

Impostor Syndrome in Medical Undergraduate students

**Amanda Viana de Araújo e Araújo¹, Anna Clara Silva Fonseca², Ivan Kevin da Silva Garcia³,
Beatriz Oliveira Amaro⁴, Wallex da Silva Guimarães⁵.**

ABSTRACT

Introduction: The Impostor Syndrome (IS) was first described by Pauline Clance, referring to it as the feeling of unworthiness of the success achieved, even in the face of objective evidence to the contrary. Individuals affected by this syndrome often feel like impostors, despite their accomplishments. The characteristics of this syndrome are described as: (1) the perception of having deceived others as to their true ability, (2) the attribution of success to external factors such as luck or circumstance rather than acknowledging one's own intelligence or ability, and (3) the constant fear of being revealed as a fraud. IS is commonly correlated with some common mental disorders (CMD) such as: anxiety, depression, burnout syndrome or exhaustion, among others. Despite the growing interest and increase in the number of publications on impostor syndrome, there is a dearth of studies focused specifically on undergraduate students in the fields of health and the impact of this condition on the mental health of these individuals. **Objective:** To analyze studies that report the occurrence of impostor syndrome among medical students and to identify the factors that contribute to the development of this condition. **Methodology:** The study was characterized as qualitative and exploratory in the format of a literature review. For the process of systematizing the searches, publications referring to the last five years (2019-2024) were considered, the following databases were used: Scielo, Pubmed and VHL, using the descriptors: Impostor syndrome, Mental health, Health professionals, Medical students. **Results:** During the search, a total of 545 studies were identified. After the identification, selection, and screening process, 47 studies were selected for full evaluation, of which 12 were included as main evidence. The total sample of studies comprised 2,860 medical students, of whom 58.3% were male and 41.6% female. Among the studies analyzed, ten (83.3%) used the "Clance Impostor Phenomenon Scale", one study (8.3%) used the "Leary Impostor Scale", and another study (8.3%) adopted the "Young Impostor Syndrome Scale". The results indicated that females had a higher risk of developing impostor syndrome, with rates ranging from moderate to high. Observed triggers include family dynamics characterized by pressure and criticism, important transitions accompanied by pressure to succeed, and lack of experience, all of which can contribute to self-deprecation. These factors can cause mental impairment and, in the professional context, compromise the ability to judge, care and make decisions, being a significant concern, especially among health professionals with regard to patient safety. **Conclusion:** It is concluded that both from the international and national perspectives, medical students, particularly females, are at high risk of developing impostor syndrome. This condition is often associated with low self-esteem, perfectionism, and depression, all of which can compromise your academic and professional performance. The lack of a formal DSM V and ICD classification of the syndrome as an official pathology makes the debate on the topic more challenging. Therefore, it is recommended that students who experience symptoms related to impostor syndrome seek professional support and consider cognitive behavioral therapy as an effective strategy for management and treatment.

Keywords: Impostor Syndrome, Mental Health, Students, Medicine.

¹ Doctor, UNIFAMAZ

² Medical, FAMINAS BH

³ Graduating in Biomedicine – Faculdade integrada Brasil Amazônia

⁴ Biomedical, Master in Epidemiology and Health Surveillance – Instituto Evandro Chagas Pará

⁵ Biologist, Master in Epidemiology and Health Surveillance – Instituto Evandro Chagas Pará



REFERENCES

- Bhama, A. R., Parikh, J., & Castillo, R. (2021). Imposter syndrome in surgical trainees: Clance Imposter Phenomenon Scale assessment in general surgery residents. *Journal of the American College of Surgeons*, 233(5), 633–638. <https://doi.org/10.1016/j.jamcollsurg.2021.07.042>
- Brennan-Wydra, E., Wallace, R., & Grasso, M. (2021). Maladaptive perfectionism, impostor phenomenon, and suicidal ideation among medical students. *Academic Psychiatry*, 45, 708–715. <https://doi.org/10.1007/s40596-020-01355-3>
- Campos, I. F. de S., Lima, R. S., & Ferreira, M. T. (2022). Síndrome do impostor e sua associação com depressão e burnout entre estudantes de medicina. *Revista Brasileira de Educação Médica*, 46, e068. <https://doi.org/10.1590/1981-5271v46.2-202104210>
- Choron, R. L., Moore, R., & Peterson, J. (2023). The impact of surgical boot camp on medical student confidence and imposter syndrome. *Journal of Surgical Research*, 283, 872–878. <https://doi.org/10.1016/j.jss.2022.08.019>
- Diniz, M. L. C. S., Bezerra, T. C. G., & de Sousa, M. N. A. (2023). Nível de síndrome do impostor em estudantes de medicina. *Revista Eletrônica Acervo Saúde*, 23(1), e11735. <https://doi.org/10.25248/reas.e11735.2023>
- Franchi, T., & Russell-Sewell, N. (2023). Medical students and the impostor phenomenon: A coexistence precipitated and perpetuated by the educational environment? *Medical Science Educator*, 33(1), 27–38. <https://doi.org/10.1007/s40670-022-01522-5>
- Gonçalves, J. R. (2019). Como escrever um artigo de revisão de literatura. *Revista JRG de Estudos Acadêmicos*, 2(5), 29–55.
- Ijaz, F., Khan, M., & Iqbal, S. (2022). Association of impostor phenomenon and burnout with mode of education among medical students of Pakistan: Impostor phenomenon and burnout with mode of education. *Journal of Aziz Fatimah Medical & Dental College*, 4(1).
- Naser, M. J., Al-Khaledi, J., & Al-Hazimi, A. (2022). Impostor phenomenon and its relationship to self-esteem among students at an international medical college in the Middle East: A cross-sectional study. *Frontiers in Medicine*, 9, 850434. <https://doi.org/10.3389/fmed.2022.850434>
- Rosenthal, S., Belkin, M., & Ghosh, D. (2021). Persistent impostor phenomenon is associated with distress in medical students. *Family Medicine*, 53(2), 118–122. <https://doi.org/10.22454/FamMed.2021.634664>
- Shahjalal, M., Hasan, M., & Ali, S. (2021). Distribution of imposter syndrome among medical students of Bangladesh: A cross-sectional study. *F1000Research*, 10(1059), 1059. <https://doi.org/10.12688/f1000research.104633.1>
- Shreffler, J., Sanders, R., & Bader, B. (2021). Association between characteristics of impostor phenomenon in medical students and Step 1 performance. *Teaching and Learning in Medicine*, 33(1), 36–48. <https://doi.org/10.1080/10401334.2020.1826302>
- White, N. C., & Elmenini, S. (2022). Learning communities: Do they improve impostor syndrome and loneliness among medical students? *Medical Student Research Symposium*, 10(1), 1–5.