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Stress, Anxiety, And Depression Among Medical Students Of The CBME Curriculum

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INTRODUCTION

Medical education has been reported to be one of the most stressful academic curricula worldwide, negatively affecting the physical and mental health of medical students. Examination fear, high parental expectations, peer pressure, lack of leisure time, financial problems, relationship disharmony, and aspirations for higher studies are some of the many factors known to contribute to the development of stress among undergraduate medical students. Early identification and necessary interventions targeting the alleviation of modifiable stressors might result in a less stressful academic life for students, which in turn could enhance their academic performance and skill development as medical graduates.[1]

Recently National Medical Council of India(NMC) introduced a new educational strategy for medical students by the name of Competency-based medical education(CBME), as it should reduce stress and may increase the efficacy and efficiency of medical students. It has been observed that medical school environments in India are extremely stressful and has led to suicidal attempts by the students. Fear of failure, vast amount of content that has to be mastered, inability to cope with the high expectations of parents and peers are found to be the most commonly observed sources of stress.[2] Stress, health and emotional problems increase during the period of undergraduate medical education. This can lead to mental distress and has a negative impact on cognitive functioning and learning. An optimal level of stress, referred to earlier as 'favourable stress', can enhance learning. However, excessive stress can lead to physical and mental health problems. It can reduce students' self-esteem and may affect academic achievement and personal or professional development.[3]
Stress is the "wear and tear" our bodies experience as we adjust to our continually changing environment; it has physical and emotional effects and can create a positive or negative influence on us. As a positive influence, stress can help to compel us to action. As a negative influence, it can result in feelings of distress, rejection, anger, and depression, which in turn can lead to health problems.[4]

Chronic exposure to stressful conditions exerts negative effects on the emotional, mental and physical well-being of the students which also affect the patients' lives and the community's health. Numerous studies have revealed that persistent stressful conditions are associated with mental and physical health problems in medical students at various stages of their training.[5]

Anxiety is a general state of uneasiness that cause nervousness, fear, apprehension, and worrying. It is a bodily response to a perceived danger or threat that could be real or imagined and triggered by an individual's thoughts beliefs and feelings. These disorders affect how we feel and behave, and they can manifest real physical symptoms. People often experience a general state of worry or fear in their routine life before confronting something challenging such as an examination, competition, social encounter or interview, etc. These feelings are easily justified and considered normal. Anxiety is considered a problem when symptoms interfere with a person's ability to sleep or otherwise function. Generally speaking, anxiety occurs when a reaction is out of proportion with what might be normally expected in a situation. Mild anxiety is vague and unsettling, while severe anxiety can be debilitating, having a serious impact on daily life.[6]
Depression is a major public health problem with a prevalence of 4.4% in the global population. Globally, individuals with depression are nearly 33 times more likely to commit suicide, while the odds of committing suicide in individuals with depression are about 12 times. Depression is the leading cause of suicide, resulting in close to 800,000 deaths annually (WHO). Medical students have a higher prevalence of depression compared to the general population, despite similar rates of help-seeking behaviours, which may suggest that there may be under-treatment among them. Several reasons have been given for the failure to seek treatment. These include fear of having mental health record and its impact on a future career, tight schedules, the stigma associated with accessing mental healthcare services, and even fear of perceived unwanted interventions. This consequently, may lead to higher rates of suicidal behaviours among medical students, for which a large multi-institution study reported a prevalence of 11.2% of suicidal ideation.

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Depression among medical students affects their academic performance, clinical practice, and rates of dropout; and may also influence the overall care given to patients as depressed medical students may show less empathy and less willingness to manage chronically ill patients.[7]

Depressive disorders are characterized by sadness, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, feelings of tiredness, and poor concentration. Depression can be long-lasting or recurrent, mild or severe, substantially impairing an individual's ability to function at work or school or cope with daily life (WHO). At its most severe form, depression can lead to suicide.[8] Many studies support the fact that medical students experience depression at higher rates than graduate students or young adults in the general public.[9] However, there is very little literature available regarding the prevalence of depressive disorders among medical students in India.[10] Medical students are exposed to tremendous pressure, leading to stress, depression and other psychiatric disorder at increasingly higher rates. The stress and depression can affect their learning and can lead to poor quality of life. The students of different professional year may have differing reasons for being under stress and in depression. Assessing stress and depression in students of different professional years may provide better insights, and help policy makers plan appropriate interventions[11]

Mental health disorders according to the World Health Organization (WHO) are one of the leading causes of disability worldwide. Three of the ten leading causes of disability in people between the ages of 15 and 44 are mental disorders, and the other causes are often associated with mental disorders. Stress is anything that poses a challenge or a threat to our well-being. It has been defined as a process in which environmental demands exceed the adaptive capacity of an organism, resulting in psychological and biological changes that may place persons at risk for disease. Anxiety is a psychological and physiological state characterized by cognitive, somatic, emotional, and behavioural components. These components combine to create an unpleasant feeling that is typically associated with uneasiness, fear, or worry. Anxiety is a generalized mood condition that occurs without an identifiable triggering stimulus, while many symptoms of depression include, persistent sad, anxious or ''empty" feelings, feelings of hopelessness, feelings of guilt, worthlessness and/or helplessness, irritability, restlessness, and loss of interest in activities or hobbies once pleasurable.[12] Although the prevalence of depression, anxiety, and stress of medical students has been extensively studied, the percentage remains high and has not been fully addressed. This might occur because students are challenged to live independently so they tend to have fewer places to tell and express their daily stressors[13]. Professional consequences include academic performance decay, decline in empathy and ethics, academic dishonesty, negative influence on their choice of specialty and high incidence of medical errors.[14]

Depression and anxiety are common among medical students across the world. In India, a recent systematic review revealed that the pooled prevalence of depression among medical students was 39.2%, and the corresponding figure for anxiety was 34.5%. The prevalence of depression and anxiety disorders in medical students is higher than that in the general population. Despite the severalfold higher prevalence of depression and anxiety disorders among medical students, they do not readily seek treatment. Steps taken to identify and address the barriers to mental healthcare seeking would help improve the students' mental well-being.[15]

Need for the study:
Recently, the medical student population is increasing every year, especially in developing countries including India. Change in lifestyle because of urbanization and globalization coupled with high-level competition in the medical field could lead to an increase in stress, anxiety, and depression among medical students. Depression in the younger age group may lead to serious developmental and functional consequences like an academic failure or persistent psychosocial problems.

The overall environment of the medical school is often considered very stressful. It projects negative effects not only on the academic performance of medical students but also deteriorate of their physical health and psychosocial wellbeing. In this background the present study will attempt to evaluate the stress, anxiety, and depression among medical students at Private Medical College in Karnataka. Considering all these facts which are already been proved, The Ministry of Health and NMC decided to introduce a new curriculum for MBBS students called CBME.

Aim of the study:
To study stress, anxiety, and depression among medical students of CBME curriculum.

Objectives:
1. To determine the self-perceived stress, anxiety, and depression among medical students of the CBME curriculum.
2. To know the association between the level of stress, anxiety, and depression with demographic variables.

RESEARCH METHODOLOGY

OPERATIONAL DEFINITION

Stress: Stress is a feeling of emotional or physical tension. It can come from any event or thought that makes you feel frustrated, angry, or nervous. Stress is your body's reaction to a challenge or demand. In short bursts, stress can be positive, such as when it helps you avoid danger or meet a deadline.

Anxiety: Anxiety is characterized as a state of being that arises from general and non-specific stimuli that are perceived as being potentially threatening in the future.

Depression: Depression is a constant feeling of sadness and loss of interest, which stops you from doing your normal activities. Different types of depression exist, with symptoms ranging from relatively minor to severe. Generally, depression does not result from a single event, but from a mix of events and factors.

Research design: Descriptive study.

Setting of the study: The study was conducted at Private Medical College, Affiliated to Yenepoya university in Mangalore, Karnataka.

Study population: The study population includes 2nd,3rd and 4th year medical students of CBME curriculum.

Sampling technique: For the study were selected by simple random sampling method with lottery technique.
Sampling size: The sample size consists of 110 students. It includes 55 males and 55 females. In detail from third year 55 students as well as from the fourth year 55.

Sample size is calculated using the following formula:

$$N=z^2_{1-2/}2\ \frac{p\ (1-p)}{E^2}$$

Z=1.96, the standard normal score
p=proportion or prevalence=36.8%
E= margin of error=9%
At 5% confidence interval and 36.8% of population (Depression, anxiety and stress among medical students) with 9% of margin of error, the total sample size is 110.[32]

Data collection procedure:
The investigator collected the list of 2nd,3rd and 4th year of medical students from the college office and samples were divided through the lottery method. The respondents were informed about the purpose of the study by sharing the study information sheet. The consent and questionnaire were sent to the selected students through google a form. The data was collected through the standardized questionnaire along with DASS 21 scale.

Method of data collection: Data were collected through the questionnaire method
Research instrument:
The research tool consists of two parts
The first one is a survey form comprising questions relating to socio-demographic variables.
The second one is the DASS-21 elements self-administered tool to assess the severity of depression, anxiety, and psychological stress symptoms. The tool comprises 21 items with three domains, where each domain (i.e., depression, anxiety, and psychological stress) is made up of seven items. Each item is scored on a Likert scale ranging from 0 to 3. The cumulative score of each subscale is calculated by summing up the scores of all its items and multiplying by two.

Hence, the score of each subscale ranges from 0 to 42, and the total score ranges from 0 to 120. A higher (lower) score indicates greater (less) severity of depression, anxiety, or psychological stress. The cut-off scores for case findings in DASS-21 are as follows: 10 for the depression subscale, 7 for the anxiety subscale, and 11 for the stress subscale. The severity score ranges for depressive symptoms are as follows: mild depression = 10– 12, moderate depression = 13–20, severe depression = 21–27, and extremely severe depression = 28–42. The severity score ranges for anxiety symptoms are as follows: mild anxiety = 7–9, moderate anxiety = 10–14, severe anxiety = 15–19, and extremely severe anxiety = 20–42. The severity score ranges for psychological stress are as follows: mild stress = 11–18, moderate stress = 19–26, severe stress = 27–34 and extremely severe stress = 35–42. 26 The Malay version of the DASS-21 has acceptable internal consistency, with Cronbach's α values of its subscales ranging from 0.74 to 0.79.[36]

Inclusion criteria:
- Students who are willing and consented was included in the study.
- Students studying in 2nd 3rd and 4th year of medicine at a private medical college.

Exclusion criteria:

- Students who were absent at the time of the study.
- 1st-year students, as they have less knowledge of what is stress, depression ,etc.

Statistical analysis:
The data was analysed using SPSS software. Descriptive and inferential statistics like frequency, percentage distribution, mean, standard deviation and chi square used 4ppropriately.

Ethical clearance: Institutional ethics committee clearance obtained.

RESULTS

Primary information of participants
Primary information of participants includes age, gender, religion, state of domicile, locality, marital status, family type, type of residence, financial support, financial problem, academic year, selection of MBBS education, number of members in the family, number of siblings, and family income.

n = 110

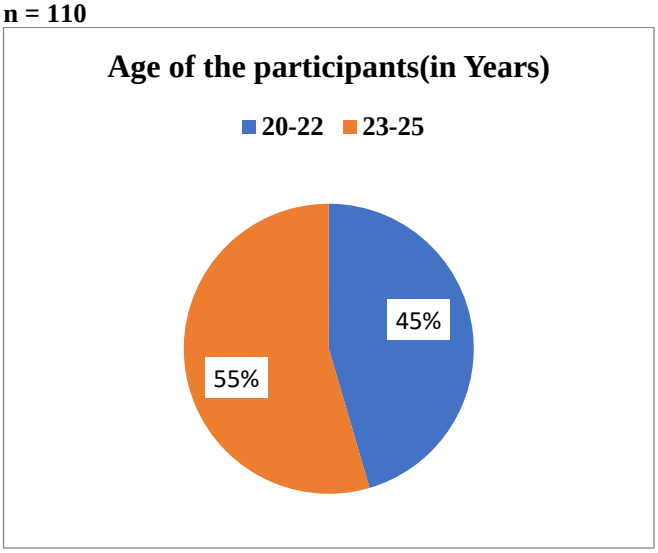

Figure 4.1.1 Age of the participants

It is observed from the above figure (4.1.1) that among the total participants 54.5% belong to the 23-25 years age group and whereas 45.5% were between 20-22 years.

n = 110

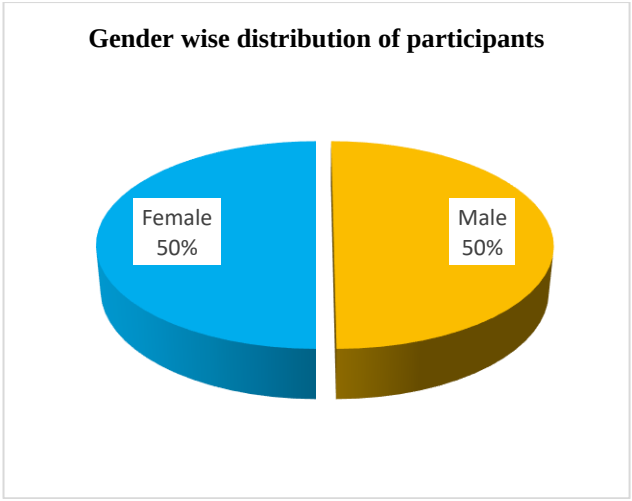

Figure- 4.1.2 Gender-wise distribution of participants

Among the total 110 participants, 50% of them were male and 50% were female participants.

n = 110

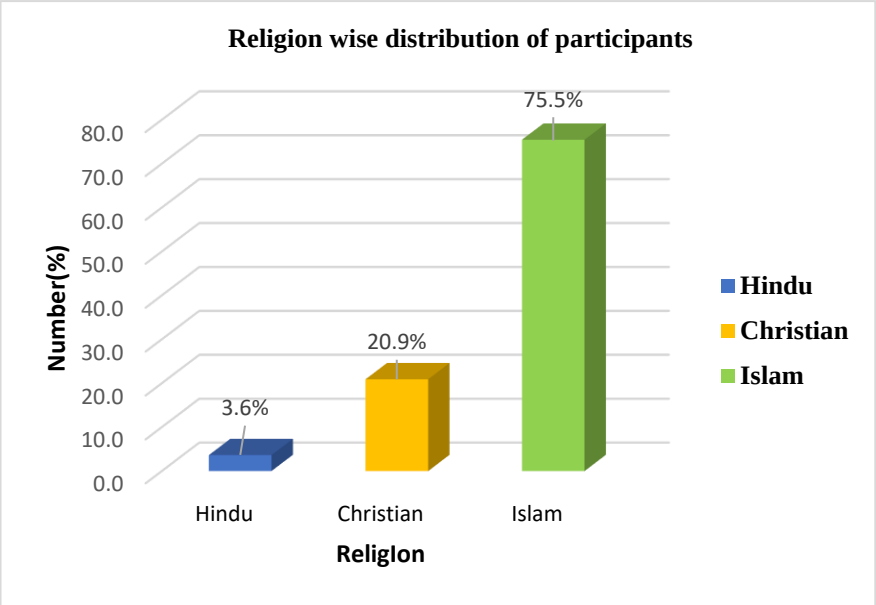

Figure – 4.1.3 Religion-wise distribution of participants

The above figure presents the religion of the participants. Among the participants 75.5% were Muslims, 20.9% were Christians and 3.6% were Hindus.

n = 110

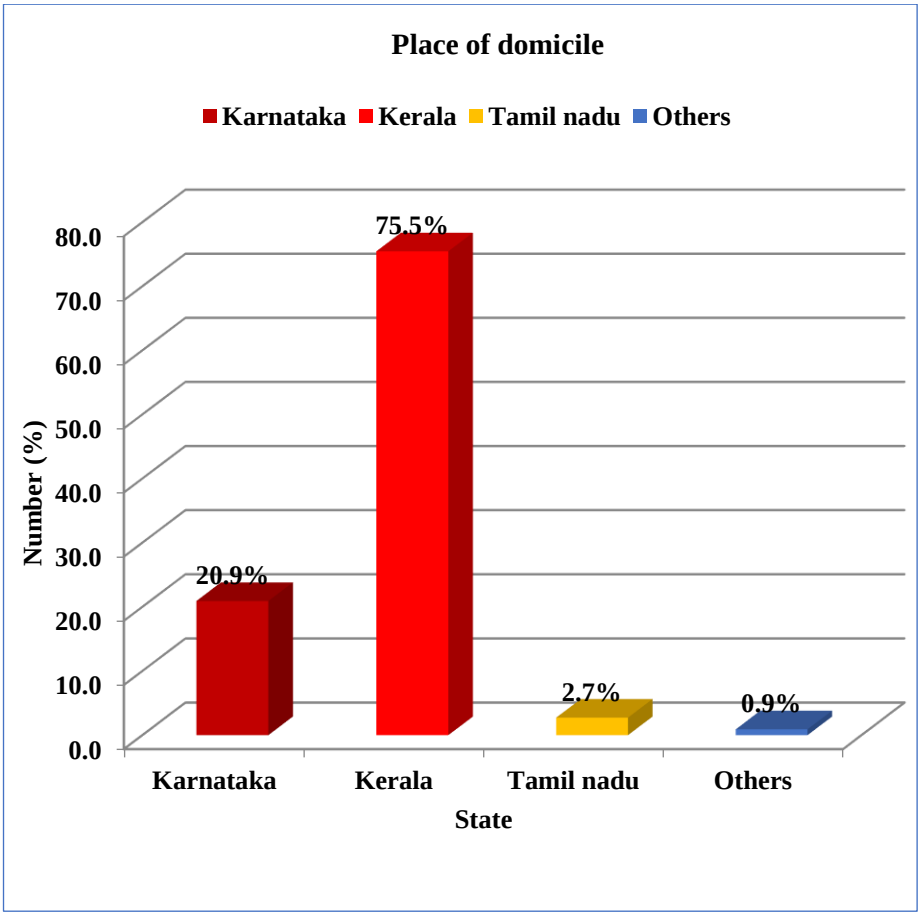

Figure- 4.1.4 Place of domicile of participants

The place of domicile of the participants shows the majority (75.5%) belong to Kerala, 20.9% Karnataka, 2.7% Tamil Nadu and below 1% from other states.

n = 110

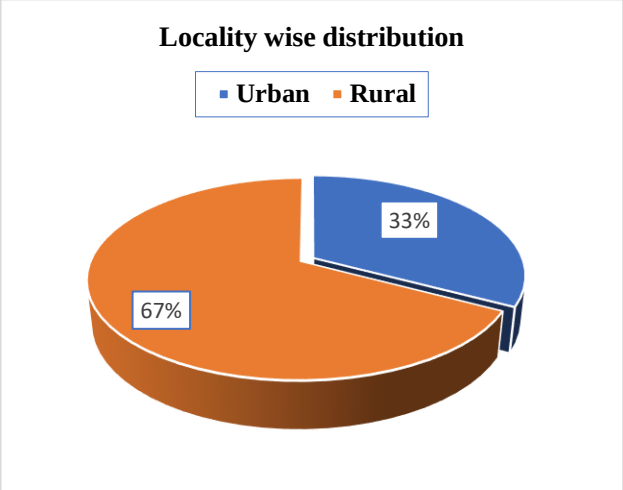

Figure-4.1.5 Locality-wise distribution of participants

The majority (67.3%) of the participants belong to rural whereas 32.7% are from urban locations.

n = 110

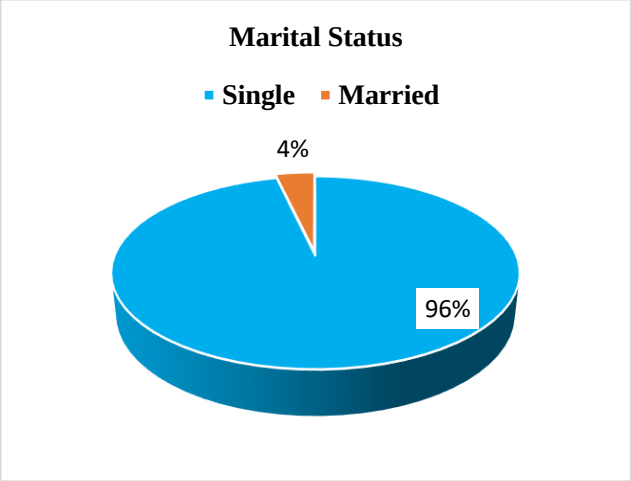

Figure-4.1.6 Marital status of participants

From the above figure, it is inferred that 96.4% of the participants were single and whereas 3.6% were married.

n = 110

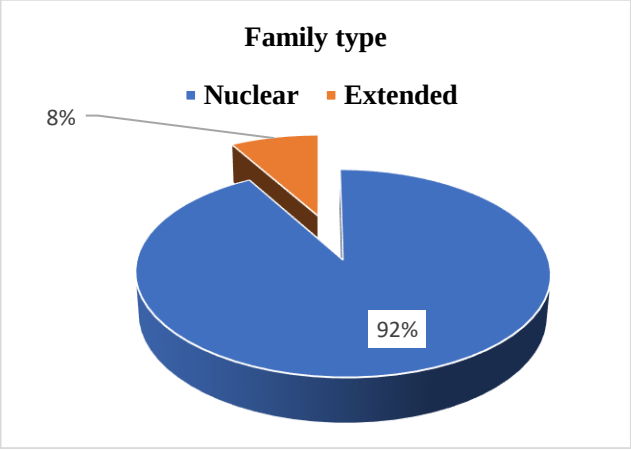

Figure- 4.1.7 Family type of participants

The family type classification of the participants indicates that 91.8% live in nuclear families and 8.2% in extended families.

n = 110

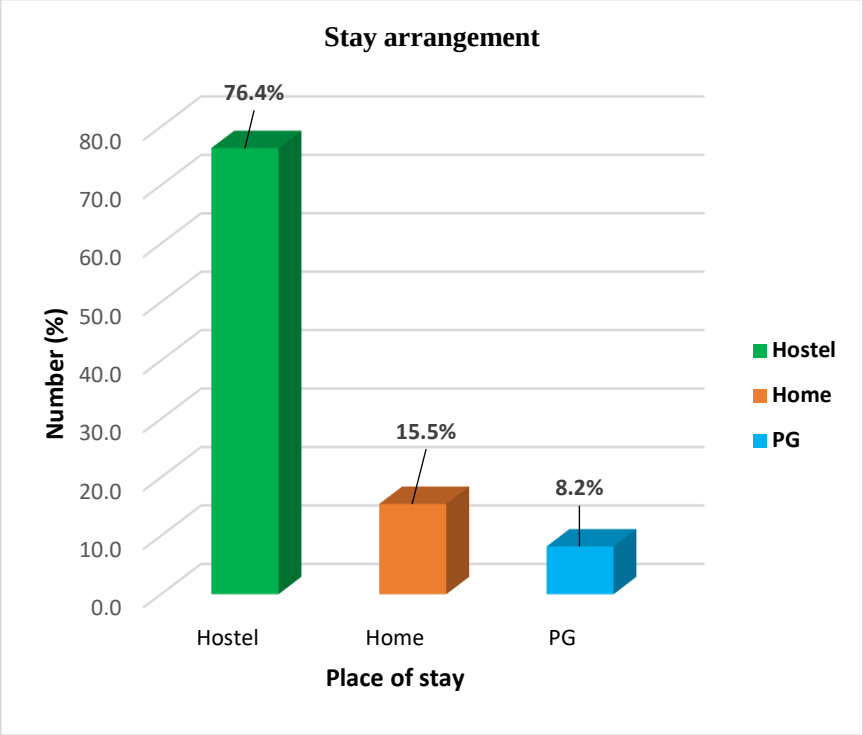

Figure- 4.1.8 Stay arrangements of participants

The above figure presents the stay arrangements of the participants. Among the total participants, 76.4% stayed in the hostel, 15.5% at their own home and 8.2% were in Paying Guest(PG).

n = 110

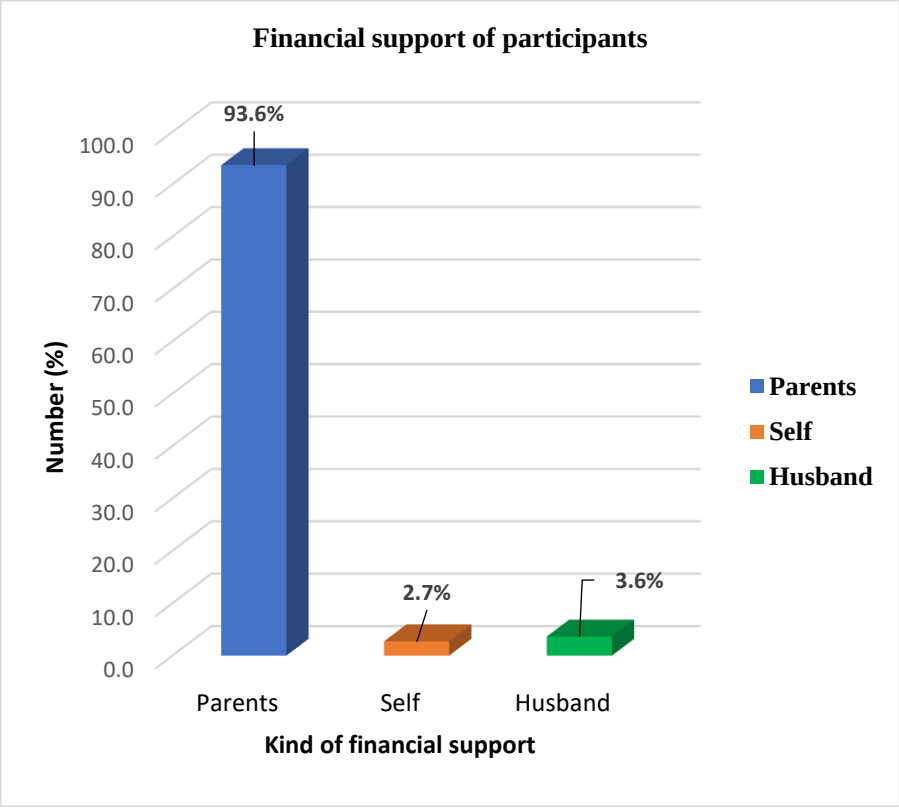

Figure- 4.1.9 Financial support of participants

The financial support of the participants shows the majority (93.6%) get from their parents, 2.7% from themselves, and in 6% cases get financial support from their spouse.

n = 110

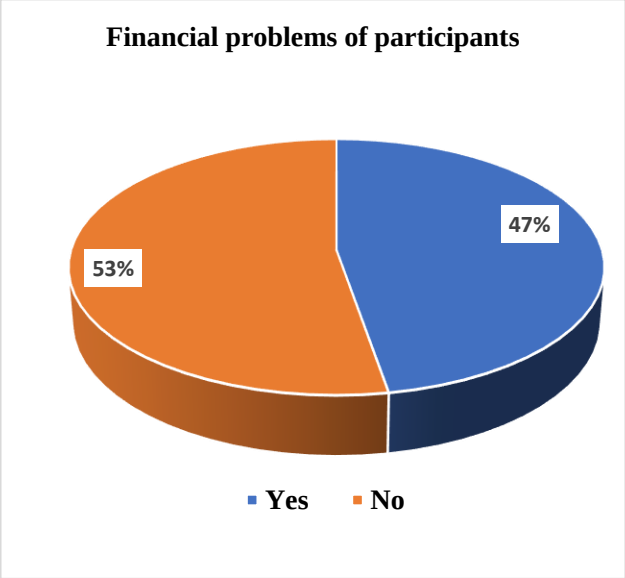

Figure – 4.1.10 Financial problems of participants

From the above figure, it is inferred that 52.7% of the participants were not facing financial problems while 47.3% had financial problems.

n = 110

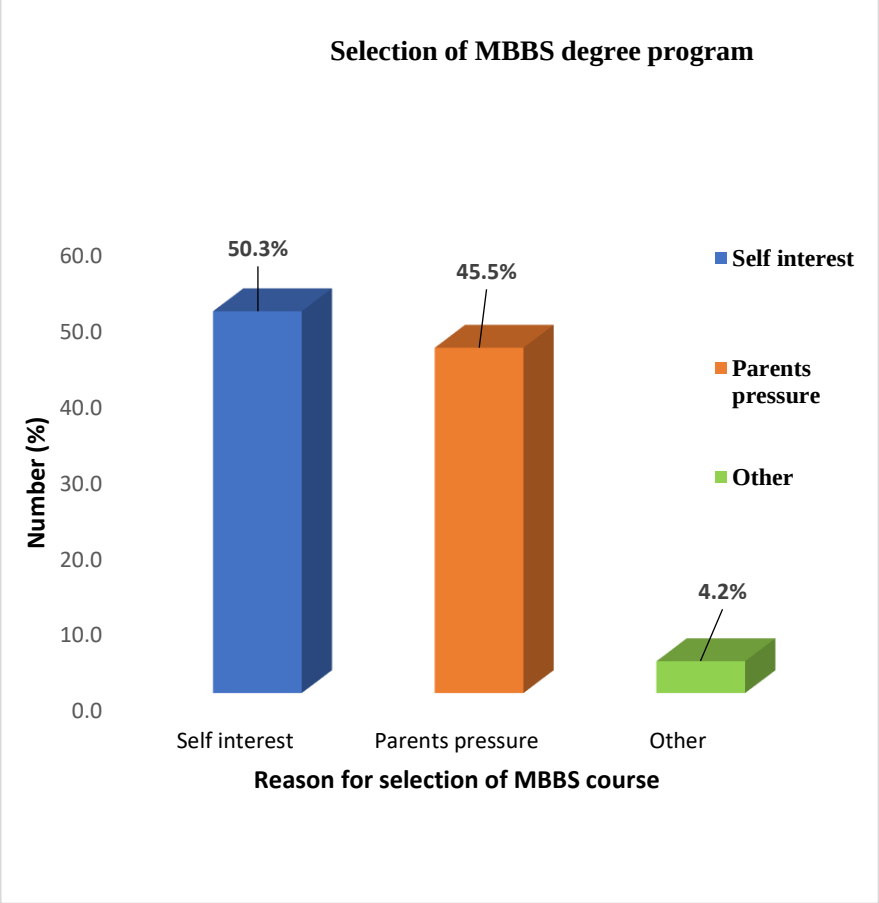

Figure – 4.1.12 Selection of MBBS Education

Figure 4.1.12 presents the selection of MBBS education by participants.
Among the participants, 50.3% pursuing with self-interest, 45.5% because of parents' pressure, and 4.2% for other reasons.

n = 110

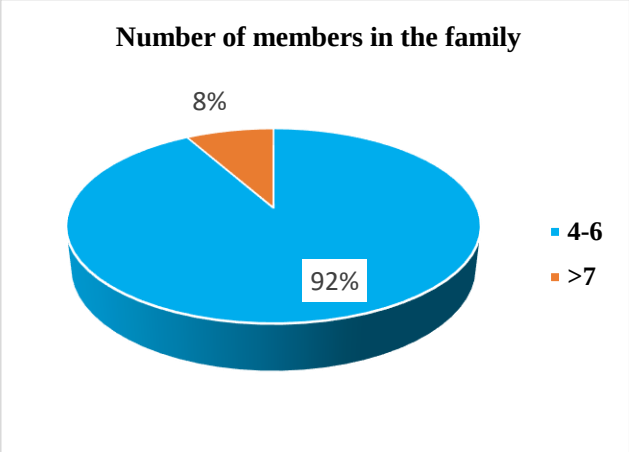

Figure – 4.1.13 Number of members in the family

The above figure (4.1.13) shows the majority (91%) had 4-6 members in their families while 8.2% had more than 7 members.

n = 110

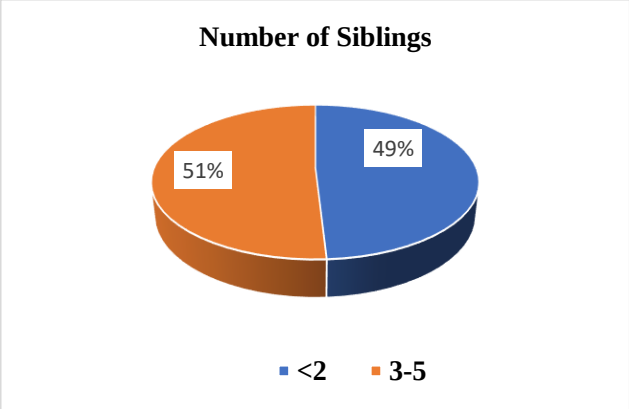

Figure – 4.1.14 Number of Siblings

The data of the above figure shows that 50.9% of the participants were having 3-5 siblings while 49.1% had less than 2 siblings.

n = 110

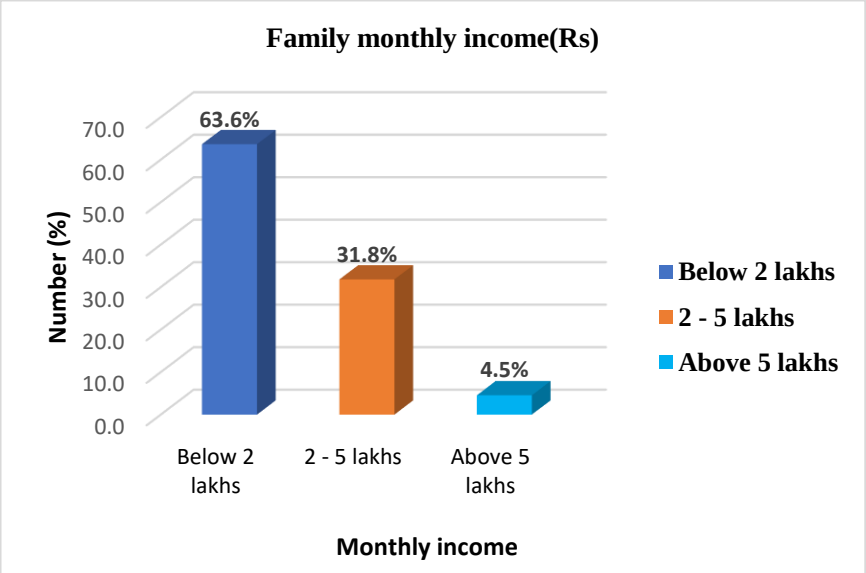

Figure – 4.1.15 Family income monthly

It is observed from the above figure (4.1.15) that 63.8% of the participants have below 2 lakh family income per month, 31.8% have 2-5 lakhs and 4.5% have above 5 lakhs.

4.2. The level of Stress, Anxiety and Depression among participants: In this section the investigator presented the findings of depression, anxiety and stress among the participants. To assess depression, anxiety and stress, DASS-21 scale was used, which was designed to measure the negative effect of depression, anxiety and stress.

Table 4.2.1 Level of Stress among participants

Level of stress	Frequency(n)	Percentage (%)
Mild	24	21.8
Moderate	9	8.4
Severe	16	14.5
Extremely severe	61	55.3
Total	**110**	**100**

The above table shows, mild 21.8%, moderate 8.4% severe 14.5%, and Extremely severe 55.3% levels of stress.

Table 4.2.2 Level of Anxiety among participants

Level of anxiety	**Frequency(n)**	**Percentage (%)**
Normal	27	24.4
Mild	10	9.4
Moderate	56	50.7
Severe	17	15.5
Total	**110**	**100**

It is observed from the above table (4.2.2) that 24.4% normal, 9.4%mild, 50.7%moderate, 15.5% severe levels of anxiety.

Table 4.2.3 Level of Depression among participants

Level of depression	Frequency(n)	Percentage (%)
Mild	30	27.2
Moderate	39	35.5
Severe	12	10.9
Extremely severe	29	26.4
Total	110	100

From the above table, it is inferred that 27.2% mild, 35.5%moderate, 10.9% severe, 26.4% extremely severe level of depression.

Table no: 4.2.4 Association between levels of Stress, Anxiety and Depression with Age

	Normal	**Mild**	**Moderate**	**Severe**	**Extremely severe**	**Chi-square**
Level of stress						
20-22	0	8	4	9	29	.645
23-25	0	16	5	7	32	
Total	0	24	9	16	61	
Level of anxiety						
20-22	12	9	18	7	0	.139
23-25	15	1	38	10	0	
Total	27	10	56	17	0	
Level of depression						
20-22	0	12	16	4	12	.410
23-25	0	18	23	8	17	
Total	0	30	39	12	29	

The above table presents, the association between levels of Stress, Anxiety and Depression with Age.
The finding indicates there is no significant association between levels of Stress, Anxiety and Depression score with Age of participants.

Table no: 4.2.5 Association between levels of Stress, Anxiety and Depression with Gender

	Normal	Mild	Moderate	Severe	Extremely severe	Chi-square
Level of stress						
Male	21(38.2%)	6(10.9%)	11(20%)	14(25.5%)	3(5.5%)	.023
Female	28(50.9%)	10(18.2%)	13(23.6%)	2(3.6%)	2(3.6%)	
Total	49(44.5%)	16(14.5%)	24(21.8%)	16(14.5%)	5(4.5%)	
Level of anxiety						
Male	5(9.1%)	4(17.3%)	12(21.8%)	5(9.1%)	29(52.7%)	.180
Female	6(10.9%)	3(5.5%)	16(29.1%)	12(21.8%)	18(32.7%)	
Total	11(10%)	7(6.4%)	28(25.5%)	17(15.5%)	47(42.7%)	
Level of depression						
Male	6(10.9%)	10(18.2%)	14(25.5%)	4(7.3%)	21(38.2%)	.021
Female	8(14.5%)	6(10.9%)	25(45.5%)	8(14.5%)	8(14.5%)	
Total	14(12.7%)	16(14.5%)	39(35.5%)	12(10.9%)	29(26.4%)	

The above table presents, the association between levels of Stress, Anxiety and Depression with Gender.
The finding indicates there is significant association between levels of Stress and Depression score with Gender of participants (p=0.023 and p=0.021). but there is no association with anxiety score (p>0.180).

Table no: 4.2.6 Association between levels of Stress, Anxiety and Depression with place of stay.

	Normal	Mild	Moderate	Severe	Extremely severe	Chi-square
Level of stress						
Hostel	35(41.7%)	12(14.3%)	17(20.2%)	15(17.9%)	5(6%)	.331
Home	11(64.7%)	2(11.8%)	3(17.6%)	1(5.9%)	0(0%)	
PG	3(33.3%)	2(22.2%)	4(44.4%)	0(0%)	0(0%)	
Total	49(44.5%)	16(14.5%)	24(21.8%)	16(14.5%)	5(4.5%)	
Level of anxiety						
Hostel	8(9.5%)	6(7.1%)	19(22.6%)	13(15.5%)	38(45.2%)	.550
Home	3(17.6%)	1(5.9%)	7(41.2%)	2(11.8%)	4(23.5%)	
PG	0(0%)	0(0%)	2(22.2%)	2(22.2%)	5(55.6%)	
Total	11(10%)	7(6.4%)	28(25.5%)	17(15.5%)	47(42.7%)	
Level of depression						
Hostel	10(11.9%)	13(15.5%)	29(34.5%)	8(9.5%)	24(28.6%)	.398
Home	3(17.6%)	2(11.8%)	7(41.2%)	4(23.5%)	1(5.9%)	
PG	1(11.1%)	1(11.1%)	3(33.3%)	0(0%)	4(44.4%)	
Total	14(12.7%)	16(14.5%)	39(35.5%)	12(10.9%)	29(26.4%)	

The above table presents, the association between levels of Stress, Anxiety and Depression with Place of stay.
The findings indicate there is no significant association between levels of Stress, Anxiety and Depression score with place of stay of participants.

Table no: 4.2.8 Association between levels of Stress, Anxiety and Depression with selection of MBBS.

	Normal	Mild	Moderate	Severe	Extremely severe	Chi-square
Level of stress						
Self interest	44(45.8%)	13(13.5%)	19(19.8%)	15(15.6%)	5(5.2%)	.518
Parents pressure	2(25%)	1(12.5%)	4(50%)	1(12.5%)	0(0%)	
Other	3(33.3%)	2(22.2%)	1(16.7%)	0(0%)	0(0%)	
Total	49(44.5%)	16(14.5%)	24(21.8%)	16(14.5%)	5(4.5%)	
Level of anxiety						
Self interest	11(11.5%)	5(5.2%)	25(26%)	16(16.7%)	39(40.6%)	.698
Parents pressure	0(0%)	1(12.5%)	2(25%)	1(12.5%)	4(50%)	
Other	0(0%)	1(16.7%)	1(16.7%)	0(0%)	4(66.7%)	
Total	11(10%)	7(6.4%)	28(25.5%)	17(15.5%)	47(42.7%)	
Level of depression						
Self interest	13(13.5%)	15(15.6%)	34(35.4%)	8(8.3%)	26(27.1%)	.116
Parents pressure	0(0%)	1(12.5%)	1(12.5%)	3(37.5%)	3(37.5%)	
Other	1(16.7%)	0(0%)	4(66.7%)	1(16.7%)	0(0%)	
Total	14(12.7%)	16(14.5%)	39(35.5%)	12(10.9%)	29(26.4%)	

The above table presents, the association between levels of Stress, Anxiety and Depression with Selection of MBBS.
The findings indicate there is no significant association between levels of Stress, Anxiety and Depression score with Selection of MBBS of participants.

Table no: 4.2.9 Association between levels of Stress, Anxiety and Depression with Family monthly income

Level of stress						
	Normal	**Mild**	**Moderate**	**Severe**	**Extremely severe**	**Chi-square**
Below 2 lakhs	27(38.6%)	11(15.7%)	11(15.7%)	16(22.9%)	5(7.1%)	.008
2-5 lakhs	18(51.4%)	4(11.4%)	13(37.1%)	0(0%)	0(0%)	
Above 5 lakhs	4(80%)	1(20%)	0(0%)	0(0%)	0(0%)	
Total	49(44.5%)	16(14.5%)	24(21.8%)	16(14.5%)	5(4.5%)	
Level of anxiety						
Below 2 lakhs	6(8.6%)	2(2.9%)	18(25.7%)	13(18.6%)	31(44.3%)	.016
2-5 lakhs	3(8.6%)	3(8.6%)	10(28.6%)	4(11.4%)	15(42.9%)	
Above 5 lakhs	2(40%)	2(40%)	0(0%)	0(0%)	1(20%)	
Total	11(10%)	7(6.4%)	28(25.5%)	17(15.5%)	47(42.7%)	
Level of depression						
Below 2 lakhs	7(10%)	8(11.4%)	24(34.3%)	7(10%)	24(34.3%)	.020
2-5 lakhs	4(11.4%)	7(20%)	15(42.9%)	4(11.4%)	5(14.3%)	
Above 5 lakhs	3(60%)	1(20%)	0(0%)	1(20%)	0(0%)	
Total	14(12.7%)	16(14.5%)	39(35.5%)	12(10.9%)	29(26.4%)	

The above table presents, the association between levels of Stress, Anxiety and Depression with Family monthly income.
The findings indicate that there is significant association between levels of Stress, Anxiety and Depression score with income of the family of participants (p=0.008, p=0.016, p=0.020).

DISCUSSIONS

This finding is significant as compared to a similar study on Stress, Anxiety, and Depression among Medical Undergraduate Students and their Coping Strategies conducted in Ethiopia. The prevalence rates of depression, anxiety, and stress were 52.3%, 60.8%, and 40.4%, respectively. The proportion of respondents who had extremely severe symptoms of depression, anxiety, and stress was 6.2%, 16.2%, and 2.3%, respectively.[16]
A study was conducted in Egypt on the topic prevalence of psychological stress, depression and anxiety among medical students indicated high frequencies of depression (65%), anxiety (73%) and stress (59.9%).[21]
Another study on depression, anxiety, and stress among private medical students in Telangana Andhra Pradesh shown 58.2%, 68.7%, and 35.3%, respectively. The most common was moderate grade of depression (30.7%), severe anxiety (39.6%), and moderate stress (15.8%).[17]
Another study conducted in two medical college students in Karachi reported that overall, 57.6% of the students suffered from moderate to extremely severe depression, 74% of the students suffered from moderate to extremely severe anxiety, and 57.7% students had moderate to extremely severe stress.[27]
A study was conducted to assess the Prevalence of Stress, Anxiety and Depression among Medical Undergraduate Students of Kashmir found that prevalence of depression, anxiety and stress was 40%,50% and 37.5% respectively.[28]

Conclusion:

According to the study findings the medical students faced mild to severe level of depression, anxiety and stress. But the stress is lesser as compared to depression and anxiety levels. This profession is highly demanding and requires utmost focus and expertise. There is a desperate need to take measures to enhance the mental health of medical students who will be the future lifesavers. There was no significant difference in depression, anxiety, and stress between age groups, place of stay, academic year and course chosen by participants.
CBME curriculum which been implemented by NMC is not at all helping students in view of stress, depression or anxiety instead it contributes more towards stress and anxiety in final year as the number of subjects and exam paper to be cleared in the year got increased by new curriculum.

Suggestions and Recommendations:

- Besides stress reduction interventions, the implementation of a structured orientation program that addresses issues like expectations for each phase, how students are going to be evaluated, how to cope, and how to get through each phase smoothly were recommended.
- In addition to awareness creation, the student counsellors and student welfare officers give particular attention to students identified with stress anxiety and depression symptoms to get regular follow up sessions.
- Faculty members need to be oriented towards the psychological and emotional needs of the students so that students will get proper guidance and support during academic period.
- Quality improvement of the mentorship program will address some of the psychological and behavioural problems of the students before students get into serious problems.

- CBME curriculum seemed to be effective with regard to stress reduction but the other mental factors remain still dominant, so the overall effectiveness of implementing this curriculum can be questioned in the future as it may seem to reduce the workload of 3rd year but increased the load in the final year of MBBS curriculum.

Limitations:

- The study is limited to only one medical institution in Karnataka with 110 respondents. Therefore, the findings of the study may not be generalized.
- The tool used for the study was DASS 21 structured self-administered questionnaire. So there may be a chance that students may have filled it up causally which impact the study outcome.
- Personal bias of the participants could influence the authenticity of data.
- 2nd-year students whom all participated in this study have completed their university exam of the year so some may be confused about which year they belong to so the real contribution of 2nd-year students is debatable.

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