Author/s:
Bailey, E;Robinson, J;McGorry, P

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Robinson Jo (Orcid ID: 0000-0001-5652-918X)

Depression and suicide amongst medical practitioners in Australia

Authors and affiliations:

1. **Eleanor Bailey**

   Research Assistant

   Orygen, The National Centre of Excellence in Youth Mental Health

2. **Jo Robinson** (corresponding author)

   Senior Research Fellow

   Orygen, The National Centre of Excellence in Youth Mental Health

   Locked Bag 10, 35 Poplar Road, Parkville VIC 3052, Australia

   p. +61 412 999 140 e. jo.robinson@orygen.org.au

3. **Patrick McGorry**

   Executive Director

   Orygen, The National Centre of Excellence in Youth Mental Health

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Abstract

This review will provide an overview of the prevalence of, and risk factors for, depression and suicide in medical practitioners. It will also discuss the barriers to accessing appropriate care and potential interventions for this population.

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Abstract

This review will provide an overview of the prevalence of, and risk factors for, depression and suicide in medical practitioners. It will also discuss the barriers to accessing appropriate care and potential interventions for this population.

Depression and suicide among medical practitioners in Australia

Introduction

Although the physical health of medical practitioners is better than average, they are at significantly higher risk of mental illness and suicide than the general population. (1) Over the past 10 years, at least 20 doctors have died by suicide in New South Wales alone. This has led to an investigation and increased media attention on the mental health of medical practitioners, with factors such as long hours, workplace culture and access to dangerous means being cited as risk factors. Perpetuating the problem, medical practitioners may be reluctant to seek help for their own mental health issues. Whilst this is likely due to a range of factors, stigma in particular acts as a barrier to seeking appropriate care. Policies and programs have been implemented in Australia to tackle the issue; however, a systemic shift in the way depression and suicide are perceived within the medical community is required to improve help-seeking and promote the wellbeing of medical practitioners. Interventions that have been shown to be effective in the general population should be adapted and tested with this particularly vulnerable group.

Prevalence of depression and suicide risk

Medical practitioners at all stages of their careers have higher levels of depression than the general population. A series of recent meta-analyses estimate the prevalence of depression to be 27% in medical students; (2) 29% in resident physicians; (3) and up to 60% in practicing doctors. (1) Prevalence rates are difficult to accurately estimate, however, due to wide variation in the measures used to assess depression in research. (1-3) In a 2013 survey of Australian medical practitioners conducted by beyondblue, Australia's national depression initiative, 18% of medical students and 21% of doctors reported ever being diagnosed with depression. (4) The survey also found that medical students and doctors reported higher rates of current mental health problems and psychological distress than the general population.

Additionally, medical students, younger doctors and females reported higher rates of psychological distress and mental health problems than males and older doctors. (4)

Medical practitioners may also be at increased risk of suicide compared to the general population, although overall the evidence is inconclusive. (1) There is, however, a substantial body of research suggesting that female medical practitioners are at higher risk of suicide compared to their male counterparts and are at twice the risk of suicide when compared to females in the general population. (4-7) There is also some evidence to suggest that suicide risk varies depending on medical specialty, with psychiatrists and anaesthetists being at greatest risk of suicide. (8, 9) The aforementioned survey found that 32% of medical students and 25% of doctors reported a lifetime history of suicidal thoughts, and 19% of medical students and 10% of doctors reported experiencing these thoughts within the past year. Four percent of medical students and two percent of doctors had made a suicide attempt at some point in their lifetime. In both groups, females had a higher rate of suicide attempts and suicidal ideation than males. Overall, the survey found that medical practitioners reported substantially higher rates of suicidal ideation and attempted suicide compared to the general population and Australians in other professions. (4)

Despite some inconsistent evidence internationally, there appears to be an increased risk for depression and suicide in Australian medical practitioners. This risk is substantially higher in females and among medical students. There is therefore not only an urgent need for preventative approaches for medical practitioners in general, but also for more targeted approaches for these particularly vulnerable groups.

Risk factors

Important risk factors for depression and suicide in medical practitioners relate to work stress and burnout. High levels of burnout, compassion fatigue and work stress, and low levels of job satisfaction, have been found in medical practitioners and are commonly cited as key

contributors to the development of mental health problems in this population. (4, 10, 11) Indeed, medical students, young doctors and females, the population groups understood to be at highest risk of suicide, also report the highest rates of stress and burnout. (4) Long work hours, substantial workload, a high level of responsibility and a fear of making mistakes are characteristic of medical practice and are likely to contribute directly to work stress and burnout. (10) This may also be exacerbated by certain personality and cognitive traits common among medical practitioners, which may in turn place them at elevated risk. Evidence suggests that traits such as conscientiousness, commitment, and obsessiveness are more common in doctors; these are associated with perfectionism, inflexibility, over-commitment, self-criticism, and an inability to relax. (12) These attributes may compromise the ability of doctors and medical students to cope with the stressors associated with the medical profession, and may be a source of particular vulnerability for medical students given the rigorous academic demands of the degree. (1)

Sources of work stress may also vary according to specialisation: for example, doctors working in mental health, emergency medicine and oncology report being very stressed by lack of resources, whereas those working in rural/remote/Aboriginal health and paediatrics report being highly stressed by work hours. (4) Additionally, research suggests that that doctors facing complaints or those under review are at increased risk of depression, anxiety, and suicidal ideation, (13, 14) suggesting that medical practitioners involved in such processes are in need of additional support.

Bullying and discrimination may also contribute to stress and burnout and increase the risk of depression and suicide. (15) Although this relationship is well-established in the general population, there is a lack of robust research evidence regarding the prevalence of bullying within the profession. Moreover, the nature of the problem means it is likely to be under-reported. Recent surveys of members of the Australasian College for Emergency Medicine

and the Royal Australasian College of Surgeons, however, identified that bullying and discrimination effect one-third to half of practitioners in these professions. (16, 17) Certain groups may experience more bullying and discrimination than others; for example, the beyondblue survey found that overseas-trained and Indigenous doctors were more likely to report being "very stressed" by racism and bullying. (4)

Finally, access to and familiarity with lethal means of suicide has been cited as one of the key contributing factors to the increased risk observed in medical practitioners. Whilst hanging is the common means of suicide employed in the general population, research has consistently found that self-poisoning is the most common suicide method used by doctors and is used at significantly higher rates than in the general population (5, 6, 18, 19). This may in part explain the increased suicide rate in female doctors compared to females in the general population, (5, 6) as the lower suicide rate in females compared to males in the general population is often attributed to gender differences in lethality of means.

Help-seeking

Despite their understanding and awareness of depression and suicide, medical practitioners may be reluctant or unwilling to seek help for their own mental health issues if and when they arise (1, 2, 11, 20). A recent meta-analysis reported that less than 16% of medical students who screened positively for depression sought psychiatric treatment. (2) Conversely, the beyondblue survey found that 56% of medical students and 64% of doctors who had ever felt seriously depressed had sought treatment, with significantly more females seeking treatment than males.(21) Of all the medical students and doctors surveyed, however, only 19% and 28% respectively reported feeling comfortable seeking help for a mental health condition. (4) Rates of help-seeking are also low in the general population (21).Stigma has been cited as one of the biggest barriers to accessing treatment for mental-health-related issues in the general population, in particular among young people (22) and is also likely to act as a

deterrent to help-seeking in the medical profession, perhaps even more so in students and younger doctors. Medical practitioners believe stigmatising attitudes towards depression and suicide are widespread within the medical community (4, 20). Specifically, many Australian medical students and doctors believe that mental health disorders are associated with reduced competency and weakness, and make doctors less likely to be appointed. (4) These views are particularly problematic because not only does stigma act as a barrier to seeking help, it may also in itself increase the risk of depression or suicide. (23) This also calls into question the ability of medical practitioners to support others, including peers and patients, presenting with mental health issues or suicidal ideation. Related to stigma, other commonly cited barriers to seeking help include concerns about career development, impact on colleagues, impact on patients, confidentiality, time constraints, embarrassment and professional integrity, as well as a preference to rely on self-help (1, 4, 11, 20, 24).

Interventions to improve mental health among medical practitioners

Effective treatments for depression in the general population primarily include psychological therapy, pharmacotherapy, or a combination. More generally, programs to foster resilience or improve wellbeing have been found to reduce levels of depression and anxiety in the workplace. For preventing suicide, a range of approaches that target different levels of the population have been shown to be effective. In particular, restricting access to means of suicide (for example, by implementing barriers at suicide "hot spots" or restricting pack sizes of paracetamol) have been demonstrated to reduce population suicide rates. Universal psychoeducation programs, screening, and gatekeeper training programs have all been associated with the identification of people at risk and reductions in suicidal ideation and behaviour, particularly in schools but also in workplaces. Psychological and pharmacological interventions, often implemented to treat underlying psychiatric disorders, can reduce suicide

risk at an individual level. Finally, there is an emerging literature supporting the use of online or web-based interventions with people experiencing depression or suicidal ideation. Despite the reasonably strong evidence base regarding interventions for depression and, to a lesser extent suicide, in the general population, there is a paucity of research regarding specific interventions designed to improve mental health and wellbeing among medical practitioners. In a 2016 systematic review of the literature, Wasson and colleagues identified only 28 articles describing empirically-evaluated learning environment interventions, and their methodological rigor was limited. The review found that some interventions (such as a pass/fail grading system, mental health programs, mind-body skills programs, curriculum structure, multicomponent program reform, wellness programs, and advising/mentoring programs) were associated with improved emotional well-being among medical students. (25) However, more rigorous research in this area is required, including developing and trialling sophisticated interventions specifically designed for this population that account for the risk factors described above.

In Australia, a number of steps have been taken to tackle the high rates of mental health problems and suicide in medical practitioners. For example, the "Let's Operate With Respect" campaign, introduced in 2016, aims to help put an end to bullying, discrimination and sexual harassment in surgery. The Australian Medical Association's "National Code of Practice - Hours of Work, Shiftwork and Rostering for Hospital Doctors" responds to ongoing concerns about working hours and safe practice. The code has been instrumental in changing attitudes to the ethic of safe hours and is believed to have led to a decline in the proportion of doctors at high risk of fatigue. (26, 27) beyondblue's "Health Services Program" aims to address the prevalence of anxiety, depression and suicide in staff working in health services across Australia, and includes a step-by-step guide for health services on

how to develop and implement a tailored mental health and wellbeing strategy to support their staff.

Systemic, cultural change is essential, however, to reduce stigma and improve attitudes towards help-seeking. One way to begin to address this is by developing and delivering training programs that are specifically designed to help medical students and doctors recognise their own vulnerabilities and seek appropriate support when required. This training should be embedded within the curriculum in medical school, but also form part of ongoing professional development. Other possible strategies include routine screening for psychological distress and the provision of appropriate support to medical practitioners at all stages of their career. (23) Given the evidence supporting means restriction as an effective suicide prevention strategy, and the relationship between medical practitioners' increased suicide risk, their access to medication, and the fact that rates of self-poisoning are higher among medical practitioners than the general population, means restriction approaches should be considered. Although implementation of such approaches is likely to be challenging, there may be the potential to work with relevant governing bodies to identify opportunities for restricting access to medication commonly used in overdose, particularly among those who have been identified as being vulnerable. Finally, online or web-based interventions that preserve anonymity may have great potential in the medical profession, where stigma is perhaps an even larger barrier to seeking help than it is in the general population.

Conclusion

Medical practitioners are at high risk of depression and suicide. This risk may be greater in female medical practitioners, younger doctors, and students, who also report higher rates of stress and burnout. The risk of depression and suicide is exacerbated by ready access to lethal means of suicide and low rates of help-seeking in this population. Thus a multi-level approach to suicide prevention, that includes means restriction (where possible), targets

stigma, facilitates help-seeking and provides evidence-based treatment and support where needed is required for this population. (20) These approaches should utilise both face-to-face and online options. Although there is a lack of rigorous research proving the effectiveness of multi-level approaches, including among this population, there is growing interest in these approaches in Australia. Internationally, such approaches have shown promise in preventing suicide in schools, in some workplace settings, and in some communities, and they are now recommended by state and federal suicide prevention policies. There may therefore be the potential to adapt these approaches for medical students and doctors and to evaluate them using rigorous study designs. Work of this nature is currently underway. Orygen, together with a number of sector partners, including the Black Dog Institute, the Hunter Institute for Mental Health, United Synergies, the Australian Medical Association and Doctors Health Services have recently been commissioned to develop a specific response to the high rates of suicide among this population. It is hoped that together this consortium will be able to develop a stronger evidence-base upon which to base interventions designed to reduce rates of depression and suicide among Australia's medical professionals.

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