

## Original research article

### A cross-sectional study on stress among first-year medical students in Medical College in Kashmir.

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#### Abstract

**Background:** Studying medicine is one of the most challenging tasks in the medical college. A medical degree is considered one of the toughest degrees in the world, so stress is common in medical students. The undue stress has undesirable effects on the health of students. **Aim:** The present study is aimed to evaluate different stress factors among first-year MBBS students. **Material methods:** 128 First-year MBBS students of SKIMS Medical College, Bemina, Srinagar J&K, during the first year were asked to complete pre-tested and pre-designed questionnaires that included a list of sources of stress. **Results:** According to the questions asked to the students, the most common stress factors reported by students were feeling successful at the time of exam (65.43 %), parental pressure in compulsion for students to study medicine (60.87 %), need to do well imposed by other (55.75%) difficulty coping with studies (47.82%), in adjusting away from home (36.82%) health issues (30.60%) socio economic, accommodation / hostel problems (27.65%), poor performances (20.63%), lack of facilities in college (15.50%), lack of time for preparation (10.21%). **Conclusion:** Medical students have stressful life. There is need to intervene to prevent stress in medical education which can be done by counselling of students.

**Key Words:** Stress, Medical Students, Counselling .

**Introduction:** A medical degree (MBBS) is considered one of the toughest degrees among the various courses worldwide. Most of the people think that medical education is only about clearing the entrance exam and getting admission to MBBS. But the reality is too far different. Clearing the entrance exam is the beginning of the life of a medical student. Medical education is highly stressful and is process-oriented.<sup>1</sup> There are multiple precipitating factors for stress in medical students, which include long-term duration of training, continuous evaluation and competition among the students.<sup>1</sup> Hans Selye, an endocrinologist, was the one who coined the term "stress" in the 1930s <sup>2</sup>. Stress results when persons' environment transactions lead the individual to perceive a discrepancy between the demands of a situation and the resources of person's psychological, biological, or social systems.<sup>3</sup> The minor amount of stress is necessary to spark a healthy competitive spirit, but the highly stressful environment has the undesirable effect on students.<sup>4</sup> Stress in addition to academics affects the life of students. Stress can cause

sleep problems, anxiety, alcohol and drug abuse.<sup>5</sup> It can also lead to depression which if untreated can lead to suicidal attempts.

**Aim:** The present study is aimed to evaluate different stress factors among first year MBBS students.

**Material & Methods:** The present cross-sectional and questionnaire-based study was conducted on first year MBBS students at SKIMS Medical College, Bemina, Srinagar. A total of 128 first year students were asked to complete a pretested and predesigned questionnaire that included a list of sources of stress shown in Figure 1.

S.No	Question	Yes( <input checked="" type="checkbox"/> )	No (×)	Other
1	Difficulty in adjusting away from home			
2	Lack of time for preparation			
3	Poor performance			
4	Difficulty coping with studies			
5	Health issues			
6	Parental pressure or compulsion for you to study			
7	Need to do well imposed by others			
8	Feeling stressful at the time of examinations			
9	Socioeconomic problems			
10	Lack of facilities in college			
11	Accommodation/ hostel problems			

**Figure 1 : Empty Questionnaire**

**Results:** A total of 128 students of first year MBBS participated in the study. All students completed and submitted the questionnaire. Out of 128 students, 56 were females which accounted for 43.75% of total students, and 72 were males which accounted for 56.25% of total students. Out of 56 female students, 22 students reported high levels of stress which accounted for 39.28%, while out of 72 male students, 24 students (33.33%) reported high levels of stress as demonstrated in Table 1 below . Thus, in our study, females were having more stress as compared to that of males.

**Table 1**

Gender	No. of students	No. of students having stress	% age of students having stress
Females	56	22	39.28
Males	72	24	33.33

Overall prevalence of stress in students was reported to be 36.26%. Among the sources of stress, the most common stress factors reported by students were feeling successful at the time of exam (65.43%), parental pressure in compulsion for students to study medicine (60.87%), need to do well imposed by other (55.75%) difficulty coping with studies (47.82%), difficulty in adjusting away from home (36.82%), health issues (30.60%) socio economic, accommodation / hostel problems (27.65%), poor performances (20.63%), lack of facilities in college (15.50%), lack of time for preparation (10.21%).

**Discussion:** Stress is very common in medical students. First year students are particularly vulnerable to struggle during their adaptation to university life. Stress along with social, emotional, physical as well as family problems may hamper the learning ability and academic performance of a student. Excessive stress can lead to course failure, voluntary withdrawal, financial costs and feeling of low self- worth. In most of medical students the performance in college and university level examination is the major stressor. The medical students always try to struggle hard to achieve their goals and this may lead to time constraints for self, families. From the present study it is confirmed that stress is common among students of 1st year MBBS. Overall prevalence of stress in our study was reported to be 36.26%. This is lower than the study conducted by Sidik et al (2003)<sup>6</sup> in Malaysia and Ko SM et al (1999)<sup>7</sup> in Singapore who found stress prevalence to be 41.9% and 57% respectively. Present study values were also found to be less than the values (57%) found by Mosley et al, 1994<sup>8</sup>. The present study was consistent with the study conducted by Abraham RR et al (2009)<sup>9</sup>, who found stress values to be 37.3% among MMMC students in India. They also found that the greater source of stress in medical students was examination.

In our study stress was found to be higher in female medical students which is consistent with the study conducted by Bazmi I et al<sup>10</sup>. In Saudi Arabia similar findings were reported by Toews J A et al<sup>11</sup>, and Vaz RF et al<sup>12</sup>, who found higher rates of stress among female medical students. Our study was not consistent with the study conducted by Cohen S et al<sup>13</sup> who found there was no significant difference in the stress levels between male and female medical students.

**Conclusion:** The present study reports the prevalence and source of stress in first year MBBS students of SKIMS Medical College Bemina, Srinagar. It was found that examination is the major source of stress among the students. The study provides scope for adopting strategies which can reduce stress. The main strategy which can reduce stress in medical education is by counselling of students.

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