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### Prevalence of anxiety disorder among neet-pg aspirant.

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#### Abstract-

Anxiety disorders represent a significant psychiatric comorbidity that plagues many students undergoing rigorous

preparations for competitive exams, including the NEET-PG examination in India. The significance of this study

stems from the well-documented connection between stress associated with competitive exam preparation and the

development of anxiety. Detecting and addressing anxiety in its early stages can significantly improve the quality of

life for affected individuals and promote mental health awareness among students preparing for high-stakes exams

which will also increase their academic performance in the exams. This research was aimed to fill that gap by

conducting a cross-sectional study during June 2022 to July 2022, targeting MBBS graduates between the ages of 24

and 30, who are actively preparing for the NEET-PG examination.

**Keywords-** Anxiety, NEET-PG , Prevalence , Doctors

## INTRODUCTION

Blanco et al (2008) suggested that the phase of young adulthood marks a time of swift intellectual and psychosocial evolution for individuals, yet it poses particular challenges for students. This period involves crucial decisions about collegiate and professional paths, rendering them susceptible to disruptions in mental equilibrium [2]. Kumar DS and Kavitha HS (2016) implicated in their study that consequently, it becomes imperative for students to possess a comprehensive understanding of mental health disorders, including their initial signs and viable treatment avenues [3]. Pursuing a career in medicine ranks among the most stressful professional paths.[4] The stress endured by medical students makes them susceptible to symptoms associated with anxiety, depression, and psychological distress.[11]. While one might assume that medical students would have better overall health compared to their counterparts in other fields, this may not entirely hold true, especially concerning anxiety, depression, and psychological distress [7]. Undoubtedly, advancements in medical science have greatly improved the diagnosis and treatment of numerous human diseases[8]. However, managing mental disorders remains a significant challenge. This challenge stems from the diverse clinical presentations of mental illnesses, the absence of specific diagnostic markers, poor adherence to treatment (often long-term), prevalent myths and cultural beliefs, and, most notably, social stigma [9]. Kessler et al in his study stated that around 20% of the world's children and adolescents have derangement in mental homeostasis [1].

Previous studies conducted on this issue suggest that mental disorders are increasing at an alarming rate, and therefore, it is an important and growing public health issue.- 12

Unfortunately , there has been a lack of proactive measures aimed at raising awareness among the general public, especially medical students, regarding the recognition and management of mental illnesses. The anticipation from family members, relatives, neighbors, and non-medical acquaintances for medical students to provide treatment and counseling during illnesses can place added pressure on them, regardless of whether they express it openly. Due to the considerable time medical students dedicate to academic endeavors, often at the expense of hobbies, physical well-being, and extracurricular pursuits, they may find it challenging to alleviate stress. This prolonged accumulation of stress can potentially precipitate depression and anxiety, either separately or in tandem, adversely impacting their quality of life and contributing

to psychological distress. In their study conducted at the All India Institute of Medical Sciences, New Delhi, India, Sarkar et al. discovered that approximately one-third of medical students exhibit significant symptoms of anxiety. [10]

Anxiety, often hidden beneath the surface of our daily lives, is a common and frequently underestimated mental health issue that affects millions worldwide. Its pervasive presence can subtly erode one's overall well-being, and if left unaddressed, it can develop into a debilitating condition with far-reaching implications. While depression has received significant attention in the mental health discourse, anxiety, despite its prevalence, remains a silent and often overlooked companion of the human experience. This discrepancy is even more pronounced when considering specific populations, such as medical students, who navigate unique stressors and demands that make them particularly susceptible to anxiety-related concerns. The world of medical education is one where ambition, dedication, and unwavering commitment are prerequisites. In India, the National Eligibility cum Entrance Test for Postgraduate courses (NEET-PG) stands as one of the most demanding, high-stakes examinations that aspiring medical professionals must conquer to advance in their careers. The path to becoming a healthcare provider, especially in India, is punctuated by rigorous academic curricula, long hours of study, and intense competition. The significance of this research lies not only in acknowledging the problem but in identifying practical solutions. By detecting anxiety early, we can devise targeted interventions to help these medical students manage their stress and mental health effectively. Our research hopes to contribute to the alleviation of anxiety-related challenges faced by NEET-PG aspirants, thereby improving their quality of life and enhancing their ability to provide high-quality healthcare services in the future. In this journey of exploration, we delve into the hearts and minds of the individuals who aspire to become healers, highlighting the pressing issue of anxiety as a silent, yet formidable, adversary that often goes unnoticed in the relentless pursuit of excellence in the field of medicine.

## MATERIALS AND METHODS

A cross sectional , descriptive study conducted over a span of 2 months from June 2022 to July 2022 among various medical colleges after getting institutional ethical committee clearance .

Sampling – Stratified Random Sampling

Population- NEET-PG aspirants

Inclusion criteria –

1. MBBS graduates preparing for NEET-PG from various parts of India.
2. Chronological Age: 24 to 30 years.
3. Willingness to participate and give informed consent.

Exclusion Criteria-

1. Participants who are seriously ill.
2. Patients having or have been diagnosed with any psychiatry disorder.
3. Participants not willing to give consent.

Sample size- 220 doctors were incorporated to get adequate statistical power and NEET-PG aspirants representation.

**DATA COLLECTION-** Hamilton Anxiety Scale was applied to assess the severity of anxiety among participants. Hamilton Anxiety Rating Scale (HAM-A), dating back to 1959, one of the first rating scales to measure the severity of perceived anxiety symptoms and is a reliable and validated scale- 10 . It consists of 14 symptom-defined elements, and caters for both psychological and somatic symptoms, comprising anxious mood; tension (including startle response, fatigability, restlessness); fears (including of the dark/strangers/crowds); insomnia; ‘intellectual’ (poor memory/difficulty concentrating); depressed mood (including anhedonia); somatic symptoms (including aches and pains, stiffness, bruxism); sensory (including tinnitus, blurred vision); cardiovascular (including tachycardia and palpitations); respiratory (chest tightness, choking); gastrointestinal (including irritable bowel syndrome-type symptoms); genitourinary (including urinary frequency, loss of libido); autonomic (including dry mouth, tension headache) and observed behaviour at interview (restless, fidgety, etc.). Each item is scored on a basic numeric scoring of 0 (not present) to 4 (severe): >17/56 is taken to indicate mild anxiety; 25–30 is considered moderate–severe.

Questionnaire: Participants were assessed a semi-structured questionnaire assessing their socio-demographic data and HAM-A scale

Analysis of data was done using SPSS software (version 27.0)

**ETHICAL APPROVAL-** Ethical approval for the study was obtained from the institutional human ethics committee of Meenakshi medical college hospital and research institute.

Informed consent was obtained from all participants and their privacy and confidentiality were maintained throughout the study.

## RESULTS –

Two hundred and twenty participants (84-males, 136-females) were assessed, represented in table 1. In the study 17% (n=37) of PG aspirants were suffering from anxiety out of which 5% (n=11) are suffering from mild anxiety, 6.36% ( n= 14) were suffering from mild to moderate anxiety and 5.45%(n=12) were suffering from moderate to severe anxiety, in which 9.54% (n=21) are female students, 7.27% (n= 16 ) are male students.

Table 1- Representing Sex Distribution

<b>Gender</b>	<b>n=220 (%)</b>
<b>Male</b>	<b>84 (38.18 %)</b>
<b>Female</b>	<b>136 (61.8%)</b>

<b>AGE</b>	<b>n=220(%)</b>
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<b>22 - 25 years</b>	<b>64 (29.09 %)</b>
<b>26- 30 years</b>	<b>117 (53.18 %)</b>
<b>31 - 35 years</b>	<b>39 (17.22 %)</b>

Table 2 – Age Distribution

<b>BACKGROUND</b>	<b>n=220(%)</b>
<b>Urban</b>	<b>116 (52.8%)</b>
<b>Rural</b>	<b>31 (14.2%)</b>
<b>Semi-urban</b>	<b>73(33%)</b>

Table 3 – Background Analysis

Table 4- Distribution of Socio- Occupational data

<b>SOCIOOCCUPATIONAL STATUS</b>	<b>n=220 (%)</b>
<b>Upper</b>	<b>16 (7.5%)</b>
<b>Upper middle</b>	<b>142 (64.2%)</b>
<b>Lower middle</b>	<b>52 (23.6%)</b>
<b>Upper lower</b>	<b>10 (4.7%)</b>
<b>Lower</b>	<b>0</b>

## **DISCUSSION**

The common belief is that a certain level of stress can serve as a motivating force, enabling individuals to confront and overcome new challenges. However, when stress persists at high levels without relief, it can have detrimental effects on an individual's psychological, physical, and behavioral well-being. This issue is particularly pertinent among medical students, where depression, anxiety, and chronic stress often go unnoticed and untreated. A significant factor

contributing to this oversight is the reluctance of medical students to seek professional help, primarily due to the social stigma and shame associated with acknowledging mental health concerns. This prevailing silence surrounding mental health perpetuates the issue and has far-reaching implications for the medical students' overall well-being and their future roles as healthcare providers. Our findings are in tune with the few studies published before like- In a 2015 study conducted by Iqbal et al. in Odisha, reported that 51% of participants experienced depression, while 67% reported anxiety, and 53% indicated stress. [1]Similarly, a 2018 study by Taneja et al. reported that 32% of participants had depression, 40% experienced anxiety, and 43% reported stress. [2]. Our findings underscore the substantial presence of mental health challenges in these populations. 69.4% participants studied at home , 25% were attending various institutes for preparation and 5.6% chose to study from library for the exam. The study we conducted showed , 81.1% of the total population reported of symptoms of anxiety out of which 16.8% have diagnosable Anxiety ranging in different categories. 69.5% feel anxious when compared toother peers (chart 1) while 54.3% feel anxious when their performance is compared with top achievers (chart 2). 62.9% of the population reported that their anxiety symptoms intensified with parental pressure (chart 3).

Chart 1: Chart representing anxiety levels when scores are compared to other peers :

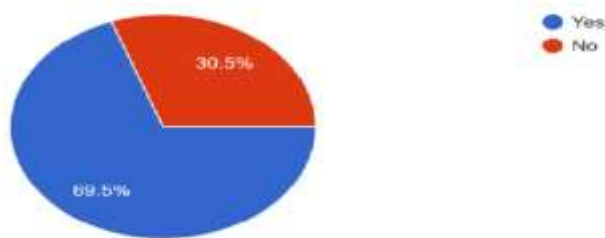


Chart 2: % of students feeling anxious when compared to top achievers :

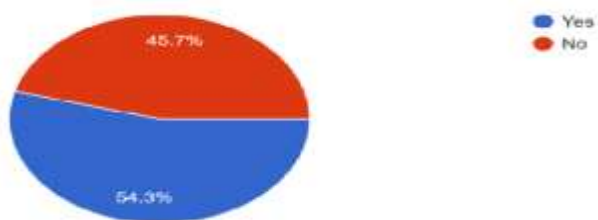
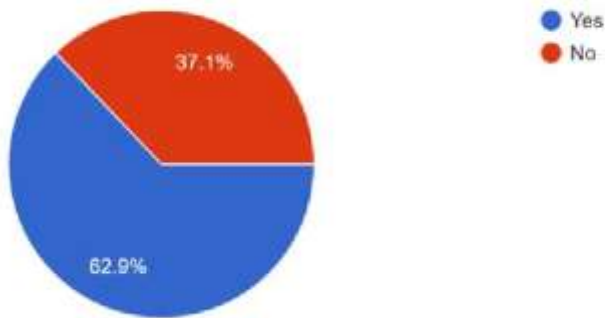




Chart 3: Does parental pressure worsen your anxiety?



These high percentages highlight the prevalence of anxiety symptoms among students and suggest that the pressure and peer comparisons they contend with contribute significantly to their anxiety levels. A study found that women are prone to anxiety as compared to men, though the difference percentage is not very striking. The chi-square test was applied to analyze the association between gender, age, and socio-economic status and the analysis revealed that the p-value greater than 0.05 for all variables, indicating no statistically significant association between age, gender, socio-economic status with anxiety.

Interventions for doctors facing anxiety are essential to support their mental well-being and ensure they can continue to provide high-quality care to their patients. Various techniques like Relaxation and mindfulness, peer support, prioritizing self-care which includes maintaining a healthy work-life balance, engaging in physical activity, getting adequate sleep, and following a balanced diet. Effective stress management strategies, time management, setting boundaries, and task delegation when feasible can lower stress. It's crucial to create a culture within the medical community that prioritizes the mental health of doctors and provides them with the required resources and assistance to address anxiety and stress effectively. Early intervention and a proactive approach to mental health can help doctors continue to excel in their careers while maintaining their own well-being. In future, we can evaluate the effectiveness of different interventions aimed at reducing anxiety, assess how counseling, mindfulness programs, or changes in study environment impact students' mental health. Also, we can consider comparing anxiety levels among medical students with those in other high-stress professional programs, such as law or engineering giving us an idea on how much level is the burnout amid medical students, providing valuable insights.

### **LIMITATIONS –**

The study lasted for two months (June to July 2022), which might not capture the variations in anxiety levels throughout the year. Anxiety levels could be influenced by factors like exam dates and academic schedules. The assessment of anxiety relied on self-reported data, which could be subject to recall bias or respondents providing socially desirable answers.

Clinical interviews in detail by a psychiatrist with regular follow-ups might provide more accurate results. A long term longitudinal study could yield information insights into how anxiety levels evolved during the NEET-PG preparation period.

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### **Declaration Of Conflict Of Interest:**

The author(s) affirmed that there were no possible conflicts of interest regarding the authorship research, or publication of this article.

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