

RACS Medical Student Essay 2022

Wellness in the Day of a Life of a Surgeon

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*"I don't know many doctors who hate medicine or wish to be removed from their patients and the altruism of our profession, but I know plenty who have been broken or damaged by the system".*¹ Dr. Nikki Stamp's most recent 2022 book "Scrubbed" explores the physical, emotional and mental toll of working as a surgeon in Australia's hospital system. This novel sits alongside a plethora of memoir-like novels; *"Emotional Female"* – Yumiko Kadota, *"This is going to hurt"* – Adam Kay, and *"Going Under"* – Sonia Henry. This new genre highlights the facts that the issue of psychosocial wellness for junior surgeons has never been more topical.

In order to define "wellness" in the life of a surgeon, what does "wellness" actually encompass? The Cambridge Dictionary defines "wellness" as: *the state of being healthy, especially when it is something that you actively try to achieve*². If we travel even further, what does a healthy state involve? The tried and tested formulaic response from medical school serves as an adequate answer to this question. *"Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity"*³ as preached by the World Health Organisation. Despite only being a medical student in Albury, I can guarantee I have never seen a junior surgical registrar finish a nightshift, or arrive bleary-eyed at 6am for a ward-round in such a 'healthy' state of well-being. Furthermore, if the definition of "wellness" is an active pursuit of health, how can one reconcile the simultaneous desires for wellness and a career in an all-consuming specialty frequently involving long shifts with minimal sleep?

The Problem:

In consideration of these definitions, continuous wellness seems unattainable as a surgeon. A career which shows over 47.7% of subspecialty and 20% of general surgical trainees working more than 25 hours of un-rostered overtime per week⁴ and significantly higher rates of occupational anxiety and burnout⁵. The intense workload and high stress of the surgical environment is not new information. Recent data suggests that 30-50% of US surgeons suffer from burnout, anxiety or depression⁵. This poses the question: are people prone to these psychological states are more likely to pursue a surgical career, or is there a fault in the system inducing this state in surgeons? It is critical to understand the root cause of these differing health outcomes for surgeons in order to establish how to appropriately address these concerns.

The idea of mindset theory has been discussed by Carol Dweck⁶. The two dichotomous mindsets theorised in her work are "growth" or "fixed". A fixed approach believes that intelligence and ability are pre-determined, whereas, the growth mindset views these attributes as open to improvement. These two different mindsets were instrumental in predicting how individuals would respond to failure and be driven to success. Those who believed traits were "fixed" felt urged to succeed, as a way of internal validation to feel pride and satisfaction in success. However, this also poses a risk, if your self-esteem is defined by perpetual success, what happens when you fail?

Recent studies have explored the impact and prevalence of Dweck's mindset model in surgical registrars. Current studies, involving general, plastics and neurosurgery registrars, showed surgeons were more likely to possess a "fixed" mindset^{7,8}. Serebrakian et al. (2021) found that United States plastic surgical registrars had an average Implicit Theories of Intelligence Scale for Children (ITIS Score), which can be utilised in adults, of 2.73, (SD +/- 0.82). In this scaled system, scores under 3 indicated a "fixed" mindset⁹. In contrast, a Thailand study conducted over a single general surgery rotation showed 63% of residents displayed a "growth" mindset¹⁰. However, as which particular mindset metric was not discussed and, due to the small sample size, it is difficult to interpret this finding. The problem with a "fixed" mindset is the impact on psychological wellbeing and motivation to develop surgical skills. A 2019 study conducted on Canadian medical students showed the correlation between a fixed mindset and maladaptive cognitions and high levels of psychological distress¹¹. Hence, integrating targeted psychological education of mindset approaches offers a potential avenue to improve wellness and reduce the prevalence of burnout and depression in surgeons.

When considering daily wellness in a surgeon's life, it seems critical to address the clear systemic issues that inhibit, or promote, wellness. Personality and mindset aside, there is a clear environmental cause underlying the wellbeing of an individual. The instalment of "The Wellbeing Charter for Doctors" by the Royal Australian College of Surgeons (RACS), Australasian College for Emergency Medicine (ACEM), Australian and New Zealand College of Anaesthetists (ANZCA) and the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) shows the collaborative and focused effort to support specialist

wellbeing. This charter states that although the individual doctor has a responsibility to “*Practise self-care... This includes basic needs – adequate sleep, exercise, nutrition, hydration, regular breaks/leave...*”. Additionally, hospitals have “*an obligation to provide safe and healthy working environment...cover for sick leave and reasonable working hours...*”. However, is this actually present in hospitals?

A NSW 2018 study explored the number of hours worked by doctors-in-training, both rostered and un-rostered. 37.7% of subspecialty surgical and 20% of general surgical trainee respondents reported more than 25 hours of un-rostered overtime per week⁴. This shows a failure by the system to provide that safe environment. Scarily, this data was collected prior to the 2019 coronavirus epidemic. The Canadian Association of General Surgeons Residents Committee conducted a survey in 2019, which showed that 75% of general surgery residents reported emotional exhaustion, burnout and feelings of depersonalisation.¹² Whilst there are no current studies examining whether Australian data replicates these figures, this does emphasise the additional stress put on surgeons during the pandemic. Anecdotally, with the virus requiring team members to take sick leave, often-times ensuring work cover is present is not always possible. Therefore, the requirement of “*reasonable working hours*” cannot always be guaranteed.

Hence, the expectation that the system will always protect the working environment to facilitate wellbeing may not be achievable. Whilst admittedly, a global pandemic seems like an extreme exception, it is difficult to forecast the lasting implications of this pandemic or, whether it is the first of many. Therefore, it is critical to establish small daily habits to create changes and help support Australian surgeons.

The media frequently depicts a surgeon’s daily life as being continuously ‘on call’. A quick YouTube search for “A Day in the Life of A Surgeon” will show 3am to 5am starts along with many hours of study. These long hours seem to be a glorified part of being a surgeon. These videos all receive thousands to millions of views and seem to perpetuate this narrative of surgery being an all-consuming career. This is reinforced even during medical school, as students are asked, “how do you know you should do surgery?... if you can’t see yourself doing anything else”. This “cult-like” all-encompassing narrative of the surgical occupation only seems to further fuel the desire to perpetuate a career path that encourages sacrificing everything for your career. A study conducted in Switzerland in 2010 revealed a high overall workload, struggles to balance professional and private life and an absence of extracurricular activities were key variables in training surgeons leaving the profession and burnout¹³. A similar study conducted in the United States in 2017 found the most common reason for leaving surgical training was due to an uncontrollable lifestyle, with female residents 1.5 times more likely to leave training than their male peers¹⁴. Therefore, there are threats to surgeon wellbeing from; inherent surgical personality traits, the hospital system and the media which perpetuates the narrative of surgical training as an all-consuming commitment requiring an unquantifiable sacrifice.

The Suggested Solution:

Wellbeing in surgery can therefore be optimised by modifying the inherent personal beliefs of individual surgeons, as well as creating systemic change within the hospital system and media. However, how can these changes be implemented into everyday life?

“*One can hardly conceive of the high degree of enjoyment I experience daily in this bloody butchering department of the healing art*”. This quote by Lord Joseph Lister echoes the passion and love of surgery we hope every surgeon inherently has. This is why people persist in the profession despite the personal sacrifice. I believe it is paramount we avoid the systemic burnout and continue to ensure those who are talented, dedicated and knowledgeable not only survive but thrive in the Australian healthcare system.

First, solving the “fixed” mindset and desire to always be perfect. Mindset training has been implemented in primary, secondary and tertiary schooling and has shown to be effective in optimising student learning. Seaton (2017) utilised six training sessions across two phases which resulted in a significant shift from a fixed to a growth mindset, which was persistent across a 3-month period¹⁵. However, this study was conducted on teachers, not medical professionals. Although there is no current research on the implementation of these mindset changes in surgeons, it has been recommended in medical schools and in nursing¹⁶. Encouraging active reflection throughout surgical training and practice, involvement of

journaling and documenting personal development and goals can attempt to reduce the risk of burnout and depression in aspiring and established surgeons. This strategy can be implemented daily and with minimal disruption to the life of an already overworked surgeon.

Additionally, addressing the systemic issues present within the hospital system is paramount to optimise daily wellness for surgeons. Vitrous et al. (2021)¹⁷ conducted a thorough meta-synthesis examining several work-related stressors as key variables increasing surgeon burnout. The most prominent among these were the influence of hospital culture and supports, lack of mentorship, administrative load, hours worked, call conditions and lack of collegial relationships. Vitrous argues that the most meaningful way of addressing these stressors was by increasing focus on redesigning the surgical training curriculum. This redesign should be targeted to moderate workload as required and promote mentorship and active institutional support for residents. Institutions have a similar responsibility to encourage active mentorship roles and protected teaching time. There should be minimal barriers for career advancement with clearly defined salary and promotion pathways, especially among minority groups and women. Any incidents of workplace bullying should be addressed immediately by the institution, with particular focus on daily micro-aggressions of sexism, racism or harassment.

The final consideration relates to the perception of surgeons in the media. The Patrick Dempsey idealised version of a benevolent saviour, who finds a miracle solution to every surgical complication is far from the truth. The reality of the surgical profession is often much more brutal and significantly less glamorous. However, the 'miracle-worker' surgeon motif is still highly prevalent in popular culture. A recent Netflix series "The Surgeon's Cut" explores the life and cases of four subspecialised surgeons. In this series, although adverse patient outcomes are discussed, the surgeons are portrayed as pioneers and revolutionary figures in their subspecialty. This may be the case for a small minority of Australian surgeons, however, for the vast majority, this is not entirely accurate. I believe this public perception of surgeons as miracle workers can actually be destructive. Surgeons should have a life outside their career especially as the profession is intense and consuming. However, with reference to the WHO definition of wellbeing, surgeons are still people and the other components of wellness need to be included in everyday life. Dr. Nikki Stamp discusses this in detail in her book "Scrubbed", where she mentions the inability to have a full night's sleep, or go to do some exercise. These basic inclusions should not be negotiable when it comes to any profession. In addition to more reasonable working hours and conditions, ending the superhero-like portrayal of surgeons is vital in creating this change.

"Put on your own mask before assisting others..." I study in Albury-Wodonga, where the vast majority of surgeons do work in the surrounding rural towns and are an integral part of the local community. One of the benefits of regional work is more accessible work-life balance. Although a number of junior doctors aspire to be surgeons, even more aspire to be happy and fulfilled in their career. The current attrition rate in general surgery is approximately 18%¹⁴, which is significantly higher than for other specialities. I believe a major reason for this is the inaccessibility of the current surgical lifestyle, especially for women. Wellbeing in a surgeon's day entails being able to work in a supportive workplace, with reasonable hours, comradery and minority representation, and when at home, have time for some leisure pursuits. There is no debate regarding the high degree of commitment surgery demands, but small 15-to-30-minute activities can rapidly change the current landscape of surgical burnout and depression. Hence, before surgeons in Australia can save others, they must first have the time, training and opportunity to save themselves. I still think Lord Lister's words ring true for the majority of those infatuated with surgery, it is just essential we minimise systemic and inherent factors that threaten that passion.

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