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Depression in Medical Students

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Abstract

Around the world, anxiety and depressive disorders are quite common disorders. This article examines the prevalence of anxiety and depressive disorders among medical school graduates and explains any possible risk factors that may be present. Those from the Middle East have a greater frequency of depression than those from other nations. These illnesses affect women more frequently than they do men. Academic and non-academic elements can be used to separate the causes of certain morbidities. There is an inconclusiveness of whether medical students experience these symptoms more commonly than their counterparts. The present review provided a crosssectional picture of the students' psychological well-being, which is crucial to formulate a health policy for preventive and therapeutic purposes.

Keywords: Anxiety; Disorder; Risk factors; Depression; Medical students

Introduction

Undergraduate students' mental health is a significant public health issue worldwide. University students are subjected to substantial obligations from both their families and their studies, which results in high levels of psychological stress that can cause major diseases and mental health problems including melancholy and anxiety [1]. The academic performance, physical health, and mental health of university students may consequently significantly deteriorate throughout the course of their academic careers and might only be identified at an advanced point [2]. Additionally, studies carried out among medical educational institutions graduates showed which psychological distress was connected with suboptimal quality for patient care, patient security as well as professionalism. The visible review presents a longitudinal picture of known as current condition of their psychological well-being during healthcare students. In furthermore, it sheds bright on significant indicator of depressive symptoms and nervousness and assists to detect and manage significant stressors in educational life.

Literature Review

Depression

In university communities, depression is a serious health issue that affects roughly one-third of students. According to a comprehensive study, university students had an overall incidence of depressive disorders of 30.6%, which was significantly higher than rates seen in general populations [3].

Differences in gender

Regarding gender, some research found a difference between men and women that was statistically significant, while others did not. In general, female undergraduate students had higher rates of depression than did male students [4]. Among a research involving undergraduates from 23 different nations, it was shown that depressed symptoms were more common among male students 19% than female students 22%. Similar to this, it was shown that female medical students had a greater prevalence of feeling depressed (31.5%) than male students (24.2%) when prevalence was categorized by gender [5]. Despite the fact that female students are more at danger, male students' high rates pose a unique problem since they are not as likely to seek assistance

Factors associated with depression

The risk of depression among students may rise due to a variety of causes. These elements include lifestyle adjustments, financial strains, alterations in family dynamics, and concerns about one's academic future in the post-graduation world. Other potential risk factors for major depressive illness include feminine sex, younger age, lower socioeconomic status a while, living alone in a leased room, and financial hardship [6]. A research also revealed certain unique variables for each academic level. Notably, first-year students cited "volume of work" and "absence of feedback" as their two top sources of stress, but third-year students cited "fears about future capability" and "pedagogical inadequacies" as their two top sources of stress. On the other side, sixth-year students raised concerns over a "nonsupportive climate" in addition to the pressures mentioned by the first and third-year students. Other social characteristics, like family economic position, were linked to a high risk of depression. University students from lower socioeconomic backgrounds reported suffering from depression at higher rates than those from higher backgrounds. In addition, individuals who were from rural regions were probably at a higher risk for developing depression than people who resided in metropolitan areas [7]. Students who misused drugs, those with a family history of anxiety or depression, as well as those who had recently lost a close relative had higher rates of depression and anxiety.

Differences between medical and non-medical students

Numerous studies compared medical students to non-medical students and assessed the prevalence of depression. In a British study, the incidence of depression was compared between medical college students and their non-medical classmates, and it was found that medicine college student had a lower frequency of depression overall. Conversely, a meta-analysis revealed that there was little variation in the depression rates of medical students and non-medical students.



Swedish research examined the risk factors for depression as well as the prevalence of depressive disorders among medical students at various academic levels. According to the study, in comparison to the general population, medical students had a greater frequency of depressive illnesses [8].

Prevalence of depression among medical students

The healthcare education community is quite concerned about the prevalence of sadness is among medical students. Medical students are more likely than everyone else to experience depression, according to many research studies [9].

A comprehensive review and meta-analysis that has been released in JAMA in 2016 indicated that depression or depressed symptoms were present in 27.2% of medical students. The incidence of depression among medical students was found to be 25.2%, according to a different one meta-analysis and systemic review that was issued in BMC medicine in 2019.

These depression rates are significantly higher than the stated general population rate, which is thought to be between 6 and 7 percent for the United States.

The increased occurrence of depression among medical students is caused by several variables, including studying long hours, a heavy workload, financial worries, and social isolation. As a result of extended stress, medical pupils are also more likely to experience burnout, a state that physical, emotional, and mental weariness.

Discussion

The high prevalence of feeling depressed among medical students must be addressed in order to advance their general wellbeing, academic achievement, and a successful career in the To address this urgent issue, medical colleges and educational institutions must give medical students priority access to mental wellness resources and support services [10].

Risk factors for depression in medical students

The probability of depression among medical students is increased by a number of risk factors [11]. Identifying these risk variables is crucial for creating interventions and prevention plans for depression in medical students. The following are some among the most typical warning signs for depression among medical students:

Academic pressure: Medical students must meet demanding academic requirements, such as a substantial amount of homework, extended study sessions, and important tests, which may be quite stressful.

High workload: Medical students frequently have a heavy workload that includes long hours spent on clinical experiences or clerkships, which can lead to both mental and physical tiredness.

Individual or familial instances of sadness: Medical students are more likely to experience depression if they have a family or personal record of the condition [12].

Financial issues: Attending school for medicine is costly and many students borrow heavily to pay for it. Stress and worry caused by money worries might contribute to depression.

Due to the lengthy hours spent studying and working in the clinics, medical students frequently encounter social isolation. This can lead to feelings of isolation and hopelessness.

Lack of social assistance: Medical students who do not have the support of family and close friends are more likely to experience depression [13].

Due to the rigours of their training, medical students frequently encounter sleep deprivation, which can affect their mood and cause sadness.

Perfectionism: Medical learners may hold themselves to high standards and feel under pressure to perform well, which can result in emotions of inadequacy and melancholy.

Among order to prevent and treat depression among medical students, these risk factors must be addressed. To address these risk factors, medical schools and universities can offer resources and assistance, such as counselling services, stress-management courses, and financial help [14].

Symptoms and signs for depression in medical students

Like those who are depressed in the general population, medical students exhibit identical symptoms and warning indications of depression. Medical students' academic performance and general well-being may be greatly impacted by these symptoms. The following are some of the most typical symptoms and indications of sadness in medical students [15].

Medical students who are depressed frequently have emotions of despair that linger for a period.

Loss relevant in hobbies or social interactions: Medical students can lose interest in the pursuits they formerly found enjoyable.

Insomnia, or having trouble getting or staying asleep, is a typical sign of sadness in medical students.

Changes in hunger: Medical students who are depressed may have considerable weight loss or increase as well as changes in appetite.

Insomnia and fatigue: Even when well-rested, medical students who are depressed may feel tired and run down.

Concentration issues: Depressive disorders can make it difficult for medical students to focus or make judgements.

Feelings of worthlessness and guilt: Medical learners who are depressed could feel guilty, useless, or hate themselves.

Restlessness or irritability: Medical students who are depressed may suffer restlessness or irritability.

Physical signs and symptoms: Physical signs and symptoms of depression might include headaches, gastrointestinal problems, and body pains [16].

It is essential to remember that every person with depression has a unique experience, and symptoms might differ in intensity and length. A medical student should think about getting professional assistance from a healthcare physician or mental health expert if they are persistently exhibiting any of these symptoms.

Impact of depression on academic performance

Among medical students, depression can have a considerable negative effect on academic performance. The signs of depression can make it difficult for a person to study, remember knowledge, and do well on examinations. These symptoms include difficulties concentrating, low energy, and diminished interest in activities.

Studies have repeatedly demonstrated the link between depression and poor academic performance in medical students, including worse marks, a higher risk of failing courses or tests, and a later graduation date. This might result in more stress and worry, which would worsen the symptoms of depression and have a detrimental effect on academic performance.

Depression can also affect a patient's ability to function clinically. Medical students that are depressed could find it challenging to establish relationships with patients, make accurate diagnoses, or collaborate well. Your clinical training and potential for future professional success may suffer as a result [17].

To lessen the effect on academic performance, it is critical to address depression in medical students as soon as possible. Medical students should obtain priority access to psychological assistance and counselling services from medical schools and educational organisations so that they may effectively manage symptoms of depression. This can include academic assistance programmes, stressmanagement classes, and counselling services. Medical schools may aid students in academic progress and enhance their general wellbeing by tackling depression [18].

Treatment options for depression in medical students

Like those available for sadness in the general community, there are options for therapy for depression among medical students. If you are exhibiting symptoms of anxiety, it is imperative that you get assistance from a medical practitioner or mental health expert. The following are a few of the most popular therapies for depression among medical students:

Cognitive-Behavioural Therapy (CBT) is one form of psychotherapy that has shown promise in the treatment of depression. Medical students can learn coping mechanisms and how to recognise negative thoughts and behaviours that lead to depression with the use of Cognitive Behavioural Therapy (CBT) [19].

Antidepressant drugs, such as Tricyclic Antidepressants (TCAs) or Selective Reuptake Inhibitors of Serotonin (SSRIs), can be used to treat sadness. To select the right drug and dose, it's crucial to speak with a healthcare professional.

Exercise: Research has shown that exercise can help alleviate depression. Exercise may be included into a medical student's everyday regimen to assist control depressive symptoms.

Techniques for mindfulness and relaxation: Practices for mindfulness and relaxation, such yoga or meditation, can help manage the symptoms of depression.

Attending support groups or looking for peer support might help medical pupils manage their depressive symptoms [20].

Self-care: Self-care practices including getting adequate sleep, eating a balanced diet, and scheduling breaks from studying can all be used to alleviate the signs of depression.

Noting that there exists no one-size-fits-all method for treating depression, it may take some time to choose the best course of action. To find the best course of treatment for their requirements, medical students should consult with their doctor or a mental health specialist.

Stigma associated with depression in medical students

The stigma attached to depression among medical students makes it difficult for them to get the support they need. Medical students may be concerned that speaking up about their depression may have a detrimental influence on their reputation, as well as professional and academic ramifications. Because of this, medical students may experience an environment of silence in which they feel forced to conceal their sadness and battle it alone.

Several things contribute to the stigma surrounding depression among medical students, including:

High expectations: Medical graduates are frequently subjected to high demands, and sadness may be viewed as a symptom of fragility or a lack of ability to cope with the rigours of medical school.

Medical students may worry that talking about their depression would harm their prospects for a future career or their professional reputation due to perceived discrimination within the medical field.

Lack of knowledge and schools: There could be a dearth of information regarding depression and mental health in the medical profession, which prevents doctors from having empathy for patients who are depressed.

Fear of prejudice: Medical pupils may worry that speaking up about their depression could make them a target for bullying by instructors or fellow students.

Enhancing mental health outcomes in medical students necessitates tackling the stigma attached to depression. This may be accomplished through fostering an environment about openness and acceptance, raising public knowledge of mental health problems, and developing approachable, non-judgmental support networks. To guarantee that medical students obtain the required care and assistance to effectively manage their depressive symptoms, medical schools should give priority to mental health assets and assistance services. Medical schools may support the wellbeing of their pupils and foster a healthier, more compassionate medical field by decreasing stigma and raising awareness of mental health issues.

Prevention and intervention strategies for depression in medical students

Promoting medical students' well-being and academic achievement requires prevention and intervention measures for depression. The following are some tactics that can be used:

Preventative programmes: To assist students in developing resilience and preventing depression, medical schools can establish preventative programmes that include managing stress, scheduling, and self-care techniques. Workshops, conversations in groups, and digital resources are a few examples of these programmes.

Medical schools can provide mental health tests to detect pupils that may be at risk for getting depression. These tests can be included into normal health examinations or provided as separate services.

Access to psychological services: Medical schools should make mental health resources as well as services, such as counselling, treatment, and and peer support networks, easily accessible. Students should understand how they can use these amenities and that requesting assistance is beneficial and welcomed.

Training for faculty and staff: Staff and faculty should be taught to recognise the symptoms and signs of depressive disorders in medical pupils and to give appropriate assistance and referrals.

Flexibility and adjustments: Medical schools can provide students suffering from depression with flexibility and accommodations. This might include assignment or test extensions, lower course loads, or other learning opportunities.

Tackling shame: Medical schools should aim to reduce the negative connotation associated with sadness among medical learners by encouraging mental wellness awareness and fostering a friendly, non-judgmental environment.

Peer assistance: Group therapy may prove an effective therapeutic option for depressed medical students. These groups provide students with a secure and friendly atmosphere in which to discuss their experiences and offer emotional assistance to one another.

It should be noted that preventative and intervention techniques should be customised to the requirements of medical students. By following these measures, hospitals may improve their students' mental health and well-being, resulting in a happier and stronger medical community.

Conclusion

Depression is a serious problem among medical students, affecting their mental health, academic achievement, and future job prospects. Medical students have a high prevalence of depression, or warning signs including high levels of anxiety, workloads, or a shortage of social support. Symptoms of depression include a poor state of mind, thoughts of desperation, and a loss of enthusiasm in activities.

Depression has been shown to have a negative influence on academic performance, resulting in bad grades and diminished motivation. It is critical to address melancholy in medical learners early on, as depression left untreated can develop to more serious mental health issues, including suicide ideation.

Therapy, drugs, and lifestyle modifications are all helpful treatment options for sadness among medical students. Prevention and intervention efforts, including as psychological tests, access to mental health services, and staff and faculty training, may be beneficial to medical students' well-being and help decrease the judgment that is associated with depression.

To summarise, depression among medical pupils is a complicated issue that must be addressed in a multidimensional manner. Medical schools may foster a more caring and compassionate culture that prioritises the emotional well-being of the pupils by increasing psychological awareness and offering access to assistance and services.

References

- 1. Limone P, Toto GA (2022) Factors that predispose undergraduates to mental issues: A cumulative literature review for future research perspectives. Front Public Health 10: 831349.
- 2. Santomauro DF, Herrera AM, Shadid J, Zheng P, Ashbaugh C, et al. (2021) Global prevalence and burden of depressive and

- anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic. Lancet 398: 1700-1712.
- Ibrahim AK, Kelly SJ, Adams CE, Glazebrook C (2013) A systematic review of studies of depression prevalence in university students. J Psychiatr Res 47: 391–400.
- Salk RH, Hyde JS, Abramson LY (2017) Gender differences in depression in representative national samples: Meta-analyses of diagnoses and symptoms. Psychol Bull 143: 783–822.
- 5. Mirza AA, Baig M, Beyari GM, Halawani MA, Mirza AA (2021) Depression and anxiety among medical students: A brief overview. Adv Med Educ Pract 12: 393–398.
- Deng Y, Cherian J, Khan NUN, Kumari K, Sial MS, et al. (2022)
 Family and academic stress and their impact on students' depression level and academic performance. Front Psychiatry 13: 869337.
- 7. Arvind BA, Gururaj G, Loganathan S, Amudhan S, Varghese M, et al. (2019) Prevalence and socioeconomic impact of depressive disorders in India: Multisite population-based cross-sectional study. BMJ Open 9: e027250.
- Rotenstein LS, Ramos MA, Torre M, Segal JB, Peluso MJ et al. (2016) Prevalence of depression, depressive symptoms, and suicidal ideation among medical students. JAMA 316: 2214– 2236.
- Puthran R, Zhang MWB, Tam WW, Ho RC (2016) Prevalence of depression amongst medical students: A meta-analysis. Med Educ 50: 456–468.
- Pattanaseri K, Atsariyasing W, Pornnoppadol C, Sanguanpanich N, Srifuengfung M (2022) Mental problems and risk factors for depression among medical students during the COVID-19 pandemic: A cross-sectional study. Medicine (Baltimore) 101: e30629.
- 11. Muaddi MA, El-Setouhy M, Alharbi AA, Makeen AM, Adawi EA, et al. (2023) Assessment of medical students burnout during COVID-19 pandemic. Int J Environ Res Public Health 20: 3560.
- McCloud T, Bann D (2019) Financial stress and mental health among higher education students in the UK up to 2018: Rapid review of evidence. J Epidemiol Community Health 73: 977– 984
- Melrose S (2011) Perfectionism and depression: Vulnerabilities nurses need to understand. Nurs Res Pract 2011: 858497.
- Moir F, Yielder J, Sanson J, Chen Y (2018) Depression in medical students: Current insights. Adv Med Educ Pract 9: 323– 333.
- 15. Harvey AG, Talbot LS, Gershon A (2009) Sleep disturbance in bipolar disorder across the lifespan. Clin Psychol 16: 256–277.
- 16. Abdulghani HM, AlKanhal AA, Mahmoud ES, Ponnamperuma GG, Alfaris EA (2011) Stress and its effects on medical students: A cross-sectional study at a college of medicine in Saudi Arabia. J Health Popul Nutr 29: 516–522.
- 17. Fazel M, Hoagwood K, Stephan S, Ford T (2014) Mental health interventions in schools in high-income countries. Lancet Psychiatry 1: 377-387.
- Gautam M, Tripathi A, Deshmukh D, Gaur M (2020) Cognitive behavioral therapy for depression. Indian J Psychiatry 62: S223– S229.
- Xie Y, Wu Z, Sun L, Zhou L, Wang G, et al. (2021) The effects and mechanisms of exercise on the treatment of depression. Front Psychiatry 12: 705559.

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20.	Woodyard C (2011) Exploring the therapeutic effects of yoga and its ability to increase quality of life. Int J Yoga 4: 49–54.