

Original Research Article

Assessment of factors causing stress among medical students: A cross sectional study

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Abstract

Background: Stress is defined as the body's nonspecific response or reaction to demands made on it, or to disturbing events in the environment. Medical field is considered as one of the most difficult and challenging profession. This study aims to determine levels of stress in final year medical students. **Methods:** A web based cross sectional study, including final year (2017) medical students of tertiary care hospital at C.G. was conducted using MSSQ-40, a standardized test for determining medical student stress levels. All students from final year were briefed about the study objectives. There are total of 150 students in 2017 batch. The study was conducted in June march 2020. Total of 143 students were included for the study. **Results and conclusions:** Academic related stressor (ARS) received the highest score (3.27 mean score) followed by GARS (2.94 mean score) and IRS (2.81 mean score). Proper planning for self-study, seeking help from mentors in helping to plan time table. Developing peer learning, communication skills to avoid any conflicts.

Keywords: Stress, Medical Students, academics

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Introduction

Stress is a normal reaction that the body has when changes occur, resulting in physical, emotional and intellectual responses.

Stress is defined as the body's nonspecific response or reaction to demands made on it, or to disturbing events in the environment[1,2].

The flight or fight response helps the body face stressful situations.

Medical field is considered to be one of the most difficult and challenging profession.

Students have to complete and successfully clear a period of almost five years which includes comprehensive and difficult subjects to receive the degree. Many factors add up to this existing stress like examination fear, peer pressure, lack of personal life etc[3].

Chronic stress leads to many untoward side effects. Depression, suicide is observed in many medical students, which is matter of concern[4].

If appropriate corrective measures are applied timely, many effects of stress can be avoided.

Therefore, we wanted to study some factors causing stress among medical students and suggest some recommendations.

Methods and materials

We conducted a web based cross sectional study, including final year (2017) medical students of tertiary care hospital at C.G. All students from final year were briefed about the study objectives.

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There are total of 150 students in 2017 batch. Amongst these 7 did not give consent for the study and therefore excluded.

The study was conducted in June march 2020.

Total of 143 students were included for the study.

We used MSSQ-40 as study tool[5]. It consists of 40 items addressing six stress domains.

The SSQ grouped stressors into six domains, each based on a common underlying theme:

1. Academic related stressors (ARS)
2. Intrapersonal and interpersonal related stressors (IRS)
3. Teaching and learning-related stressors (TLRS)
4. Social related stressors (SRS)
5. Drive and desire related stressors (DRS)
6. Group activities related stressors (GARS)

Having a high score in a particular stressor group generally indicates that you perceive events, conditions or situations from that particular group as causing you stress.

Participants responded to each item using a five-point Likert scale (0–4) reflecting an increasing level of severity in stress from no stress (0) to severe stress (4). All items encompassing the six stressor domains were collated to measure the overall stress experienced by the medical students.

Data was entered and analysed using MS Excel 2019

Results

Table 1 Gender distribution of study participant

| Final year medical students | Number |
|-----------------------------|--------|
| Male | 75 |
| Female | 68 |
| Total | 143 |

Table 2 Factors scoring highest within the stressor categories

| Sr. No. | Stressor | Factors with highest score | Mean score |
|---------|---|--|------------|
| 1 | Academic-related stressor (ARS) | Large amount of content to be learned | 3.27 |
| | | Frequent examination | 3.19 |
| 2 | Intrapersonal and interpersonal- related stressor (IRS) | Conflicts with other students | 2.81 |
| | | Conflicts with teachers | 2.13 |
| 3 | Teaching and learning related stressors (TLRS) | Lack of guidance from teachers | 2.16 |
| | | Uncertainty of what is expected from him/her | 2.02 |
| 4 | Social-related stressors (SRS) | Frequently interruption of my work by others | 1.96 |
| | | Lack of time for family and friends | 1.95 |
| 5 | Drive and desire related stressors (DDRS) | Parental wish for you to study medicine | 1.86 |
| 6 | Group activity related stressor (GARS) | Feeling of incompetence | 2.94 |
| | | Need to do well (Imposed by others) | 2.33 |

*A score above 2.0 indicates high stress likely to induce emotional disturbance that interferes with students' daily lives.

Discussion

In our study academic related stressor (ARS) received the highest score (3.27 mean score). Factors in ARS included poor marks in examinations, the need to do well in examinations, large amounts of content to be learned, not understanding what to learn first, poor timetabling and unskilled teachers have been identified as being among the causes of this stress. Similar findings were observed in other studies also[6,7,8].

This is true since being final year students, they need to review and remember all the clinical major as well as pre-clinical subjects to clear the examination. The content is vast and takes a really meticulous planning of self-study to achieve completion of all subjects.

Second highest score was for GARS (2.94 mean score) and IRS (2.81 mean score)

This holds true, since in final year students are posted in clinical postings where they have to deal with patients, the actual clinical experience and its difficulties are faced in this duration and they should develop good communications skills, team and learning skills to get success.

Similar findings were observed in other studies also[9,10].

Conclusion

Academic related stress remains to be major factor of stress amongst medical students. Proper planning for self-study, seeking help from mentors in helping to plan time table. Developing peer learning, communication skills to avoid any conflicts.

And seeking prompt help whenever feel overburdened and stressed from mentors.

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