'Just What the Doctor Ordered': Promoting Wellbeing with Medical Students

Hannah Sloan
Danielle Clayman
Health & Wellbeing Practitioners

The University of Melbourne

Abstract

The tertiary student experience is not the same for all. Some students navigate the challenges of student life and flourish amidst stresses, whilst others experience considerable distress and disengage (Stallman, 2010; Larcombe et al., 2015). Much research has sought to identify what factors contribute to students' thriving at university and what constitutes a successful student. Medical students have long been thought of as 'successful' students with high academic attainments and abilities, however recent research suggests medical students experience higher rates of mental health distress and suicidal ideation compared to the broader student population (Rotenstein et al., 2016). In recognition of the challenges faced by medical students, in 2017 the Melbourne Medical School (MMS) developed a new proactive approach to student wellbeing through adopting a 'Health Promoting University' strategic model (Okanagan Charter, 2015). The overarching strategic model entails a stage-based process of program endorsement, implementation and evaluation; of which the MMS is currently half way through (Stage 4). The framework has facilitated the development of proactive individual interventions and group based programs, all designed in close consultation with medical students, and seeking to broaden the scope of what constitutes a successful medical student. This innovative approach to medical student health and wellbeing demonstrates a school-wide, prevention-based approach to promoting student wellbeing. The authors detail the design, beginning stages of delivery, and future plans and aspirations for this evidence-based model of student wellbeing.

Keywords Medical Students, Mental Health, Wellbeing

Commencing university: The big picture

Commencing university has long been considered a stressful life transition for young adults, marked by complex changes in social, emotional and academic domains (Gerdes & Mallinckrodt, 1994). This transition represents more than just a discrete or acute life change, but rather a series of life stressors and adjustment difficulties manifesting over the course of university life (Lu, 1994). Some of the stressors associated with this transition include establishing greater levels of independence in the midst of increased levels of social instability, as well as changes in both the quantity and quality of social relationships (Larose & Boivin, 1998; Tanner, 2006). Furthermore the university context involves a range of unique stressors including: increased study load, academic pressures (i.e., pressure to achieve good grades and graduate), studying in a more self-directed manner, and learning in an environment that is largely unfamiliar (Chemers, Hu & Garcia, 2001; Jones & Frydenberg, 1998). Students are often also juggling the broader developmental tasks and responsibilities associated with their age period, such as establishing independence from primary care givers and consolidating a sense of self-identity (Havighurst, 1972; Mattanah, Lopez & Govern, 2011). Given these challenges, commencing university has been found to be a particularly stressful time for students, testing students' coping strategies and overall resilience (Lopez & Gormley, 2002).

Despite the known stresses and challenges associated with university life, recent Australian Government statistics have shown a continued increase in the number of students applying to study at university (Department of Education and Training, 2016). Furthermore, following the Bradley Review of Higher Education in 2008, the Australian Government reported an ongoing commitment to increase university participation, in order to better meet the needs of the Australian community and economy (Department of Industry, 2009). Combining these top-down government-based initiatives with increasing bottom-up student-led interest, the tertiary education sector has seen considerable growth in recent years. Now, as more and more students commence their journey into

tertiary education, interest has steadily risen regarding the plight of these students, with greater concern for student experiences beyond academic attainment.

Certainly, for some students, university presents as a new realm full of possibilities and opportunities for growth and development; however, for other students, university presents as an overwhelming environment, placing them at risk of attrition (McMillan, 2005; Schrader & Brown, 2008; Stallman, 2010; Larcombe et al., 2015). Much research has sought to explain these varied experiences, suggesting factors such as prior academic performance (Chemers, Hu & Garcia, 2001), perceived social support (Solberg, Valdez and Villarreal, 1994), coping and support strategies (DeBerard, Spielmans & Julka, 2004), emotional stability (Gerdes and Mallinckrodt, 1994), intrinsic factors such as locus of control and self-efficacy (Klomegah, 2007), or broader contextual factors such as family of origin (O'Shea, May, Stone & Delahunty, 2017), predicted student experiences, adjustment and retention at university. A review by Nelson, Duncan and Clarke (2009) concluded that no single factor can explain why some students leave university before the completion of their course; but rather, multiple factors and issues in the personal, social and academic domains are interactive and influential to students' university adjustment. Although no singular factor may impact a students' experience at university, one issue that is central to understanding these unique student experiences is student mental health.

Growing evidence has suggested that rates of mental illness among university students are on the rise, with some describing the issue as an epidemic (Kay, 2010; Kim, Coumar, Lober & Kim, 2011). Estimates suggest that 27% of young people aged 18-24 years have a mental health disorder (Patel, Fisher, Hetrick, McGorry, 2007). This is consistent with epidemiological studies confirming many mental health disorders such as psychoses, substance use and anxiety-based conditions, reach peak prevalence within the young adult age range (Commonwealth of Australia, 2004; Kessler et al., 2007). Within this population of young people, students in particular have been found to have higher rates of stress compared to their aged-matched peers in the general population (Storrie, Ahern & Tuckett, 2010). Studies have also shown that students who present to university counselling services have significantly high levels of distress and symptomatology within a pathological range (Connell, Barkham & Mellor-Clark, 2007). Given what is known about the rates of mental health needs in young adults and that those attending university are most frequently young adults, it is not surprising that universities are facing growing numbers of students with mental health difficulties (Stallman, 2008). Now more than ever, universities face the challenge of not only keeping students engaged in their learning and education, but keeping them mentally well.

The medical student journey

Whilst there is now greater awareness surrounding the challenges of university life and the importance of student mental health, the university experience is not ubiquitous. Similarly, the stressors that students face vary. Certain courses and fields of study require varying levels of contact hours, academic pressures, and differing emphasis on grades versus competencies. For example, one student beginning their journey within the field of education may face different contextual challenges and opportunities compared to a student beginning their journey in dentistry. The different disciplines provide students with their own norms, expectations, values and epistemic cultures (Ylijoki, 2000; Knorr-Cetina, 1997). Recently, there has been growing interest regarding the potential impact of students' chosen area of study or chosen course, on their mental health. One field of study that has attracted much interest has been the field of medicine.

Traditionally medical students have been thought of as the most successful, high achieving and aspirational students, overcoming the hurdles of entrance requirements and competitive academic pressures to pursue a highly valued and esteemed career. Undoubtedly medical students are a gifted collection of individuals with certain academic and personal strengths; however, more and more,

these same students have been thought of as vulnerable or 'at risk' of mental health difficulties (Australian Medical Students' Association, 2014). An Australian based survey of doctor and medical student mental health in 2013 (beyondblue, 2013) was momentous in opening a dialogue regarding the wellbeing and mental health of the nations' doctors and future doctors. The study, which sampled over 1,800 medical students, found these students reported higher rates of distress, anxiety and depression compared to the general Australian population, and perceived stigmatic attitudes around mental health to be prominent in the medical environment. Perhaps most alarmingly, the study also found that one in five medical students had suicidal thoughts over a one-year period, significantly more than those in the general population. Highlighted in this study was the need to better understand the mental health of medical students and the unique challenges and stressors these students face.

Beyond Australia, much research has sought to recognise and measure the 'problem' associated with medical student mental health. Multiple large scale, multi-institute studies with medical students have consistently found symptoms of depression and suicidal ideation to be most prevalent during time spent as a medical student, compared to time spent as a Resident (Goebert et al., 2009) or early in the medical career (Dyrbye et al., 2014). Studying medicine was seen as the peak period when participants were likely to experience greatest distress and burnout, suggesting this may be the highest point in need of support within the journey to becoming a doctor. These findings have been further confirmed in a recent systematic review and meta-analysis combining over 160 cross-sectional studies and 16 longitudinal studies examining depression and suicidal ideation in medical students (Rotenstein et al., 2016). Findings from the review suggested depressive symptoms and suicidal ideation were prevalent in approximately 27% and 11% of medical students respectively. Such findings highlight the higher than average experience of significant mental health difficulties apparent in medical students across various international medical schools.

With research consistently reporting mental health difficulties in medical students, attention has now shifted towards identifying interventions, programs or strategies to address this problem. Various approaches have been reported, from individual student support to targeting the broader culture of medicine, each with differing approaches and outcomes. One particular approach introduced at Saint Louis University, USA, has involved a deliberate restructure of the pre-clinical medical curriculum (including reduction in contact hours, shift to pass/fail grading, changes to scheduling) intended to reduce some of the stressors associated with the learning environment and pressure on students (Slavin, Schindler & Chibnall, 2014). Mindfulness and resilience training were also part of the program adopted at the university to promote student wellness, with overall positive findings reported. In particular, these changes to the course were found to be associated with significant reductions in self-reported stress, depressive and anxiety symptoms and significantly higher levels of community connection within the student body. This particular medical school is unique in its adoption of holistic curriculum-wide changes, though variations of these wellbeing-focused approaches have been adopted more broadly.

Other studies focussing on addressing medical student mental health, have explored the role of modifying grading approaches (Reed et al., 2011), improving student skills through mindfulness-based educational programs (Hassed, Sierpina & Kreitzer, 2008; Hassed, DeLisle, Sullivan & Pier, 2009) or broader wellbeing and career advisory programs (Sastre et al., 2010). A recent systematic review of these various wellbeing-based interventions within the medical student population concluded that *some* specific learning environment interventions were found to be associated with improved wellbeing amongst students (Wasson et al., 2016). More specifically, the review recommended 'comprehensive reform' within the learning environment, that incorporates a range of targeted interventions, as most likely to be effective. Through such reviews of various implemented interventions, it is clear that a multifaceted, holistic approach anchored in a strong theoretical evidence base is needed within medical education.

A health promoting medical school

In recognition that a system-wide health and wellbeing initiative within the medical education context was needed, the University of Melbourne, Melbourne Medical School (MMS) recently adopted a Health Promoting University strategic framework, with the aim of becoming a 'Health Promoting Medical School'. This framework stems from an international movement (Healthy Universities) towards unifying health promotion and wellbeing-based initiatives under a principal strategic umbrella (Dooris, Dowding, Thompson & Wynne, 1998; Dooris & Doherty, 2010; Okanagan, 2015). The purpose of such an overarching strategic framework within the MMS is to ensure that all interventions and strategies to improve medical student wellbeing are connected, holistic in focus and part of a school-wide approach to improving the learning culture in medicine.

There are many envisaged benefits to adopting a school-wide approach to student mental health within the medical education context. Firstly, it allows for co-ordination of wellbeing-focused initiatives that have previously been implemented as individual, one-off activities or programs, often within silos of departments or at certain year levels and not others. Through coordinating the equitable out-rolling of such activities and interventions, it is hoped that this will allow for increased student access and participation. Secondly, it allows for preventative-based initiatives to student mental health, through the shift away from a 'reductionist focus on single issues' and towards a more holistic approach (Dooris, Cawood, Doherty & Powell, 2010). Thirdly, the approach involves many different stakeholders, including perhaps most importantly, the students themselves. Involving the student voice in steering the strategic model to health and wellbeing ensures students are active participants in the promotion and planning regarding student health matters. Finally, the model is aligned with international standards and evidence-based recommendations regarding how universities may better address student mental health (World Health Organization, 1986; Dooris et al., 2010; Veness, 2016; Ripp et al., 2017). As such, the university will be among the first of the Australian medical schools to adopt a school-specific strategic health promoting framework to unify student support strategies, policies and procedures.

As articulated within the Healthy Universities model (Dooris et al., 2010), the Melbourne Medical School plans on following a systematic approach to implementation of the Health Promoting Medical School strategy. More specifically, implementation will entail a seven-staged approach, namely; 1) Executive management endorsement and commitment, 2) Appointment of health promoting MMS Coordinators, 3) Needs and assets assessment, 4) Establishment of governance and working groups, 5) Action planning, 6) Delivery, 7) Monitoring and evaluation. Further information regarding each of these stages is provided in Table 1.

As shown in Table 1, involving key educators, academics and students alike is key to the consultative planning and holistic delivery of health and wellbeing-based initiatives. At present, the medical school is in the process of establishing a governance body and is planning further working groups and seeking relevant stakeholder input (Stage 4). As with many new programs, getting started has been a timely process. The logistics of gaining input and engagement from stakeholders based across multiple clinical sites across the state of Victoria has presented as an obstacle to rapid progression. As engagement from staff and students is key to the success of this strategic plan, allowing more time to effectively seek and facilitate engagement has been worthwhile. Now that the governing Student Wellbeing Advisory Group (SWAG) has been established, it is anticipated that greater momentum in achieving the final stages of the strategic plan will be possible. Furthermore, the ongoing and unwavering support of senior leadership within the medical school has ensured that the focus on student health and wellbeing remains a forefront priority within the school. Further time is now needed to continue working through the remaining stages of implementation and gaining valuable feedback regarding effectiveness through robust evaluation.

Table 1. Health Promoting Medical School Implementation Stages.

Stage	Focus	Details
1.	Executive Management Endorsement	Endorsement by the MMS Executive of the Health Promoting University approach as the overarching charter guiding health and wellbeing work in the Melbourne Medical School.
2.	Appoint Health Promotion Co-ordinators	The two coordinators will be the Health and Wellbeing Practitioners that operate in rural and metropolitan regions related to the MMS clinical sites. Together they will drive the initiative, and provide the designated points of contact within the MMS for the work being undertaken in this area.
3.	Needs & Assets Assessment	Identification of key partners and stakeholders (both internal and external). Consultation with key partners and stakeholders to facilitate involvement and commitment to the strategic model. Implementation of UK Healthy Universities Self-Review Tool to audit current health and wellbeing activities and identify areas of need and service gaps. Collation of audit results to inform future action planning and service delivery.
4.	Establish Governance & Working Groups	Establishment of an overarching Student Wellbeing Advisory Group (SWAG) that serves as a steering body to provide governance and project management. Establishment of action-focused Working Groups based on key focus areas; e.g., Mental Health and Physical Health. The development of working groups will be informed by the findings of the Needs Assessment. Development of systems and mechanisms to ensure school-wide involvement including academic and professional staff, students and student representative groups.
5.	Action Planning	Within Working Groups, development of action plan/s to facilitate work and service delivery. Important that these plans match the planning and curriculum cycle of the MMS. Identification of clear, attainable deliverables that can be measured and delivered within an appropriate time frame. Service delivery areas would be both preventative and reactive in addressing needs identified in stage 3. Establishment of links to relevant expertise. Important that action plans have synergy with local, national and international health standards and documents.
6.	Delivery	Provision of timely advice and assistance to students with wellbeing challenges or concerns regarding discrimination, bullying and harassment. May include case management. Referral of students to internal and external service providers. Support of students to identify and navigate relevant pathways for effective resolution of grievances and academic progression issues. Design, delivery and evaluation of preventative programs promoting student health and wellbeing e.g. Mindfulness. Investigation and development of innovative ways to integrate new knowledge in health and wellbeing into MMS. Management of compliance and reporting requirements associated with monitoring of student wellbeing. Provision of strategic support and advice regarding student wellbeing to MMS leadership that is aligned with broader University policies.
7.	Monitoring & Evaluation	Development of evaluation framework to measure scope and impact of service delivery (in consultation with MMS Evaluation Committee). Evaluation of progress in relation to attaining Health Promoting University status. e.g. UK Health Promotion evaluation tool, self-review tool. Evaluation can be linked to external standards i.e. Vic Health guidelines. Utilisation of evaluation data to inform future service planning and delivery.

Discussion

The pertinent issue of medical student mental health is an ongoing matter and will require coordinated supports and responses, both within and outside of the university context. It is hoped that through the adoption of the Health Promoting Universities model within the Melbourne Medical School, students within this medical school will begin to feel more supported in their health, wellbeing and learning and ultimately reach their potential, academically, emotionally and socially. A genuine strength of the framework presented is its alignment with internationally developed models to address tertiary student mental health (e.g., Healthy Universities), the multi-layered and holistic nature of the approach, and the inclusion of the student voice throughout planning and delivery of the proposed interventions and programs. The model is also thought to combine aspects of various other approaches to medical student mental health, including individual skill-building programs such as mindfulness, mentoring, and curriculum-based programs that target student health and wellbeing. In this way, the model is thought to answer the call for more comprehensive reform of the medical education environment (Wasson et al., 2016) and incorporation of multiple strategies to target student mental health. However, it must be noted that there is a long way to go in furthering the implementation of the model and consequent revisions over time.

Reducing the known challenges and barriers in medical students accessing support services, as well as overcoming fears of stigma and a lack of confidentiality (Givens & Tjia, 2002; Schwenk, Davis & Wimsatt, 2010; Dyrbye et at., 2015; Gold, Johnson, Leydon, Rohrbaugh & Wilkins, 2015), will be crucial to the future stages of implementation and overall effectiveness of the model. Furthermore, given the recognised high contact hours and time pressures medical students face, delivery of the health and wellbeing focused initiatives must be practically accessible, conveniently timed and add value to students' busy lives. Currently however, the strategic model is in its infancy and will require more rigorous evaluation and measurement of outcomes over time in order to determine overall student engagement and effectiveness. Future cross-institutional and international research would also be worthwhile and may further validate the utility of the framework within the medical education context. Overall, the documentation and initial implementation of the Health Promoting Medical School strategic model marks a significant contribution towards supporting students to thrive, and not just survive, medical training.

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The authors may be contacted via:
Hannah.sloan@unimelb.edu.au

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