ORIGINAL ARTICLE

Perception of Addiction as a Stress-Relieving Mechanism among Medical Students

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Abstract

Objectives: To describe the frequency of stress among MBBS medical students and their perception about addiction as a stress-relieving mechanism (coping strategies).

Methodology: A descriptive cross-sectional survey was conducted among a total of 131 medical MBBS students to assess their stress levels coping mechanisms and patterns of potentially addictive behaviors.

Results: Among the 131 respondents, 56% were female and 41% were male, reflecting a balanced gender distribution. A significant majority of the participants reported experiencing frequent academic stress which they attributed to the demanding workload long study hours and continuous examinations inherent in medical training.

Conclusion: Medical MBBS students frequently encounter overwhelming academic pressure due to the demanding nature of their studies long hours and constant performance expectations. This persistent stress often drives some students to seek temporary relief through addictive behaviors such as excessive use of social media caffeine nicotine or even substance abuse.

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Introduction

Addiction can be defined as a chronic condition in which an individual develops a compulsive need to use a substance or engage in a behavior despite being aware of its harmful consequences. It is characterized by loss of control, cravings, and persistence of the behavior even when it interferes with health, relationships, or daily responsibilities. Addiction is no longer seen simply as a lack of willpower, but rather as a complex medical condition that affects the brain and behavior. The American Society of Addiction Medicine describes addiction as a treatable disease influenced by a person's genetics, the environment, and life experiences[1].

At the same time, some theories, such as the self-medication hypothesis, suggest that individuals may turn to addictive behaviors as a way of coping with stress or emotional pain. In this sense, addiction is not just a medical disorder, but also a mal-adaptive

coping mechanism that people may rely on when faced with overwhelming pressure.

Medical students, in particular, experience unique challenges such as academic overload, long study hours, clinical stress, and emotional exhaustion. These pressures may shape how they view addiction, not only as a disease but also as a potential, though harmful, strategy to cope with stress. Understanding their perception is therefore essential in order to address both of the prevention and the support strategies within this vulnerable group.[1]

Previous studies consistently demonstrate high levels of psychological distress among medical students, with prevalence rates of stress and burnout ranging from 30% to 70%. Research also suggests that such a stress often results in maladaptive coping mechanisms, including substance use and behavioral addictions. [1]

This study aims to explore how medical students perceive addiction as a means of stress relief. By understanding the attitudes and beliefs of the participants, the research seeks to inform better mental health interventions and promote healthier coping mechanisms within medical education environment.

Although the medical college curriculum is designed to achieve these core objectives, certain elements of the training process can inadvertently compromise students' psychological well-being. At an individual level, this distress is strongly associated with adverse outcomes, including substance abuse, interpersonal conflict, suicidal ideation, and increased attrition rates.[2]

Objectives:

To describe the frequency of stress among MBBS medical students and their perception about addiction as a stress relieving mechanism (coping strategies).

Methodology

A descriptive cross-sectional survey was conducted among a total of 131 medical students to assess their stress levels, coping mechanisms, and patterns of potentially addictive behaviors. The study aimed to gain a clearer understanding of how medical students manage academic pressure and the extent to which certain behaviors are used as the stress-relief strategies. Data were gathered using a structured online questionnaire that included sections on demographic information such as age, gender, and year of study, as well as the frequency and sources of academic stress. The questionnaire also explored the types of coping methods adopted by students ranging from healthy strategies like exercise or social interaction to maladaptive ones such as excessive gaming, caffeine consumption, or social media use.

Participants were further presented with a series of perception statements related to stress and coping behaviors, which they rated on a five-point Likert scale, allowing for the evaluation of their attitudes and awareness regarding these issues. The responses were analyzed using descriptive statistical methods to identify trends and patterns within the data. The results were then summarized and visually represented using pie charts and bar graphs for clearer interpretation and presentation of findings.

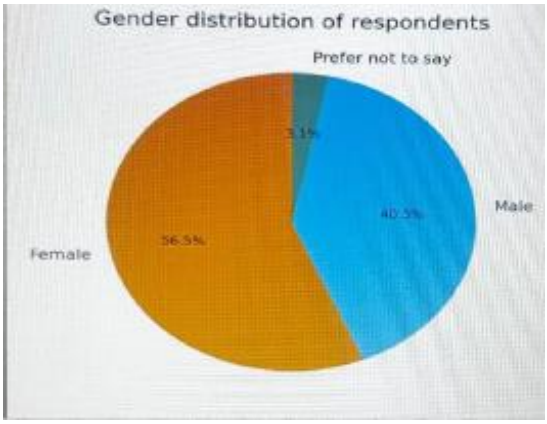
Ethical considerations were strictly maintained throughout the study. Participation was entirely voluntary, and respondents were informed about the purpose and confidentiality of the research before providing consent. Anonymity of participants was ensured, with no identifying information collected or disclosed. These ethical safeguards aimed to create a comfortable environment that encouraged honest and acc-

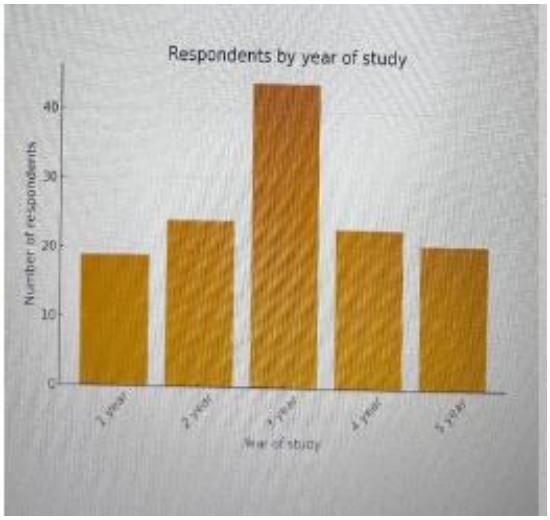
urate responses, thereby enhancing the credibility and reliability of the study's findings.

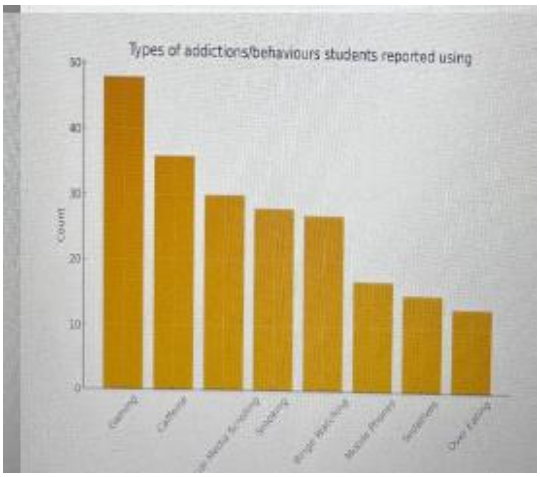
Results

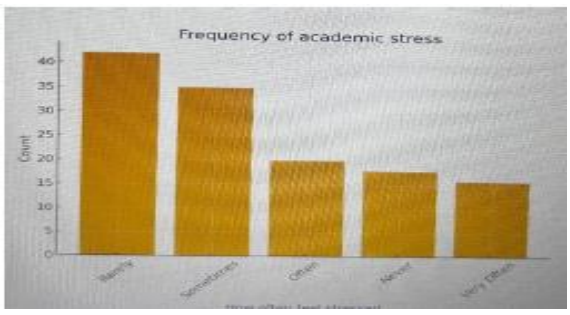
Among the 131 respondents, 56% were female and 41% were male, reflecting a balanced gender distribution. A significant majority of the participants reported experiencing frequent academic stress, which they attributed to the demanding workload, long study hours, and continuous examinations inherent in medical training.

When asked about their coping strategies, students commonly mentioned engaging in activities such as gaming, listening to music, scrolling through social media, and consuming caffeine to stay alert and manage fatigue. These behaviors were identified as the most accessible and immediate sources of stress relief, despite their potential to develop into addictive patterns over time. Furthermore, a notable portion of respondents agreed that such behaviors serve as temporary escapes from the pressures of medical college rather than long-term solutions. Many also acknowledged that peer influence significantly contributes to the adoption and reinforcement of these habits, as students often share similar stressors and coping practices within their social circles. The key findings of the study are visually represented through pie and bar charts, offering a clear and comprehensive overview of the patterns observed among participants.









Discussion

Concurrently, while exercise is frequently utilized as a coping mechanism, it can manifest maladaptively as exercise addiction, a

dysfunctional behavior characterized by dependence that results in physiological, psychological, and social impairment [2].

Notably, literature lacks a robust conceptual distinction regarding how these problematic behaviors differ between team-based and individual exercise modalities[2]. Given the substantial prevalence of the psychological morbidity, systemic institutional intervenetions, such as targeted counseling, social support systems, and structured stress-management training, are critical to safe-guarding student quality of life[3].

The transition to higher education, particularly within medical curricula, represents a period of heightened vulnerability for student psychological well-being. At an individual level, this chronic distress manifests in severe adverse outcomes, including substance misuse, interpersonal conflict, attrition, and suicidality [4,5].

Furthermore, macro-level data from frameworks like EUROSTUDENT 8 high-light that these mental health trajectories are further compounded by the global crises (e.g., the COVID-19 pandemic) and vary internationally based on cultural stigma, healthcare infrastructure, and institutional support mechanisms[6].

This study underscores the concerning prevalence of potentially addictive behaviors adopted by medical students as a means to cope with academic and emotional stress. The findings reveal that behavioral addictions such as excessive gaming and social media use are the most common, serving as easily accessible outlets for distraction and temporary relief. Among substance-related habits, caffeine consumption emerged as the most dominant, likely due to its widespread availability and perceived benefits in enhancing alertness and concentration during long study hours.[6]

Peer influence, academic pressure, and the competitive environment of medical education appear to play a significant role in reinforcing these coping patterns. Many students, despite being fully aware of the negative consequences and long-term risks associated with such behaviors, continue to engage in them because of the immediate psychological comfort and escape they offer from their demanding routines. This paradox highlights the urgent need for institutional support and early intervention.[7]

Conclusion:

Medical students frequently encounter overwhelming academic pressure due to the demanding nature of their studies, long study hours, and the constant performance expectations. This persistent stress often drives some students to seek temporary relief through addictive behaviors such as excessive use of social media, caffeine, nicotine, or even substance abuse.

Recommendations:

1. **Structured stress and time management education;**
   While these behaviors may offer short-term comfort, they can have serious long-term consequences for both the mental and physical health. Therefore, it is essential for the medical institutions to take an active role in addressing this issue. They should integrate structured stress management education into the curriculum, helping students develop healthy coping mechanisms such as mindfulness, physical activity, and time management skills.
2. **Awareness counseling and mental health programs;**
   Additionally, institutions must work to raise awareness about the risks associated with addiction and ensure that

counseling and psychological support services are easily accessible and stigma-free. By implementing proactive and compassionate mental health programs, medical college can significantly reduce students' reliance on harmful coping strategies and foster a supportive environment that promotes emotional well-being and academic success.

3. **Emotional resilience skills;**
   Medical colleges should take proactive measures by introducing targeted educational programs that not only inform students about the dangers of addiction but also teach effective stress management and emotional resilience skills. Moreover, counseling services should be made easily accessible, confidential, and free of stigma, encouraging students to seek help without fear of judgment. By addressing the root causes of stress and promoting healthier coping mechanisms, such as mindfulness, exercise, and peer support the institutions can play a crucial role in improving students' mental well-being and reducing their dependence on maladaptive behaviors.
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