

Research Paper

## Stress, Anxiety and Mental Well-Being Among Medical Students

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### ABSTRACT

The purpose of the study was to assess the relationship between Stress, Anxiety and Mental well-being among medical students and the difference between male and female in Stress, Anxiety, and Mental well-being. The result indicated that there is a significant relationship between the three variables Stress, Anxiety, and Mental well-being. There was a significant difference in stress in male and female and no significant difference in Anxiety and Mental well-being in gender. Medical students are at a higher risk of experiencing Stress, Anxiety, and adverse effects on their mental well-being. The demanding curriculum, academic workload, and pressure to succeed significantly contribute to Stress among medical students. The negative impacts of Stress and Anxiety on cognitive performance, clinical skills, and empathy may lead to long-term consequences. Therefore, interventions such as mindfulness-based programs may help mitigate the adverse effects of Stress and Anxiety among medical students.

**Keywords:** *Stress, Anxiety, Mental Well-Being, Medical Students*

Stress is a big challenge for medical students, particularly during the first year, and is caused by not having a study plan, having a restless night before the test, and eating poorly while taking it. Medical students experience stress as a result of challenging medical programs, which can have both physical and psychological effects on students' well-being. Excessive stress in medical college predisposes students to trouble resolving interpersonal issues as a result of prior stress. A major issue among medical students is anxiety. A recent study found that nearly one-third of medical students experience moderate to severe levels of anxiety. This is a serious issue, as anxiety can lead to problems with focus and concentration, difficulty sleeping, and increased stress. As a result, it can be difficult for students to fulfil their educational goals. Anxiety disorders affect a significant proportion of medical students due to the long-term influence of stress on mental and behavioural symptomatology. Medical school has long been recognised as a source of several pressures that might negatively impact students' well-being. In addition to dealing with ordinary stressors, medical students must cope with stressors unique to medical school, such as knowledge and input overload, financial debts, a lack of leisure time, and job, work relationships, and career options. We must be concerned about the well-being of medical students because this condition has become a national and global source of concern. Students must be taught how to recognise and cope with stress, as well as given guarantees

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that they will not be judged by others for seeking stress-management assistance. Instructors, advisers, and other faculty members who notice signs of stress in a student must engage the student to help them understand and manage their stress in a non-threatening, non-judgemental manner. Medical students are exposed to various sources of Stress and Anxiety throughout their academic journey. These stressors may include academic workload, exams, clinical rotations, and the pressure to succeed in their profession. Consequently, medical students may experience negative impacts on their mental well-being.

Stress is a person's adaptive response to stimuli that place an unusually high psychological and physical strain on him or her. Stress is our body's reaction to everything that requires our attention or action. However, how we respond to stress has a big influence on our overall well-being. Stress is a normal feeling that helps us deal with stressful situations. In small doses, it may be useful since it encourages us to work hard and do our best. However, if we are unduly anxious or think we are unable to manage stress, it can lead to mental health concerns such as anxiety. It can also have an influence on our academic performance. A medical student may experience a variety of types of stress throughout their academic career. In many situations, stress can be beneficial, but it shouldn't persist and negatively affect our ability to carry out daily activities or succeed in school. Different type of student stress is:

**Acute stress:** A medical student may experience acute stress as their first type of stress. Perhaps the most typical form of stress a medical student will experience during their academic career is this one. Due to its brief duration and tendency to be caused by last-minute events, this type of stress is the most prevalent. The good thing about experiencing acute stress and having periods of it is that they don't last long and frequently pass fast. Since everyone experiences acute stress at some time, and because it does not follow a predictable pattern, there are also very few long-lasting impacts from acute stress.

**Episodic stress:** Episodic stress is the second sort of stress that a medical student may experience. Acute stress that tends to come in episodes or has a continual aspect that appears to be a pattern is called episodic stress. For instance, episodic stress is when you experience tension about the same issues again while coping with a routine situation. A person may experience periodic stress if they take on too many duties and get overburdened by the need to do them all within a certain amount of time. When someone feels stuck in a worry-induced mood, that is another example of episodic stress.

**Chronic stress:** Chronic stress is the third sort of stress that a student may experience. This is the most severe stress that a student may experience over time since it gradually wears the person down. A student who is experiencing or managing chronic stress frequently has the impression that there is no end in sight and that the tension won't soon go away. If the stress isn't reduced, it will eventually have an adverse effect on a student's health, and the student may eventually have major medical conditions. The main issue with persistent stress is that children frequently become accustomed to feeling stressed. Students will become accustomed to this kind of pressure and believe that feeling this way for as long as they do is entirely normal. This constant tension might eventually lead to major health problems that require future costly medical care.

### **Anxiety**

Anxiety is the mind's and body's reaction to stressful, hazardous, or unexpected occurrences. It is the sense of anxiety, discomfort, or dread that you have before a significant event. Anxiety helps us keep attentive and observant, but for people who suffer from an anxiety

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condition, it feels far from normal - it can be absolutely devastating. Anxiety is a feeling of unease, nervousness or fear. It can be triggered by things like a stressful event or worry about the future. Anxiety can make it hard to concentrate, feel happy and relaxed, or sleep well. It can affect people in different ways - some people find it debilitating and others just find having a niggle.

Medical Student Syndrome (MSS) is a distinct kind of hypochondriasis also called health anxiety that generates worry about one's health in relation to the illnesses that one studies while pursuing a medical degree. To differentiate it from hypochondriasis, this syndrome does not result in an increase in appointments. Nevertheless, both disorders have the trait that the affected individual continually feels the dread or conviction that they have a serious illness as a result of the misunderstanding of physical symptoms. A diagnosis of exclusion is made when a medical examination performed several times fails to reveal any medical disorders that properly explain the physical symptoms or the patient's worries about the disease. Sadly, despite assurances from doctors, the worries typically continue in medical students, distracting them from their study.

### **Mental well-being**

The current situation of mental health in our culture has been the subject of considerable public debate and inquiry in recent years. Some have advocated for more open debate about mental health in order to foster a more inclusive society, while others have advocated for better understanding of the stigma associated with mental illness in order to remove obstacles to obtaining care for those in need. The World Health Organization has stated that “stigma and discrimination remain a major barrier to the effective treatment of mental disorders.”. Although there has been great progress in raising awareness about mental illness and eliminating the stigma associated with it in recent years, there is still a long way to go in improving overall mental health treatment. mental health may be defined as the absence of mental disease and a happy outlook on life. So, mental wellness is the state of thriving in various elements of life, such as relationships, work, pleasure, and so on, despite ups and downs. It is the realisation that we are apart from our problems and the belief that we can overcome them. Our mental health is a vital aspect of our total well-being. Society usually believes health to be biological and physical: the status of our bodies, the quality of our diet, and the amount of physical activity we engage in. An essential component of health, however, is absent. It refers to our mental health, which involves our inner workings and how we express ourselves in our daily lives.

The ability to build relationships with people that promote health and happiness is a sign of mental well-being. A person who is mentally healthy is aware of their needs and wants, has objectives that are clear, is able to relate to people by employing emotional literacy, and is extremely good at accepting and handling disagreements without resorting to coercion. People who are mentally healthy feel joy, happiness, satisfaction, and peace of mind. People who are mentally well may be tough and confident while coping with the ups and downs of life. So, mental health is more than just the absence of mental problems or illnesses. It symbolises the side of mental health that is good and is achievable by those who have been diagnosed with a mental disease. There are many various aspects to mental health; it is not a single quality that either a person possesses or does not. Regardless of ups and downs, mental wellbeing is the state of thriving in a number of areas of life, such as relationships, job, leisure, and so on. It is the belief that we can overcome our troubles and the realisation that we are not our issues.

### *Need and significance of study*

Studies have revealed a high prevalence of stress and anxiety in medical students, ranging from 30% to 50%. The stress level is higher in medical students compared to students in other courses. As per review of related literature the problem under taken is to state that “stress in medical student”. More study is needed to uncover anxiety risk factors specific to medical students. The findings indicate that there are several pressures on the route to becoming a doctor. A more thorough assessment of these factors throughout medical schools, followed by the implementation of centrally and university-based protocols, will surely aid in the resolution of many of these issues. It is vital to identify several stressors impacting the psychological well-being of medical students in medical school, as well as to investigate methods used by students to assist them cope with stress.

## **METHOD**

### *Research Design*

The current study follows Correlational research design. Correlational study design explored between two variables without the control of the investigator or manipulating the variables.

### *Statement of the Problem*

The current study was chosen to examine whether stress and anxiety of the medical students is related to their mental well-being and have a better understanding and better knowledge of the state of their mental well-being and try their best to improve and provide the best potential in them and yield more positive outcome for the society.

### *Objective of the Study*

- To examine the difference between male and female in stress.
- To examine the difference between male and female in anxiety.
- To examine the difference between male and female in mental well-being
- To check whether there is a relationship between stress and mental well-being.
- To check whether there is a relationship between anxiety and mental well-being.
- To check whether there is a relationship between stress and anxiety.

### *Hypotheses*

- H<sub>01</sub>-There is no significant relationship between stress and mental well-being among medical student in Mizoram
- H<sub>02</sub> -There is no significant relationship between anxiety and mental well-being among medical students in Mizoram
- H<sub>03</sub> -There is no significant relationship between stress and anxiety among medical students in Mizoram
- H<sub>04</sub> -There is no significant difference between male and female in stress.
- H<sub>05</sub> -There is no significant difference between male and female in anxiety.
- H<sub>06</sub> -There is no significant difference between male and female in mental well-being.

### *Operational Definition*

- **STRESS:** Stress is the nonspecific response of the body to any demand for change (Hans Selye, 1936). Stress is a ‘perception’ it is the demands that are imposed upon us because there are too many alternatives. (Hans Selye, 1979)
- **ANXIETY:** Anxiety is a subjective feeling of tension, apprehension, nervousness and worry associated with arousal of the nervous system (Spielberger, 1983)

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- **MENTAL WELL-BEING:** Mental well-being is often referred to as subjective well-being which is defined as our perception and evaluation of our life (Keyes, 2006). Well-being is a broad, non-medical term that encompasses an overarching sense of feeling well (Baldwin et al., 2021).

### *Variables*

- Independent variables: Stress and Anxiety
- Dependent variables: Mental well-being

### *Sample*

The sample consists of 120 subjects (N =120, 60 female and 60 male) medical students in Mizoram. The subjects were drawn through convenient sampling. The age of the selected participant ranges from 18-25 years. In general, the subject should have a good mental health and physiological health.

### *Sampling Method*

Convenient sampling method is use to draw samples for the study. This sampling is also known as availability sampling, it is a specific type of non-probability sampling method that relies on data collection from population members who are conveniently available to participate in study.

### *Inclusion Criteria*

- Participant not having any major mental/physical illness
- People who can read and write
- Age between 18-25 years
- Medical students in Mizoram.

### *Exclusion Criteria*

- Who cannot understand English
- Participants who are not willing to participate
- Medical students studied outside Mizoram

### *Ethical Consideration*

- An informed consent was taken from the participants
- Confidentiality on their responses were assured

### *Procedure of the Study:*

The study will be conducted by taking a prior permission from the head of the institutions and consent from the participants, the study will be conducted through Google form, they will be given instruction through the form so they can understand how to perform and complete the task. They will be assured about the confidentiality of the data assure.

### *Tools Use*

- **MEDICAL STUDENT STRESSOR QUESTIONNAIRE (MSSQ):** The MSSQ was developed by Muhamad Saiful Bahri Yusoff & Ahmad Fuad Abdul Rahim. It is a 5-point Likert scale that consists 40 items representing the six stressor domains. The validation found that the MSSQ has good psychometric properties; it is a valid and reliable instrument that can be used to identify students' stressors as well as measure the intensity of the stressors. Factor analysis shows that all the items are well distributed

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according to the six groups. Reliability analysis shows that the MSSQ has a high internal consistency as Cronbach's alpha coefficient value was 0.95 which is more than the acceptable cut-off point of 0.6 (35).

The Cronbach's alpha value for each stressor domain. Academic related stressors (ARS) 0.921. Intrapersonal and interpersonal related stressors (IRS) 0.895. Teaching and learning-related stressors (TLRS) 0.858. Social related stressors (SRS) 0.710 Drive and desire related stressors (DRS) 0.646 Group activities related stressors (GARS) 0.728.

- **HAMILTON ANXIETY RATING SCALE (HARS):** The HARS scale is a measurement of anxiety that is based on the appearance of symptoms in individuals experiencing anxiety. According to the HARS scale There are 14 Symptoms that appear in individuals experiencing anxiety. Any item that observed given 5 levels of scores (likert scale) between 0 (Zero Present) to 4 (severe). The HARS scale was first used in 1959, which was introduced by Max Hamilton and It has now become standard in the measurement of anxiety, especially in trial clinic research. The HARS scale has been proven to have high enough validity and reliability to take measurements anxiety in the trial clinic study was 0.93 and 0.97. This condition indicates that the measurement anxiety by using the HARS scale will obtain valid and reliable results.
- **THE WARWICK-EDINBURGH MENTAL WELL-BEING SCALE (WEMWBS):** The Warwick-Edinburgh Mental well-being scale (WEMWBS) was developed by Tennant et al in 2007. It was founded by Scottish Government National programmed for improving Mental Health and Well-Being. This measure was used to assess the mental health of adolescents. It is a 5- point Likert scale that is consisting of 14 items. Cronbach's alpha coefficient is 0.84 and test-retest reliability of the scale is 0.83. The current measure is reliable and valid.

### *Statistical Analysis*

- Pearson correlation- to measure the relationship between stress, anxiety and mental well-being.
- Independent t-test- to find out the difference between male and female.

## RESULTS AND DISCUSSION

### *Results*

The following tables and description show the descriptive and inferential statistics performed on the variables of the study and its analysis.

**Table 1: Correlation of stress and mental well-being among the medical students in Mizoram**

		Mental well-being	Stress
Mental well-being	Pearson Correlation	1	*-0.37
	Sig. (2 tail)		<0.01
	N		120
Stress	Pearson Correlation 1	*-0.37	1
	Sig. (2 tail)	<0.01	
	N	120	

*\*Correlation is significant at the 0.01 level (2-tailed)*

Table1 shows the relationship between stress and mental well-being among medical students in Mizoram. A Pearson correlation was performed to test whether there was a relationship

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between Mental Health Well-being and Stress. The result of the Pearson correlation showed that there was a significant relationship between Mental Health Well-being and Stress,  $r(120) = -0.37$ ,  $p < .001$ . There is a medium, negative correlation between the variables Mental Well-being and Stress with  $r = -0.37$ . Hence the null hypothesis which states that there is no relationship between stress and mental well-being among medical students in Mizoram is rejected

**Table 2: Correlation of Anxiety and Mental well-being among medical students in Mizoram**

		Mental well-being	Anxiety
Mental well-being	Pearson Correlation	1	*-0.44
	Sig. (2 tail)		<0.01
	N		120
Anxiety	Pearson Correlation 1	*-0.44	1
	Sig. (2 tail)	<0.01	
	N	120	

*\*Correlation is significant at the 0.01 level (2-tailed)*

Table 2 shows the relationship between anxiety and mental well-being among medical students in Mizoram. A Pearson correlation was performed to test whether there was a relationship between Mental Health Well-being and Anxiety. The result of the Pearson correlation showed that there was a significant relationship between Mental Health Well-being and Anxiety,  $r(120) = -0.44$ ,  $p < .001$ . There is a medium, negative correlation between the variables Mental Health Well-being and Anxiety with  $r = -0.44$ . Hence the null hypothesis which states that there is no relationship between Anxiety and Mental well-being among medical students in Mizoram is rejected.

**Table 3: Correlation of stress and anxiety among medical students in Mizoram**

		Mental well-being	Anxiety
Stress	Pearson Correlation	1	*0.65
	Sig. (2 tail)		<0.01
	N		120
Anxiety	Pearson Correlation 1	*0.65	1
	Sig. (2 tail)	<0.01	
	N	120	

*\*Correlation is significant at the 0.01 level (2-tailed)*

Table 3 shows that the relationship between Anxiety and Stress among medical students in Mizoram. A Pearson correlation was performed to test whether there was a relationship between Anxiety and Stress. The result of the Pearson correlation showed that there was a significant relationship between Anxiety and Stress,  $r(120) = 0.65$ ,  $p < .001$ . There is a high, positive correlation between the variables Anxiety and Stress with  $r = 0.65$ . Thus, there is a high, positive association between Anxiety and Stress in this sample. Hence the null hypothesis which states that there is no significant relationship between stress and anxiety among medical students in Mizoram are rejected.

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**Table 4: Independence sample t-test on stress based on gender**

Variables	Male (N=60)		Female (N=60)		t
	M	SD	M	SD	
Stress	80.79	38.34	97.71	35.29	-2.83*

\*p>0.05

Table 4 shows the difference between Male and Female students on their stress levels. The results of the descriptive statistics show that the male group has lower values for the dependent variable Stress (M = 80.97, SD = 38.34) than the Female group (M = 97.71, SD = 35.29). A two-tailed t-test for independent samples (equal variances assumed) showed that the difference between male and Female with respect to the dependent variable Stress was statistically significant,  $t = -2.82$ ,  $p = .005$ , 95% confidence interval. This shows that there is significant difference between male and female regarding stress among medical students in Mizoram hence the null hypothesis which states that there is no significant difference between male and female in stress is rejected.

**Table 5: Independence sample t-test on anxiety based on gender**

Variables	Male (N=60)		Female (N=60)		t
	M	SD	M	SD	
Anxiety	17	10.93	19.48	10.05	-1.47*

\*p<0.05

Table 5 shows the difference between Male and Female students on their levels of anxiety. The results of the descriptive statistics show that the male group has lower values for the dependent variable Anxiety (M = 17, SD = 10.93) than the Female group (M = 19.48, SD = 10.05). A two-tailed t-test for independent samples (equal variances assumed) showed that the difference between male and Female with respect to the dependent variable Anxiety was not statistically significant,  $t = -1.47$ ,  $p = .144$ , 95% confidence interval. This shows that there is no significant difference between male and female regarding anxiety among medical students in Mizoram hence the null hypothesis which states that there is no significant difference between male and female in anxiety is accepted.

**Table 6: Independence sample t-test on mental well-being based on gender**

Variables	Male (N=60)		Female (N=60)		t
	M	SD	M	SD	
Mental well-being	41.53	9.03	40.32	8.02	0.89*

\*p<0.05

Table 6 shows the difference between Male and Female on their levels of mental well-being. The results of the descriptive statistics show that the male group has higher values for the dependent variable Mental Health Well-being (M = 41.53, SD = 9.03) than the Female group (M = 40.32, SD = 8.02). A two-tailed t-test for independent samples (equal variances assumed) showed that the difference between male and Female with respect to the dependent variable Mental Health Well-being was not statistically significant,  $t = 0.89$ ,  $p = .37795$  confidence interval. This shows that there is no significant difference between



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male and female regarding mental well-being among medical students in Mizoram hence the null hypothesis which states that there is no significant difference between male and female in mental well-being is accepted.

### *Interpretation*

The objective of the study was to determine the relationship of each variables Stress, Anxiety and Mental well-being among medical students and the differences between gender. The study consists of 120 participants where there are 60 male and 60 female medical students from Mizoram.

From Table 1 we can see that there is a significant relationship between Mental well-being and stress among medical students showing the H<sub>0</sub> to be rejected. This implies that there is a negative relationship between these two variables if students are stress is high then there mental well-being is low. Kathyrine and Judalyn (2021). The study aimed to determine the relationship between stress and anxiety on emotional social and psychological well-being among nursing students. They carried out a descriptive cross-sectional research design and their result revealed that there was a significant negative correlation between stress and well-being.

Table 2 shows that there is a significant relationship between Mental well-being and anxiety among medical students showing the H<sub>0</sub> to be rejected. This implies that there is a negative relationship between these two variables if students have high anxiety level, then there mental well-being is low. Eva Biro, Iilina Balaiti, Roza Adany & Karolina Kosa (2020). Their aim was to determinant mental well-being in medical students. The study was carried out descriptive cross-sectional method and the result shows that almost one fifth of the students scored above the strict threshold on the general health questionnaire indicating notable psychological distress which include anxiety.

Table 3 shows that there is a significant relationship between stress and anxiety among medical students showing the H<sub>0</sub> to be rejected. This implies that there is a positive relationship between these two variables if the medical students have anxiety, then there is a chance that they will also have stress. Shekhar, Avinash & Philip, Sharad & Chaturvedi, Santosh & Bhugra, Dinesh. (2022). Their aimed was to study stress and burnout amongst medical students in India. The result shows that the covid pandemic has exacerbated this situation with medical students reporting high levels of stress and anxiety.

From Table 4, it can be observed that there is significant difference between medical students male and female students on stress. The results of the descriptive statistics show that the male group has lower values for the Stress. Dušan V. Backović, Jelena Ilić Živojinović, Jadranka Maksimović & Miloš Maksimović conducted a cross-sectional study in 2012 on the gender differences in academic stress and burnout among medical student in final year of education. Their results shows that female students have higher stress level than male students.

From Table 5, it can be observed that there is no significant difference between medical students male and female students on anxiety. A study conducted by Judith Bernstein and Sara Carmel (1991) on gender difference in the perception of medical school stressor, anxiety and the sense of coherence result shows that there is no significant difference between gender regarding anxiety. Trait anxiety increased and the sense of coherence decreased over time for both sexes.

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From Table 6, it can be observed that there is no significant difference between medical students male and female students on mental well-being. Brett Roothman, Doret K. Kristen and Marie P. Wissing (2003) The aim of this study was to determine whether men and women differ with regard to aspects of psychological well-being. The participants each completed 13 scales that measure psychological well-being in affective, physical, cognitive, spiritual, self and social aspects. No significant gender differences were found between man and women.

### SUMMARY AND CONCLUSION

#### *Summary*

In this study the relationship between Stress, Anxiety and Mental well-being among medical students in Mizoram was determined where it was found out that there was negative relationship between Mental well-being and stress and also with Mental well-being and Anxiety. The research findings also showed that there was a significant relationship between Anxiety and stress among medical students in Mizoram.

The difference in Stress, Anxiety and Mental well-being among the male and female medical students in Mizoram was also considered in this study. The results of the independent sample t-test showed that there is a significant difference between male and female regarding stress among medical students in Mizoram. However, there is no significant difference between in male and female regarding anxiety and mental well-being among medical students in Mizoram.

#### *Implications*

The research will provide insight into the medical students' stress, anxiety, and mental well-being in order for them to have a better understanding and knowledge of the state of their mental well-being and try their best to improve in order to provide the best potential in them and yield a more positive outcome for society. The current study will assist students in improving their well-being and dealing with stress and anxiety, and it will prepare medical students to be psychologically healthy and pleased, as well as able to accelerate performance and profitability.

#### *Limitation and further direction*

- Only medical students from Mizoram were included.
- Sample size was small and may not be presentative of all medical students.
- For further studies larger sample from different regions and institution can be used for more reliable results.

### CONCLUSION

The present study aimed to examined the relationship between Stress, Anxiety and Mental well-being among medical students in Mizoram. From the results, it can be concluded that there is relationship between Stress, Anxiety and mental well-being among medical students in Mizoram. The study also reveals that there is no difference between male and female medical students regarding Anxiety and Mental well-being but a difference regarding stress. However, this study cannot be generalised. Medical students are at a higher risk of experiencing Stress, Anxiety, and adverse effects on their mental well-being. The demanding curriculum, academic workload, and pressure to succeed significantly contribute to Stress among medical students. The negative impacts of Stress and Anxiety on cognitive performance, clinical skills, and empathy may lead to long-term consequences. Therefore,

interventions such as mindfulness-based programs may be helpful in mitigating the adverse effects of Stress and Anxiety among medical students.

### REFERENCES

- Barikani, A. (2009). *Stress in Medical Students*. J Medical Educ. 11.
- Backović, D. V., Ilić Živojinović, J., Maksimović, J., & Maksimović, M. (2012). *Gender differences in academic stress and burnout among medical students in final years of education*. Psychiatria danubina, 24(2.), 175-181.
- Bernstein, J., & Carmel, S. (1991). *Gender differences over time in medical school stressors, anxiety, and the sense of coherence*. Sex Roles, 24, 335-344.
- Bíró, É., Balajti, I., Ádány, R. et al. *Determinants of mental well-being in medical students*. Soc Psychiat Epidemiol 45, 253–258 (2010). <https://doi.org/10.1007/s00127-009-0062-0>
- Business Bliss FZE. (2023). Definition And Types of Anxiety Literature Review English Language Essay. [www.ukessays.com](http://www.ukessays.com).
- Calong, C., K. & Comendador, J. (2021). *Stress, Anxiety and Mental well-being among Nursing students: A Descriptive-Correlational study*. Journal of Health and Caring Sciences. 3. 33-42. 10.37719/jhcs. 2021.v3i1.oa003.
- Chumakov, E. et al (2022). *The impact of covid-19: Anxiety, depression, and wellbeing among medical students*. International Journal of Social Psychiatry. 68. 002076402 211217. 10.1177/00207640221121717.
- Fink, G. R. (2009, January 1). *Stress: Definition and History*. Elsevier eBooks.
- Hardeman, R.R., Przedworski, J.M., Burke, S.E. et al. *Mental Well-Being in First Year Medical Students: A Comparison by Race and Gender*. J. Racial and Ethnic Health Disparities 2, 403–413 (2015). <https://doi.org/10.1007/s40615-015-0087-x>
- Haykal, K., Pereira, L., Power, A & Fournier, K. (2022). *Medical student wellness assessment beyond anxiety and depression: A scoping review*. PloS one.
- Jadoon, N. A., Yaqoob, R., Raza, A., Shehzad, M. A., & Zeshan, S. C. (2010). *Anxiety and depression among medical students: a cross-sectional study*. JPMA. The Journal of the Pakistan Medical Association, 60(8), 699-702.
- Juul, M., Fast, Anders., Lassen, A. & Laugesen, S. (2022). *Anxiety among medical students and junior doctors in Denmark*. Danish medical journal. 69.
- Mao, Y., Zhang, N., Liu, Jinlin., Zhu, Bin., Rongxin, H. & Wang, X. (2019). *A systematic review of depression and anxiety in medical students in China*. BMC Medical Education.
- Mohd, S, S., Rampal, L. & Kaneson, N. (2005). *The prevalence of anxiety among medical students*. Malaysian Journal of Medicine and Health Sciences.
- Mosley, T H Jr; Perrin, S G; Neral, S M; Dubbert, P M; Grothues, C A; Pinto, B M. *Stress, coping, and well-being among third-year medical students*. Academic Medicine 69(9): p 765-7, September 1994.
- Rehman, F., Tahir, N., Ain, Qurat., Mehmood, H., & Sayed, T. & Afshan, S. (2022). *Level of Anxiety among Medical Students during COVID-19 Pandemic*. Pakistan Journal of Medical and Health Sciences.
- Roothman, B., Kirsten, D. K., & Wissing, M. P. (2003). *Gender differences in aspects of psychological well-being*. South African journal of psychology, 33(4), 212-218.
- Sharma, S. et al (2018). *Study of Psychological Wellbeing of Medical Students at Mahatma Gandhi Institute of Medical Sciences*. 4.
- Shekhar, A., Philip, S., Chaturvedi, S. & Bhugra, D. (2022). *Stress and burnout amongst medical students in India*.

## Stress, Anxiety and Mental Well-Being Among Medical Students

- Siripongpan, A., Namkune, T., Uthansakul, P., Jumphoo, T., & Duangmanee, P. (2022). *Stress among Medical Students Presented with an EEG at Suranaree University of Technology, Thailand*. *Health psychology research*, 10(3), 35462. <https://doi.org/10.52965/001c.35462>
- Philip, S., Molodynski, A., Barklie, L. et al. *Psychological well-being and burnout amongst medical students in India: a report from a nationally accessible survey*. *Middle East Curr Psychiatry* 28, 54 (2021). <https://doi.org/10.1186/s43045-021-00129-1>
- Quek, Tam, Tran, Zhang, Zhang, Ho, & Ho. (2019). *The Global Prevalence of Anxiety Among Medical Students: A Meta-Analysis*. *International Journal of Environmental Research and Public Health*, 16(15), 2735.
- Wilkes, C., Lewis, T., Brager, N., Bulloch, A., MacMaster, F., Paget, M., ... Ventriglio, A. (2019). *Wellbeing and mental health amongst medical students in Canada*. *International Review of Psychiatry*, 31(7-8), 584–587. <https://doi:10.1080/09540261.2019.1675927>
- World Health Organization: WHO. (2022). Mental health. [www.who.int](http://www.who.int). <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>
- Zia, M., Qayyum, A., Majeed, S., Saad, M., Hanif, Farah. & Rashid, Shazia. (2022). *Sources of Stress among Medical Students*. *Pakistan Journal of Medical and Health Sciences*. 16.

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### **Conflict of Interest**

The author(s) declared no conflict of interest.

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