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ARTIGO ORIGINAL

Suicidal ideation among medical students, burnout or depression? Maybe both

Ideação suicida entre estudantes de medicina, burnout ou depressão? Talvez ambos

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Abstract. Depression is a common mental condition worldwide and a major cause of debility, with the potential to impair the quality of life of affected people. Medical students are more likely to develop psychiatric disorders, with depression, anxiety, and burnout being the most common ones. The aim of this study was to investigate the prevalence of depressive symptoms in medical students and their association with burnout and aspects of life. This is an analytical cross-sectional study. Data collection was performed using four validated scales and a questionnaire in 511 medical students from the first to the fourth year from different universities. Depression was present in 49% of the students. A correlation was found between depression and female gender. Regarding the students' daily sleep time, 54.5% of the students slept only 3 to 6 hours per night. The use of psychoactive substances was reported by 29.9%. Regarding the emotional support offered by universities, about 92.8% of students with depressive symptoms reported not receiving adequate emotional support. As for quality of life, all domains were impaired among students with depression. According to the two-dimensional criterion, 37% of the students have burnout, with correlation between the presence of the syndrome and depressive symptoms. In addition, burnout proved to be an independent risk factor for suicidal ideation and self-mutilation. New methods that can help detect and address factors that trigger stress and depressive symptoms in medical students are needed to reduce the incidence of depression.
Keywords: Medicine. Mental health. Psychological support.

Resumo. A depressão é uma condição mental comum no mundo, sendo uma das principais causas de debilidade, com potencial para comprometer a qualidade de vida dos indivíduos afetados. Estudantes de medicina são mais propensos a desenvolver transtornos psiquiátricos, sendo depressão, ansiedade e *burnout* os mais comuns. O objetivo deste estudo foi investigar a prevalência de sintomas depressivos em estudantes de medicina e sua associação com o *burnout* e aspectos da vida. Trata-se de um estudo transversal analítico. A coleta de dados foi realizada por meio de quatro escalas validadas e um questionário aplicados a 511 estudantes de medicina do primeiro ao quarto ano de diferentes universidades. A depressão esteve presente em 49% dos alunos. Foi encontrada correlação entre depressão e sexo feminino. Em relação ao tempo de sono diário dos alunos, 54.5% dos alunos dormiam apenas 3 a 6 horas por noite. O uso de substâncias psicoativas foi relatado por 29.9%. Cerca de 92% dos alunos com sintomas depressivos relataram não receber suporte emocional adequado pelas universidades. Quanto à qualidade de vida, todos os domínios estavam prejudicados entre os escolares com depressão. De acordo com o critério bidimensional, cerca de 37% dos alunos apresentam *burnout*, havendo correlação entre a presença da síndrome e sintomas depressivos. *Burnout* demonstrou ser um fator de risco independente para ideação suicida e automutilação. Novos métodos que possam ajudar a detectar e abordar os fatores que desencadeiam o estresse e os sintomas depressivos em estudantes de medicina são necessários para reduzir a incidência de depressão.
Palavras-chave: Medicina. Saúde mental. Apoio psicológico.

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INTRODUÇÃO

Depression is a common mental condition worldwide and a major cause of debility, with the potential to impair the quality of life of affected people (WHO, 2017). Thousands of people all over the world suffer from depression and at least 3% of the world's population report having depressive symptoms at some point in their lives (KESHAVARZ et al., 2013).

Depression is a heterogeneous and multifactorial syndrome, since genetic, environmental, and behavioral conditions regulate its expression. Because it is a complex syndrome, the underlying pathophysiology is difficult to identify, which complicates its diagnosis and treatment (MALHI et al., 2018).

Students' mental health has become a topic of frequent discussion due to the high prevalence and severe associated morbidity of mental disorders (NJIM et al., 2019). Medical school is traditionally recognized as highly laborious, often becoming a stressful environment and exerting a negative impact on the student's academic performance, physical health, and psychosocial well-bein (KUMAR et al., 2019; LOAS et al., 2019). Medical students are more likely to develop psychiatric disorders, with depression, anxiety, and burnout being the most common ones. Mental health problems may persist into adulthood if undetected or not properly treatment (KUMAR et al., 2019; LOAS et al., 2019).

The prevalence of depression among medical students varies between studies due to sociodemographic differences (gender, age, social status, among other variables) and different teaching methodologies applied to the studied populations (PISANIELLO et al., 2019; ROMO-NOVA et al., 2019).

Several stressors are known to correlate with depression in medical students, such as the high amount of work and of information that must be assimilated during the course of medical school, poor diet, lack of leisure time, and constant contact with illness and death (ROMO-NAVA et al., 2019)[9]. Other stressors include undue expectations by students' themselves, their family members, and teachers, while students are in the process of training to take responsibility for the well-being and lives of patients (HAMILTON-SHIELD et al., 2018; ROMO-NAVA et al., 2019).

Recent studies have shown that medical students tend to sleep less than 6 hours per day, which may worsen their quality of life, and consequently lead to psychiatric conditions. These conditions can decrease academic productivity and act as initial triggering factors for health impairment [10].

In addition, depression can have severe consequences, such as increased use of licit and illicit drugs and increased prevalence of suicidal ideation (CORREA et al., 2018).

Such stressors may lead to other forms of mental illness, such as burnout (CECIL et al., 2014). This condition is characterized by high levels of emotional exhaustion and depersonalization (described as emotional indifference and dehumanization towards the patient), associated with decreased perception of personal fulfillment (GRACE, 2018). This syndrome is considered relevant in several areas, with considerable proportions among health workers due to the laborious work environment (CHUNMING et al., 2017). In this context, burnout has been a global concern, both for its detrimental effect on the health and well-being of medical professionals, as well as for its potential impact on the quality and safety of patient care (DYRBEY et al., 2008; TALIH, 2018).

This article provides contributions on the incidence of burnout and depression in medical students and evaluates and suggests ideas about the impact of these conditions on different aspects of students' quality of life.

Therefore, the aim of the present study was to investigate the prevalence of depressive symptoms in medical students and their potential association with burnout. Other aspects, such as exercise practice, alcohol consumption, smoking, use of illicit drugs, psychotherapeutic follow-up, and quality of life were evaluated and correlated with major depression.

METHODS

Type of study, data collection, population, and sample

This is a multicenter analytical cross-sectional study conducted in three northeastern Brazilian universities (Ceará State University, Federal University of Ceará, and Federal University of Cariri).

The course lasts six years and curriculum is basically divided into three stages of training: preclinical (1st and 2nd years), clinical (3rd and 4th years), and clerkship (5th and 6th years).

Data collection was performed using four scales and a questionnaire in students from the first to the fourth year of medical school (first to eighth semester). The study included a systematic random sample of both male and female students in the Colleges of Medicine. Students were approached in classrooms to attain good representation of students' body. Final-year students were excluded from this study because of their unavailability as they were preparing for their board exams. The final sample consisted of 511 students, distributed per year of medical school, as follows: 111 from the first year, 174 from the second year, 138 from the third year, and 88 from the fourth year.

The sample of this research represents around 50% of the total of students from the three universities. The rest of the students were excluded for one of two reasons: the students either chose not to participate or they answered incorrectly.

During the collection period, at least one researcher was a student in each university. We sent emails to the students explaining the research and then they were approached in person, after or in between classes, to fulfil the questionnaires. The data was collected between September and October of 2018.

When we observed the concerning results of this research, we could not approach the students

individually because of the anonymity, but we informed the faculty members of the results so that institutional measures could be taken.

Data collection instruments

Four internationally validated scales and one evaluative questionnaire prepared by the authors were used. Non-attendees and incomplete responses were excluded from the study. The study was conducted in the leisure time, in between the lectures.

The questionnaire was prepared by the researchers to collect data complementary to the scales. It consists of 15 items, with objective questions about demographic and academic information, sleep habits, need for psychotherapeutic follow-up, exercise practice, perception of the emotional support offered by the faculty, smoking, and use of psychoactive drugs and illicit drugs.

The Patient Health Questionnaire (PHQ-9) is a validated scale for screening and stratification of depression. The global score ≥ 10 detects major depression with high sensitivity and specificity, and is the criterion adopted for the present study.

The Maslach Burnout Inventory-Student Survey (MBI-SS) is an internationally validated self-administered instrument used by several studies to screen burnout. The items evaluate three dimensions: emotional exhaustion, cynicism, and academic efficacy. Low scores for academic efficacy and high scores for emotional exhaustion and cynicism are indicative of burnout, according to the three-dimensional criterion, the most widely adopted in studies. The two-dimensional criterion involves high scores for emotional exhaustion and cynicism.

The third instrument is the Alcohol Use Disorders Identification Test (AUDIT). This scale is an instrument developed by the World Health Organization (WHO) to identify people with risky consumption, harmful use, and dependence of alcohol, and assesses the consumption of this substance in the previous 12 months. It is a test that has been extensively used in primary health care, the general population, college students, and adolescents. The AUDIT score classifies individuals by risk levels in Zone I (0 - 7 points), Zone II (8 - 15 points), Zone III (16 - 19 points), and Zone IV (20 – 40 points), with progressive increase in risks the higher the scores.

The WHOQOL-BREF instrument is used to assess quality of life, and there are studies that validate its use in medical students. The instrument addresses four domains: physical, psychological, social relationships, and environment. The score for each domain is obtained from an average according to the number of questions in the domain.

Data analysis

Categorical data were expressed as absolute count with frequency and percentages and were compared by chi-square test. All quantitative variables were tested for normal distribution using the Kolmogorov-Smirnov test. Variables with normal distribution were presented as mean ± standard deviation and for non-normal data were shown as median and interquartile range. Student's t-test, one-way analysis of variance (ANOVA) with Tukey post-test, or the Kruskal-Wallis test with Dunn's post-test were used to compare means/medians of continuous variables appropriately with the distribution of data between groups.

Correlations were evaluated by Pearson correlation. In addition, univariate logistic regression was used to assess the association between variables with the presence of burnout. All analyzes were performed using IBM SPSS Statistics for MAC OSX, version 23.0 (IBM, USA).

Ethical aspects

The project was approved by the Research Ethics Committee of Ceará State University. Moreover, the authors contacted the directors of all University. If the director agreed to participate, medical students were invited to participate in this study. Consent was requested from participants through an Informed Consent Form and anonymity was ensured.

RESULTS

A total of 511 medical students from the first to the eighth semester participated in the research, 42.3% being female. Students in the basic cycle of medical school (first and second years) represented 55.7% of the sample, while the rest were in the clinical cycle (third and fourth years). The age group up to 25 years old represented 90.4% of the sample.

Regarding the students' daily sleep time, it was observed that 54.5% of the students slept only 3 to 6 hours per night. In addition, 40 students (7.8%) reported regular use of sleeping medications.

The use of psychoactive substances was reported by 153 students (29.9%). Only 17.3% and 13.1% of the sample reported drug use and smoking, respectively. Of the smokers, 53.7% started their addiction before entering medical school, while the rest started smoking during medical school. Twenty-six point eight percent of the students considered that medical school promoted the increase of smoking. Major depression was observed in 49% of the 511 medical students studied.

The study showed a statistical correlation between the presence of depression and gender (Table 1). It was observed that 56.5% of the female population studied presented major depression, while only 43.7% of male students had the same condition. There was no statistical correlation between age and depression.

The year of medical school the students were in was associated with the presence of depression (Table 1). We observed that 40.2% of second-year students had depression, while only 12.3% of fourth-year students had this diagnosis. Regarding the emotional support offered by university faculty, about 92.8% of students with depressive symptoms reported not receiving adequate emotional support to cope with the disease. Regarding alcohol use, students in Zone III

and IV had higher scores on the depression scale when compared to students in Zone I.

The correlation between the quality of life of medical students and the presence of depression was evaluated, as shown in Table 1. The data presented have statistical significance and demonstrate that all quality of life domains of students with depression have a score below four points. Comparing students without depression and with depression, it was noted that in the latter group there is a clear worsening of quality of life in all domains considered, with the physical and psychological domains being the most affected ones.

Table 1 - General aspects of depression and assessment of academic parameters according to the presence of depression.

Correlation between gender and presence of depression			
	Female Gender	**Male Gender**	***p***
With Depression (251)	122 (56.5%)	129 (43.7%)	0.004
Without Depression (260)	94 (43.5%)	166 (56.3%)	
Correlation between age and presence of depression			
	< 25 years	**≥ 25**	***p****
With Depression (251)	224 (89.2%)	27 (10.8%)	0.366
Without Depression (260)	238 (91.5%)	22 (9.5%)	
Correlation between medical school year and presence of depression			
	Second year	**Fourth year**	***p****
With Depression (251)	101 (40.2%)	31 (12.3%)	< 0.01
Without Depression (260)	73 (28.1%)	57 (21.9%)	
Perception of emotional support according to the presence of depression			
	Yes	**No**	***p****
With Depression (251)	18 (7.2%)	233 (92.8%)	< 0.05
Without Depression (260)	32 (12.3%)	228 (87.3%)	
Correlation between alcohol use and presence of depression (AUDIT)			
	Low risk	**Increased risk**	**High risk/dependence**	***p****
Depression - n (%)	205 (48%)	37 (56%)	9 (69%)	0.015
Mean depression score	10.1 ± 6.2	11.3 ± 6.6	14.4 ± 8.5	

Correlation between substance use and presence of depression					
	Caffeine (*p* < 0.01)*	**Sleep-inducing medications (*p* < 0.01)***	**Smoking (*p* < 0.189)***	**Psychoactive drugs (*p* < 0.01)***	**Illicit drugs (*p* < 0.055)***
With Depression (251)	149 (59.3%)	28 (11.1%)	38 (15.1%)	91 (36.2%)	53 (21.1%)
Without Depression (260)	124 (47.6%)	12 (4.6%)	29 (11.1%)	62 (23.8%)	38 (14.6%)

Comparison of quality of life domain scores according to the presence of depression				
	Physical (p < 0.001)**	**Psychological ** (p < 0.001)**	**Social relationships ** (p < 0.001)**	**Environment ** (p < 0.001)**
With Depression (251)	3.14 (2.8 – 3.4)	3.0 (2.5 – 3.3)	3.3 (3.0 – 4.0)	3.2 (2.9 – 3.7)
Without Depression (260)	3.8 (3.4 – 4.1)	3.8 (3.3 – 4.0)	4.0 (3.3 – 4.3)	3.6 (3.2 – 4.1)

Caption: *Data expressed as absolute count and percentage in parentheses or as mean ± standard deviation.*
**Chi-square test for independence for categorical data and Student's t test for quantitative data.*
***Data expressed as median and interquartile range in parentheses (Mann-Whitney test).*
Source: Prepared by the authors.

Table 2 evaluates the relationship of depression with several parameters. Statistical correlation was evidenced between the occurrence of depression and the female gender. The condition was significantly more prevalent among those students who required psychotherapeutic follow-up at some point in medical school.

There was a statistical correlation between depression and use of psychoactive drugs, medications to regulate the sleep-wake cycle, and caffeine. No correlation was observed between depression and amount of sleep per night, smoking, and drug use.

Table 2 - factors correlated with the presence of depression

Variables	Total group (*n* = 511)	Depression (*n* = 251)	Univariate Analysis		
	n	***N***	**O.R**	**C.I**	***p***
Female gender	216	122	1.67	1.172 - 2.379	0.005
Age < 25 years	462	232	1.593	0.872 - 2.910	0.135
Sleeping Hours (<6 hours per night)	278	143	1.226	0.865 - 1.738	0.252
Psychotherapy in medical school	147	95	2.436	1.638 - 3.622	<0.001
Second-year students	174	101	1.725	1.192 - 2.497	0.004
Fourth-year students	88	31	0.502	0.311 - 0.809	0.005
Use of caffeine	273	149	1.602	1.129 - 2.274	0.008
Smokers	67	38	1.415	0.843 - 2.375	0.189
Use of sleep inducing medications	40	28	2.596	1.289 - 5.229	0.008
Use of psychoactive drugs	153	91	1.816	1.237 - 2.667	0.002
Alcohol abuse	79	46	1.544	0.950 - 2.508	0.08
Use of illicit drugs	91	53	1.564	0.989 - 2.474	0.056

Caption: *O.R: odds ratio; C.I: confidence interval*
Source: Prepared by the authors.

It was found that 37% of the students had a diagnosis of burnout according to the two-dimensional criterion, and 31% when considering the three-dimensional criterion for the diagnosis. In addition, there was a correlation between burnout and depression (Table 3), in which 44.6% of the students with depressive symptoms presented concomitant burnout by the three-dimensional diagnostic criterion. This percentage drops to 18.1% when we analyze students without depressive symptoms. This statistical difference persists regardless of the dimension analyzed and is always higher in the group with depression.

Table 3 - Association between burnout and depression.

Variable	Without Depression (*n* = 260)	With Depression (*n* = 251)	*p**
Dimensions - Burnout			
Efficacy	21.9 ± 6.6	18.3 ± 6.2	<0.001
Cynicism	5.4 ± 4.7	9.4 ± 6.4	<0.001
Exhaustion	12.8 ± 6.2	18.8 ± 6.2	<0.001
Sum (cynicism and exhaustion)	18.3 ± 9.6	28.3 ± 10.9	<0.001
Burnout			
Two-dimensional Burnout	62 (23.8%)	126 (50.2%)	<0.001
Three-dimensional Burnout	47 (18.1%)	112 (44.6%)	<0.001

Caption: *Data expressed as absolute count and percentage in parentheses or as mean/standard deviation.*
** Chi-square test for independence for categorical data and Student's t test for quantitative data.*
Source: Prepared by the authors.

Findings regarding suicidal ideation and self-mutilation were relevant (Table 4). A total of 10.17% of the students tended to suicidal ideation and/or self-mutilation at some time during medical school. In the univariate analysis there was impairment of all dimensions of burnout in students who considered suicide/self-mutilation at some point in medical school. These students showed 4.9 times greater risk of burnout. When performing multivariate analysis controlled for depression, three-dimensional burnout remains associated, proving to be an isolated risk factor for suicidal ideation and/or self-mutilation.

Table 4 - Association between burnout and suicidal ideation

Variables	**Suicide intent and self-mutilation (*n* = 106)**		
	O.R	**C.I**	***p***
Univariate			
Three-dimensional Burnout	4.956	3.154 - 7.789	<0.001
Multivariate*			
Three-dimensional Burnout	3.337	2.049 - 5.433	<0.001

Association between burnout dimensions and suicidal ideation/self-mutilation

Variables	**Never**		**At some point have considered the possibility.**		***p***
	Mean	*Standard deviation*	*Mean*	*Standard deviation*	
Efficacy	20.80	6.58	17.15	6.17	<0.001
Cynicism	6.35	5.26	11.42	6.68	<0.001
Exhaustion	14.54	6.38	20.72	6.76	<0.001

***Caption**: *Adjusted for presence of depression.*

DISCUSSION

The present study showed that depressive symptoms are frequent among medical students. Approximately 49% of the students had moderate to severe depression, similar to many studies (DYRBEY et al., 2008; MELO-CARRILLO et al., 2012). These data are worrying, since the development of depression has been associated with an increased risk of suicide in the short and long term, and with a higher risk of recurrence of future depressive episodes and associated morbidities (CLARKE et al., 2008; LOAS et al., 2019).

A large multicenter study in 43 countries showed a prevalence of depressive symptoms in medical students of 27.7%, which is considerably lower than what we found (ZHONG et al., 2019). This prevalence could be explained by the existence of particular characteristics related to the predominant teaching method in each culture and different sociodemographic profiles in the studied populations.

According to this study, students in the first two years of medical school (basic cycle) are more likely to develop depressive symptoms when compared to fourth-year students (clinical cycle), which is in agreement with several studies on the subject (QUINCE et al., 2012; ROMO-NOVA et al., 2016). This can be explained by the fact that the basic cycle of medical school represents a difficult phase of adaptation to the university environment, in which students have not yet developed sufficient resilience to assist in this process. In addition, the basic courses often do not match students' expectations, as there is little physician-patient contact. In the fourth year, however, clinical courses and the physician-patient relationship gain eminent space.

An adult should sleep at least 7 hours per night for good health and quality of life. Medical students are exposed to poor sleep quality due to many factors, such as high study load (TAFOYA et al., 2018). Recent evidence suggests that they tend to sleep less than 6 hours per night. This factor can impair academic performance, with negative impact on the psychological sphere (WOLF , 2016; ALMOJALI et al., 2017).

In the present study, it was observed that sleep time per night did not correlate with the presence of depression. It was observed that 11.1% of students with depression needed regular use of medications to regulate the sleep-wake cycle, while only 4.6% of students without depressive symptoms use sleep-inducing medications. This data contrasts with other studies in the literature, in which depression was associated with the presence of sleep disorders (PAN et al., 2016; ABDELAZIZ et al., 2017). It is possible that the greater use of sleep-inducing medications in the group of students with depression may be responsible for the lack of association between sleeping hours and major depression.

The present study showed a correlation between the presence of depressive symptoms and gender, and the female gender was more commonly associated with this condition. Other studies have presented similar findings, showing that female medical students are more likely to feel more discouraged and exhausted, and have a more negative perception of their social life and less resilience to adversity (MAYER et al., 2016; PACHECO et al., 2017). When added to the stressful educational environment, professional and family demands, and cultural aspects, these factors may explain the higher prevalence of depression in female students.

Substance use disorders are a global public health concern; they have a significant prevalence among medical students, and, in many cases, are related to depression, burnout, and anxiety (MBANGA et al., 2018; TALIH et al., 2018; SOUSA et al., 2020; RIBEIRO; SOUSA, 2020). A study that assessed the incidence of this condition showed that up to 10% of medical students have a history of abuse of substances including alcohol, tobacco, cannabis, psychedelics, sedatives, and opioids (BALDWIN et al., 1991).

The use of psychoactive substances and licit and illicit drugs was prevalent in students both with and without depressive symptoms. The beneficial effect of these substances on memory, reasoning, and concentration may explain the frequent use by some of the students (BROZEK et al., 2019). In a study with 453 medical students, 74.7% of them reported using substances to improve cognitive functions, and only 2 students (0.6%) reported using prescribed medications. In addition, the following variables were associated with psychoactive substance use among medical students: male gender, self-reported memory impairment, concerns about impaired cognitive performance, and illegal substance use (PIGHI et al., 2018).

In this study, a statistical correlation was observed between high levels of alcohol consumption and depression. This data is similar to what was found in other studies, in which alcohol abuse was shown to be high among medical students, especially those with depression, sometimes serving as a form of emotional escape (IORGA et al., 2018; CARRASCO-FARFAN et al., 2019). However, some study participants may not have been comfortable reporting use of alcohol or other substances, even though anonymity was ensured.

Quality of life, as defined by WHO, is the perception of one's position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns. It is a broad and holistic concept that is complexly incorporated into people's physical health, psychological state, level of independence, social relationships, personal beliefs, and their relationships with the environment (SINGH et al., 2016).

The analysis of the quality of life of medical students is a way of reflecting their overall health, based on specific domains (KHALEGHI et al., 2019). Several factors can impair quality of life in medical students, such as academic overload, extensive curriculum, hostile and morbid hospital environment, and sleep disorders. Depressive symptoms were one of the main psychological predictors associated with low quality of life scores (SOLIS et al., 2019). In addition, depression among medical students may influence the quality of patient care at academic medical centers and may impair the long-term health of students (MOUTINHO et al., 2018).

In line with several studies (MOUTINHO et al., 2018; SOLIS et al., 2019), it was observed that the quality of life of students with depression is below four points in most domains of quality of life, except for the domain of social relationships. Moreover, there is a clear deterioration in quality of life in all domains considered, with the physical and psychological domains being the most affected ones. This fact can be explained by several factors, such as greater concern with future personal insecurities and financial issues related to students.

Burnout is an independent risk factor for suicidal ideation/self-mutilation among medical students, in agreement with other studies (DYRBEY et al., 2016; CORREA et al., 2018). There was also a correlation between these thoughts and the three dimensions of the syndrome. A recent meta-analysis estimated an 11% prevalence of suicidal ideation among medical students (ROTENSTEIN et al., 2016).

The precariousness of emotional support offered to these students suffering from psychiatric conditions, as evidenced in our study, may aggravate this association. These results demonstrate the importance of psychotherapeutic follow-up, so that students can discuss various subjects related to mental health (SILVA et al., 2017).

The main limitation of this study is the cross-sectional design, which does not allow us to assess causality or analyze a possible temporal relationship between the results. Thus, we suggest that longitudinal studies be conducted to better clarify the information found here.

CONCLUSION

This study adds to others that assess mental distress conditions in medical students, a subject of increasing importance in the area of mental health. Females were most commonly affected. Depression was associated with reduction in all domains of quality of life, especially in the physical and psychological domains. In addition, burnout was associated with depression, suicidal ideation, and self-mutilation, regardless of the presence of depression. It is necessary to increase and improve the psychological support offered to medical students with mental suffering. In our study, the group of students with depression was precisely the one that most felt the need for psychological support from their educational institution.

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