the participants.

In the national literature, there are few studies investigating the association of anxiety and the use of anxiolytics among college students in the health area. In this sense, it becomes a great challenge for HEIs to conduct research along these lines that reflect the national reality and contribute to the implementation of preventive actions and the evaluation of their evolution and impact.

This study has limitations. First, the fact that the cross-sectional data make it impossible to draw inferences about cause and effect. Second, all responses were self-reported, with the potential for reporting bias. On the other hand, we emphasize the importance of considering the results of this study for the benefit of college students in health courses, using them as a guide for planning future work that investigates cultural factors, identifying risk factors and determining patterns for the consumption of anxiolytics in this population.

Future research should explore mental health interventions for these students because they are in a context of vulnerability. Therefore, it is necessary that higher education institutions invest in educational actions to raise awareness about the rational use of psychotropic drugs (e.g., anxiolytics) and offer psychological care services to minimize anxiety among college students in the health area. For this, it is very important to expand the services offered by the school clinics of psychology in universities to promote the mental health of this population.

Authors' contribution declaration

Ma. D. PEREIRA, J. P. SILVA and M. F. SANTANA contributed to the conception and design of the overall project (data analysis and interpretation), as well as for the review and approval of the final version of this article. C. A. S. ROSA and P. F. S. ANTUNES contributed to the data collection, interpretation and discussion of the results. Mi. D. PEREIRA contributed to the design, supervision of data collection, interpretation and discussion of results. J. A. MORAES FILHO contributed to data analysis, interpretation and discussion of results.

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Table 1.
Distribution of university health students according to sociodemographic variables

Variable	N (%)
Ethnicity	
Yellow	2 (0,7)
White	142 (49,8)
Indigenous	6 (2,1)
Black	26 (9,1)
Brown	109 (38,2)
Sex	
Female	222 (77,9)
Male	63 (22,1)
Marital status	
Married	17 (6)
Divorced	1 (0,4)
Single	267 (93,7)
State	
Alagoas	18 (6,3)
Bahia	9 (3,2)
Minas Gerais	16 (5,6)
Outros	35 (12,3)
Paraná	14 (4,9)
Rio de Janeiro	1 (0,4)
Rio Grande do Sul	6 (2,1)
São Paulo	20 (7)
Sergipe	166 (58,2)
Course	
Biology	1 (0,4)
Biomedicine	13 (4,6)
Physical Education	3 (1,1)
Nursing	78 (27,4)
Pharmacy	14 (4,9)
Physiotherapy	9 (3,2)
Phonoaudiology	2 (0,7)
Medicine	126 (44,2)
Nutrition	5 (1,8)
Dentistry	2 (0,7)
Psychology	29 (10,2)
Chiropractic	1 (0,4)
Occupational Therapy	2 (0,7)
Period	
1	11 (3,9)
2	24 (8,4)
3	19 (6,7)
4	17 (6)
5	40 (14)
6	35 (12,3)
7	24 (8,4)
8	74 (26)
9	19 (6,7)
10	21 (7,4)
12	1 (0,4)
Higher Education Institution	
Community	9 (3,2)
Private	229 (80,4)
Public	47 (16,5)

Table 2.
Correlations between the variables studied and trait-state anxiety

Variable		IDATE-E	IDATE-T
Age	r	-0,044	-0,114
	p	0,301	0,007
Period	r	-0,037	-0,066
	p	0,396	0,125
Number of medications	r	0,132	-0,065
	p	0,081	0,390

Note: Kendall's Tau b Correlation test was used. *p:* probability of significance. *r:* correlation coefficient.

Table 3.

Multivariate association between anxiolytic use and trait-state anxiety

Variable	IDATE-E				IDATE-T			
	No or mild anxiety	Moderate anxiety	High anxiety	*p	No or mild anxiety	Moderate anxiety	High Anxiety	*p
Anxiolytic use	2 (1,8)	69 (60,5)	43 (37,7)	0,187	1 (0,9)	46 (40,4)	67 (58,8)	0,019
Sex								
Female	3 (1,4)	151 (68)	68 (30,6)	0,283	1 (0,5)	106 (47,7)	115 (51,8)	0,379
Male	0 (0)	38 (60,3)	25 (39,7)		0 (0)	36 (57,1)	27 (42,9)	
Diazepam	0 (0)	8 (72,7)	3 (27,3)	0,649	0 (0)	6 (54,5)	5 (45,5)	0,582
Amitriptyline	0 (0)	8 (72,7)	3 (27,3)	0,722	0 (0)	3 (37,5)	5 (62,5)	0,945
Bupropion	0 (0)	4 (100)	0 (0)	0,259	0 (0)	2 (50)	2 (50)	0,911
Buspirone	0 (0)	2 (40)	3 (60)	0,564	0 (0)	2 (40)	3 (60)	0,977
Citalopram	0 (0)	9 (69,2)	4 (30,8)	0,730	0 (0)	7 (53,8)	6 (46,2)	0,552
Clonazepam	1 (2)	30 (60)	19 (38)	0,982	0 (0)	19 (38)	31 (62)	0,588
Desvenlafaxine	0 (0)	3 (60)	2 (40)	0,952	0 (0)	2 (40)	3 (60)	0,977
Duloxetine	0 (0)	2 (50)	2 (50)	0,855	0 (0)	2 (50)	2 (50)	0,911
Escitalopram	0 (0)	7 (87,5)	1 (12,5)	0,268	0 (0)	5 (62,5)	3 (37,5)	0,410
Fluoxetine	0 (0)	10 (50)	10 (50)	0,399	0 (0)	9 (45)	11 (55)	0,818
Fluvoxamine	0 (0)	0 (0)	2 (100)	0,186	0 (0)	0 (0)	2 (100)	0,490
Levomepromazine	0 (0)	1 (100)	0 (0)	0,720	0 (0)	1 (100)	0 (0)	0,474
Sertraline	0 (0)	4 (40)	6 (60)	0,301	0 (0)	4 (40)	6 (60)	0,952
Venlafaxine	0 (0)	3 (75)	1 (25)	0,720	0 (0)	1 (25)	3 (75)	0,793
Zolpidem	0 (0)	2 (66,7)	1 (33,3)	0,956	0 (0)	2 (66,7)	1 (33,3)	0,953
Bromazepam	0 (0)	3 (75)	1 (25)	0,821	0 (0)	2 (50)	2 (50)	0,911
Clobazam	0 (0)	1 (100)	0 (0)	0,720	0 (0)	1 (100)	0 (0)	0,474
Clorpromazine	0 (0)	0 (0)	1 (100)	0,435	0 (0)	0 (0)	1 (100)	0,702
Vortioxetine	0 (0)	1 (100)	0 (0)	0,720	0 (0)	0 (0)	1 (100)	0,702
Trazodone	0 (0)	2 (66,7)	1 (33,3)	0,956	0 (0)	1 (33,3)	2 (66,7)	0,953
Quetiapine	0 (0)	0 (0)	2 (100)	0,186	0 (0)	1 (50)	1 (50)	0,955

Note: *χ2: Pearson's chi-square test. p: probability of significance.

Declaration of Conflicts of Interest

We, Mara Dantas Pereira, Míria Dantas Pereira, Michele Fraga de Santana, Joilson Pereira da Silva, João Alves de Moraes Filho, Caique Anizio Santos da Rosa, and Paola Fernanda Santos Antunes, authors of the manuscript entitled " Association of anxiety and use of anxiolytics among health-related college students" declare that we have no conflict of interest of financial, institutional, commercial, political, religious, academic, or personal nature.

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