

# Depressive symptoms in students at a university in the far north of the Brazilian Amazon

Rosalina Marques Baia\* Fernanda Matos Fernandes Castelo Branco\*

Renan Alves Silva\*\*

#### **Abstract**

Depression is a contemporary disease whose silent symptoms are often barely noticeable in academic life. The objective of this study was to analyze the prevalence of depressive symptoms in academics at a border university. This was a cross-sectional, descriptive study, carried out with 233 students, from the various existing courses, regularly enrolled in a university located in the Brazilian Amazon. For data collection, a self-administered questionnaire, prepared by the researchers themselves, structured with closed questions, contemplating the sociodemographic variables, educational, clinical and behavioral aspects was used first; and to survey depressive symptoms, the Beck Depression Inventory (BDI) was applied. The results showed a predominance of young adults (82.4%), aged between 20 and 40 years old, female (58.6%), single (51.9%), evangelical (39.9%), who performed academic activities concomitantly with the remunerated ones (59.7%). BDI indicated that 53% of respondents were without depression/minimal symptoms, 31.6% had symptoms of mild depression; 13.2% had signs of moderate depression, and 2.2% had severe depression. A higher index of depressive symptoms was speculated among the investigated students, due to the physical and social conditions of the studied field, therefore, the result was antagonistic to the hypothesis of this study. It is believed that, in spite of the low rates, there is a need for an in-depth reflection on improvements in the psycho-pedagogical support given to students, in the dissemination of the service provided in the psychological sector of the campus, in order to further reduce the percentage of depressive levels and foster appropriate strategies for coping with problems related to academic life.

**Keywords:** Depression. Universities. Health at the border.

## INTRODUCTION

Depression is a type of mood disorder and social quality of life<sup>1</sup>. that can appear for several reasons and with a different degree of intensity, constituting, however, a treatable condition. It is a serious mental health problem, which causes emotional symptoms, psychomotor, and vegetative cognitive changes. Furthermore, it can affect the individual's physical, professional, family, academic

The World Health Organization (WHO) considers depression as a frequent mental disorder in modern society. Worldwide, cases of depression increased 18% between 2005 and 2015, estimating an average of 322 million people, which makes it the leading cause of disability worldwide. contributing significantly to the global

DOI: 10.15343/0104-7809.202044250260

Universidade Federal do Amapá, Coordenação de Enfermagem, Oiapoque, AP, Brasil. \*\*Universidade Federal do Espírito Santo/Centro Universitário do Norte do Espírito Santo. São Mateus, ES, Brasil. E-mail: fmfernandescb@gmail.com





burden of diseases2.

In Brazil, the National Health Survey (NHS) pointed out that depression is frequent in women, with a low educational level and associated chronic health conditions. It also added that access to mental health care is not enough, despite the fact that most Brazilians have clinically relevant depressive symptoms (78.8%)<sup>3</sup>. In context, it is worth mentioning the those in academia, who are a public that is vulnerable to mental illnesses due to stressful events, such as pressure from family members and teachers, work presentations, tests, absence of leisure, sleep deprivation, expectations regarding the future, having a greater chance of developing mood and anxiety disorders4.

However, these symptoms are not always related to depressive disorders. The academic performing student activities is in the process of formation. In this flow, their life undergoes a great transformation, because they interacts with several methodologies, in a theoretical and practical training process that demands from the individual a simultaneous commitment of an institutional character, coming from the labor system, the university itself, the family and other people. Life is surrounded by a complex routine of studies and diverse commitments. This leads to a detachment from a social life of leisure and can lead them into a depressive state.

In this context, a university campus isolated in the extreme north of Brazil, the Brazilian Amazon, isolates and places students into situations of vulnerability, when compared to other contexts in the country. This withdrawal from social life can cause psychological and emotional wear, which provokes the emergence of different types of disorders that seriously affect emotional health and cause symptoms similar to depression. It is also emphasized that the absence of this type of survey in the investigated municipality, therefore, makes this study a pioneering investigation into

the student community of the Binacional Campus of Oiapoque; an institution belonging to a regional-border community.

In this sense, this study may contribute to the academic community, since it will allow the construction of a quantitative statistical framework with symptomatic data, traced around the students' behavior. The chart, in addition to being a formal source, will help form new studies with methods of prevention, treatment and assistance. Based on the data listed, it may be possible to build a mechanism of information about the disease, through educational actions, with spaces for dialogues in academic centers and wide dissemination to the community, helping to understand that depression deserves attention.

Thus, this study had the guiding question: what is the prevalence of depressive symptoms in academics at a border university? And as a hypothesis: depressive symptoms among academics at the border university are frequent, due to the physical and social conditions to which students are subjected.

Therefore, this study aimed to analyze the prevalence of depressive symptoms in academics at a border university.

#### **MEHOD**

This was a descriptive, cross-sectional study, developed at a university located in the extreme north of Brazil, in the Amazon region, at a border area. The study population consisted of university students, regularly enrolled and attending the campus. During the collection, in a survey carried out with the Teaching Coordination, 717 students were found, and were distributed in eight undergraduate courses.





Therefore, the inclusion criteria were: university students aged  $\geq 18$  years, regularly enrolled in undergraduate courses. The exclusion criteria were students enrolled, but who did not attend university or who had left the institution at the time of collection.

For data collection, two instruments were used, first a self-administered questionnaire prepared by the researchers themselves, structured with closed questions, covering the sociodemographic variables, educational, clinical and behavioral aspects. To screen for depressive symptoms, the Beck Depression Inventory (BDI) was applied using translated, adapted and validated instrument for the Brazilian population, which was self-administered, and was composed of 21 items that assess the severity of symptoms of depression, scored on a Likert-type scale from 0 (absolutely not) to 3 (seriously). In this study, the scores were considered: no depression/depression on minimum (0-11), mild (12-19), moderate (20-35) and severe (36-63) levels. Originally created for use with psychiatric patients, this instrument also proved to be suitable for use in the general population<sup>5</sup>. The evaluation of the instruments counted on the collaboration of a psychologist, since it is a private instrument of this professional category, as well as the acquisition of the BDI to permit its use for the purposes of this study, even though it is already widely disseminated.

For data collection procedures, the targeted students of the study were approached cautiously, at the interval periods of classes, in the campus area. Those who agreed to participate were taken to the reserved room or laboratory on campus, so that the subjects felt safe, at ease and interested in answering the questions.

Regarding the sample calculation, the technique of a stratified sample proportion was used. Stratification was carried out by

university courses, based on the number existing in the Undergraduate Coordination of the University studied: Pedagogy (N=86, n=30), Linguistics (N=57, n=20), Indigenous Intercultural Degree (N=139, n=49), History (N=63, n=22), Geography (N = 74, n=26), Nursing (N=106, n=37), Law (N=105, n=37), Biology (N=87, n=30), totaling a sample of 251 individuals.

During the collection, it was noticed that many students who were initially on the list no longer attended university, for various reasons. Then, the questionnaires were applied in a smaller quantity than that established by the minimum sample, but without compromising the representativeness of the students of the investigated campus; therefore, 233 questionnaires were applied.

The data were inserted in an electronic spreadsheet, in the Microsoft Excel® program, and analyzed using the Statistical Package for the Social Sciences Software, version 22. Descriptive analyses were performed to verify the consistency of the data, which were presented in absolute and relative frequency. Finally, the Cronbach's Alpha test was applied to show the internal consistency of the investigated data.

The research followed the necessary ethical procedures, which was a priori, and was forwarded to the campus management to release data collection. Subsequently, it was submitted for evaluation by the Ethics Committee of the Federal University of Amapá, through Plataforma Brasil, and was approved according to opinion no. 3.103.734/18 and by the Certificate of Presentation for Ethical Appreciation No. 04144018.6.0000.0003. Student participation was voluntary, upon reading and signing the Informed Consent Form, based on the Resolution of the National Health Council<sup>6</sup>. The participants were guaranteed confidentiality and anonymity to avoid any damage to those involved.





#### **RESULTS**

The majority of the sample studied was female (n=136; 58.6%), within the age group of 20 to 40 years old (n=192; 82.4%), from the State of Amapá (n=143; 61.4%), single (n=121; 51.9%), who declared themselves as brown-skinned (n=119; 51.1%), evangelical (n=93; 39.9%), with children (n=151; 64.8%), living in the municipality for more than five years (n=187; 80.3%), in their own home (n=135; 58.4%), with family members (n=95; 40.8%), with an excellent family life (n=125; 53.6%), having a family income of 954 reais or less (n=92; 39.7%), and both studied and worked (n=139; 59.7%).

With regard the educational characterization of university students on the Franco-Brazilian frontier most students studied/worked (n=139;59.7%), without financial assistance (n=154; 66.1%), where the Indigenous Intercultural course prevailed (n=49; 21.0%), were active students (n=122; 52.4%) taking their first choice of undergraduate course (n=138; 59.2%), were satisfied with the course (n=115; 49.4%), and had time available for academic activities (n=105; 45.1%).

clinical/behavioral In terms of the characterization of university students, a sleep time of less than seven hours was observed (n=167; 71.7%), with an unsatisfactory sleep quality (n=140; 60.1%); had less than three meals a day (n=115; 49.4%); did not perform physical activity (n=140; 60.1%); spent more than four hours on the internet (n=122; 52.4%); drank alcoholic beverages (n=74; 31.8%); smoked (n=21; 9%); used other drugs (n=13; 5.6%), of these, 11 - marijuana (84.6%) and two - cocaine/crack (15.4%). 230 (98.7%) students denied having any type of disability; four used psychotropic drugs (1.7%), of these, two (50%) had a medical prescription and two (50%) on their own, each with more than one year of use. 216 (92.7%) students

did not use other medications, 161 (69.1%) did not know of the psychologist's existence at the university, 232 (99.6%) never received assistance by the psychologist at the university, six (2.6%) underwent psychological treatment, and 230 (98.7%) denied receiving psychiatric treatment.

Table 1 shows the details of the response percentages of the study participants in relation to the 21 items of the Beck Depression Inventory that were frequent. Sadness - I do not feel sad, (n=161; 69.1%); discouragement - I am not especially discouraged about the future, (n=177; 76.0%); failure - I do not feel like a failure, (n=187; 80.3%); pleasure - I have as much pleasure in everything as before, (n=134; 57.5%); guilt - I do not feel particularly guilty, (n=169; 72.5%); punishment - I do not think I'm being punished, (n=190; 81.5%); disappointment - I do not feel disappointed with myself, (n=173; 74.2%); terrible - I do not feel any worse than the others, (n=120; 51.5%); suicide - I have no ideas of killing myself, (n=212; 91%); cry - I do not cry more than usual, (n=172; 73.8%); irritation - I am not more irritated now than I have been, (n=101; 43.3%); interest - I did not lose interest in other people, (n=131; 56.2%); decision - I make decisions as well as before, (n=110; 47.2%); appearance - I do not think I look any worse than before, (n=147; 63.1%); work - I can work as well as before, (n=139; 59.7%); **sleep** - I do not sleep as well as I used to, (n=100; 42.9%); tiredness - I get tired more easily than I used to, (n=134; 57.5%); appetite - my appetite is no worse than usual, (n=140; 60.1%); weight - I have not lost much weight, if any recently, (n=147; 63.1%); health - I am not more concerned with my health than usual, (n=118; 50.6%); sex - I did not notice any recent change in my interest in sex, (n=161; 69.1%).





**Table 1–** Characterization of the responses to the Beck Depression Inventory of university students on the French-Brazilian border. Oiapoque (AP). N: 233

	n	%
1.Sadness		
I do not feel sad	161	69.1
I feel sad	68	29.2
I am always sad and I cannot get out of this	3	1.3
I am so sad or unhappy that I cannot stand it	1	0.4
2. Discouragement		
I am not particularly discouraged about the future	177	76.0
I feel discouraged about the future	43	18.5
I think I have nothing to expect	8	3.4
I find the future hopeless and I have the impression that things cannot improve	5	2.1
3. Failure		
I do not feel like a failure	187	80.3
I think I failed more than an ordinary person	34	14.6
When I look back on my life, all I can see is a bunch of failures	8	3.4
I think, as a person, I am a complete failure	4	1.7
4. Pleasure		
I have as much pleasure in everything as before	134	57.5
I no longer enjoy things as before	84	36.1
I do not find real pleasure in anything else	7	3.0
I am dissatisfied or upset about everything	8	3.4
5. Guilt		
I do not feel particularly guilty	169	72.5
I feel guilty much of the time	53	22.7
I feel guilty most of the time	8	3.4
I always feel guilty	3	1.3
6. Punishment		
I do not think I am being punished	190	81.5
I think I could be punished	26	11.2
I believe I will be punished	6	2.6
I think I am being punished	11	4.7
7. Deception		
I do not feel disappointed in myself	173	74.2
I am disappointed in myself	56	24.0
I am disgusted with myself	3	1.3
I hate myself	1	0.4
8. Pessimism		
I do not feel any worse than the others	120	51.5

	n	%
I am critical of myself for my weaknesses or mistakes	90	38.6
I always blame myself for my failures	19	8.2
I blame myself for everything bad that happens	4	1.7
9. Suicide		
I have no ideas of killing myself	212	91.0
I have ideas of killing myself, but I would not execute them	18	7.7
I would like to kill myself	1	0.4
I would kill myself if I had the chance	2	0.9
10. Crying		
I do not cry any more than usual	172	73.8
I cry more now than I used to	48	20.6
Now, I cry all the time	2	0.9
I used to be able to cry, but now I cannot, even if I wanted to	11	4.7
11. Irritation		
I am not angrier now than I was	101	43.3
I get bored or irritated more easily than I used to	92	39.5
Now, I feel angry all the time	9	3.9
I do not get irritated anymore with things that used to irritate me	31	13.3
12. Interest		
I have not lost interest in other people	131	56.2
I am less interested in other people than I used to be	84	36.1
I lost most of my interest in other people	16	6.9
I lost all interest in other people	2	0.9
13. Decisions		
I make decisions as well as before	110	47.2
I postpone decision making more than I used to	80	34.3
I have more difficulty making decisions than before	40	17.2
I cannot make decisions anymore	3	1.3
14. Appearance		
I do not think I look any worse than before anyway	147	63.1
I am worried about looking old or unattractive	57	24.5
I think there are permanent changes in my appearance that make me look unattractive	18	7.7
I believe I look ugly	11	4.7

to be continued...





...continuation - Table 1

	n	%
15. Work		
I can work as well as before	139	59.7
It takes some extra effort to do something	75	32.2
I have to work hard to do something	17	7.3
I cannot do any more work	2	0.9
16. Sleep		
I can sleep as well as usual	94	40.3
I do not sleep as well as I used to	100	42.9
I wake up 1 to 2 hours earlier than usual and find it difficult to go back to sleep	25	10.7
I wake up several hours earlier than I used to, and I cannot go back to sleep	14	6.0
17. Tiredness		
I do not get more tired than usual	74	31.8
I get tired more easily than I used to	134	57.5
I get tired from doing anything	19	8.2
I am too tired to do anything	6	2.6
18. Appetite		
My appetite is no worse than usual	140	60.1
My appetite is not as good as it used to be	75	32.2
My appetite is much worse now	14	6.0
I have absolutely no appetite	4	1.7
19. Weight		
I have not lost much weight if I lost any recently	147	63.1
I lost more than 2 and a half kilos	43	18.5
I lost more than 5 kilos	7	3.0
I lost more than 7 kilos	36	15.5
20. Health		
I am not more concerned with my health than usual	118	50.6
I am concerned about physical problems such as pain, upset stomach or constipation	100	42.9
I am very concerned about physical problems and it is difficult to think of anything else	10	4.3
I am so worried about my physical problems that I cannot think of anything else	5	2.1
21. Sex		
I did not notice any recent changes in my interest in sex	161	69.1
I am less interested in sex than I used to	55	23.6
I am much less interested in sex now	13	5.6
I completely lost interest in sex	4	1.7

Source: Authors (2019).

**Table 2–** Characterization of the Beck Depression Inventory score of university students from the Franco-Brazilian frontier. Oiapoque (AP). N: 233

	None	Low	Median	High
1. Sadness	161 (69.1)	68 (29.2)	3 (1.3)	1 (0.4)
2. Discouragement	177 (76.0)	43 (18.5)	8 (3.4)	5 (2.1)
3. Failure	187 (80.3)	34 (14.6)	8 (3.4)	4 (1.7)
4. Pleasure	134 (57.5)	84 (36.1)	7 (3.0)	8 (3.4)
5. Guilt	169 (72.5)	53 (22.7)	8 (3.4)	3 (1.3)
6. Punishment	190 (81.5)	26 (11.2)	6 (2.6)	11 (4.7)
7. Deception	173 (74.2)	56 (24.0)	3 (1.3)	1 (0.4)
8. Pessimism	120 (51.5)	90 (38.6)	19 (8.2)	4 (1.7)
9. Suicide	212 (91.0)	18 (7.7)	1 (0.4)	2 (0.9)
10.Crying	172 (73.8)	48 (20.6)	2 (0.9)	11 (4.7)
11. Irritation	101 (43.3)	92 (39.5)	9 (3.9)	31 (13.3)
12. Interest	131 (56.2)	84 (36.1)	16 (6.9)	2 (0.9)
13. Decisions	110 (47.2)	80 (34.3)	40 (17.2)	3 (1.3)
14. Appearance	147 (63.1)	57 (24.5)	18 (7.7)	11 (4.7)
15. Work	139 (59.7)	75 (32.2)	17 (7.3)	2 (0.9)
16. Sleep	94 (40.3)	100 (42.9)	25 (10.7)	14 (6.0)
17. Tiredness	74 (31.8)	134 (57.5)	19 (8.2)	6 (2.6)
18. Appetite	140 (60.1)	75 (32.2)	14 (6.0)	4 (1.7)
19. Weight	147 (63.1)	43 (18.5)	7 (3.0)	36 (15.5)
20. Health	118 (50.6)	100 (42.9)	10 (4.3)	5 (2.1)
21. Sex	161 (69.1)	55 (23.6)	13 (5.6)	4 (1.7)

Source: Authors (2019).

Table 2 shows the characterization of Beck Inventory scores, at different levels, based on the responses of the investigated students. The highlighted classifications are none (suicide=212/91%), low (tiredness=134/57.5%), medium (decision=40/17.2%) and high (weight=36/15.5%).

Prevalence of depressive symptoms was found in academics from the investigated campus. Through BDI, it is possible to prove that 124 (53%) of the interviewees did not display depression or showed minimal symptoms, 74 (31.6%) had signs of mild depression, 31 (13.2%) had moderate depression, and five (2.2%) had manifestations of severe depression.



Table 2 shows the characterization of Beck Inventory scores, at different levels, based on the responses of the investigated students. The highlighted classifications are none (suicide=212/91%), low (tiredness=134/57.5%), medium (decision=40/17.2%) and high (weight=36/15.5%).

Prevalence of depressive symptoms was found in academics from the investigated campus. Through BDI, it is possible to prove that 124 (53%) of the interviewees did not display depression or showed minimal symptoms, 74 (31.6%) had signs of mild depression, 31 (13.2%) had moderate depression, and five (2.2%) had manifestations of severe depression.

Based on the consistency test, statistical evidence was observed in the responses of the participants, who showed a high internal consistency, with a Cronbach alpha of 0.888 in the 21 items analyzed, thus, the result reflected the researched reality.

#### **DISCUSSION**

Based on the analysis and literature search, results were found that were in agreement with this study, as in the study that determined the prevalence of symptoms of anxiety and depression in medical students, demonstrating that the majority of the sample was female  $(65.4\%)^7$ . Another survey also pointed out the prevalence in women (60.63%) and the percentage of depression in women  $(53.45\%)^8$ , data that corroborate this investigation.

A study with a sample of 151 medical students from the University of the State of Amapá also showed a prevalence of females (52.3%), ages 21-15 years old (60.9%), single (53.2%), Catholics (40.3%), from other states (61.3%), without children (92%), brown (46.3%), living with family members (64.2%), denied psychological/psychiatric treatment (70.3%), performed physical activities sporadically (34.8%), had a good social relationship inside and outside the academic environment (72.8%), sporadic use of alcoholic drinks (52.6%), and denied smoking (89.4%). This data was similar to those of this study and while some variables differed from the results found, such as age and religion9.

Concerning the sociodemographic variables of the study to searches in the literature, a study showed a mean age of 21.8 years<sup>10</sup> and another study found a predominance of an age group below 20 years<sup>11</sup>, data that oppose

this investigation. Regarding religion, it was greatly elevated in a study with 251 university students in Mato Grosso, Brazil, in which 78% of students declared themselves religious<sup>12</sup>, data that corroborate this research.

The variable that deserves to be stressed is the development of work activities concomitant with academic life, an important factor that can contribute to the emergence of pathological symptoms, as academics are not exclusively involved with pedagogical activities, which can generate mental impairment and difficulties during the teaching-learning process<sup>13</sup>. Research reconciles this fact, showing, among the academics interviewed, that most of them worked (79%) or performed some work-like activity<sup>14</sup>.

Regarding the instrument's scores for analyzing the symptoms found the interviewees, the Beck Depression Inventory obtained a response with a good distribution in the classification of depression, which made identifying the Cronbach's alpha (0.888) possible. This reflected the researched reality and showed a score that 47% of respondents with some degree of depression, ranging from mild to severe.

Therefore, given the analysis of the data pointed out in this study, a significant part of the sample presented some spectrum of depression. The most evident degree was



53.0% of respondents without depression/minimal symptoms. Comparing these data with another study<sup>15</sup> that described the prevalence of depressive symptoms among medical students at the University of Itaúna, in the Midwest of Minas Gerais, it was observed that 56.7% of academics had symptoms of depression at a minimum level and 20.0% in moderate level, similar to the present study.

Another study that aimed to verify the occurrence of depressive symptoms in students of the Federal University of Paraná, pointed out that of 181 students responded to the research, 42% were from Psychology, 11% from Medicine, 22% from Linguistics and 25% from Nutrition courses. They were aged between 17 and 52 years, of which 26.52% had symptoms classified as severe depression, 34.25% had moderate depression, 24.31% had mild depression, and 14.92% had minimal symptoms of depression or no symptoms at all. Despite the population's age group being close to the present study, different percentages were perceived from those found these studies<sup>16</sup>.

A study<sup>9</sup> aiming to know the prevalence and factors associated with depressive symptoms in medical students, from the Federal University of Amapá, showed that of the 151 students, constituting a sample of 80.0% of the studied population, 69 (45.7%) presented some degree of depression, 32 (21.2%) had characteristics of mild to moderate depression, 27 (17.8%) had moderate to severe depression and 10 (6.6%) had symptoms of severe depressive. The study was conducted in the same location as the present research, with degree indices that resembled the investigated public.

Another survey carried out, which aimed to find out the prevalence of depressive symptoms among medical students at the Federal University of Uberlândia, showed that among the 400 academics evaluated, there was a predominance of young women, single, coming from Uberlândia and living with their parents.

The prevalence of depressive symptoms was 79%, where 29% were mild; 31% moderate; and 19.25% severe<sup>17</sup>. This is a reality that is different from that which was researched, with a higher percentage of depression levels.

In a more recent study that identified the prevalence of depression among students in different areas, the results indicated that 74.4% of students were without depression, 19.5% had mild depressive symptoms, 5.4% moderate depression, and 0.7% severe depression. The percentage of students without depression in the humanities area was 20.9%, for health it was 19.7%; and for science/mathematics it was 33.6%<sup>18</sup>; which are data that also differ from what was found in this survey.

Another study that evaluated the prevalence of depressive symptoms in students of health courses in the initial semesters, showed the following result: 55.8% were classified as not having depressive symptoms, 26.6% had mild/moderate symptoms, 13.6% were moderate/severe, and 4% were severe. In other words, 44.4% of academics in the health field had some degree of depressive symptoms, according to the BDI<sup>19</sup>, which is data that is similar to this study.

Research that aimed to identify the prevalence of anxious and depressive symptoms and their correlations with sociodemographic and occupational characteristics in university students, showed that the majority of the participants were female, single, born in the state capital and lived with their parents. The prevalence of depression was 30.2%<sup>20</sup>; a rate lower than that of the present study.

Another survey, which aimed to identify cases of depression and prevalence levels in nursing students, in a teaching institution in Brasília, pointed out that 57 (62.6%) had levels of minimal depression; 23 (25.2%) were in the range of mild to moderate depression, 10 (10.9%) reported moderate to severe depression, and one (1.1%) manifested severe depression<sup>21</sup>. This made it possible to perceive divergent data





when dealing with lesser degrees of severity and data close to the other levels of depression, when compared to the findings of this study.

A study that aimed to identify the depressive trend among students of health courses at a public university, identified a higher prevalence in 41.0% of university students, data that are close to those of this study.

In June 2018, a cross-sectional, descriptive study was carried out among medical students enrolled in the first year of college. Among the 100 students surveyed, a prevalence of minimal depressive symptoms or absence of depression was identified (53%), but among the others, the probabilities of depression were: 38% for mild, 7% for moderate and 2% for severe<sup>22</sup>, which are numbers close to the results of this study.

From the comparison of the data found with the studies carried out, it can be inferred that the depressive symptoms of the students on the investigated campus are sometimes similar, sometimes smaller and, in some contexts, larger. Thus, since this is a regional border area, difficult to access, it makes the municipality of Oiapoque a quiet city, without much stress, when compared to large cities from the previous studies and, therefore, a positive aspect for not triggering depressive symptoms. However, on the other hand, it can be said that this distance may contribute to the appearance of symptoms since, when dealing with an educational institution in the countryside, the difficulties are even greater. The distance from the place of classes, commuting to practical activities in the capital and the distance from family and spouses contribute to the compromised emotional status. Consequently, when there are a number of factors contributing to negative emotional stability linked to physical factors, it is fateful that symptoms of depression appear more frequently.

Thus, despite the diversity in the results, this study pointed out that most of the interviewees did not have depression/ had it at a minimum

degree, rejecting the hypothesis initially raised that suggested high frequency. This may be due to the physical and social conditions to which the investigated students are submitted. It is also noteworthy that a considerable part of the students come from a poor educational base, which is a risk factor for the development of depressive symptoms, as they need to redouble their studies for monitoring and pedagogical training. More than half (59.7%) are students and workers, having to divide their tasks and achieve the longed-for graduation. However, it was not possible to infer this fact based on the data collected.

In short, this reflects on the situation experienced and reveals the need for preventive measures and actions in order to ensure improvement in the quality of life of students and coping mechanisms aimed at controlling symptoms, thus, ensuring a better performance in their process of training as well as preserving their cognitive and emotional well-being; which are relevant themes in the areas of Nursing, Mental Health and Public Health.

Therefore, programs that value mental health should be implemented at universities, with the aim of offering mental and psychological balance to academics, since the changes that the training process requires are large and are not always easy to deal with. The need for psychological support is vital for better quality of life and less contact with suffering, given that mental health is urgent.

In view of this premise, there is a psychology service on the investigated campus since there is a qualified professional ready to attend the students. However, according to the data, it was observed that the community was unaware of this service and did not use it. Thus, it is not enough to offer services, they must reach those who need them. The promotion of mental quality of life is extremely important for the academic community, since it faces difficulties, in order to promote health and prevent diseases.





### CONCLUSION

This theme, the prevalence of depressive symptoms at the cross-border university researched is unprecedented and has great potential, and other researchers, students and professors should deepen the debate on the prevalence of depression among the university students surveyed, in order to entrench the theme with more advanced studies. Thus, in this study, it is emphasized that despite having internal consistency, the data cannot be generalized to other contexts which is the principal limitation of this research.

A higher index of depressive symptoms was speculated among the investigated students, due to the physical and social conditions of the studied campus, therefore, the result was antagonistic to the hypothesis of this study. Thus, when identifying depressive symptoms, through Beck's inventory, depressive symptoms were found in academics, although they were not of the majority. However, it deserves attention that 47% of the total had some

symptom, a sign that something is happening, and some measure must be taken in relation to this situation; especially since the university has a psychological service sector that, in general, is poorly known.

Despite the lower than expected rates, an in-depth reflection on the improvement of the psycho-pedagogical support to students is urgent. The service performed in the psychological sector of the campus must be disseminate in order to further reduce the percentage of depressive levels and to foster appropriate strategies to face the problems concerning academic life. This reveals the need for preventive measures and actions, in order to guarantee improvement in the students' quality of life and coping mechanisms aimed at controlling symptoms, thus, ensuring a better performance in the educational process and preservation of the cognitive and emotional well-being.

### REFERENCES

- 1- Del Porto JA. Conceito e diagnóstico. Rev Bras Psiquiatr. 1999;21(Suppl 1):6-11. DOI: 10.1590/S1516-44461999000500003.
- 2- World Health Organization (WHO). Depression and Other Common Mental Disorders Global Health Estimates. [Internet]. Geneva, 2017. [cited 2020 Jan 12]. Available from: http://apps.who.int/iris/bitstream/10665/254610/1/ WHO-MSD-MER-2017.2-eng.pdf?ua=1.
- 3- Lopes CS, Hellwig N, Silva GA, Menezes PR. Inequities in access to depression treatment: results of the Brazilian National Health Survey PNS. Int J Equity Health. 2016;15:154. DOI: 10.1186%2Fs12939-016-0446-1
- 4- Carneiro AM, Baptista MN. Saúde geral e sintomas depressivos em universitários. Salud & Sociedad. 2012;3(2):166-78.
- 5- Cunha, JA. Manual da versão em português das Escalas Beck. São Paulo: Casa do Psicólogo; 2001.
- 6- Brasil. Ministério da Saúde. Conselho Nacional de Saúde. Resolução n.º 466, de 12 de dezembro de 2012. Aprova diretrizes e normas regulamentadoras de pesquisas envolvendo seres humanos. Diário Oficial da União, Brasília, 13 dez. 2012.
- 7- Vasconcelos TC, Dias BRT, Andrade LR, Melo GF, Barbosa L, Souza E. Prevalência de Sintomas de Ansiedade e Depressão em Estudantes de Medicina. Rev Bras Educ Med. 2015;39(1):135-42. DOI: 10.1590/1981-52712015v39n1e00042014.
- 8- Moro A, Valle JB, Lima LP. Sintomas depressivos nos estudantes de Medicina da Universidade da Região de Joinville (SC). Rev Bras Educ Med. 2005;29(2):97-102. DOI: 10.1590/1981-5271v29.2-015.
- 9- Oliveira GS, Rocha CA, Santos BEF, Sena IS, Fávaro L, Guerreiro MC. Prevalência e fatores associados à depressão em estudantes de medicina da Universidade Federal do Amapá. Rev Med Saude Brasilia. 2016;5(3):186-99.
- 10- Maltoni J, Palma PC, Neufeld CB. Sintomas ansiosos e depressivos em universitários brasileiros. Pisco. 2019; 50(1). DOI: 10.15448/1980-8623.2019.1.29213.
- 11- Leão ÁM, Gomes IP, Ferreira MJM, Cavalcanti LPG. Prevalência e Fatores Associados à Depressão e Ansiedade entre Estudantes Universitários da Área da Saúde de um Grande Centro Urbano do Nordeste do Brasil. Rev Bras Educ Med. 2018;42(4):55-65. DOI: 10.1590/1981-52712015v42n4rb20180092.
- 12- Mesquita AM, Lemes AG, Carrijo MVN, Moura AAM, Couto DS, Rocha EM, et al. Depressão entre estudantes de cursos da área da saúde de uma universidade em Mato Grosso. Journal Health NPEPS. 2016;1(2):218-30.





- 13- Oliveira ASD, Pereira MS, Lima LM. Trabalho, produtivismo e adoecimento dos docentes nas universidades públicas brasileiras. Psicologia Escolar e Educacional, SP. 2017;21(3):609-19. DOI: 10.1590/2175-3539/2017/0213111132.
- 14- Medeiros PP, Bittencourt FO. Fatores associados à Ansiedade em Estudantes de uma Faculdade Particular. Rev Psic. 2017:10(33):43-55.
- 15- Silveira MP, Silva TF, Souza RSB. Prevalência de sintomas depressivos em acadêmicos de Medicina da Universidade de Itaúna MG. Revista de Ciências e Estudos Acadêmicos de Medicina. 2017;7:10-26. DOI: 10.14295/idonline.v10i33.594.
- 16 Krefer L, Vayego AS. Prevalência de sintomas depressivos entre estudantes universitários. Cadernos Brasileiros de Saúde Mental. 2019;11(28):170-81.
- 17 Rezende CHA, Abrãao CB, Coelho EP, Passos LBS. Prevalência de sintomas depressivos entre estudantes de medicina da Universidade Federal de Uberlândia. Rev Bras Educ Med. 2008;32(3):315-23. DOI: 10.1590/S0100-55022008000300006.
- 18- Rezende AM, Vieira EMS, Basili JOV, Goulart M, Ferreira SR, Barreto MAM. Sintomas depressivos entre alunos de graduação: levantamento em instituição de ensino do interior do Rio de Janeiro. Cadernos UniFOA. 2010;5(1):60.
- 19- Paulim CP, Reis GA. Frequência de sintomas depressivos nos estudantes da área da saúde da Universidade do Extremo Sul Catarinense [trabalho de conclusão de curso]. Criciúma: Universidade do Extremo Sul Catarinense, 2018.
- 20- Fernandes MA, Vieira FER, Silva JS, Avelino FVSD, Santos FDM. Prevalência de sintomas ansiosos e depressivos em universitários de uma instituição pública. Rev Bras Enferm. 2018;71(supl. 5):2169-75. DOI: 10.1590/0034-7167-2017-0752.
- 21- Camargo RM, Sousa CO, Oliveira MLC. Prevalência de casos de depressão em acadêmicos de enfermagem em uma instituição de ensino de Brasília. REME. 2014;18(2);392-7. DOI: 10.5935/1415-2762.20140030.
- 22- Gil I, Maluf EC, Souza TSC, Silva JYF, Pinto MCS. Análise transversal de sintomas depressivos em estudantes de Medicina: prevalência no primeiro ano de graduação. Rev Psico FAE: Pluralidades em Saúde Mental. 2018;7(2):99-118.

Received in march 2020. Accepted in july 2020.

