

## A primary try out for taking care of mental health of medical entrants

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### Abstract

**Background:** Initial exposure of the students to the Professional Institutes specifically Medical Colleges can be stressful because they can easily make students anxious while trying out to juggle school work, friends and family in order to figure out the future of their life. Most of them bounce back. Students head off to college with excitement and anticipation, a certain amount of anxiousness, stress and change in personality are expected. However for some students it can become troublesome and overwhelming.

**Aim:** The present study aims to assess stress, anxiety and personality of medical entrants.

**Objective:** The main objective is to identify initial specific behavioural characteristics among new comers when they join the medical profession in order to support them if they face difficulty.

**Material & Methods:** A sample of 40 medical entrants (2016-2017) was taken up for this study, consisting of 20 girls and 20 boys. They were administered Sinha Anxiety Scale, Stress Reaction Checklist and Eysenck Personality Questionnaire to assess their level of anxiety, stress and their personality dimensions respectively.

**Results:** The results have indicated various significant findings in relation to dimensions of personality, level of stress and anxiety.

**Implications:** The study is helpful not only to identify the student's psychological difficulties rather the measures would be taken up to handle their difficulties by providing a sustained support throughout their training.

**Keywords:** Medical Entrants, Personality, Stress, Anxiety

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### Introduction

Medical courses such as MBBS, Engineering sciences & IT are quite demanding which often lead to stress and anxiety among students. We will concentrate here on medical undergraduates who are the entrants for MBBS. The journey to become doctor often starts with the feelings of many new experiences. Some of them which are directly exposed are like new friends, new syllabus & interaction with their new teachers & some of the experiences, are expected in future so in nut shell they remain engaged throughout their training path. In this phase many psychological changes occur.

There is a growing concern about stress, anxiety and personality change in medical entrants. Students react to college in a multiple ways. For some of them, separation from their home is a cause of stress and anxiety. Besides an abrupt change from school to college, high dependence on their teachers, fear of academic failure, drop-outs and unwillingness to visit mental health professionals either because of ignorance or stigma are marked.

### Review

Studies have observed that medical students experience a high incidence of personal distress during their undergraduate course. High levels of stress may have a negative effect on mastery of their academic curriculum. Stress, health and emotional problems increase during the period of their medical education.

This can lead to mental distress and has a negative impact on cognitive functioning and learning too.<sup>(1)</sup>

Meit et. al.<sup>(2)</sup> conducted a research on personality profiles of new male and female medical students. His study revealed distinct personality differences between male and female medical students. Female medical students tested as being more warm and outgoing (Warmth), more dutiful (Rule-Consciousness), more sensitive (Sensitivity), more self-doubting and worried (Apprehension), more organized and self-disciplined (Perfectionism), and more tensed and driven (Tension) than their male counterparts. On the other hand, male medical students appear to be more adaptive and mature (Emotional Stability), more forceful and assertive (Dominance), more suspicious and skeptical (Vigilance), more imaginative and idea-oriented (Abstractedness), more private and discreet (Privacy) than female medical students. Abdulghani. H M<sup>(3)</sup> examined stress and depression in medical students. This study is conducted to determine prevalence of stress among undergraduate medical students and to observe an association between stress and academic year, grades, regularity and physical problems. It was noted that high level of psychosocial distress was found in the students during the initial three years of their course. The prevalence of stress was higher (74.2%) in first year of study followed by second year (69.8%), third year (48.6%), fourth year (30.4%) and 49% was observed in fifth year of the study. There is statistically high significant association between the year of study

subjects and the stress levels. As the year of study was increasing, the prevalence of stress was decreasing.

Another research was conducted by Singh & Jha<sup>(4)</sup> on "Anxiety, Optimism and Academic Achievement among Students of Private Medical and Engineering Colleges:" A Comparative Study. The study reveals that of total participants, 46% students had high level of anxiety and in case of medical students it was still higher (56 %) as compared to the students of humanities stream. Iqbal<sup>5</sup> in the year of 2015 conducted a study on "stress, anxiety & depression among medical undergraduate students & their socio-demographic correlates". It was found that more than half of the respondents were affected by depression (51.3%), anxiety (66.9%) and stress (53%) revealing a neglected area of the students' psychology requiring urgent attention.

### Materials and Methods

The study was initiated to identify initial specific behavioural characteristics among new comers when they join the medical profession in order to support them if they face difficulty. The current research was done to assess the stress, anxiety and personality of medical entrants. For this purposes, 40 entrants were selected randomly & basing upon their willingness in which 20 were males and 20 were females. For this study, Sinha Anxiety Scale (SAS), Stress Reaction Checklist (SRC) and Eyesenck Personality Questionnaire (EPQ) were administered students. MBBS first year medical entrants were included and those students who were not willing to participate were excluded. All included students were required to fill up the consent form. Statistically Mean, Standard

Deviation & Correlation by Carl Pearson's method of Medical were calculated for the analysis.

### Results

The analysis was started with male students (ref: Table 1, Histogram 1, 2, 3) The group wise analysis reveals that students are intended towards Psychoticism & gender wise analysis indicates that males are a bit more inclined towards Psychoticism while females are intended more towards Neuroticism. The overall analysis reflects that both the groups are carrying the dimensions of psychoticism & neuroticism but their score is not at all objectionable because at present they are maintaining their cool. Various studies have reported that professional achievement is positively correlated with mild neuroticism.<sup>(6)</sup> Yes of course their intenseness towards Psychoticism in future may make them to catch some psychological stress as they seem to be little vulnerable due to this dimension provided they carry the related traits in personality. Even if they carry the same they must carry the similar potential of coping skills which will keep them guarded to stress.

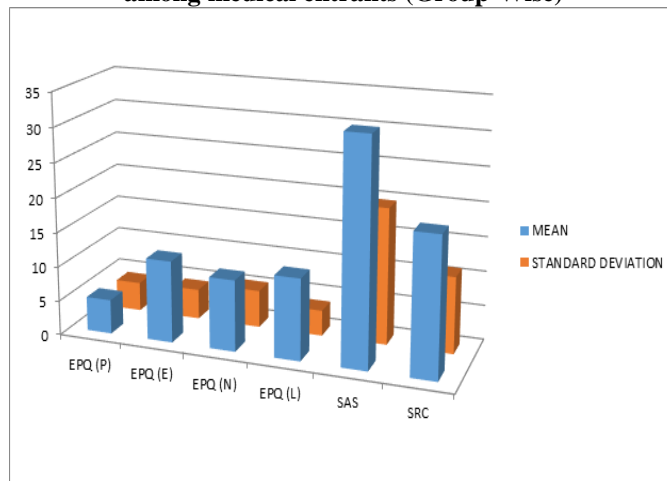
As far as the anxiety level is concerned findings have reflected that the entire group mild anxiety where male are little more anxious. This much of anxiety is advisable for better achievement more some present variable for new situations are also working so it is genuine but it should exceed more than this preferably among male students.

Table 1 indicates the group as a whole is mildly stressed & gender wise that males are moderately stressed while females are mildly stressed. These finding referring the same safe guards as have been reported above.

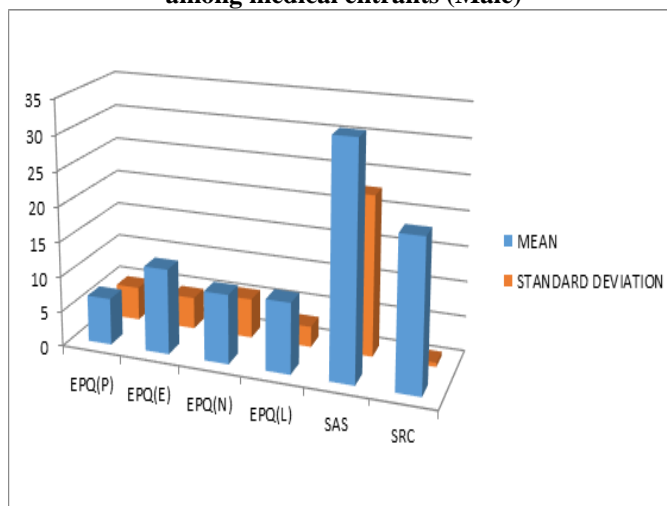
**Table 1: Mean with standard deviation between personality dimensions with anxiety and level of stress among medical entrants**

Group of MBBS I <sup>st</sup> Year	EPQ (P)	EPQ (E)	EPQ (N)	EPQ (L)	Sinha's Anxiety Scale (SAS)	Stress Reaction Checklist (SRC)
Group	4.95 + 4.20	11.80 + 4.35	10.27 + 5.40	11.73 + 3.70	32.27 + 19.68	20 + 11.04
Male	6.65 + 4.82	12.1 + 4.55	9.8 + 5.63	10 + 2.93	32.95 + 22.73	21.25 + 14.02
Female	3.33 + 2.74	11.52 + 4.24	10.71 + 5.25	13.38 + 3.63	31.61 + 16.81	18.80 + 7.36

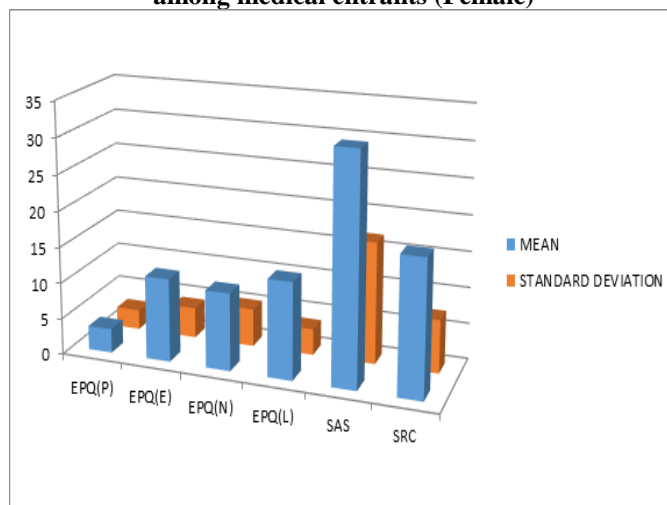
**Histogram 1: Mean with standard deviation between personality dimensions with anxiety and level of stress among medical entrants (Group-Wise)**



**Histogram 2: Mean with standard deviation between personality dimensions with anxiety and level of stress among medical entrants (Male)**



**Histogram 3: Mean with standard deviation between personality dimensions with anxiety and level of stress among medical entrants (Female)**



**Table 2: Correlation personality dimensions with anxiety and level of stress among medical entrants (Group)**

Group of MBBS 1 <sup>st</sup> Year	Psychoticism	Extraversion	Neuroticism	Lie Scale	Anxiety	Stress
Correlation of p with SAS	0.212					
Correlation of E with SAS		-0.154				
Correlation of N with SAS			0.833			
Correlation of L with SAS				-0.188		
Correlation of P with SRC	0.214					
Correlation of E with SRC		-0.205				
Correlation of N with SRC			0.58			
Correlation of L with SRC				-0.135		
Correlation of SRC with SAS					0.686	

We have also calculated correlation between dimensions of personality (P, E, N, and L) (Psychoticism, Extraversion vs Introversion, Neuroticism & Lie-Scale respectively) and other two psychological variables like level of anxiety and stress. These findings are indicated in Table 2. Group as a whole, it is founded that there is a positive correlation between neuroticism and anxiety as well as with level of stress.

**Table 3: Correlation(CORR) of personality dimensions with anxiety and level of stress among medical entrants (gender Wise)**

	CORR of P with SRC	CORR of E with SRC	CORR of N with SRC	CORR of L with SRC	CORR of P with SAS	CORR of E with SAS	CORR of N with SAS	CORR of L with SAS	CORR of SAS with SRC
Male	0.27	-0.40	0.56	-0.01	0.37	-0.37	0.85	-0.12	0.67
Female	-0.12	0.11	0.72	-0.23	-0.19	0.12	0.82	-0.29	0.72

Gender wise correlation of personality dimensions with level of stress and anxiety are also calculated. Table 3 indicates that in both males and females, there is a positive correlation between neuroticism and stress which means if the tendency of neuroticism will increase then stress will also increase & we can put it other way round means if neuroticism in behaviour is strengthening then certainly they will more stressed.

There is also a positive correlation of neuroticism with level of anxiety. This positive correlation means that if the level of stress grows up then level of anxiety in a person will also grow up.

### Discussion

Professional education especially medical one is highly stressing due to heavy syllabus & clinical work & certain personality variables make the person prone to catch stress. The above analysis shows that if the level of anxiety will be more because of carrying neurotic dimensions they will be experiencing more level of stress and anxious state. To some extent their worry will be considered normal and achievement oriented. But since they are carrying psychotic dimensions also in their system, which may make them to be disturbed more while facing study stress. But in our day to day life apart from study stress other variables also exert their effect in our general well-being as well as career wellbeing. So this study is giving us a future direction that these students must be supported by their teachers as & when they need. This is the way of the development of support system to handle the student's career softly.

### References

- Dahlin M, Joneborg N, Runeson B. Stress and depression among medical students: a cross-sectional study. *Med Educ* 2005;39:594-604.
- Meit S, Borges N, Larry A. Personality Profiles of Incoming Male and Female Medical Students: Results of a Multi-Site 9-Year Study. *Med Educ* 2007;12:1-6.
- Hamza Mohammad Abdulghani. Stress and depression among medical students: A cross sectional study at a medical college in Saudi Arabia. *Pakistan J Med Sci* 2008; 1.
- Singh I, Jha A. Anxiety, Optimism and Academic Achievement among Students of Private Medical Engineering Colleges: A Comparative Study, Department of Management Studies, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, India. April 7, 2013 Online Published: April 16, 2013.
- Iqbal S, Gupta S. Stress, Anxiety & Depression among Medical Undergraduate Students & their Socio-Demographic Correlates. *Indian J Med Res* 2015;141:354-357.
- Eysenck, H. J., & Eysenck, S. B. G. (1975). *Manual of the Eysenck Personality Questionnaire (Junior and Adult)*. Kent, UK: Hodder & Stoughton.
- Bhagat V, Nayak R, Neuroticism and Academic Performance of Medical Students. *International Journal of Humanities and Social Science Invention* 2014;3(1);51-55.

