Need for mentorship to improve learning in low-performers

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ABSTRACT

Background. About 15% of medical students perform poorly in examinations. This study was done to ascertain the causes for low performance and the effectiveness of counselling and advice regarding study skills in improving performance in a subsequent assessment.

Methods. Of the 353 students who appeared for the first internal assessment examination in pathology, 83 (23.5%) scored less than 30% marks. These 83 low-performers were given a questionnaire listing stress-inducing factors and academic problems; 81 filled the questionnaire. Of these, 73 attended sessions on study skills and counselling where they interacted on a one-to-one basis regarding their personal problems. Their performance was evaluated in an internal assessment 6 months later.

Results. The low-performers included 52 boys and 29 girls, 19–20 years of age. Non-academic problems contributing to low performance included language problems, problems in adjustment to life outside home, lack of self-confidence, fear of failure and worrying about the future. Academic problems included difficulty in managing study time, lack of concentration while studying, inability to retain what is studied, anxiety before examinations and inability to write an examination.

Paired t-test revealed a statistically significant improvement in the post-programme performance of the 73 students who participated in the counselling sessions (p < 0.001), while that of the 10 who did not participate in the project, showed no statistically significant difference (p = 0.54, Wilcoxon signed rank test). A majority of students felt that the sessions helped to improve their performance (average score 3.83/6.00), change their study behaviour (3.74/6.00) and change their attitude (3.46/6.00). The programme also improved their confidence and self-esteem.

Conclusion. Low-performers can benefit from tailored remedial programmes which include counselling and training in stress-coping strategies.


INTRODUCTION

Academic and non-academic problems can result in low performance in medical students.1 If low-performers do not receive timely help and support, their performance falls further and they may drop out of the medical course. I had observed that about 15% of students perform poorly in examinations. I aimed to ascertain the cause of low performance of medical students and to help tackle their non-academic and academic problems through counselling sessions and instructions on study skills, respectively. I also aimed to find out whether this approach was effective.

METHODS

Low-performers from three consecutive batches of second professional MBBS students were included, after obtaining their written consent. A questionnaire including demographic and personal information, stress-inducing factors and academic problems, was prepared and validated by six senior faculty members.

The first internal assessment in pathology was conducted about 6 months after the students entered the second phase of the MBBS course. Those students who scored <30% (pass mark was 50%) were identified. This cut-off was used because those who scored <30% at the first test needed to score ≥60% in each of the remaining two tests, to get an average pass mark.

Of the 335 students who appeared for the internal assessment (from the three batches together), 83 (23.5%) scored <30% marks. These 83 students were informed about the study, told that participation was voluntary and non-participation would have no bearing on the subsequent examinations. They were assured of strict confidentiality and explained the possible benefits of the intervention. Eighty-one students agreed to participate and filled the questionnaire. However, only 73 participated in the study skill and counselling sessions.

The session on study skills was conducted a month after the internal assessment and emphasized listening and taking notes in class, time management, study practices, concentration, recall, test anxiety and method of answering questions. In the following 6 months, these students were counselled regarding their academic and non-academic problems. The students were introduced to various stress-coping strategies. Identical sessions were held for all three batches to maintain uniformity and ensure reliability of the results. The students maintained a log book to enter their personal experiences, thoughts and progress. I did not feel the necessity to involve a professional counsellor/psychiatrist in the counselling process.

The second internal assessment was conducted 6 months after the first assessment, taking care to maintain the same difficulty level. The performance of the students was evaluated by an examiner unaware of which candidates had participated in the above-mentioned sessions. A post-programme questionnaire was administered to the 73 students who participated in the counselling sessions to assess whether the intervention was of any benefit.

Analysis of the data was done using the Statistical Package for the Social Sciences (SPSS) version 11. The paired t-test was used to compare pre- and post-programme performance of the 73 students who participated in the counselling sessions. The pre- and post-programme performance of the 10 low-performers who did not participate in the project was compared using Wilcoxon signed rank test.

RESULTS

Of the 81 low-performers who filled up the questionnaire 52 were boys; all came from good socioeconomic backgrounds. 50 (61.7%) had their schooling in a medium other than English, all had scored well in the pre-university examination and had high ranks in the entrance test for the MBBS course. Seventy-two of the 81 (88.9%) had passed their 1 year MBBS examination at the first attempt,
4 (4.9%) at the second attempt and 5 (6.2%) at the third attempt; 69 (85.2%) had joined the course by choice, while 12 (14.8%) had been forced by parents/friends; 53 (65.4%) were outstation students. The academic and non-academic problems identified by the low-performers are listed in Table I.

There was a statistically significant improvement in the performance of the 73 students who participated in the counselling sessions (p<0.001), while there was no difference (p=0.53) in the performance of those (10) who did not participate in the project. However, 8 of these 10 students did score higher marks in the second assessment compared to the first assessment.

Of the 73 students, 54 (74%) felt that 1–2 hours should be allotted for such counselling sessions every week. Many students (40/73; 54.8%) felt that the programme gave them more confidence and motivated them to perform better. However, 8 of 73 students (11%) felt depressed as only low-performers were included in the study. They suggested that the programme should involve all the students to avoid any discrimination. Also, 21 of 73 students (28.8%) felt that all students should have a mentor who was approachable and empathetic.

**DISCUSSION**

Academic failure among undergraduate medical students is due to a variety of academic and non-academic problems.1 Stress is one of these factors and can be further aggravated by a poor performance. Stress is more common among II year MBBS students because of a higher load of paraclinical and clinical subjects.2 All low-performers in this study came from a good socioeconomic background and had scored well in their entrance tests, suggesting that pre-set standards and high expectations led to stress. It has been observed that boys tend to be more stressed.3 Life in a hostel also appeared to be an important stress-inducing factor, contrary to the opinion that day-scholars undergo the stress of daily commuting between the college and residence.4 Language problems can hamper proper understanding and result in poor oral and written expression, thus lowering performance as was seen in this study. Non-academic as well as academic factors contributed to stress and low performance in the present study. In other studies,2,4 academic factors were a greater perceived cause of stress in medical students. Pressure of examinations is also a major problem among medical students.4,5

Counselling facilities for students should be comprehensive to deal with all psychological difficulties.6 A review revealed that a wide variety of interventions helped in stress reduction, e.g. directed and non-directed support groups, relaxation training including meditation and hypnosis, time management and coping skills, and mentoring programmes.7 In this study, the students were open to discuss academic problems, but were inhibited when discussing their personal problems. None of the students mentioned any problems with substance abuse.

Modifications in the curriculum and teachers’ approach can help low-performers improve their performance, confidence and self-esteem, and sustain their motivation. Students could be exposed to skills such as stress and time management, as well as study skills to deal with stress. Low-performers need to be assigned a variety of tasks that give them the opportunity to learn in their individual styles and their progress should be monitored continuously. A mentor is an experienced, highly regarded and empathetic person who can empower and encourage the mentee, be a role model, and assist in the mentee’s personal development.8 In this and other studies, students have expressed a desire to have a student support system9,10 and wellness education11 to help them learn new ways to cope with the burden of stress.

**Conclusion**

Low-performers can benefit from counselling and training in stress-coping strategies. Faculty members who are empathetic can provide good mentor support to low-performers. Study skills, time management and test/examination management need to be taught to students during their medical course.

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**REFERENCES**


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