Study of stress and depression in first year medical student and sources of stress among them

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Abstract Background: Medical education is recognized as stressful environment that often leads to negative consequences on the academic performance, physical health and psychological wellbeing of the student. High rates of stress are well documented in medical students. This study reports the level of stress, depression and evaluation of sources of stress among first year students. Objectives: 1) To determine levels of stress and depression among first year medical students. 2)To explore the sources of stress in these students. Materials and Methods: In this cross sectional study, 300 first year medical student were invited to participate voluntarily. General Health Questionnaire (GHQ), Beck's Depression Inventory, were used for screening stress and depression respectively. Results: Among 300 students responded to questionnaire, 132 were females and 168 males. 46.3% (128) had stress and 26.1% (78) had depression. 59.09% of females and 45.49% of males had stress similarly 31.81% of females and 21.42% of males had depression, the difference was not significant. Stress was found high for amount of information to be learnt followed by long hours of academic work. Other problems were difficulty in understanding the teaching language, high work load, communication difficulty with teaching staff. Non-academic problems were home-sickness, no time for recreation, non-adjustment with roommates. Conclusion: In present study, the prevalence of psychological stress and depression was high. Female students were more prone to develop stress and depression. Early identification and appropriate intervention is a must before it could lead to psychological morbidity. Keywords: stress, depression.

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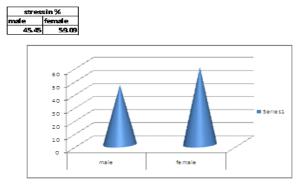


INTRODUCTION

For nearly half a century, stress in medical field has been a topic of concern. Medical education is recognized as a stressful environment that often leads to negative consequences on the academic performance, physical health and psychological wellbeing of the student. Medical course is demanding as far as student's efforts are concerned. It is therefore, important to examine mental health of today's medical student, as they are tomorrows health care professionals. Psychological distress has ramifications in the behavioural, cognitive and emotional areas of the student's life, such as academic functioning, decreased empathy for patients and drug use. The high suicide rate among physicians may reflect the consequence of untreated depression. Since depression among medical students has such an obvious negative effect on functioning in medical college and later in clinical practice, it is important to focus on the extent and severity of the problem, its causes and potential factors that may alleviate or protect against the phenomenon. The purpose of this study is to report the level of stress, depression and evaluation of sources of stress among first year students. To determine levels of stress and depression among first year medical students. To explore the sources of stress in these student. Another questionnaire the Beck Depression Inventory (BDI) was also used to screen for depression in the respondents'. The validated questionnaire consisted of 21 questions. Scores of 11 and above were considered to be positive for depression. Sources of stress was identified by asking the student to answer the questions indicating academic and non-academic problems. Student were informed about the nature of study, all the questionnaire were given to student simultaneously, and were taken back immediately after filling. They are instructed not to discuss question and answers among themselves. The information is kept confidential. Scoring done and percentages of stress and

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depression were calculated depending upon scores. Among 300 students 132 were females and 168 were males. Mean age is 18.11 yrs.(17-21 yrs)46.3% i.e. 128 students were found to have stress among these 59.09% i.e. 78 were females and 45.45% i.e. 50 were males.



46.3% i.e. 128 students were found to have stress among these 59.09% i.e. 78 were females and 45.45% i.e. 50 were males. Similarly % of students having depression was 26.12% i.e. 78 students. Among these female was 31.81% (42) and 21.42% (36) males. Gender difference was not significant. Among the sources of stress in the academic category, 90.01% of the students had difficulty in keeping pace with the amount of information that has to be mastered. 62.6% of the students felt that the workload is too much and 70.25% of the students had difficulty in adjusting to the long hours of academic work. . Only15.54% of the students felt that they had difficulty in following the teaching language and in approaching the faculty staff. competition for good grades was also a source of stress. Among the non-academic problems, 50.6% of the students stated that they didn't have time for recreation and 30.6% felt home-sick. and 22.5% seemed to be having problems with their health. The other sources of stress identified were, students found difficulty with their accommodation, room-mates, financial matters and in making friends. The present study confirmed the general impression that stress and depression is common in medical student. In the present study, prevalence of stress found to be 46.3%. This is much lower when compared to studies conducted in Singapore (Ko et al., 1999) wherein the prevalence was 57%, and higher when compared to studies conducted in Malaysia (Sidik et al., 2003) wherein the prevalence was

41.9%. The findings of the present study correspond to the findings in a study conducted in Malaysian students by Reem Rachel Abraham et al. (2009) in that information overload were found to be the greatest sources of stress among academic problems. Academic hours are from 9.00 am to 5 pm including one hour of break in between on all days except Sunday. The attendance requirement for the students to undertake the university examination is 90%, So, there is literally no time for students for recreation. It was encouraging to find that only a small group of students found difficulty in following the teaching language and approaching the teachers. That indicates the strong student-teacher relationship. In present study, the prevalence of psychological stress and depression was high among medical students. Female students were more prone to develop stress and depression. 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. Early identification and appropriate intervention is a must before it could lead to psychological morbidity.

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