



Prevalence of Mental Health Disorders in Medical Students

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ABSTRACT

Background: Mental illness also known as mental health disorders refers to a wide range of problems that affects mood, thinking, and day-to-day behavior. Examples of such mental health problems are depression, anxiety, stress, schizophrenia, eating disorders, and addictive behavior. We have analyzed the prevalence of certain illnesses in medical students. Students have been affected by many mental health disorders such as stress, anxiety, depression, etc, so analysis of their occurrence percentage in the first, second, and third year of M.B.B.S students.

Objective: To observe the level of depression and compare it between different years. To observe the level of anxiety and compare it between different years. To observe the level of stress and compare it between different years.

Methodology: It's a cross-sectional study and was done with help of google forms, responses from different medical colleges with the DASS21 scale are compared and analyzed between the first, second, and third years of medical students.

Results: Depression Level (mild, moderate, severe, extremely severe) of: 1st-year student is (23.52%) 2nd-year student is (11.11%) 3rd-year student is (5.88%).

The anxiety Level (mild, moderate, severe, extremely severe) of the 1st-year student is(43.12%) the 2nd-year student is (61.11%) 3rd-year student is(47.05%).

Stress Level (mild, moderate, severe, extremely severe) of 1st-year students is (21.56%) 2nd-year student is(11.11%) and 3rd-year student is(11.76%).

Conclusion: Depression level is more in 1st year than in 2nd year and least in 3rd year anxiety level: is more in 2nd year than in 3rd year and least in 1st-year stress level: is more in 1st year than in 3rd year and least in 2nd year.

Keywords: Depression, Anxiety, Stress

INTRODUCTION

Medical schools around the world aim to train and produce competent and empathetic physicians to help the sick, advance medical knowledge, and promote public health [1]. However, medical education is considered to be one of the most academically and emotionally demanding training programs out of any profession, and consequently, the time and emotional commitment necessary for medical students to devote to their training is extensive. Such demands and stress harm the students' psychological well-being and can precipitate depression and anxiety [2-4].

Anxiety, although as common and arguably as debilitating as depression, has garnered less attention and is often undetected and undertreated in the general population. In addition to intense feelings of fear or panic, an attacker of anxiety can experience other physiological symptoms including fatigue, dizziness, headaches, nausea, abdominal pain, palpitations, shortness of breath, and urinary incontinence [5-8].

Anxiety can also impair goal-directed attention and concentration, working memory, and perceptual-motor function, all of which are important domains that enable. Medical schools are known to be stressful environments for students and hence medical students have been believed to experience greater incidences of depression than others [9-11].

We evaluated the global prevalence of depression amongst medical students, as well as epidemiological, psychological, educational, and social factors to identify high-risk groups that may require targeted interventions [12]. Mental disorders are common among college students and have onsets that mostly occur before college entry, in the case of pre-matriculation disorders are associated with college attrition, and are typically untreated.

Detection and effective treatment of these disorders early in the college career might reduce attrition and improve educational and psychosocial functioning [13]. The college years represent a period of increased vulnerability for a wide range of Mental Health (MH) challenges. The onset of common psychiatric conditions occurs during this period of development. Increases in depression, anxiety, and suicidality among U.S. college students have been observed.

This study identified the prevalence and correlates of MH diagnoses and suicidality in a recent sample of U.S. college students [14]. Psychological health problems, especially emotional disorders, are common among adolescents. The epidemiology of emotional disorders is greatly influenced by stressful events according to W.H.O. Quality of patient care suffers with a doctor of anxiety because it tends to demonstrate poor work efficacy [15].

This study aims to identify and compare the level of mental health disorders in medical students. And look for the Prevalence of Anxiety, Stress, and Depression.

MATERIALS AND METHODS

A cross-sectional pen paper survey based method was devised which had 102 medical college students. Data were collected by the first 3 years of medical students. Using DASS-21 Questionnaire.

The Depression, Anxiety, and Stress Scale-21 Items (DASS-21) is a set of three self-report scales designed to measure the emotional states of depression, anxiety, and stress. Each of the three DASS-21 scales contains 7 items, divided into subscales with similar content. The depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia, and inertia. The anxiety scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The stress scale is sensitive to levels of chronic nonspecific arousal. It assesses difficulty relaxing, nervous arousal, being easily upset/agitated, irritable /anxious, and subjective experience of anxious affect.

Students who are presently in their first, second, and third year and were willing to give consent and fill out the form were included provided they had any psychiatric condition. Students not willing to Consent or patients going to a psychiatrist were excluded.

Exclusion criteria: students of the same age but in different fields and going through any psychiatric conditions.

Ethical permission from the committee was waived as the research was survey based provided proper care was taken not to reveal the subject's data using initials which were carried out (Table 1).

Table 1. Questionnaire: DASS 21 SCORING

Range	depression	Anxiety	Stress
Normal	0 - 9	0-7	
Mild	13-Oct	9-Aug	0-14
Moderate	14 - 20	14-Oct	15-18
severe	21 - 27	15-19	26-33
Extremely severe	28+	20+	34+

RESULTS

The result was evaluated on basis of the Dass 21 scale.

Table 2. Depression

MBBS Year	No. of Students	Depression Normal	Mild	Moderate	Severe	Extremely Severe	% of Non-Normal
1	102	78	9	8	2	5	23.52%
2	18	16	2	0	0	0	11.11%
3	17	16	1	0	0	0	5.88%

Table 3. Anxiety

MBBS Year	No. of Students	Anxiety Normal	Mild	Moderate	Severe	Extremely Severe	% of Non-Normal
1	102	58	11	12	8	13	43.12%
2	18	7	2	5	2	2	61.11%

3	17	9	2	4	1	1	47.05%
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Table 4. Stress

MBBS Year	No. of Students	Stress Normal	Mild	Moderate	Severe	Extremely Severe	% of Non-Normal
1	102	80	8	6	3	5	21.56%
2	18	16	0	2	0	0	11.11%
3	17	15	2	0	0	0	11.76%

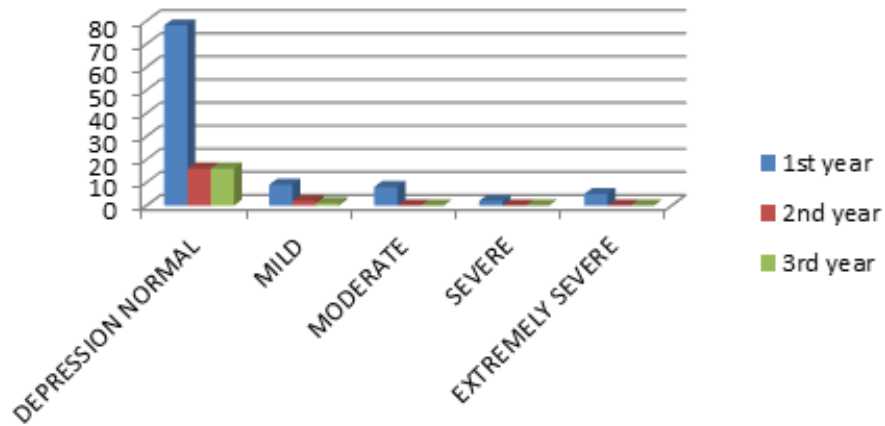


Figure 1. Depression rate

% OF DEPRESSION IN DIFFERENT YEARS

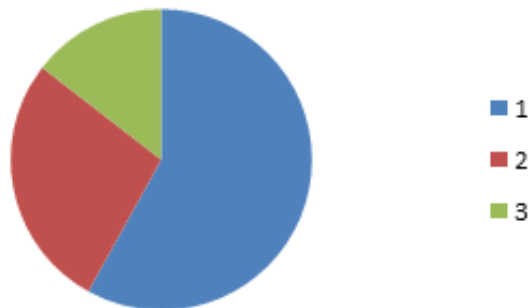


Figure 2. Percentage of depression in different years

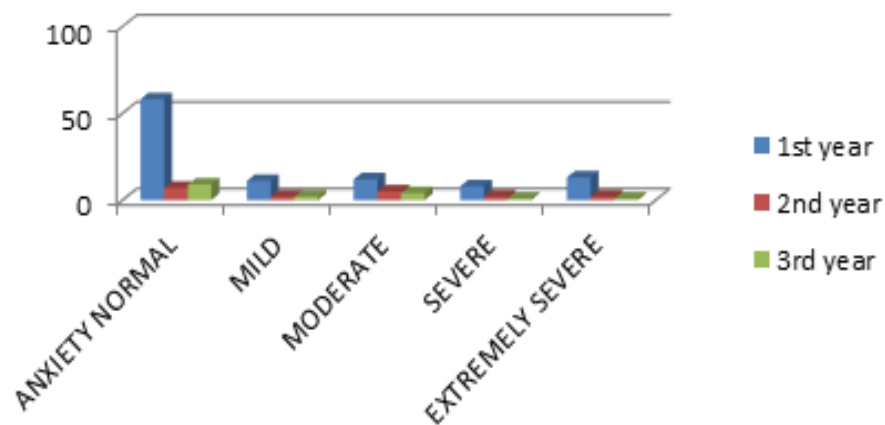


Figure 3. Anxiety rate

% OF ANXIETY IN DIFFERENT YEARS

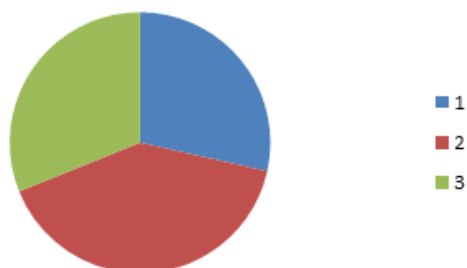


Figure 4. Percentage of anxiety in different years

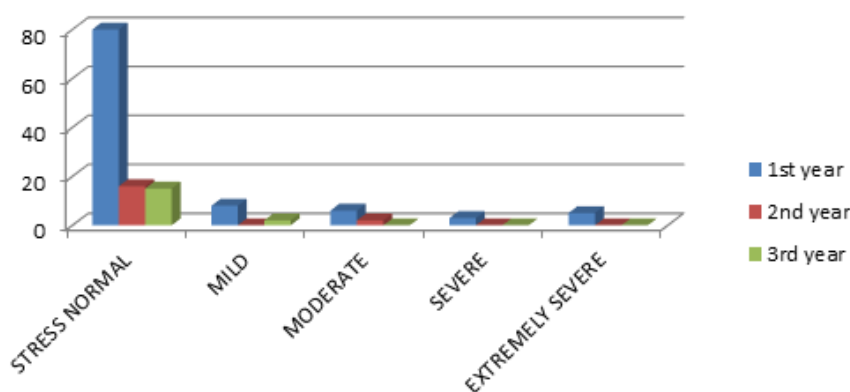


Figure 5. Stress rate

% OF STRESS IN DIFFERENT YEARS

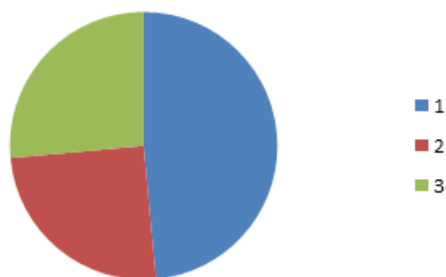


Figure 6. Percentage of stress in different years

DISCUSSION

For Depression, as can be seen in Table 2, and Figures 1 and 2, it can be observed that the percentage of people going through depression is more in 1st year following 2nd year followed by 3rd year maybe because as the person enters medical college are exposed to a different environment with different pressure. So people need to cope with the new surroundings so it maximum in 1st year which correlates with the other meta-analysis which says the same that by year of study, Year 1 students had the highest rates of depression at 33.5% (95% CI 25.2%-43.1%); rates of depression then gradually decreased to reach 20.5% (95% CI 13.2%-30.5%) at Year 5 [16]. University students face various stressors such as academic requirements, time pressure, and social adjustments, and medical students in particular may face additional challenges such as the large workload, the time commitment, and the number of assessments, as well as the pressures of a clinical environment [17]. The prevalence of depression was found to be more in first-year medical students than the third-year medical students. This finding could be due to students just entering medical school after high school. Also, it is seen that as the years of training in a medical school increase, the prevalence of depression decreases which is also shown by similar studies that have reported the prevalence of depression to be found less in the clinical years than the non-clinical years [5,14-16]. This clarifies the need for early prevention and intervention of depression which is seen to be more in the first year of medical schooling itself [18].

According to Table 3 and Figures 3 and 4, anxiety in 2nd year is maximum followed by 3rd year followed by 1st year. As the medical students pass on to the 2nd year they are exposed to completely new subjects which include both understanding and memory power and it's the base for all the following year so eventually, anxiety to complete and remember it and to apply it is eventually more, followed by 3rd year and least in 1st year because in medical colleges the professors make the students more comfortable to the environment as well as with the subjects, it feels similar to their school professors. Another study states the same that second-year medical students exhibited the highest percentage of anxiety. There was a significant correlation between depression and anxiety among medical students ($r=0.6$). "Crying" was the most common depressive symptom, and "fear of the worst happening" was the most common anxiety manifestation in medical students [19].

To understand stress, According to Table 4 and Figures 5 and 6, the stress is maximum in 1st year followed by equal in 2nd and 3rd year reasons include homesickness, meeting new people, having a different schedule, and first time exposing themselves to future doctors. Another study states that the prevalence of stress was the highest among first-year students (78.7%), followed by the second-year (70.8%), and third-year (68%) [20]. Another study states that in all the years of MBBS students, mild level of stress was more common. When compared, final-year students were found to be more stressed than second and third year. All these findings suggested that there is a need to reduce the stress in medical students in all four years of MBBS study and enroll them in stress management programs [21]. Another study states that the prevalence of stress is highest among third-year medical students. Academic problems were found to be a major cause of stress among all students. The most prevalent source of academic stress was the test/exam. Other sources of stress in medical school and their relationships are also discussed. The findings can help medical teachers understand more about stress among their students and guide the way to improvement in an academic context, which is important for student achievement [22].

CONCLUSION

Mental health is more important now than ever before; it impacts every area of our lives. The importance of good mental health ripples into everything we do, think, or say.

Reasons to care for mental health

Maintaining positive mental health and treating any mental health conditions is crucial to stabilizing constructive behaviors, emotions, and thoughts. Focusing on mental health care can increase productivity, enhance our self-image, and improve relationships.

Nurturing mental health doesn't just improve our daily functioning, but it can also help us control or at least combat - some of the physical health problems directly linked to mental health conditions. For example, heart disease and stress are related, so managing stress might have a positive outcome on heart disease.

Mental health is the most important concern in today's world and it should not be neglected because the majority is prevalent in the adolescent age group which includes the youth of the nation people should be taught to speak about it and reach out to their family and friends for help before anything serious happens.

Depression, anxiety, and stress are common among medical students compared to other students of the same age.

This is because of the mental and academic pressure among students and burnout after several days and their stress and it should be worked out for a better state of mind.

Having a solid foundation when it comes to mental health means you can:

- Have productive, healthy relationships.
- Cope with daily stress in life.
- Establish a positive sense of self.
- Stay motivated and physically active, and healthy.
- Be more productive at work and school.
- Make meaningful connections and contributions to the community.
- Realize and work towards achieving your full potential.

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