

A report on stress among first year students in an Indian medical school

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Abstract

Stress is common in medical students. However, studies on stress among students in Indian medical schools are very few. The present study was undertaken to determine the prevalence and sources of stress among first year Malaysian students at Melaka Manipal Medical College (MMMC), (Manipal Campus), India. The General Health Questionnaire (GHQ) was used as the screening instrument. Based on the score, the prevalence of emotional disorders was determined. The sources of stress in students were identified by asking them to respond to a questionnaire which had items categorized under academic and non-academic problems. It was found that the prevalence of stress among the students was 37.3%. Among the sources of stress, frequent examinations and information overload were found to be the greatest sources of stress among academic problems. Among nonacademic problems, limited time for recreation and home-sickness were found to be the greatest sources of stress. The present study revealed that academic problems were greater sources of stress in first year medical students compared to non-academic problems. The study provided scope for adopting strategies intended to reduce students' stress.

Introduction

The Bachelor of Medicine and Bachelor of Surgery (MBBS) course in India is demanding as far as students' efforts are concerned. It has been observed that medical school environments in India are extremely stressful and has lead to suicide and 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.

Studies have proved that compared to the general population, medical students are the most distressed students (Lloyd & Gartrell, 1984). In the Indian scenario, too much content is delivered in a short span of time. In addition to that, students are required to undertake too many examinations. Stress can lead to social insecurity as well as poor academic performance. A pub-med search on stress among medical students in India revealed only one study report (Supe, 1998). This indicates the importance of such studies in the Indian scenario. Melaka Manipal Medical College (MMMC) (Manipal Campus) offers the MBBS programme in two campuses. The first two and a half years study is based in Manipal and the remaining in Malaysia. 98% of the students are from Malaysia and the rest are from Seychelles, Canada, Australia and Sri Lanka. The present study was undertaken with the following objectives:

1. To determine the prevalence of stress in first year medical students at MMMC
2. To explore the sources of stress in these students

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Methodology

First year students (n=125) of MMMC were invited to participate in the study. The General Health Questionnaire (GHQ) which consisted of 12 questions was used as the screening instrument. Each of the 12 questions had 4 responses and the responses were scored 0-0-1-1. The total

score was obtained by adding the scores of the individual scores. Scores of 4 and above were considered to be positive for emotional disorders. The data was analyzed using SPSS. Sources of stress were identified by asking the students to respond to a questionnaire which had items grouped under academic and non-academic problems (table 1).

Table 1: Questionnaire on students' sources of stress

Kindly read the following statements and indicate your response by encircling either Yes or No.

Academic problems

I find difficulty

In following the teaching language	Yes	No
With the amount of information to be learnt	Yes	No
With competition for marks	Yes	No
With frequent examinations	Yes	No
With long hours of academic work (8.00am to 5.00pm)	Yes	No
In communicating with/approaching the staff	Yes	No
With the workload	Yes	No

Non-academic problems

I find difficulty

With my accommodation (living conditions)	Yes	No
In staying with my room-mates	Yes	No
In making friends	Yes	No
In finding time for recreation	Yes	No
With my health conditions	Yes	No
In adjusting with my girl friend/boy friend	Yes	No
In being away from home	Yes	No
With financial problems	Yes	No

Results

Out of 125 students, 115 returned the completed questionnaire indicating a response rate of 92%. The prevalence of emotional disorders among the students was 37.3%. Among the sources of stress in the academic category, 91.6% of the students had difficulty in keeping pace with the amount of information that has to be mastered. 76.6% of the students felt that the workload is too much and 64% of the students had difficulty in adjusting to the long hours of academic work. For 52.5% of the students, competition for good grades was also a source of stress. Only

12.5% of the students felt that they had difficulty in following the teaching language and in approaching the faculty staff. Among the non-academic problems, 56.6% of the students stated that they didn't have time for recreation and 26.6% felt home-sick. 25.8% felt that they find difficulty in adjusting with their girl friend/boyfriend and 22.5% seemed to be having problems with their health. 20.8%, 15.8% 14.16% and 11.6% of students found difficulty with their accommodation, room-mates, financial matters and in making friends respectively. The other sources of stress identified by the students are summarized in table 2.

Table 2: Other sources of stress identified by the students

- Problem-Based Learning sessions
- Self-Directed Learning (SDL) sessions
- Long hour of academic work, less time to study, lack of sleep
- Compete with time to achieve my daily goals
- I don't see myself learning what I want to learn due to examination preparation. I don't feel like I am in medical school, it's as if I am still in A- levels, learn just to pass exams!
- Slow to catch up and this adds to the workload
- To cope up with family expectations
- Slow in understanding when compared with classmates
- Percentage of attendance is too high
- Worrying about not getting through first year
- Missing guidance from parents sometimes
- Time management
- Dealing with attitudes of people
- Making decisions
- Can't find a study group
- Bad food
- Not interested in medicine
- Cannot express emotions
- Friends not talking

Discussion

The present study confirmed the general impression that stress is common in medical schools. In the present study, the prevalence of emotional disorders was found to be 37.3%. This is much lower when compared to studies conducted in Malaysia (Sidik *et al.*, 2003) and Singapore (Ko *et al.*, 1999) wherein the prevalence were 41.9% and 57% respectively. Another study in the US (Mosley *et al.*, 1994) revealed a prevalence rate of 57%. The findings of the present study correspond to the findings in a study conducted in Malaysian students by Sherina *et al.* (2003) in that the greatest source of stress was examinations. In MMMC, first year students have to undertake repeated summative examinations in three subjects; anatomy, physiology and biochemistry. Academic hours are from 8.00 am to 5 pm for five days (including two hours of break in between) and 8.00am to 11.30 am on Saturday. The attendance requirement for the students to undertake the university

examination is 90%. So, there is literally no time for students for recreation.

Nevertheless, the institution offers mentorship programme wherein a faculty member guides a group of 10-12 students. The faculty provides support and guidance in both the academic and non-academic matters of the students. Also, Personal and Professional Development (PPD) classes are taken for the students for better personal and professional growth. These could be the reasons for the lower prevalence of emotional disorders in our students compared to the studies conducted in Malaysia, Singapore and US. It was encouraging to find that only a small group of students (12.5%) found difficulty in following the teaching language and approaching the teachers. That indicates the strong student-teacher relationship in MMMC. However the study revealed areas of concern regarding information overload and the frequency of summative examinations.

Conclusion

The present study reports the prevalence of emotional disorders and sources of stress in first year Malaysian students in an Indian medical school. It revealed that academic problems were greater sources of stress in first year medical students compared to non-academic problems. The study provided scope for adopting strategies intended to reduce students' stress.

Notes on contributors

Dr. Reem conceived the study and was involved in conducting the study, data analysis and writing the article. Eva, Elaine, Gan Ning Xin, and Jennie were involved in conducting the study, data analysis and in contributing to the final version of the article.

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