



ANALYSIS

Excising the “surgeon ego” to accelerate progress in the culture of surgery

Healthy self confidence has an important role in surgery, but we must take care that it doesn't develop into disruptive ego, say **Christopher G Myers and colleagues**

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Recent years have seen a palpable change in the surgical community, with major efforts made to shift towards a more positive, humanistic surgical culture.¹⁻³ This reflects a broad recognition that ego driven behaviours and disruptive attitudes pose a risk to surgical culture and to patients.^{2,4,5} The objective and subjective evidence that has prompted these efforts, however, has not been thoroughly explored and understood by the surgical community.

Periodically, drastic examples of ego driven behaviour generate increased scrutiny and discussion, but these are often fleeting and do not fuel substantive changes. In December 2017, for example, transplant surgeon Simon Bramhall was convicted of assault in the United Kingdom for cauterising his initials on patients' livers during operations.⁶ Unnecessary cauterisation of any kind may be considered a reckless behaviour, but the choice to cauterise his initials highlights an element of ego in his behaviour. The judge in his case described the action as “conduct born of professional arrogance of such magnitude that it strayed into criminal behaviour.”⁶

Fortunately, such cases of extreme arrogance are rare among surgeons—although, this is not the first time patients have been allegedly marked with surgeons' initials.⁷ But milder forms of ego driven behaviour are still observed in modern surgery. A study of “unsolicited patient observations” among surgeons⁸ found examples of patient complaints about surgeons' arrogant, intimidating, or rude behaviour, such as: “I asked Dr Y how long he thought the operation would take. He said, ‘Look, your wife will die without this procedure. If you want to ask questions instead of allowing me to do my job, I can just go home and not do it.’”⁸

Though high profile cases of arrogant behaviour garner widespread attention, recognising the milder forms of ego driven disruptive behaviour, and their consequences, is important for healthcare organisations and those who work in them. We draw

from research in the medical and organisational literatures to outline the deleterious effects of “surgeon ego” in healthcare organisations and discuss the progress made in shifting surgical culture in a more positive direction, as well as potential solutions to accelerate change.

What is the problem?

Overconfidence has long been noted as a potential problem among doctors,⁹ but the practice of surgery has a particular reputation for arrogant, ego oriented behaviours. In a study of personality traits among UK healthcare professionals, surgeons were found to have significantly higher levels of narcissism (a personality characteristic that manifests in egotist, arrogant, or dominant attitudes¹⁰) than their non-surgeon colleagues.¹¹ Other research has found greater numbers of disruptive behaviours and patient complaints among surgeons than non-surgeons, which could be the result of more arrogant attitudes (alongside the high stakes, high stress environment of surgery).¹²⁻¹⁶

Arrogant behaviour among surgeons is certainly not universal and very likely varies across specialties or departments, though existing data at the specialty level are insufficient to draw more substantial conclusions.¹¹ But just a few “bad apples” can disrupt patient care and perpetuate the reputation of surgical culture as ego oriented.³ Medical students often perceive surgeons as overly self confident to the point of arrogance, and think that they would need to fit this stereotype to be a successful surgeon.^{12,13,17} This perception is shared by other health professionals. In a Swiss study, ratings provided by nurses showed a shared perception of surgeons as less socially oriented and more aggressive than internists.¹⁸ Notably, these perceptions were supported by self reported ratings from doctors in the study, with surgeons rating themselves as more aggressive than internists.¹⁸

This widespread perception raises a concern about self selection, where people comfortable with this behaviour are more likely to enter the specialty and, more importantly, where the profession loses promising candidates who are averse to these behaviours. A study of US medical students found that those who chose technique oriented specialties (including surgery) tended to be more dominant and less warm than those who entered person oriented specialties.¹⁹ Compounding this selection effect, surgical training may perpetuate ego oriented behaviour “down the chain” as trainees model the behaviour of more senior surgeons, and unintentionally encourage trainees to carry forward disruptive behaviours in their future practice.^{3 12} These dual pressures of selection and socialisation are worrisome because they may push well intended individuals from reasonably confident to problematically arrogant through the course of surgical training. In a study at a large US academic medical centre, for example, surgical residents and faculty scored significantly lower on the personality characteristic of agreeableness (the tendency to exhibit altruism, trust, and modesty) than did faculty and residents in medicine and family medicine. Moreover, the surgical faculty also scored significantly lower on agreeableness than surgical residents,²⁰ a troubling trend across these different career points.

Conceptualising the “surgeon ego”

One obstacle to tackling the effects of surgeon ego is the fragmentation of research in this area, with studies focusing on different manifestations—such as narcissism, arrogance, dominance, and disruptive behaviour. Fig 1 shows how these disparate findings relate to each other, offering an integrated understanding of what is meant by the surgeon ego.

Specifically, many of the surgeon attitudes and behaviours described in research are manifestations of an underlying characteristic of narcissism, considered a subclinical personality characteristic possessed by most people to varying degrees.¹⁰ Narcissism, evident to others as “arrogant, self promoting, aggressive” attitudes,¹⁰ is a driver of disruptive behaviour in the perioperative environment (though it can also result from situational stressors or other cultural conditions).¹² In turn, these attitudes and disruptive behaviours can have a detrimental effect on outcomes relevant to patients and providers.

What are the consequences?

Healthy self confidence has an important role in medicine, especially surgery.²¹ The ability to take decisive action in the face of complex, time sensitive, and high stakes procedures requires a confident disposition and belief in one’s own abilities to step up and lead. But in the modern era of multidisciplinary care, where the “captain of the ship” is less clear,²² this confidence should not give way to a more disruptive ego.

Notwithstanding the preceding examples, we found relatively little research directly examining the performance consequences of surgical ego. Yet drawing on established literature in the organisational sciences, we can infer the consequences of ego driven behaviour among surgeons. Higher levels of arrogance in the workplace, for example, are associated with worse job performance,²³ and meta-analytic evidence shows a strong association between narcissism and counterproductive behaviours in organisations and between narcissism and worse job performance for those in positions of authority.^{10 24}

Some surgical research has examined the outcomes of surgeon ego indirectly. Cooper et al found that patient complaints about intimidating or disrespectful behaviour predicted complication

and readmission rates for that surgeon.⁸ At the same time, substantial research has shown how disruptive behaviours can divert attention from patient care, while also increasing medical errors and affecting the wellbeing, turnover, and collaboration of others in the perioperative environment.^{5 13 14 25} And conversely, surgeons’ interpersonal effectiveness and non-technical skills (such as teamwork, communication, and cooperation) are increasingly being identified as drivers of technical performance²⁶ and the differential ability of surgical units to rescue patients after major postoperative complications.²⁷⁻²⁹

One particular consequence of the surgeon ego is that it may deter women from pursuing surgical careers.³⁰ Alongside perceptions of arrogance and intimidation, medical students report perceiving the practice of surgery as “masculine” and feeling pressured to conform to that norm (or feeling that they must be highly exceptional to succeed without conforming).¹⁷ At the same time, much attention has been paid to recent evidence of better outcomes for the patients of female surgeons than those of male surgeons.³⁰⁻³² Though we cannot say definitively that surgeon ego is linked to sex, more than half of doctors and nurses who responded to a survey on disruptive behaviour reported that male doctors engage in more disruptive behaviour, whereas only 2% reported that female doctors engage in more disruptive behaviour, and 41% reported no difference.²⁵ Moreover, meta-analytic findings in the general population show that men consistently score higher on measures of grandiose narcissism than do women.³³

What are the paths forward?

Considering these negative consequences for teamwork, wellbeing, and patient care, the surgical community must recognise and tackle practices and norms that might unintentionally encourage or condone ego oriented behaviour. Effective change will require a multidisciplinary effort from surgeons, anaesthesiologists, nurses, and the many other professionals vital to perioperative care. Bramhall was not alone in the operating room when he cauterised his initials into patients’ livers, yet no one stopped him. It wasn’t until years later that he was held accountable. A key first step is simply acknowledging that this behaviour—both in its extreme and less severe manifestations—disrupts interprofessional teamwork, decreases situational awareness, and inhibits communication in ways that ultimately affect patients.

Creating lasting change, however, necessitates systematic efforts to understand and deal with these behaviours (with grounded interventions and reliable assessment of key outcomes) and will require altering the fundamental norms and practices that may unwittingly encourage these behaviours. We need more research to directly assess the effects of surgeons’ differing interpersonal behaviours on care outcomes and patient perceptions. Responsibility for developing this evidence based, interprofessional approach lies with all levels of surgical practice, including not only professional associations and regulatory bodies but also the leadership of hospitals and departments and the peer community of surgeons.

Professional associations can set the agenda for dealing with ego concerns by setting guidelines and developing training materials regarding these disruptive attitudes and behaviours—similar to the non-technical skills training modules developed by the Royal College of Surgeons of Edinburgh.³⁴ Surgeons look to these associations and regulatory bodies for not only awareness of important issues, but also concrete recommendations for action. Some surgical governing bodies

have stepped up efforts to combat negative aspects of surgical culture, including the Royal Australasian College of Surgeons' 2016 Let's Operate with Respect campaign, which was focused on ending bullying, discrimination, and sexual harassment in surgery.³⁵ These surgery specific efforts can bolster existing, broader endeavours, such as the American Medical Association's development of health systems science as the third pillar of medical education (joining basic and clinical sciences).³⁶ This curriculum provides a framework for understanding aspects of healthcare delivery not traditionally taught in medical schools, such as teamwork and leadership.

At the same time, the leadership of surgical departments, hospitals, and schools of medicine should focus on attitude and disruptive behaviour when recruiting and promoting people to positions of authority. Many healthcare systems and their leaders have made efforts in recent years to create the necessary infrastructure and support to curb ego driven behaviour across the medical profession (not only in surgery). The Center for Professionalism and Peer Support at Brigham and Women's Hospital has pioneered interventions for reducing disruptive behaviours and improving the quality of physician peer interaction.³⁷ Likewise, the University of Michigan Department of Surgery's "Michigan Promise" is a longitudinal investment to create an inclusive and welcoming environment for current and future surgeons.³⁸ Yet these efforts are often not fully integrated into the systems used for training, selecting, or promoting surgeons, representing a key opportunity for matching intention with action. Departments could develop in-depth, interpersonal simulations for assessing and training surgeons as they engage in the complex interprofessional dynamics of an operating room. Simulation methods have been used to evaluate these types of interpersonal, non-technical skills when hiring department chairs,³⁹ revealing key insights into leadership skills and attitudes. Interpersonal simulations can also be beneficial if incorporated into the training of surgical residents,⁴⁰ helping to break the cycle of selection and socialisation described earlier.

These organisational efforts would undoubtedly advance the field's understanding and ability to tackle the causes and consequences of surgeon ego, but they may be isolated to specific institutions or regions, emphasising the need for the entire surgical community to recognise and deal with these behaviours among their peers. Social media campaigns such as #ILookLikeASurgeon,³¹ for example, have highlighted longstanding biases and problematic attitudes within surgery, sparking important discussion and change. Understanding the accumulating evidence in the medical literature—and the broad existing evidence in the organisational sciences—that show the deleterious effects of ego driven behaviour may provide even more impetus for this movement and generate more sustainable change. After all, the bulk of surgical education still occurs through informal mentoring and apprenticeship models, as surgeons look to their community of peers and mentors to role model effective behaviour.

The typical surgeon today no doubt possesses an appropriate degree of confidence and self assurance, as well as a healthy level of humility. But as we continue to see cases of behaviour that depart from the normal bounds of confidence, the field at large must reiterate its commitment—in both word and deed—to selecting, training, and maintaining a population of surgeons prepared to act and interact in ways that deliver the best outcomes to patients in the modern healthcare environment. Given the monumental shifts and progress made in just the past few years, the future is bright.

Key messages

Surgical culture is shifting towards a more positive and humanistic culture, in part as a response to both extreme and subtle ego driven disruptive behaviours among surgeons

Accumulating evidence from both the medical and organisational sciences shows substantial negative consequences for ego driven behaviour in complex work environments such as surgery

We need more research and systematic exploration of ways to further reduce ego driven behaviour in the practice of surgery

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Figure

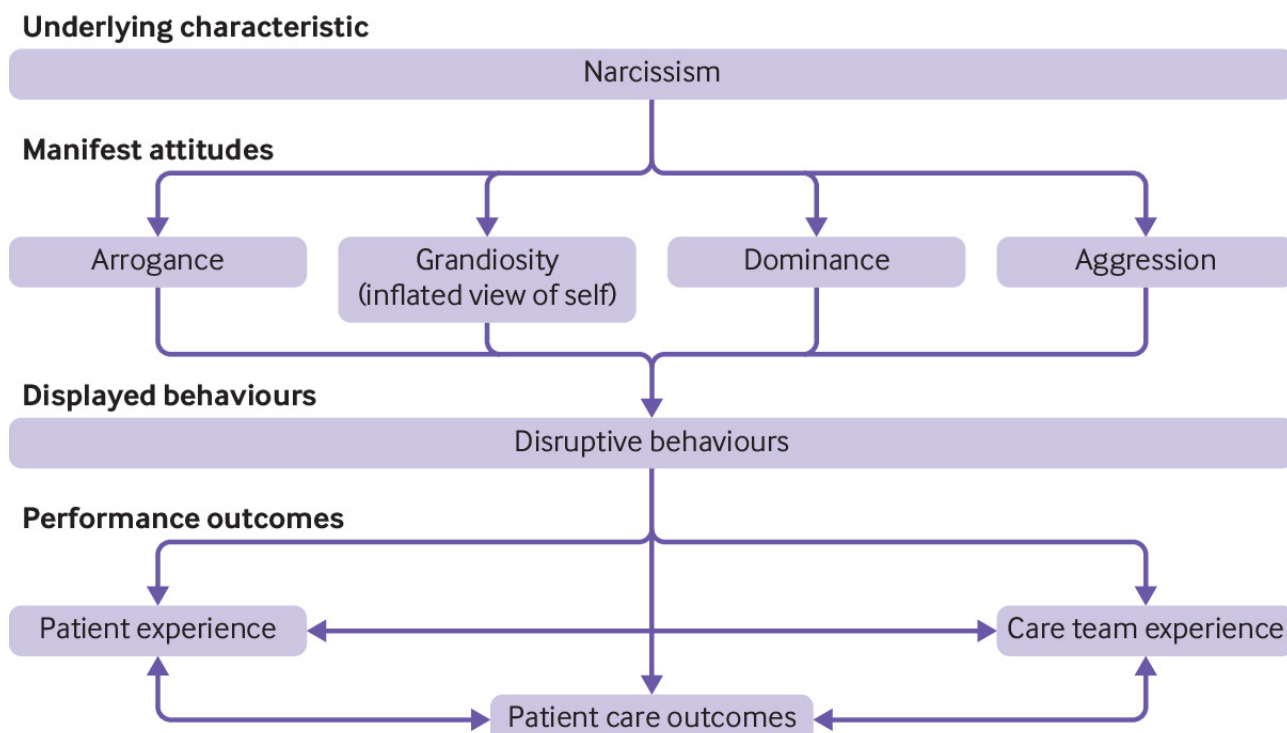


Fig 1 Organising framework for causes and consequences of surgeon ego

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