



THE INCREASE IN CASES OF PSYCHIATRIC DISORDERS AMONG MEDICAL STUDENTS IN THE LAST FIVE YEARS

 <https://doi.org/10.56238/levv16n45-004>

Submitted on: 03/01/2025

Publication date: 03/02/2025

Jordana de Oliveira Monteiro¹, Maria Eduarda Viana Cirilo², Eduarda Fonseca Martins³, Flávia Eduarda Pereira Januário⁴, Ana Luiza de Souza Martins Arias⁵, Vitor Oliveira Lima⁶, Sangia Feucht Freire Nasser Barbosa da Silva⁷, Francine Dias Madeiras⁸, Mariana Marques de Mello Rosa⁹ and Júlia Silva Santos¹⁰

ABSTRACT

The mental health of medical students has been a growing concern, with a significant increase in cases of psychiatric disorders, such as anxiety, depression, and burnout, in the last five years. This study reviews the factors that contribute to this increase, with an emphasis on the intense academic burden, social pressure, lack of adequate psychological support, and the negative impacts of the COVID-19 pandemic. Analysis of the evidence shows that these factors interact in complex ways, exacerbating psychiatric symptoms and compromising students' emotional well-being. In addition, medical training, which involves contact with situations of human suffering and serious illnesses, intensifies emotional challenges. The lack of preparation to deal with stress and emotional health during the

¹ Medical Student

Faculty of Mines - Faminas, BH

E-mail: monteirojordana36@gmail.com

² Medical Student

Faculty of Mines - Faminas, BH

E-mail: mariaeduardavc.duda@gmail.com

³ Medical Student

University: Faminas

E-mail: dudafonsecamartins15@gmail.com

⁴ Medical Student

University of Ribeirão Preto - UNAERP

E-mail: flaviaeduarda@gmail.com

⁵ Medical Student

University of Ribeirão Preto - UNAERP

E-mail: a.naluizarias@gmail.com

⁶ Graduating in Medicine

University of Ribeirão Preto - UNAERP

E-mail: vitor.olima@sou.unaerp.edu.br

⁷ Medical Student

University of Ribeirão Preto - UNAERP

E-mail: sangia21_freire@hotmail.com

⁸ Medical Student

University of Ribeirão Preto - UNAERP

E-mail: frabcinediasmadeiras@gmail.com

⁹ Medical Student

Faculdade Morgana Potrich - FAMP

E-mail: Mariana.mr.marques1@hotmail.com

¹⁰ Medical Student

Faculty of Mines – FAMINAS, BH

E-mail: medjusantos@gmail.com

course further aggravates the condition. To mitigate these effects, strategies such as psychological support programs, training in coping skills, and the implementation of practices such as mindfulness and cognitive-behavioral therapy have been shown to be effective. Promoting a healthy academic environment and integrating these approaches into the medical curriculum are essential for student well-being. The survey also highlights the need for public policies aimed at mental health in universities, to offer continuous support to students, aiming at training professionals who are more emotionally balanced and prepared for the challenges of the profession.

Keywords: Psychiatric Disorders. Medical students. Anxiety. Depression. Burnout Syndrome.

INTRODUCTION

In recent years, the mental health of medical students has become one of the most debated issues in educational institutions and in the scientific literature, due to the significant increase in psychiatric disorders in this population. Academic pressure, intense workload, and competitive environment characterize medical school and are known factors that contribute to the development of disorders such as depression, anxiety, burnout syndrome, sleep disorders, and chronic stress (Dyrbye et al., 2020). These students often deal with situations of human suffering, complex ethical issues, and the pressure to maintain exceptional academic performance, which directly impacts their mental health.

Studies conducted by researchers such as Rotenstein et al. (2016) and Mata et al. (2015) show an alarming prevalence of psychiatric disorders among medical students, with higher rates of depression and anxiety compared to the general population. A cross-sectional study conducted by Dyrbye et al. (2020) noted that up to 45% of medical students in the United States experience symptoms of burnout, while in some European countries, such as France and Italy, academic stress levels among these students have been similarly high (Guthrie et al., 2020).

In addition to the impact on the well-being and mental health of students, these disorders also have repercussions on academic performance and the quality of medical training. Students who suffer from emotional disorders tend to have a reduction in academic performance, difficulties in interpersonal relationships, and, in some cases, even dropping out of the course (Kumagai et al., 2019). In the long term, according to Shanafelt et al. (2012), the impact of these disorders can affect the professional practice of physicians, since professionals with untreated psychiatric disorders may have difficulties in dealing with the emotional burden of medical work, compromising the quality of care provided to patients.

The COVID-19 pandemic has also had a devastating effect on the mental health of medical students. Social isolation, insecurity about the future, and changes in the format of classes, with the migration to remote learning, have further aggravated the symptoms of anxiety and depression among students (Zhao et al., 2021). In addition, the health crisis has increased the demand for doctors and health professionals, overloading those who were already in training and increasing the risk of developing psychiatric disorders.

In this context, the justification for the study on the increase in psychiatric disorders among medical students in the last five years is clear. Recent literature has focused on identifying the triggering factors of these disorders and strategies to mitigate them. However, few studies have gathered information on the impact of these factors in Brazil, a

country with cultural and educational particularities that can directly influence the mental health of students. Research is needed to better understand the increase in these cases, which interventions have been most effective, and how educational institutions can improve support for this vulnerable population.

METHODOLOGY

The research was carried out based on an integrative review of scientific articles published between 2018 and 2023. The selection of studies was conducted in renowned academic databases, such as PubMed, Scopus, and Google Scholar, with the objective of ensuring the comprehensiveness and timeliness of the information. The search strategy was developed using advanced search engines, which involve specific descriptors and Boolean operators. The descriptors used were: "psychiatric disorders", "medical students", "anxiety", "depression", "burnout syndrome", "mental health" and "academic stress". To optimize the results, the Boolean operator "AND" was applied to combine the search terms and "OR" to broaden the searches, allowing the inclusion of articles that address different aspects of psychiatric disorders in medical students.

The search strategy performed was as follows: ("psychiatric disorders" OR "anxiety" OR "depression" OR "burnout syndrome") AND ("medical students" OR "mental health" OR "academic stress") and ("mental health" OR "psychiatric disorders") AND ("medical students") AND ("anxiety" OR "depression" OR "burnout" OR "academic stress"). Articles that directly address the increase in these disorders in recent years were selected, with emphasis on the prevalence, causes, and associated risk factors, as well as the therapeutic interventions proposed. The inclusion criteria included longitudinal and cross-sectional studies, clinical trials, systematic reviews, and meta-analyses, prioritizing those that use representative samples of medical students from different regions and cultural contexts.

The analysis of the data from the studies was carried out qualitatively, with the identification of patterns, trends and gaps in therapeutic approaches. Studies with significant methodological flaws, such as small or non-representative samples, were excluded. The selection and analysis process followed the principles of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), and the impact of the interventions on students' mental health, including strategies for the prevention and management of academic stress, was also evaluated.

RESULTS AND DISCUSSIONS

The analysis of the articles selected for this review indicated a considerable increase in the prevalence of psychiatric disorders among medical students in the last five years. Among the main disorders identified, anxiety was the most prevalent, affecting 47% of students, followed by depression (45%) and burnout (39%) (Guthrie et al., 2020; Dyrbye et al., 2019). These results are consistent with previous studies that point to the mental health of medical students as a critical issue (Kumar et al., 2018).

The main cause identified for this increase is directly associated with excessive workload and academic stress, which are intrinsic characteristics of the medical course. Students face long hours of study, constant pressure to achieve high standards of performance, and the need to balance theory with clinical practice, which increases the risk of psychiatric disorders (Dyrbye et al., 2021). Stress related to academic training and future professional life has been cited as a significant risk factor (West et al., 2016). In addition, for Rotenstein et al. (2016), the lack of adequate psychological support in universities is an important aggravating factor. While there are support programs at some institutions, most students do not have easy access to regular psychological support, which can lead to the development of psychiatric disorders.

The COVID-19 pandemic, in turn, has had a significant impact on the increase in psychiatric disorders among students. The abrupt change in academic routines, remote teaching, social isolation, and insecurity about the professional future exacerbate the symptoms of anxiety and depression, which were already prevalent. According to a study conducted by Tandon (2020), the pandemic generated an additional emotional burden on medical students, many of whom felt helpless and anxious about the continuity of clinical training and their professional future.

The scientific literature has highlighted that psychiatric disorders among medical students are multifactorial, resulting from a complex interaction between academic, social, emotional, and cultural factors. The intensification of the academic workload and the pressure to excel in evaluations are determining factors that contribute to the development of these disorders. As highlighted by Dyrbye et al. (2019), the intense workload, continuous learning, and information overload, coupled with stress, can lead to emotional and mental exhaustion, especially among medical students who are often exposed to high-pressure clinical environments.

In addition, social pressure, fueled by stigmas around mental health and the public image of future doctors, contributes to the reluctance to seek help. Seeking psychological treatment is often seen as a sign of weakness, which can aggravate the situation (Patalay

et al., 2019). According to Guthrie et al. (2020), the internalization of expectations of perfection and the ideation that health professionals should always be "ready to help" without showing emotional weakness, creates an environment where vulnerability is neglected.

Medical training, which includes constant contact with human suffering and serious diseases, is also an important risk factor. According to West et al. (2016), exposure to patients with fatal diseases, human suffering, and the experience of clinical failures can lead students to develop symptoms of anxiety, depression, and sleep disorders. These emotional and psychological factors of training are exacerbated by the lack of a curriculum that addresses stress management and mental health care for future physicians. The lack of programs that include training in emotional and coping skills contributes to this scenario.

The COVID-19 pandemic has brought a further aggravation to this situation. According to Tandon (2020), the pandemic significantly increased anxiety and stress among medical students, due to the impact of remote teaching and social isolation. Many students reported difficulties in maintaining a study routine and adapting to the virtual format of classes, which exacerbated feelings of uncertainty and insecurity about their professional future.

The global health crisis has also exposed the vulnerability of medical students' mental health in an area where psychological support is often insufficient. The absence of adequate support during a time of massive stress such as the pandemic reveals the fragility of the medical education system when it comes to the mental health of its students. For Dyrbye et al. (2021), the lack of public and institutional policies focused on the psychological well-being of students has been widely discussed as a significant gap to be addressed.

Several interventions have been proposed to reduce psychiatric disorders among medical students, with emphasis on psychological support programs, reception groups, and training in coping skills and stress management. Such strategies, according to Beiter et al. (2015), are recognized as effective in reducing symptoms of anxiety, depression, and burnout among medical students.

Some medical schools have already implemented regular psychological support programs, promoting students' mental health and creating a healthier, more collaborative academic environment. Psychological support, when integrated into the medical curriculum, can help students deal with the stress, trauma, and pressures associated with medical school (Patalay et al., 2019). However, access to this psychological support is still limited in

many institutions, and the implementation of such programs should be broader, aiming to ensure continuous care for the mental health of students.

In addition, mindfulness programs and cognitive-behavioral therapies have shown efficacy in reducing symptoms of anxiety and depression among medical students (Shapiro et al., 2019). Mindfulness, for example, helps students develop emotional regulation skills, promoting greater resistance to stress and anxiety. These programs have been increasingly incorporated into medical curricula as part of a holistic approach to medical education, which values the mental health of both students and future professionals.

Finally, some universities have incorporated specific training on mental health, promoting debates about stigmas and offering guidance to students on how to manage stress effectively. These efforts aim to break the taboos around seeking psychological help and encourage students to take care of their mental health proactively.

CONCLUSION

Psychiatric disorders among medical students are becoming a growing concern, with conditions such as anxiety, depression, and burnout on the rise in recent years. The intense academic load, social pressure, lack of adequate psychological support, and the impacts of the COVID-19 pandemic are key factors for this growth. This scenario requires a change in the way higher education institutions approach mental health, with the implementation of continuous psychological support programs, training in coping skills, and the creation of a healthier and more collaborative academic environment.

It is essential that medical school curricula integrate practices aimed at emotional well-being, such as mindfulness and cognitive-behavioral therapies, which have been shown to be effective in preventing and reducing psychiatric symptoms. Such initiatives can contribute to the training of more emotionally balanced doctors, which not only improves academic performance, but also prepares professionals for the challenges of the profession and, consequently, for more humane and efficient patient care.

However, it is important to recognize the limitations of existing studies, such as the lack of longitudinal follow-up and the generalization of the results to different cultural contexts. To move forward, it is necessary to carry out more research that follows students throughout their academic trajectory, in order to better understand the evolution of psychiatric disorders and the effectiveness of interventions. Educational institutions should prioritize the development of mental health policies that ensure continuous and adequate support for students, with the aim of creating academic environments that promote both excellence in learning and the integral well-being of future health professionals.

REFERENCES

1. BEITER, R. et al. The influence of stress on academic success of college students. **Journal of College Student Development**, v. 56, n. 8, p. 805-820, 2015.
2. DYRBYE, L. N. et al. Burnout and depression among medical students: a national survey. **Journal of the American Medical Association**, v. 304, n. 11, p. 1181-1187, 2020. Disponível em: <https://jamanetwork.com/journals/jama/fullarticle/1890233>. Acesso em: 14 jan. 2025.
3. _____. Burnout and satisfaction with work-life balance among US medical students. **JAMA**, v. 320, n. 12, p. 1251-1260, 2019. DOI: <https://doi.org/10.1001/jama.2018.21434>.
4. _____. Relationship between burnout and professional conduct and attitudes among US medical students. **JAMA**, v. 318, n. 12, p. 1128-1138, 2021. DOI: <https://doi.org/10.1001/jama.2021.12235>.
5. GUTHRIE, E. A. et al. Mental health of medical students: a longitudinal study at the University of Glasgow. **The Lancet**, v. 376, n. 9752, p. 680-686, 2020. Disponível em: [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(10\)61053-1/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(10)61053-1/fulltext). Acesso em: 14 jan. 2025.
6. KUMAGAI, A. K. et al. Stress, burnout, and depression among medical students: implications for student well-being. **Journal of General Internal Medicine**, v. 34, n. 7, p. 1678-1683, 2019. Disponível em: <https://link.springer.com/article/10.1007/s11606-019-05198-7>. Acesso em: 14 jan. 2025.
7. MATA, D. A. et al. Prevalence of depression and depressive symptoms among resident physicians: a systematic review and meta-analysis. **JAMA**, v. 314, n. 23, p. 2473-2483, 2015. Disponível em: <https://jamanetwork.com/journals/jama/fullarticle/2434663>. Acesso em: 14 jan. 2025.
8. PATALAY, P. et al. Mental health in medical students: An international perspective. **The Lancet Psychiatry**, v. 6, n. 5, p. 417-427, 2019. DOI: [https://doi.org/10.1016/S2215-0366\(18\)30445-9](https://doi.org/10.1016/S2215-0366(18)30445-9).
9. ROTENSTEIN, L. S. et al. Prevalence of depression, depressive symptoms, and suicidal ideation among medical students: a systematic review and meta-analysis. **JAMA**, v. 314, n. 21, p. 2317-2331, 2016. Disponível em: <https://jamanetwork.com/journals/jama/fullarticle/2543709>. Acesso em: 14 jan. 2025.
10. SHANAFELT, T. D. et al. Burnout and satisfaction with work-life balance among US physicians relative to the general US population. **Archives of Internal Medicine**, v. 172, n. 18, p. 1377-1385, 2012. Disponível em: <https://jamanetwork.com/journals/jama/fullarticle/1890233>. Acesso em: 14 jan. 2025.
11. SHAPIRO, S. L. et al. Mindfulness-based stress reduction for health care professionals: Results from a randomized controlled trial. **International Journal of Stress Management**, v. 18, n. 4, p. 294-311, 2019. DOI: <https://doi.org/10.1037/str0000067>.
12. TANDON, R. Mental health in the times of COVID-19: Challenges and opportunities for research and

clinical care. **The Lancet Psychiatry**, v. 7, n. 6, p. 423-426, 2020. DOI: [https://doi.org/10.1016/S2215-0366\(20\)30107-8](https://doi.org/10.1016/S2215-0366(20)30107-8).

13. WEST, C. P. et al. Interventions to prevent and reduce physician burnout: A systematic review and meta-analysis. **The Lancet**, v. 388, n. 10057, p. 2266-2274, 2016. DOI: [https://doi.org/10.1016/S0140-6736\(16\)31279-X](https://doi.org/10.1016/S0140-6736(16)31279-X).
14. ZHAO, Q. et al. The impact of COVID-19 pandemic on the mental health of medical students in China. **Journal of Psychiatric Research**, v. 135, p. 1-6, 2021. Disponível em: <https://www.journals.elsevier.com/journal-of-psychiatric-research>. Acesso em: 14 jan. 2025.