

Painting the picture: Australasian medical student views on wellbeing teaching and support services

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ABSTRACT

Objective: To explore medical students' views on support services, stigma, and teaching of wellbeing in light of their experiences of stress and distress.

Design, participants and setting: Quantitative survey of medical students at five universities in Australia and New Zealand in November 2007.

Main outcome measures: Medical students' experiences of support services, stigma attached to undergoing stress and distress, and teaching of wellbeing.

Results: 1328 students completed the survey (26% response rate). Seventy-one per cent of students were aware of support services at their university. Of these, 46% believed the services were adequately promoted, and 49% had either used the services themselves or knew someone who had. Overall, 70% of students had their own general practitioner, but this fell to 45% for international students ($P < 0.001$). Fifty-five per cent of students believed there was a stigma associated with being a medical student undergoing stress and distress. Fifty-six per cent of students believed they had received formal teaching on stress and distress. Students most wanted to learn methods to help somebody else cope and preferred to be taught through formal lectures.

Conclusion: Medical curricula on wellbeing should include strategies for self-help and giving assistance to others, and aim to decrease stigma. Adequate and well-promoted support services are required to complement this teaching, in particular for international students.

INTRODUCTION

There is a growing body of evidence that medical students experience disproportionate levels of stress-related impairment. Before commencing medical school, their mental wellbeing is similar to that of the general student population.¹⁻³ However, as they progress through their training, in an environment of multifactorial stressors, medical students exhibit lower psychological wellbeing than age-matched peers and the general population.⁴⁻⁹ Within the first year alone, there is a significant increase from baseline in the prevalence of stress, depression and burnout.¹⁰ These levels remain high throughout medical school,^{2,11} resulting in lower life satisfaction by the time students reach their final year.¹²

It has been reported that 24% of first-year and second-year medical students are depressed, of whom 26% have suicidal ideation, but only 22% have used mental health services. Identified barriers to accessing

support include confidentiality concerns, stigma, poor service availability and difficulty in gaining access to care.¹³

Coping mechanisms learnt at medical school affect students' long-term health and the quality of care they provide to patients.¹⁴⁻¹⁷ Stress and distress may also impair academic performance,¹⁸ and increase cynicism, academic dishonesty¹⁴ and the prevalence of suicidal ideation or suicide.¹⁹

Few studies have explored the teaching of wellbeing, and there is little consensus about what should be included in a wellbeing curriculum. This study aimed to identify students' access to and awareness of support services, and their perceptions on the teaching of wellbeing and its relevance.

METHODS

We developed a survey to investigate students' experiences and perceptions of their wellbeing. It was reviewed by university academic staff and representatives of wellbeing awareness organisations. Response modes included yes/no options and five-point Likert scales (from 1 [strongly disagree] to 5 [strongly agree]). Identical hard-copy and online versions of the survey were used. The online version was hosted on the website of the relevant national medical students' association. Both versions were completed anonymously.

Medical students enrolled at five universities in Australia and New Zealand were invited to complete the questionnaire in November 2007. Final-year students at one university completed the questionnaire during a lecture. All other students were informed of the online questionnaire via student email lists.

Statistical analysis

Results were collated and SPSS version 15.0 (SPSS Inc, Chicago, Ill, USA) was used for analyses comparing students by entry type (international, local graduate and local school leaver), sex (female and male) and stage of study (preclinical and clinical students). Few international graduate students responded, so data from international students was not separated into graduate and school-leaver students. Missing responses were treated as absent data in all analyses. Three entry type by two sex by two stage of study univariate and multivariate analyses of variance (general linear model) were used for all rating scales, while χ^2 tests were used for categorical data. Significant differences between entry types that could be attributed to differences between universities are not reported.

Ethics approval

This study was approved by the Monash University Standing Committee on Ethics in Research Involving Humans (#2007001948EA), University of Otago Human Ethics Committee (#07/198), Flinders University Social and Behavioural Research Ethics Committee, University of Melbourne Health Sciences Human Ethics Subcommittee (#0721504) and University of Tasmania Human Research Ethics Committee (#H9831).

Table 1. Students' experiences of support services*

Survey statement	Student entry type				P (x 2)†	Sex		P (x 2)†	Stage of study		P (x 2)†
	All students	Inter-national	Local graduate	Local school leaver		Female	Male		Pre-clinical	Clinical	
Aware of support services	71%	—	—	—		74%	66%	0.001 (10.53)	71%	71%	
• If "yes", services promoted adequately	46%	—	—	—		44%	51%	0.028 (4.82)	55%	39%	<0.001 (26.09)
• Have used or know someone who has used services	49%	—	—	—		54%	38%	<0.001 (21.70)	43%	54%	0.001 (11.82)
- If "yes", satisfied with services	67%	—	—	—		65%	71%		73%	63%	
- Services culturally appropriate	87%	—	—	—		88%	87%		88%	87%	
Comfortable seeking services offered by university	78%	83%	79%	77%		78%	78%		80%	77%	
Comfortable seeking services outside of university	76%	65%	79%	77%	0.001 (13.82)	78%	71%	0.005 (7.82)	69%	81%	<0.001 (25.67)
Have general practitioner	70%	45%	73%	75%	< 0.001 (64.27)	72%	66%	0.033 (4.57)	67%	73%	0.019 (5.49)

* Values represent percentage of students agreeing with the survey statement. Omitted results contain differences attributable to differences between universities.

† Statistics are only provided for significant differences.

RESULTS

Of a total 5072 students, 1328 (26%) responded. Fifty-four per cent were clinical students, 64% were female, 15% of respondents were international students, 26% were local graduates and 60% were local school-leaver students. The distribution by entry type, sex and stage of study was consistent with the study cohort at each university.

Support services

Our findings on students' experiences of support services, including significant differences between student entry type, sex or stage of study, are summarised in Table 1. Of the 71% of students aware of support services at their university, fewer than half (46%) felt support services were adequately promoted and approximately half (49%) had either used them or knew someone who had.

Approximately three-quarters of students (78%) felt comfortable seeking support services offered within and outside their university. Seventy per cent of all students had their own general practitioner; this proportion dropped to 45% for international students ($P < 0.001$).

Stigma

Fifty-five per cent of students agreed or strongly agreed that there was a stigma attached to being a medical student experiencing stress and distress. Seventy-two per cent agreed or strongly agreed that there was a stigma attached to being a medical student diagnosed with a mental health condition. International male students were most likely to perceive a stigma associated with undergoing stress and distress ($F [2, 1320] = 4.27$; $P = 0.014$). There were no other significant differences between entry type, sex or stage of study.

Wellbeing curriculum

Fifty-six per cent of students believed that they had received formal teaching on medical student stress and distress. Of these students, 55% agreed or strongly agreed that there was sufficient curriculum time allocated to the topic, and 54% agreed or strongly agreed that it was approached in an appropriate way.

Students were asked seven questions about which topics of medical student stress and distress they would benefit most from learning about (Figure 1). The topic of helping somebody else cope with stress and distress was considered the most beneficial, and medical background of stress and

distress the least beneficial. Students were asked a further four questions about which modes of teaching on stress and distress they would participate in (Figure 1); they were most likely to attend a curriculum lecture and least likely to attend a lecture outside the course.

DISCUSSION

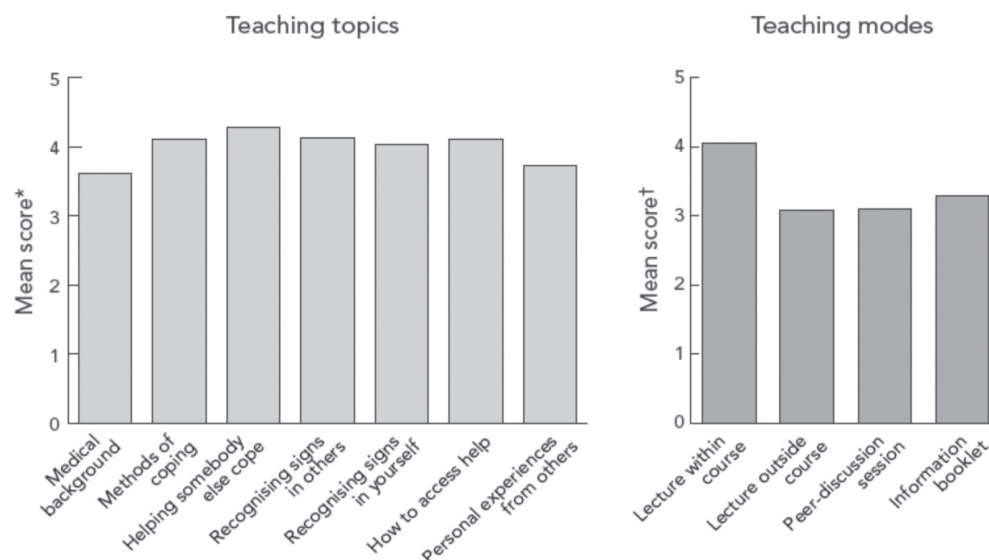
At the time of the survey, all medical schools involved offered support services, yet only 71% of students were aware of these services, and fewer than half of these (46%) thought they were adequately promoted. Only 39% of clinical students, who are based off campus, felt that the services were adequately promoted, with the majority believing the services were under-promoted. These results highlight the need for greater promotion, awareness, and education about the services available, with a particular focus on the clinical years.

It was concerning that only 45% of international students had their own GP. International graduate students encounter cultural and language barriers, social isolation and financial hardship,^{20,21} and are known to have unsupported mental health requirements.²² We also found that international students are more likely to feel uncomfortable accessing help outside the university. This study indicates that international students need additional help to establish a relationship with a GP.

Our findings reinforce the importance of addressing stigma. Medical schools should actively counter the perception of stigma associated with mental health issues. Three methods of doing so have been identified — education, protest, and contact.²³ Examples of these in the medical school setting include informing medical students about the reality of mental health issues within the profession; countering beliefs that bolster stigma, such as resultant academic jeopardy (the belief that seeking support will adversely affect academic standing and references);²⁴ and facilitating communication between senior colleagues and medical students regarding experiences with stress or mental health issues.

Only 56% of students believed that they had received formal teaching on stress and distress, and only half of these students felt that the subject had sufficient time allocated and was approached appropriately. The Australian Medical Council (AMC), which accredits Australian and New Zealand medical schools, states: "The medical curriculum should specifically

Figure 1. Wellbeing teaching topics and teaching modes preferred by students



*For whether students feel they would benefit from learning about that aspect of stress and distress.

† For whether students would attend or like to receive that mode of wellbeing teaching.

address issues of self-care, doctor health and the responsibility to identify and assist peers in distress^{1,25} Medical schools thus have an obligation to address these statistics by increasing or altering the way wellbeing is taught within their curricula. In doing so, they must prioritise its place within the curriculum and the development of its content.

There is no absolute consensus on what should be taught in wellbeing curricula. We found that student learning priorities were: helping others cope with stress and distress, identifying when others are experiencing stress or distress, and self-help techniques for coping with stress and distress. These align with AMC standards.²⁵ Further research is required, in particular, to test the effectiveness of curriculum interventions.

We surveyed over a thousand students across five medical schools in two countries. A weakness of our study was the low response rate. There was possible selection bias. Sample bias was unlikely, as the demographic characteristics of the respondents reflected those of the student population.

The results of our survey reinforce the need for medical schools to ensure that student wellbeing receives appropriate attention. An integrated approach of curriculum inclusion and adequate support service provision is required to avoid the potential ill effects of low personal wellbeing.

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Competing interests:

None identified.

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REFERENCES

- Singh G, Hankins M, Weinman JA. Does medical school cause health anxiety and worry in medical students? *Med Educ* 2004; 38: 479-481.
- Rosal M, Ockene I, Ockene J, et al. A longitudinal study of students' depression at one medical school. *Acad Med* 1997; 72: 542-546.
- Carson AJ, Dias S, Johnston A, et al. Mental health in medical students. A case control study using the 60 item General Health Questionnaire. *Scot Med J* 2000; 45: 115-116.
- Aktekin M, Karaman T, Senol Y, et al. Anxiety, depression and stressful life events among medical students: a prospective study in Antalya, Turkey. *Med Educ* 2001; 35: 12-17.

5. Henning K, Ey S, Shaw D.
Perfectionism, the imposter phenomenon and psychological adjustment in medical, dental, nursing and pharmacy students.
Med Educ 1998; 32: 456-464.
6. Toews JA, Lockyer JM, Dobson DJ, et al.
Stress among residents, medical students, and graduate science (MSc/PhD) students.
Acad Med 1993; 68 (10 Suppl): 546-548.
7. Toews JA, Lockyer JM, Dobson DJ, et al.
Analysis of stress levels among medical students, residents, and graduate students at four Canadian schools of medicine.
Acad Med 1997; 72: 997-1002.
8. Psujek JK, Martz DM, Curtin L, et al.
Gender differences in the association among nicotine dependence, body image, depression, and anxiety within a college population.
Addict Behav 2004; 29: 375-380.
9. Dahlin M, Joneborg N, Runeson B.
Stress and depression among medical students: a cross-sectional study.
Med Educ 2005; 39: 594-604.
10. Dyrbye LN, Thomas MR, Shanafelt TD.
Medical student distress: causes, consequences, and proposed solutions.
Mayo Clin Proc 2005; 80: 1613-1622.
11. Clark DC, Daugherty SR, Zeldow PB, et al.
The relationship between academic performance and severity of depressed mood during medical school.
Compr Psychiatry 1988; 29: 409-420.
12. Kari K, Reidar T, Arnstein F, et al.
Life satisfaction and resilience in medical school — a six-year longitudinal, nationwide and comparative study.
BMC Med Educ 2006; 6: 48.
13. Givens J, Tjia J.
Depressed medical students' use of mental health services and barriers to use.
Acad Med 2002; 77: 918-921.
14. Dyrbye L, Thomas M, Shanafelt T.
Systematic review of depression, anxiety, and other indicators of psychological distress among US and Canadian medical students.
Acad Med 2006; 81: 354-374.
15. Shanafelt TD, Bradley KA, Wipf JE, Back AL.
Burnout and self-reported patient care in an internal medicine residency program.
Ann Intern Med 2002; 136: 358-367.
16. Ball S, Bax A.
Self-care in medical education: effectiveness of health-habits interventions for first-year medical students.
Acad Med 2002; 77: 911-917.
17. Gutgesell M, Reeve R, Parsons B, et al.
Exercise and alcohol consumption among medical students.
Acad Med 1999; 74: 750-751.
18. Hojat M, Robeson M, Damjanov I, et al.
Students' psychosocial characteristics as predictors of academic performance in medical school.
Acad Med 1993; 68: 635-637.
19. Hays LR, Cheever TC, Patel P.
Medical student suicide 1989–1994.
Am J Psychiatry 1996; 153: 553-555.
20. Aubrey R.
International students on campus: a challenge for counsellors, medical providers, and clinicians.
Smith Coll Stud Soc Work 1991; 62: 20-33.
21. Rai G.
Meeting the educational needs of international students.
Int Soc Work 2002; 45: 21-33.
22. Hyun J, Quin B, Madon T, et al.
Mental health need, awareness, and use of counselling services among international graduate students.
J Am Coll Health 2007; 56: 109-118.
23. Corrigan PW, Penn DL.
Lessons from social psychology on discrediting psychiatric stigma.
Am Psychol 1999; 54: 765-776.
24. Roberts LW, Hardee JT, Franchini G, et al.
Medical students as patients: a pilot study of their health care needs, practices and concerns.
Acad Med 1996; 71: 1225-1232.
25. Australian Medical Council.
Assessment and accreditation of medical schools: standards and procedures. Part 2. Educational standards.
Canberra: AMC, 2007: 26. <http://www.amc.org.au/images/Medschool/StandardsPart2-2007.pdf> (accessed Dec 2009).

