

Resilience and the Modern Surgeon

Authors:

Dr Agnes Arnold-Forster
Centre for History in Public Health,
Faculty of Public Health and Policy,
London School of Hygiene and Tropical Medicine,
15-17 Tavistock Place,
London, WC1H 9SH

Military metaphors

The place (and some of the problem) of resilience in surgery lies in its origins in the profession's long historical association with the military. In the nineteenth century, members of the medical professions exploited and elaborated, as historian Michael Brown has put it, "visions of masculinity framed by war, heroism, and self-sacrifice."ⁱ Clinical practice was conceptualised as a form of warfare against a malevolent enemy and military metaphors were used to refer both to the activities of germs, gangrene, and cancerous tumours, and to the actions of surgeons and physicians.

The military metaphor worked on multiple levels. Surgeons were waging war against damage, disability, and disease – inanimate, if deadly foes. Surgeons were also increasingly seen as part of a society-wide conflict between life and death, cures and killers, progress and stagnation. In 1900, Surgeon-Extraordinary to Queen Victoria, Frederick Treves, spoke at the annual meeting of the British Medical Association. His address entitled, 'The surgeon in the nineteenth century,' concluded with a flourish, reflecting on the future of surgeon in a passage suffused with military language: "So as one great surgeon after another drops out of the ranks, his place is rapidly and imperceptibly filled, and the advancing line goes on with still the same solid and unbroken front."ⁱⁱ

The relationship between surgery and the military was not only metaphorical. Throughout the nineteenth and twentieth centuries, many surgeons participated in the war effort, engaging both on the literal frontline and back home, in military hospitals.

As a result of these material and metaphorical links, by the end of the Second World War the archetypal surgeon, or the surgical caricature, shared many qualities with the soldier. Both were supposed to embody ideals of stoic masculinity and both were supposed to be bold, brave, and robust under pressure. In modern terms, they were supposed to be resilient.

Resilient surgeons

But resilience did not enter the surgical lexicon until the twenty-first century. While patients have long been described as resilient in the face of disease or invasive treatment, surgeons were rarely, if ever, described using the term. Resilience is a psychological concept, defined as, 'that ineffable quality that allows some people to be knocked down by life and come back stronger than ever; the capacity to recover quickly from difficulties, often equated with toughness.'ⁱⁱⁱ It is a type of emotional armour, a 'plastic shield' comprised of personality traits such as a robust sense of humour and what psychologists call 'stress immunity.'

Indeed, the idea that surgeons need to be resilient, and that the most successful surgeons are high-achievers partly because of their robust 'emotional armour', is now prevalent. Prominent voices in the profession suggest that it is not only something surgeons should possess, and something that should be selected for when recruiting medical students and surgical trainees, but that it also something that surgeons and other healthcare professionals can learn and develop. Indeed, there is a widespread view in the medical profession that doctors, and particularly surgeons, should possess an

inherent heightened mental robustness to manage the highly stressful nature of their work. Resilience among surgeons and physicians has become an expanding area of research, and associated with other twenty-first-century wellbeing preoccupations like burnout, stress, and moral injury.^{iv}

Most of the studies conducted into resilience have been undertaken in Australia and the USA. These studies use and investigate doctors' 'resilience scores', supposedly objective measures of personal resilience. However, while researchers acknowledge that resilience is 'complex' and 'multifactorial,'^v some studies demonstrate that doctors report relatively low resilience. Surgeons are no more robust than the general population, and indeed might actually be less so.^{vi}

To tackle the supposed lack of resilience among surgeons, resilience training is now big business. Professional societies, royal colleges, and other institutions contract private organisations and individuals to provide general or tailored courses designed to 'upskill' surgeons and improve their ability to cope with the emotional turmoil of their jobs. The Medical Protection Society offers free online workshops to its paying members designed to help them 'recognise the signs of burnout' and 'prevent recurrence.'^{vii} In 2020, Healthcare Conferences UK offered a one-day event devoted to 'enhancing resilience, reducing stress, and supporting the wellbeing of doctors.' Registration cost £438.^{viii}

It is unsurprising, considering surgery's long associations with warfare, that resilience entered the lexicon of surgery from the military, via business and management. The British Army's Mental Resilience Training programme is designed to help soldiers recognise and regulate the signs of stress and help them to prepare for difficult events and circumstances. Similarly, the UK Royal Air Force offers its recruits a 'novel military health and well-being approach' called SPEAR that emphasises key activities: 'participating in Social networks, capitalising on Personal strengths and weaknesses, managing Emotions, enhancing Awareness of psychological symptoms and learning methods to promote Resilience.'^{ix}

Much of the research into resilience has also taken place in military settings. From the early 2000s onwards, healthcare researchers into professional wellbeing and system management began looking to the army, navy, and air force for lessons and inspiration. In 2015, the chair of the General Medical Council, Terence Stephenson, told the House of Commons Health Committee: 'I am struck by how much the military invest in resilience training...they do not wait until they are out in Helmand province; they start at recruitment and training.' He thought this strategy might apply to healthcare: 'That is probably something that we could think about exploring...building in resilience training when people are medical students and young trainees rather than waiting...until you've been reported or had a complaint, and then trying to develop that resilience.'^x

The problem with resilience

While seductive, some have challenged the applicability of the military to the medical. Authors of a *BMJ* article argued in 2010, 'Many of the organisations studied are solely military or include military personnel, which brings an acceptance and adherence to routines and procedures.'^{xi} Moreover, there is limited evidence that the military's resilience training programmes work even for the soldiers and settings they are designed for. A randomised controlled trial published in *Occupational & Environmental Medicine* in 2019, found, 'no evidence that resilience-based training had any specific benefit to the health and well-being of UK military recruits.'^{xii} While research has found that feedback after resilience training for surgeons is generally positive, there has not been similar rigorous testing of such interventions in healthcare settings.^{xiii}

Perhaps the most problematic element of the rise of resilience research and training in surgery is the focus it necessitates on the individual, rather than on the system or structures in which they train and work. While a certain degree of emotional robustness might be useful, attending to personal resilience alone risks cultivating a generation of surgeons who are expected to put up with restricted resources and worsening working conditions. Instead of focusing on resilient individuals, perhaps more attention should be paid to resilient institutions.

References:

- i. Michael Brown, “Like a Devoted Army”: Medicine, Heroic Masculinity, and the Military Paradigm in Victorian Britain’, *Journal of British Studies*, 49:3 (2010), 592-622, 594.
- ii. Frederick Treves, ‘Address in Surgery. The Surgeon in The Nineteenth Century’, *British Medical Journal*, 2:2066 (1900), 284-289, 285.
- iii. ‘Resilience’, *Psychology Today*, <https://www.psychologytoday.com/gb/basics/resilience> (accessed 23 May 2021)
- iv. Nicola McKinley et al, ‘Resilience, Burnout and Coping Mechanisms in UK Doctors: A Cross-Sectional Study’, *BMJ Open*, 10 (2020), 1-8, 1.
- v. *Ibid*, 2.
- vi. H. Bolderston et al, ‘Resilience and Surgeons: Train the Individual or Change the System?’, *Royal College of Surgeons Bulletin*, 102:6 (2020), 2244-247.
- vii. <https://www.medicalprotection.org/uk/articles/building-resilience-and-avoiding-burnout-workshop> (accessed 31 May 2021)
- viii. <https://www.healthcareconferencesuk.co.uk/assets/conferences-and-masterclasses/conferences/2020/october-2020/resilience%2C-stress%2C-wellbeing-doctors-oct-2020.pdf> (accessed 31 May 2021)
- ix. Norman Jones et al, ‘Resilience-Based Intervention for UK Military Recruits: A Randomised Controlled Trial’, *Occupational & Environmental Medicine*, 76:2 (2019), 90-96, 90.
- x. House of Commons Health Committee. Accountability Hearing with the GMC (6 January 2015) www.parliamentlive.tv/Main/Player.aspx?meetingId=16853 (accessed 23 May 2021)
- xi. Charles Vincent, Jonathan Benn, and George B. Hanna, ‘High Reliability in Health Care’, *British Medical Journal*, 340:7740 (2010), 225-226, 225.
- xii. Jones et al, ‘Resilience-Based Intervention for UK Military Recruits’, 90.
- xiii. *Ibid*.