Navigating the Storm

The threat of burnout and our role in stopping it:

a medical student's perspective

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1.0 Introduction

Staff shortages. Bed blocks. Patient waitlists. As medical students soon to venture into the workforce, the ravages of burnout on health care practitioners (HCPs) are a loud and concerning challenge for our future occupation, and our health system. It leaves us with a single burning question: what can we do about this?

Moral distress, moral injury and burnout all continue to present a growing issue within the healthcare community. As medical students, it appears we receive little education on the systemic change required to address it. We are often surrounded by burnout, but rarely taught about it. Regardless, we can recognise its hallmark features in ourselves and others: emotional exhaustion, depersonalisation, and reduced personal accomplishment. Hence, our unique perspective on burnout as students may provide insight to guide future interventions to prevent it. Through this, we can help construct a resilient healthcare workforce.

Why does this matter to us, those who are yet to fully enter the workforce? The seeds of this essay were planted back in my first placement as a medical student; an exhausted principal house officer kindly taking us for teaching. Comments of fatigue, of late nights and early starts rattled my naive perceptions of medicine. Were we not the tireless helpers? The supporters? Advocates for all? It seems like in the chaos of the medical world, we may have forgotten to advocate for ourselves. The seeds of this thought have sprouted as I have progressed into my third year and engaged with placement fulltime; meeting countless doctors and health care practitioners and hearing their experiences. Night shifts, weekends shifts and the difficulty of navigating high-pressure scenarios that are often infused with conflicting emotions. One must be honest; it is a daunting prospect. On top of these pressures of the future, we have our own. The financial, emotional, and academic pressures facing medical students can isolate us from our peers, push us away from our 'time-wasting' pleasurable pursuits, and bury us deep into the current cost of living crisis.

We will aim to discuss the lived and observed experiences of burnout from a medical student perspective and suggest preventative measures we can advocate for in the future. Only through examining these aspects that impact our mental health so significantly can we hope to implement change; despite how uncomfortable it may be to explore this.

We will start by first establishing the theoretical framework around burnout, before exploring lived and observed experiences and finally examining what can be done to address it individually, institutionally, and educationally.

2.0 Frameworks of Fatigue

Moral Distress and Injury

Whilst burnout is a familiar term to most, whether as a by-product of existing as a COVID-era university student, surgical principal house officer or overstretched nursing staff, some exploration of the modern framework around burnout is warranted. This hopefully can contextualise my own experiences and guide us as we explore the future.

Burnout, within the professional practice, does not occur in isolation. Rather it is a continuum, starting with moral distress and culminating in burnout. Through understanding this continuum, we can contextualise its prevention.

An early stage is moral distress, which is violation of one's own moral code in traumatic events. Recent studies suggest moral distress is common, with a survey of British surgeons finding 67.9% reported experiencing a high grade adverse event within the last six months, and almost half reporting a worsening of sleep following the event.¹ As medical students, this can occur in many forms, including a sense of helplessness as we are exposed to new clinical, societal, and personal demands. These events can range from witnessing unpleasant confrontations between HCPs and patients to self-perceived failings in clinical performance. Some of us can struggle in these new systems; unaware of or unable to access support services. Unsupported moral distress can lead to moral injury, whereby one experiences sustained emotional distress. Not only can this lead to a sense of guilt, but the internal dissonance can accumulate and lead to anxiety, depression, and withdrawal.

Second Victim and Burnout

Second victim syndrome arises when HCPs witness or facilitate an unpleasant or unexpected patient outcome and are traumatised in turn by the action. As summarised by Wu²: "The doctor who makes the mistake needs help too." This can lead to guilt, shame, and depression, and eventually to burn out. Consequently, HCPs can become entrenched into a 'what if' mindset, negatively impacting their ability to deliver safe healthcare for future patients. It is surprisingly common, with a recent survey of an obstetrics and gynaecology department finding 26.7% of staff identified as second victim at some point of their career.³

This stress, cognitive dissonance and ongoing professional impact all contribute to burnout. Anecdotally, we see this in our own placements: sombre warnings of near misses from exhausted residents, hardship regaled by our tutors (many of whom are retired HCPs themselves) and quiet disbelief from fellow students crowded into hospital cafeterias.

The current discourse focuses on HCPs as second victims; with residents tending to have a considerably higher degree of exposure than medical students.⁴ Nonetheless, an Italian study found that more than 1 in 10 medical students have exposure to adverse patient outcomes and almost 1 in 20 experiencing self-reported second victim syndrome.⁴ We can see a significant number of our fellow students are experiencing adverse participation in the medical system even before we've become employed in it.

And finally, the looming threat that rears its head repeatedly throughout medical school – burnout. Whilst it can take many forms, it can broadly be defined as a chronic response to

prolonged emotional stress; demonstrated by emotional exhaustion, depersonalisation, and lack of social involvement. In an examination of Australian trainee physicians, 76% presented with burnout and 52% met the criteria for depression.⁵

How can we expect to sustainably guide patients through a healthcare system that seems to be harming those already occupying it?

Burnout for Medical Students

Rates of burnout are high in the medical community, and students are not spared. Whilst data is poor for the Australian population, burnout rates as high as 90% have been published for fellow students in Hong Kong.⁶ The factors contributing to burnout are often not unique to a single place. Kilic, Nasello ⁷ found that cynicism increased as students progressed through their degree, suggesting some factors within medical school contribute to this mindset change. Medical schools, educators and programs are aware of these factors.⁸ The heavy workload, long hours and high expectations placed by supervisors and ourselves put significant academic and clinical pressures on students. These can manifest in sleep deprivation and over working, states of mind almost all medical students can attest to. Alongside this, many students find it necessary to sacrifice aspects of their personal life to combat these pressures. Students too often had the unfortunate experience of declining a friend's party, weekend getaway or simply catch-up to study or sleep. A seemingly minor act that over time can isolate ourselves from our friends and family. Furthermore, the emotional impact of clinical experiences cannot be ignored. Exposure to death and suffering is common, and often presents itself to young medical students with no previous experience. It is an honour and privilege to assist people in these difficult times, but the stress of these experiences and emotional burden have been associated with increased burnout.⁷ The triggers for burnout are not the same for everyone, and may often be unavoidable within the study of medicine. However, an appreciation of these is needed to be able to address them.

The factors contributing to burnout have real consequences on medical students. We can recognise the theoretical triad of burnout, emotional exhaustion, depersonalisation, and reduced personal accomplishment; but how does this present in the medical student context? Burnout is correlated with university attrition, cynicism, and career attrition.⁹ Burnout can impact students academically; hindering their grades and more importantly their learning as they navigate the waves of knowledge that we aim to harness. This can culminate in feelings of failure, maladaptive coping, and self-harm. Burnout is a tangible threat to the physical and mental safety and health of students. But it can be addressed.

3.0 Personal Battles with Burnout

A theoretical basis on burnout is important, but how does it take shape in the lives of everyday students? Through lived experience on rotation and studying through the COVID pandemic, paired with observations gleaned from medical staff, we can translate this framework into a more tangible reality. Studying medicine is a unique experience and framing it as a 'burden' unfairly biases us towards the rewards it holds. I hope through my own personal reflection, I can demonstrate the challenges common to many students. A reflection of the causes of burnout in medical students as discussed within the literature drew three key events to my mind.

Every student can attest to the basic experiences of missing social events to align with the demands of medical school, but this was brought into a sharp focus with my relocation to Toowoomba at the beginning of my third year of medical studies. Whilst a wonderful opportunity, it presented an isolation from the support networks that have enabled me to engage with the previous five years of study. Relocation is a common experience for students, and a major factor for the burnout and mental health crises many experience. Just as we have settled into Toowoomba, discussions around the location of our fourth-year and subsequent internship arose. The opportunity for mobility and diverse opportunities in medicine should not

be framed as a negative aspect, it is one of its many positives, but an acknowledgement of the burden that is places on students is needed. In conjunction with a six-week term in Roma this year, I will be relocated for between six and eighteen weeks in my final years of study. This turbulence highlights the need for positive supports to prevent burnout.

Crowded around a crackling fire with my friends from high school, we often discuss the different pathways we have taken. A computer engineer, a carpenter, two psychology students and one professional traveller make up part of the eclectic group that comprises my invaluable support network. Yet, one discussion has stuck with me. During a discussion of death, and my friend's exposure to it, I reflected on how normalised the loss of life becomes as a medical student. Very few other careers give twenty-year old students such consistent exposure to people facing death or the loss of a loved one. It is a privilege, that cannot be understated, but in that conversation, I realised that the unique emotional experience of medicine is not necessarily as 'normal' as we think it is within the medical sphere. Something held me back from contributing my thoughts in this conversation. I wondered if it was okay to share with my friends that my perception of death was changing. Would they understand? Or would I be ostracising myself? I believe this experience is not unique to me, but common to many medical students. A self-enforced emotional isolation of our studies from those of our friends, fearing what would happen if they mixed. Unfortunately, this subtle isolation that develops is part of the pathway to burnout.

Finally, as I barraged myself with statistics and consequences of burnout, I reflected if I had done anything. Was I just another student, staring down the conveyor belt to burnout, convincing myself of its inevitability? No. I have tried to combat it, where I can. I've tried to keep an active and healthy life outside of medicine, playing sports and seeing people I care about. I've tried new things, budgeted wisely, and seen places I never would have imagined. I've volunteered my time, building UQMS Sport and allowing over 400 students to participate in social sport. Even in Toowoomba, I've tried to establish roots for my placement, volunteering

as Third Year Representative and signing up at a local rugby club. I do not want the conclusion of this essay to end with a whimper, a resigned sigh against the buffering winds of burn out. So, what we can do to prevent it?

4.0 Building Barriers

On a theoretical basis, moral injury and second victim syndrome may be avoided, even when moral distress has occurred. Whilst we have explored the framework and reflected on personal experiences, one must look to the future with hope. The reality of medical student mental health cannot be addressed with wishful thinking; tangible steps are needed. Practically, that may take the form in individual, systemic and education changes.

Individually, we must arm ourselves with strategies to face the moral distress that will likely arise in our future clinical experience. Brémault-Phillips, Cherwick ¹⁰ suggests that the following framework may be useful to address this:

- 1. Self-evaluation: What values were violated?
- 2. Identify: What specific emotions arose from this violation?
- 3. Reflection: How did this violation and emotions impact how you see the world and yourself?
- 4. Rituals: Create opportunities for forgiveness and progression
- 5. New endeavours: Engage with activities that align with your own beliefs.

Beyond this, Abreu Alves, Sinval ⁹ found that higher social support satisfaction, adaptive coping (as described above) and academic engagement attenuates the impact burnout on dropout rates for medical students. Conversely, general distress and maladaptive coping is associated with increased burnout and negative outcomes. The study broadly shows us that as a community, we must take care of each other. Simple adaptive techniques can be implemented. Self-care with regular exercise, adequate sleep and balanced nutrition are often regarded as luxuries medical students must occasionally sacrifice on the scholastic altar, but ironically that very sacrifice can limit our success, happiness, and progress. These can be

improved with time management, mindfulness, and support networks; things often discussed in medical school. However, we often fail to engage with these systems and structures when under stress, instead focusing on the next exam. 'One more exam and I will have a break'; a lie we have all told ourselves as we force our mind back to the seemingly mammoth textbook placed in front of us. Only through building strong foundations may we create personal structures resistant to the years ahead.

Institutionally, these personal reflective frameworks should be integrated into changes within the hospital. Whilst addressing personal maladaptive strategies may help, it is a reality that the medical field has it's emotionally difficult times. Through implementing system-based solutions at the very place that can contribute to the burn out, we can help create a workplace armed with the tools to fight the issues. For example, small group sessions allow HCPs to openly discuss their navigation of moral injury and how it personally affects them.¹¹ This open discourse can facilitate individualised processing within the benefits of a community environment, which has been successfully implemented in American hospitals.¹² Second victim peer support networks outline an evidence-based framework to provide trained peer supporters. A recent Danish study explored the use of a buddy system, finding it encouraged a compassionate culture, created safe spaces for disclosure and increased attentiveness to colleagues.¹³ Whilst beyond the scope of medical students, these studies suggest systemic changes are possible to enable a positive, resilient workforce.

Education may present a route of addressing the burnout cascade, however this is still in its early stages. Shiner ¹⁴ explored the role of simulation in preparing first year medical students for their first exposure to open wounds in clinical practise, finding that engaging students prior to confrontation decreased negative feelings and improved emotional preparedness and excitement. As we progress into the medical establishment, it is also our duty as medical students to reflect on the systems that have moulded us and evaluate its effectiveness in preparing us. At the current rates of burnout for physicians, we must sincerely question if the

establishment we a part of has succeeded in that goal. Beyond changes made to prepare students to face the future, the stress that occurs as a part of attending medical school is also a driving factor. Every student can recount receiving emails explaining how another assessment piece is 'essential,' emphasising that students may fail if not implemented. As discussed previously, I have personally experienced the jarring and exhausting juxtaposition of harsh warnings of possible failure paired with technological malfunctions that make completing timely assessments impossible. Actively fostering a compassionate, yet academically challenging, environmental for medical students is not as easy task. Yet is one we must continue to strive for.

Through the three approaches of personal, institutional, and educational, we can strive to address the looming threat of burnout. Rather than despair, we can arm ourselves with meaningful routes of change and advocate for them. Whilst these changes may not occur within our fleeting years as medical students, we can strive to make our personal lives, workplaces, and universities happier and healthier for years to come.

5.0 Conclusion

Whilst burnout seems like a daunting inevitability of our future, together we can implement changes to create a happier, more productive, and safer workforce. We've examined the theoretical framework for burnout and the factors experienced by medical students. Together, we explored my personal experiences with these factors to illustrate how they may lead to isolation. And finally, we explored what can we do to prevent it. Distressing situations will arise in our medical careers – having occurred already for some of us – yet personal, institutional, and educational changes may present alternative ways to prepare and cope.

I discussed my own experiences in this area. From moving between cities to questioning the validity of self-imposed emotional isolation, I have had fatigue and burnout threaten me. Yet we can acknowledge that it is not an inevitability. There is tremendous potential for medical students and doctors in this career. I recognise the value of my position, and whilst identifying its difficulties, am left with a sense of hope for the future.

The cause of burnout is well-established in the literature, but prevention is under-researched. We examined some of the techniques institutions are using to try to care for students and prepare them for the realities of their future. Yet, the field is still developing. Looking forward, further examination of these techniques should be explored as we aim to create an evidencebased educational system that simultaneously prepares students emotionally and intellectually.

Medical students become doctors. If we fail to address the drivers of burnout that are so present in our medical community, it will harm ourselves, our colleagues, and negatively impact patient care. By nurturing the systems that look after us, we can look after each other and ourselves better.

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