

either social or psychological problems. Initially, a supportive identified member of that office screens the problem. The matter can then be referred to the Associate Dean or the year coordinator and discussed at the Student Welfare Committee meeting. Appropriate documentation is kept. Secondly, students may be reported to the Associate Dean by other concerned students or staff, usually when they appear quite psychologically disturbed or have significant behavioural problems.

In the early days of this Committee, there were often differences of opinion, particularly in considering, firstly, duty of care to patients and other staff, and, secondly, confidentiality within the faculty. For example, should relevant university staff be notified of a student who was distressed or not coping so they could be of support and assistance in the student's next rotation? As the committee progressed, these issues were largely resolved. It was agreed that one key staff member in a rotation would be made aware of a student needing support.

Stress in a graduate medical degree

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MEDICAL COURSES are inherently stressful because of the nature of the course, the workload and, for some students, financial issues. These stressors can lead to impaired judgement, reduced concentration and self-esteem, and increased anxiety, manifesting in turn in depression and even suicide.

In 1997, as a first-year medical student of the graduate program at Sydney University, I attended the conference of the Australian and New Zealand Association of Medical Education. The conference explored facets of stress for medical students and found that medical students were indeed stressed. However, the causes of the stress were not explored, and neither were the ways of managing this stress. I decided to examine the level of stress in students in my year.

There are fundamental differences between the undergraduate and graduate medical courses and in the type of students enrolled. As opposed to the predominantly lecture-based, didactic undergraduate courses, the graduate course emphasises self-directed learning in problem-based, small-group tutorials. Graduate students have an advantage in that they have had previous experience of university education. In 1997 the average age of the students in my year was 24.5 years. They therefore had different life experiences to younger undergraduate students.

Conclusions

The pressures placed on medical students during their education, which can lead to significant psychological problems, are increasingly being recognised. The consequences for the student — in distress caused, and in interruption to their education — are considerable. The problems may also adversely affect others. Medical faculties need to be aware of these problems and identify and deal with them as soon as possible. Structures should be in place to accomplish this.

References

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I hypothesised that stress in the first year of the graduate course would reflect financial, personal and living issues; time management problems; the new format of the course and the problem-based learning structure; using computers; and, for some students, the requirement to move residence to study. Examination pressures were not applicable in the first year.

The study

A study was devised to assess overall stress and the effect of these eight potential stressors.

Methods

Each parameter of stress was assessed by a retrospective questionnaire, using a four-point scale ("stressed", "very stressed", "unstressed", and "very unstressed"). Students were assessed twice in their first year, at enrolment and six months later. Stress at these two time points in first-year students in 1997 was compared with that in first-year students in the two subsequent years, when an intrafaculty support network, the "Buddy Program", had been established. For this program, the medical faculty encouraged students to be involved, and supported the development of this student support network. Students finishing first year were asked to volunteer to take part in peer support — to be a "buddy" for the next year's first-year students. Volunteers were introduced to two or three students at an informal morning tea. Contact between the buddy and first-year students was maintained using the tutorial rooms, telephone

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Rates of overall stress and factors causing stress, by year, at intake and at six months. Data are number and proportion of first-year students in a graduate medical course, with 95% CIs for comparison of rates — 1997 v 1998 and 1997 v 1999

| | At intake | | | At six months | | |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 1997 (n = 115) | 1998 (n = 131) | 1999 (n = 166) | 1997 (n = 115) | 1998 (n = 131) | 1999 (n = 166) |
| Overall stressed | 60 (52.2%) | 46 (35.1%) | 72 (43.4%) | 50 (43.5%) | 52 (39.7%) | 77 (46.4%) |
| 95% CI | | 4.8%, 29.3% | - 15.7%, 8.0% | | - 8.5%, 16.1% | - 14.7%, 8.9% |
| Individual stressors | | | | | | |
| Time management | 82 (71.3%) | 75 (57.3%) | 103 (62.0%) | 85 (73.9%) | 104 (79.4%) | 123 (74.1%) |
| 95% CI | | 2.2%, 25.9% | - 1.8%, 20.3% | | - 16.1%, 5.1% | - 10.6%, 10.2% |
| Financial issues | 66 (57.4%) | 60 (45.8%) | 88 (53.0%) | 67 (58.3%) | 68 (51.9%) | 84 (50.6%) |
| 95% CI | | - 0.8%, 24.0% | - 7.4%, 16.2% | | - 6.1%, 18.8% | - 6.9%, 22.2% |
| New format of the course | 65 (56.5%) | 59 (45.0%) | 80 (48.2%) | 28 (24.3%) | 48 (36.6%) | 60 (36.1%) |
| 95% CI | | - 1.0%, 23.9% | - 3.5%, 20.2% | | - 23.7%, -0.9% | - 22.5%, -1.1% |
| Personal issues | 56 (48.7%) | 51 (38.9%) | 74 (44.6%) | 58 (50.4%) | 45 (34.4%) | 73 (44.0%) |
| 95% CI | | - 2.6%, 22.2% | - 7.7%, 16.0% | | 3.8%, 28.3% | - 5.4%, 18.3% |
| Problem-based learning | 51 (44.3%) | 42 (32.1%) | 54 (32.5%) | 27 (23.5%) | 31 (23.7%) | 32 (19.3%) |
| 95% CI | | 6.1%, 18.5% | 0.3%, 23.4% | | - 10.8%, 10.4% | - 5.6%, 14.0% |
| Using computers | 40 (34.8%) | 36 (27.5%) | 23 (13.9%) | 9 (7.8%) | 17 (13.0%) | 8 (4.8%) |
| 95% CI | | - 4.3%, 18.9% | 8.2%, 33.6% | | - 12.7%, 2.4% | - 2.9%, 8.9% |
| Living conditions | 36 (31.3%) | 25 (19.1%) | 47 (28.3%) | 29 (25.2%) | 18 (13.7%) | 37 (22.3%) |
| 95% CI | | 1.4%, 23.0% | - 7.9%, 13.9% | | 1.6%, 21.4% | - 8.0%, 12.4% |
| | (n = 44) | (n = 73) | (n = 82) | (n = 44) | (n = 73) | (n = 82) |
| Moving residence to study | 28 (24.3%) | 21 (16.0%) | 44 (26.5%) | 12 (10.4%) | 10 (7.6%) | 18 (10.8%) |
| 95% CI | | 7.9%, 43.7% | - 17.3%, 19.1% | | - 10.0%, 20.7% | - 10.6%, 21.2% |

and email. The students were encouraged to approach their buddy with questions, or for support, whether on an academic, social or personal level. All interactions were confidential, with support from the honours supervisors (trained in psychology and counselling) if situations demanded their intervention.

The Statistical Package for the Social Sciences (SPSS) was used for all analyses of results: χ^2 analyses were used to test relationships between categorical variables, and descriptive data were compared using *t*-tests. Because of very small numbers in sections of the four-point scale, rates for “stressed” and “very stressed” were combined, as were rates for “unstressed” and “very unstressed”. Stressor frequency in the intervention years was compared with the baseline year (1997) using 95% CIs.

Results

All students in 1997, 1998 and 1999 were included in the study. Response rates of students to the questionnaires were as follows: in 1997, 115/132 (87.1%); in 1998, 131/154 (85.1%); and in 1999, 166/201 (82.6%). The results are presented in the Box.

Students in 1997 had higher stress levels than those in the two subsequent years. Across the three years, the main stressor was time management: between enrolment and six months later, the proportion of students with stress from time management problems did not decrease significantly.

Financial issues also caused significant stress. There were temporal changes in overall stress. In the intervention years when the “Buddy Program” was operating, more students were not stressed at enrolment and remained so six months later

Conclusions

- A substantial proportion of graduate medical students find the course stressful, with the main stressors being related to time management and financial issues.
- Stress levels fluctuate throughout the academic year.
- Starting a course which acknowledges inherent stresses and has an established support network for this creates a less stressed group of students at enrolment.
- The “Buddy Program” maintained low stress levels in individuals who started the course unstressed. However, students commented that there was not enough access to buddies, despite the high rate of buddy volunteers for the program.
- Medical students need to be taught structured time management skills, and given access to financial support. □