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MENTAL HEALTH IN MEDICAL STUDENTS: CHALLENGES AND INTERVENTION STRATEGIES

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ABSTRACT

Exploring the unique challenges faced by medical students during their academic training, this article seeks to deepen the understanding of the prevalence of mental health problems, identify risk factors, and discuss intervention strategies to promote a healthier academic environment. Medical students face a higher risk of anxiety, depression, stress, and burnout due to academic pressures, intense competition, and lack of support. Studies show a high incidence of these problems, requiring urgent interventions. Intense academic demands, lack of work-life balance, lack of social support, and peer competition are all risk factors. The clinical setting can also expose students to emotionally difficult situations. It is crucial to reduce excessive workload and promote work-life balance. It highlights the urgency of actions by medical education institutions to promote a healthier and more compassionate academic environment, aiming not only at the well-being of students but also at the quality of future medical care.

Keywords: Mental Health. Medical student. Medical Students. Anxiety. Depression.

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INTRODUCTION

The mental health of medical students is a topic of growing concern, as these future professionals face several unique challenges throughout their academic training. From intense academic pressure to exposure to emotionally demanding situations, the medical student's journey can be permeated by several obstacles that directly affect their psychological well-being. Medical education is known to be extremely stressful and challenging. This article aims to deepen the understanding of the prevalence of mental health problems in this population, identify the associated risk factors, and discuss essential intervention strategies to promote a healthier and more sustainable academic environment for these students. By critically analyzing these aspects, it is possible to develop more effective and compassionate approaches to support the mental health of future medical professionals (Barbosa-Medeiros; Boiler; 2021).

METHODOLOGY

An integrative data review was carried out whose guiding question was: "What is the impact on the mental health of medical students?" Review articles based on bibliographic search in the electronic database Medline (PubMed), SCIELO Brasil (Scientific Electronic Library

Online) and Google Scholar, using the terms Mental health; Medicine student; medical academics; Anxiety; Depression.

DISCUSSION

The high prevalence of mental health problems among medical students, these students face a significantly higher risk of developing disorders such as anxiety, depression, stress, and burnout when compared to university students in other areas, also exhibiting a higher prevalence of depression and sleep disorders (Dyrbye; Thomas; Shanafelt; 2006). The quality of life among medical students is also worse than that of individuals of the same age group, according to a longitudinal study (Barbosa-Medeiros; Boiler; 2021). Risk factors include the demands inherent to medical training, the stigma associated with seeking help related to mental health, individual factors of each student, and lack of support within the university environment as evidenced in the integrative study (Ferreira; et.al; 2023) Therefore, we address the prevalence of mental health problems, risk factors, and possible interventions among medical students, reviewing articles from the main academic databases, such as *PubMed, SciELO and Google Scholar*. In addition, we explore implemented or suggested interventions, demonstrating the importance of a healthy and

compassionate learning environment capable of mitigating the mental health risks of future medical professionals.

PREVALENCE OF MENTAL HEALTH PROBLEMS

Regarding the mental health of medical students, they highlight a considerably higher risk of developing psychological problems compared to the general population. Anxiety, depression, stress, and burnout are often cited as common challenges faced by these students, reflecting the unique pressures of medical education. Factors such as study overload, a culture of intense competition, high expectations, and a lack of social support are identified as significant contributors to these emotional challenges.

Previous findings corroborated the cross-sectional study (Oliveira et al., 2024), demonstrating a high incidence of symptoms related to anxiety, depression, and stress in medical students in different cultural contexts. Surprisingly, a substantial proportion of these students have already sought professional help, with half of them having undergone therapy or consulted psychiatrists, and a significant portion have been diagnosed with a mental disorder, especially anxiety and depression. There is a tendency to depression, emotional exhaustion, disbelief, and feeling of professional ineffectiveness of medical students throughout the course. (Conceição; et al; 2019). It demonstrates the urgency of effective strategies to support mental health within medical academic environments.

High levels of disbelief indicate a distancing in interpersonal relationships and a low expectation regarding the professional future. When combined with high levels of emotional exhaustion, these signs correspond to Burnout Syndrome. This conclusion is problematic, as burnout can undermine professionalism, contribute to medical errors, lead to suicidal ideation and burnout, and be a factor in substance abuse and relationship difficulties (Dyrbye; Thomas; Shanafelt; 2006). Although this syndrome is not classified as a nosological entity, its identification in students is extremely relevant as it is closely linked to the environment in which it occurs. This highlights the importance of discussing how the academic context can be a triggering factor for psychic suffering, according to Barbosa-Medeiros and Boiler; 2021).

In addition to the more well-known disorders, such as anxiety and depression, other mental health challenges, such as sleep disorders, eating disorders, and the potential harmful use of alcohol, are also prevalent among medical students. These problems not only persist during the course but can also negatively influence professional practice in the future (Oliveira et.al..; 2024). Thus, it becomes imperative that medical education institutions recognize and proactively address these challenges by implementing preventive

and supportive measures that aim to create a healthier and more sustainable learning environment.

RISK FACTORS

Several risk factors are associated with poor mental health in medical students, reflecting a complex panorama of pressures and demands inherent to medical education. In addition to the intense academic demands, which often include long hours of study and preparation for rigorous exams, students face emotional challenges when dealing with traumatic situations during clinical internships and the need to maintain a delicate work-life balance (Dagnew; Andualem, & Dagne, 2020). A culture where students feel they must always be available and functioning to the best of their ability adds additional pressure, leading many to neglect self-care for the sake of academic achievement.

These risk factors interact in complex ways and may vary according to the individual context of each student (Dâmaso et al; 2019). For example, some students may face financial difficulties or additional family challenges, while others may feel the weight of cultural expectations or deal with pre-existing health conditions. In addition, the lack of social support within the university setting and the stigma associated with seeking help for mental health issues can create an unfavorable environment for the dissemination and early treatment of these problems (Benbassat, 2014).

Another critical factor is intense competition among peers, which can lead to feelings of isolation and rivalry rather than camaraderie and mutual support. The pressure to stand out and the constant comparison with peer performance can exacerbate stress and anxiety, negatively impacting self-esteem and mental health (Barbosa-Medeiros; Boiler; 2021). In addition, the clinical environment often exposes students to harsh realities, such as human suffering, death, and serious illness, without offering adequate emotional support. Lack of emotional preparation and a dearth of resilience and coping training can leave students vulnerable to conditions such as burnout, depression, and post-traumatic stress disorder.

INTERVENTION STRATEGIES

Given the challenging scenario faced by medical students about mental health, it is crucial to adopt comprehensive and effective intervention strategies (Imran et al; 2015). In this sense, holistic and personalized approaches are key to mitigating risks and promoting a healthier and more inclusive learning environment.

There are several strategies available to promote the mental health of medical students (Imran; et al; 2015). From mental health education programs to easy access to

counseling and psychological support services, to mindfulness programs and relaxation techniques, all of these effective approaches can be implemented.

A multifaceted approach may include the creation of accessible and culturally sensitive psychological support programs, ranging from the provision of individualized counseling to support groups to promote resilience and self-compassion (Oliveira; et.al.; 2024). Additionally, it is critical to integrate mental health education into the academic curriculum, providing students with tools to recognize and manage stress, as well as develop self-care skills and promote healthy learning environments.

In parallel, medical education institutions must adopt measures to reduce the excessive workload of students, promote a culture of support among colleagues, and facilitate access to external mental health resources, such as counseling and psychotherapy services. These interventions aim not only to mitigate the risks associated with poor mental health, but also to promote a more inclusive and compassionate academic environment where students feel supported in their journey towards medical practice (Barbosa-Medeiros; Boiler; 2021). In addition, it is imperative to foster an institutional culture that values the well-being of students, reduces the stigma associated with mental health care, and provides adequate resources to support those who are struggling. This involves implementing policies that limit excessive workload, encourage a supportive environment among colleagues, and promote the importance of work-life balance.

These measures are essential to create a healthier and more inclusive academic environment, where students feel encouraged to seek help when needed, without fear of stigma or discrimination (Ferreira; et al; 2023*).* In addition, encouraging the practice of sports and leisure activities, which in some studies have shown to be stress-reducing, can also be a good strategy to consider. It is interesting to point out the importance of psychological support, sports projects, mindfulness practice, in addition to the curricular reorganization with free periods during the week for leisure brought by the observational study (Silva; Saints; Martini; 2022).

FINAL CONSIDERATIONS

The mental health of medical students is an increasingly urgent concern, given the alarming prevalence of psychological problems in this population. This article has looked at the complexity of the challenges faced by medical students, highlighting the need for effective and comprehensive interventions to promote their emotional well-being throughout their academic education. The evidence presented demonstrates that anxiety, depression, stress, and burnout are significant challenges faced by medical students, influenced by a

range of risk factors, including intense academic pressure, lack of social support, and stigma associated with seeking help for mental health issues as demonstrated in the integrative review (Ferreira; et al; 2023).

However, promising intervention strategies were also discussed. The proposed multifaceted approach includes mental health education, easy access to counseling and psychological support services, mindfulness programs, encouragement to practice physical activities and relaxation techniques, as well as the promotion of an institutional culture that values the well-being of students (Barbosa-Medeiros; Boiler; 2021). After analyzing the studies used for this work, it was concluded that medical schools urgently need to review their teaching methods.

Medical education institutions must act proactively to implement these strategies, promoting a healthier, more inclusive, and more compassionate academic environment (Rosa, 2021). Not only will this help mitigate the risks associated with poor mental health, but it will also ensure that future medical professionals are well-equipped to navigate the emotional challenges of clinical practice. Ultimately, investing in the mental health of medical students is not only a matter of ethical responsibility, but also an essential measure to ensure the quality and safety of medical care in the future. By taking a humanized and proactive approach, we can create a learning environment that not only prepares students for a successful career, but also supports them in their personal and professional journey.

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