

## Is the "Surgical Personality" a Threat to Patient Safety?

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### Case Objectives

- Describe the myth of the "surgical personality"
- Identify features of highly reliable organizations
- Describe steps that can be taken to improve the culture of safety in medicine

### Case & Commentary: Part 1

*A 7-year-old boy with acute lymphocytic leukemia presented for insertion of a portacath. The surgeon utilized a supraclavicular approach for the guidewire placement and was having significant difficulty obtaining venous access. During this period, the surgeon began to yell at the members of the operating room (OR) team for a variety of issues, including the degree of chatter in the OR, the failure of the OR staff to anticipate his next request, and their failure to move the patient into his desired position to place a Bovie pad. This behavior did not surprise the OR team, as this surgeon had a reputation for being "old school" and possessing poor communication skills.*

*On the next attempt to pass the guidewire, it appeared to pass into the left ventricle. This was noted by both the X-ray technician and the anesthesiologist, neither of whom were willing to speak up given the senior surgeon's reputation of berating team members who gave unsolicited input on "his case."*

The first joke I ever heard about surgeons had as its punch line: "Oh, that's God, he just thinks he is a surgeon." The act of practicing surgery requires a very specific skill set—excellent eye–hand coordination that translates into excellent manual skills, the ability to act decisively on uncertain knowledge under time-limited situations, and a willingness to improvise when the unexpected occurs—all of which creates the aura of the surgeon as a Hemingwayesque hero who displays grace under pressure. But neither the aura nor the skill set preordains a certain personality. In fact, there is great variation in social skills, interpersonal style, and individual demeanor within any group of surgeons—what *is* shared by both self-effacing and soft-spoken surgeons and by arrogant, brashly assertive ones is the ability to rise to the occasion, to do what is necessary, to project a calming confidence when odds suddenly and unexpectedly become long.

Nonetheless, the myth of a surgical personality persists in the organizational culture of the modern hospital.

One of the surgeons I shadowed while gathering data for *Forgive and Remember: Managing Medical Failure* (1) appeared to be the perfect embodiment of the surgical personality. It was as if he entered the operating room directly from central casting. He strode into rooms and instantly commanded the spotlight. His grooming was immaculate; his unwrinkled surgical scrub suits possessed a military crease. His posture was ramrod straight. He was tyrannical in the demands that he made upon residents, nurses, and, to be fair, himself. He directed public verbal abuse at residents when their performance failed to meet his unsparing standards.(1)

Had I shadowed only one surgeon, I might have conflated this surgeon's boorish behavior with those qualities necessary to achieve clinical excellence. However, I saw a number of this surgeon's colleagues who achieved the same results, displayed the same level of surgical skill, and were able to make the same time-pressured decisions under conditions of uncertainty while treating others with respect.

A surgical personality exists, although it is misnamed and overly specified. As illustrated in this case, its features include wielding authority in an overbearing way and treating subordinates in a psychologically abusive manner. Individuals in positions of authority who misuse authority to humiliate those under their control are not in short supply in the workplace, medical or otherwise. As with most clichés and stereotypes, probably more surgeons behave this way than other physicians; however, there is no shortage of the surgical personality among physicians in all specialties. Exactly how this particular style became associated with, tolerated by, and perhaps even encouraged within surgery is a topic worthy of some reflection.

The practice of surgery has always been closely associated with the battlefield. Some of the hierarchical patterns of authority so observable in surgical practice and training surely owe something to surgery's close connection with the military. The attending surgeons whom I observed in the 1970s (for the first edition of *Forgive and Remember*) honed their skills serving in MASH units in Korea; they were trained by physicians who learned their craft in World War II; and many surgeons, now in their early sixties, saw service in Vietnam.

Surgeons have always served in the military, but they have never been *of* the military, in that many surgeons (particularly those exhibiting the surgical personality) maintain a near complete disregard for organizational rules and behavior. This characteristic is surely maddening to administrators who try to create rule-based order within the hospital. "True surgeons" will not allow what they feel is in their patients' best interest to be compromised by organizational policies and procedures. Yet, the same surgeon that treats organizational rules with such disdain demands total obedience from those that work under them.

At one time, the demands for quick compliance with orders and the intolerance of delay may well have served the patient's interest. But those days are long gone. Surgical procedures now require complex teamwork among radiologists, anesthesiologists, nurses, and a variety of specialists. For instance, the development of minimally invasive fiber-optic surgery has increased the demands for coordination within the operative suite. Procedures that were once two-handed have become four-handed.(2) This evolution in the nature of surgery now means that the surgical personality is not just a vestigial presence but a counterproductive one as well.

## Case & Commentary: Part 2

*The dilator and peel-away covering were placed over the wire and the catheter was threaded into place. The surgeon then injected multiple boluses of saline and Hypaque dye, and the child became tachycardic and hypotensive, with narrowing of the pulse pressure. Severe respiratory variation was noted on the pulse oximeter tracing. The anesthesiologist voiced his belief that the surgeon had placed the device in the pericardial space and demanded that he perform an immediate pericardiocentesis. Instead, the surgeon insisted on removing the portacath and closing the skin incision. Over the next 10 minutes, the child's cardiovascular status deteriorated, requiring boluses of epinephrine. Once pericardiocentesis was finally performed, the child immediately improved and more than 200 cc of bloody fluid were drained. Ultimately, the patient required two pericardiocenteses and was intubated overnight in the PICU. He required readmission and a repeat surgery several weeks later and had a delay in administration of his intrathecal chemotherapy.*

Once it becomes clear that a particular practice or leadership style hinders our achieving important goals, the question arises: Why did we tolerate this state of affairs for so long? So long as social arrangements seem natural, so long as they go unchallenged, and so long as we cannot imagine an alternative, we tolerate them. Wisdom is said to reside in recognizing that which we are powerless to change, so why aggravate ourselves over the unchangeable? The question is not why “the natural” order is tolerated. Rather, we need to ask: Under what conditions are social arrangements once thought unassailable and uncontested challenged?

The most obvious challenge to the unthinking acceptance of the surgical personality came with the publication of the Institute of Medicine (IOM) report on the prevalence of preventable adverse events in medicine.<sup>(3)</sup> That document identified dysfunctional responses to error characterized by “naming, blaming, and shaming” individuals.<sup>(1)</sup> The problem with such responses is that they inhibit the sharing of knowledge that would serve to prevent mistakes from being repeated. The IOM report not only decried dysfunctional approaches to managing errors; it also pointed to lessons that medicine had to learn from industries that had made significant progress in emphasizing safety.

In high-technology organizations, in which production processes are characterized by tight coupling—in other words, the timing of sequencing is critical—and complex or unpredictable interactions, accidents have been said to be “normal.” The seemingly oxymoronic term, “normal accident,” indicates that accidents are a consequence of the way work is organized. Small errors, innocent in themselves, combine stochastically with other minor deviations to create unexpected, unpredictable accidents and errors. Normal accident theory suggests that, in complex human endeavors, accidents are inevitable and that efforts at prevention yield limited results.

A number of theorists who have studied high-technology organizations that manage to operate without baleful consequences challenge this counsel of despair. These theorists have developed the theory of highly reliable organizations.<sup>(1,5)</sup> For example, on the flight decks of aircraft carriers, safety is achieved in multiple ways. Any member of the crew is empowered to wave off a landing—judgments of safety trump formal rank. Crew members are rotated through the different assignments of the flight deck, so all workers possess not only an understanding of their responsibility but also a global knowledge of flight deck

operations. Finally, the lessons of experience are communicated through a dense oral culture—inexperienced workers are schooled through vivid narratives elaborating threats to safety.

Karl Weick has shown that organizational culture is itself a source of high reliability and safety.<sup>(6)</sup> Two elements are critical to safety cultures. First, there is the inculcation of core values in members of an organization or profession. This has an important consequence: when activities are dispersed and not amenable to supervision from a central source, organizational leaders can have some confidence in the rationales that support decisions made in the field. Second, those in charge communicate to other team members how important they are for early detection and communication of impending problems. For Weick, “safety cultures” seek wisdom rather than knowledge alone, couple confidence in skill with humility, and promote respectful and “heedful” interactions. Had this been the culture in the OR during the case described above, the X-ray technician and anesthesiologist might have felt free to express their concerns about the guidewire placement, which could have prevented this error.

A number of factors are critical if safety cultures are to become a reality rather than a rhetorical goal. First, there needs to be an increased emphasis on the importance of teamwork early in medical training. Next, physicians need to be taught the dangers that “the captain of the ship” doctrine presents to safety. A dense oral culture that celebrates the benefits to safety and quality care that teamwork provides (similar to that which exists on aircraft carrier flight decks) needs to be developed and circulated. When I did the fieldwork for *Forgive and Remember*, the oral culture of surgeons celebrated individual professional responsibility. Now, that oral culture needs to be reformulated so that heroic action that creates safety is seen to flow from the coordinated action of team members. Finally, there needs to be intolerance from organizational leaders of the behaviors that characterizes the “surgical personality.” The system changes necessary for high quality and safe care are impossible unless we recognize and change those counterproductive behaviors that, in too many cases, have been allowed to persist without challenge.<sup>(7)</sup>

Charles L. Bosk, PhD Professor and Graduate Chair Department of Sociology, University of Pennsylvania

*Faculty Disclosure: Dr. Bosk has declared that neither he, nor any immediate member of his family, has a financial arrangement or other relationship with the manufacturers of any commercial products discussed in this continuing medical education activity. In addition, his commentary does not include information regarding investigational or off-label use of pharmaceutical products or medical devices.*

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