Tension and Counter-Tension: Growing Pains in Surgical Training Culture

By Yujin Park

Department of Surgery, Indiana University School of Medicine

Stay strong; show no weakness. Work hard; keep your head down; never complain. Respect hierarchy. This is a summary of the advice I received from general surgery attendings and residents as a bright-eyed bushy-tailed medical student aspiring to join their ranks. Surgeons were tough. They took pride in their ability to deprive themselves of basic human needs like food, water, bathroom breaks, and sleep, to do whatever was needed to take care of their patients and save lives. The advice was reflective of the traditional values of surgical training and a reason why many of my medical school classmates unfortunately shied away from the field despite their interest. The common explanations given for not pursuing surgery included doubting their ability to survive such a harsh environment and valuing their health and sanity too much to potentially sacrifice it all.

As a current surgical resident, I have become more closely acquainted with the reality that surgeons are often placed in situations where they are expected to stay calm and take the lead under immense pressure, to make medical decisions and perform technically complex operations with the understanding that any mistakes would directly affect the health of another human being. It is perhaps understandable that the "old school" surgical training mentality operated on the belief that weathering difficult training conditions would create stronger residents, as if they were carbon atoms requiring extreme pressures to be transformed into diamonds.

Unfortunately, another well-known outcome of constant, unrelenting pressure is burnout, which has been associated with poorer patient safety outcomes (Al-Ghunaim, 2022). The spotlight on mental health in recent years has revealed some disturbing statistics, including a multicenter study reporting that 75% of general surgery residents met criteria for burnout, 39% met criteria for depression, and 12% had contemplated suicide in the two weeks before the study data were collected (Williford, 2018). The staggering results have prompted leaders in surgical education to re-evaluate the culture of surgical training and attempt to promote a more supportive learning environment. It is unsurprising, however, that progress has been challenging, given that most of the faculty were trained in the "traditional" era, and many of the trainees have already internalized a reluctance to show weakness by asking for help.

The Regressive

Since starting residency, I have had the opportunity to do some soul-searching on why I so eagerly sprinted toward a career path that was clearly labeled with a "DANGER" sign. Aside from an obvious interest in the field of surgery and a strong desire to help people and fix problems, I realized that some of my personal values, molded by my upbringing as a second-generation Korean American and by my childhood extracurricular activities, may have made it easier for me to embrace the parts of surgical training culture that had scared away so many.

Park, Y. (2024). *Tension and counter-tension: Growing pains in surgical training culture*. *Currere Exchange Journal*, *8*(1), 11–15.

After all, "No pain, no gain!" was one of the phrases I had heard ad nauseum from my dad throughout my childhood, and my parents always led by example—always giving 110% effort, never complaining, and focusing on discipline and productivity. Furthermore, as someone who participated in numerous classical piano competitions from ages 8 to 18, I was no stranger to high pressure situations, the concept of time as a limited commodity, or the idea of necessary sacrifice to accomplish a goal, which started with giving up some daily playtime in elementary school to practice piano and eventually progressed to sacrificing sleep in my busier high school years to maintain advanced piano technique while staying on top of academics and varsity sports practice. Finally, the emphasis on respect for elders and filial piety in Korean culture and my experiences on sports teams meant that I was already quite comfortable with navigating hierarchical systems.

In many ways, I had a combination of past experiences that set me up to be relatively more accepting of a hierarchical system that demanded that residents become workhorses who never complained or admitted any vulnerabilities. That said, I am grateful and relieved that that has not been my experience so far in residency. In fact, many of the more senior attending surgeons currently in practice are often quick to describe how much easier we have it now than in the past.

Objectively speaking, a drastic change occurred in 2003 with the implementation of an 80-hour work week limit for residents in all specialties by the Accreditation Council for Graduate Medical Education (ACGME). Interestingly, the impact of this change has been unclear at best, with many studies concluding that it has had no significant impact on patient care or resident wellness, but it may have negatively affected resident education (Bolster, 2015). There is a significant amount of ongoing surgical education research attempting to gather more information to optimize the resident training environment.

The shift in training culture has been subtle and gradual compared to the more abrupt change in duty hour restrictions. While it is no longer considered acceptable to publicly humiliate or berate residents for mistakes or shortcomings, there are still more subtly malignant mentalities that are difficult to eradicate, such as residents feeling pressured to never show weakness (perhaps even more so with the existing opinions that we are "softer" than previous generations of trainees due to the existence of duty hour limitations).

During the residency application process, I, therefore, did my best to identify programs that were recognized for being leaders in surgical education and improving the culture in surgical training. I knew that there were surgical experts all around the country who could train me to be a strong technical surgeon, but it was important to me to surround myself with role models who shared my passion for education and belief that the field of surgery needed to work toward creating a safer and more supportive learning environment.

The Progressive

In the personal statement that I submitted when applying to residency programs, I stated that one of my long-term goals was to become a residency program director because I wanted to improve the culture of surgical training. While in residency, I have been serving as a member of our program evaluation committee for the past few years to advocate for my colleagues and help our program identify and address issues that negatively affect the local resident training environment. While it has been a meaningful experience, I do recognize that this does not necessarily translate to improving surgical

training culture outside of our institution. My hope is that once I complete training and become a surgical attending, I would have the opportunity to participate in program leadership positions, which would subsequently open avenues to collaborate with other surgical education leaders across the nation. My specific goals are to help change the stereotype of the harsh and unforgiving training environment that scares interested and talented medical students away from the field, as well as the overemphasis on "grit" that may ultimately contribute to mental health issues by pressuring residents to hide their problems.

I do want to take a moment to recognize that there are many positives in the "traditional" surgery values of resilience, strength, sacrifice, and dedication. As described earlier, surgeons must be able to perform even in highly stressful situations and demonstrate confidence from a professional standpoint to appropriately reassure patients and earn their trust. At the end of the day, it is always an honor and privilege to care for patients at their most vulnerable. Rather than suggest that these traditional values be completely abandoned, I would hope that they can instead be maintained but tempered so that residents feel more supported and empowered to advocate for themselves. Similarly, the existence of hierarchy in itself is not problematic, as those with greater expertise should take the lead and responsibility for high stakes decisions that are made, but it is never appropriate for hierarchy to be used as a justification for disrespecting and demeaning trainees.

One of my goals as a future attending surgeon is to always have my operating room be a safe space for trainees. I would want them to be able to focus on their education, ask questions without fear of being judged, and feel like they are respected members of the team. Accomplishing this will require that I work to continually improve my teaching and communication skills both in and out of the operating room and to learn to differentiate when to give my trainees space to figure things out on their own and when to step in to protect the patient.

The Analytic

At this point in my surgical training, I still have much to learn, but I have had the opportunity to teach junior residents and medical students both while "on the job" and in more formal classroom settings as an instructor for the surgical skills curriculum. My ability as a resident to affect surgical training culture on a large scale is obviously very limited, but my clinical experiences have taught me that the chief resident of a team does have a significant impact on the team dynamic. In my remaining years of residency, I plan to be intentional about developing a leadership style that works best for me and to pay attention to improving team morale.

One of the recurrent themes I have noticed as a resident is the tendency for people to complain about subsequent generations of trainees "having it easier" than them and not having to work as hard. Attending surgeons who trained prior to the duty-hour restriction implementation sometimes express their belief that current residents are "weaker" both in terms of grit and technical skill, due to less time spent in the hospital and in the OR. This perception may affect their ability to empathize with current trainees and might make residents feel like they have to work even harder to demonstrate that the perception is wrong.

It is a fact that current residents are protected from working as many hours as residents did in the past, but attendings may not take into account that the current practice environment is also very different from when they trained and subject to

unique challenges of the digital era—more stringent requirements for documentation in patient charts, electronic texting-based paging systems, which have made residents much more accessible for trivial pages, attendings being required to be present in the OR for all critical parts of the case, etc. Regardless of whether the generational differences are factual or simply perceived, I believe that broad negative generalizations are unproductive and will do my best to avoid using them when I am tempted to do so in the future and encourage others to do the same.

The Synthetical

I believe there is something to take away from most interactions I have with senior residents and attendings, whether I see them as positive role models whose practices and attitudes I wish to emulate or even as negative role models with less-than-ideal teaching styles ranging from benign but ineffective (due to nonspecific feedback or subpar teaching ability) to malignant and hurtful (due to lack of emotional intelligence or empathy). My hope is that I will be able to compile my observations and put them into practice to help spread a more supportive learning culture and avoid repeating unhelpful behaviors.

One thing that my role models all seem to have in common so far is that they practice empathy, choose to be respectful and kind, and communicate clear expectations. Speaking from personal experience, it is especially hurtful when attendings assume the worst of you—that a task was missed because you were careless or lazy, as opposed to an honest mistake from being busy or overwhelmed. I hope that, as an attending, I remember to give residents the benefit of doubt and, if they are falling short of expectations, approach them with a supportive, not punitive, mindset. I believe that giving honest and actionable feedback is part of being a good teacher and team leader and that it is possible to be direct without being unkind. Mistakes absolutely should be addressed because patients' lives are at stake, but without intentional shaming. Finally, some of the best chief residents and attendings I have worked with were often ones who communicated their expectations early, which allowed them to set the stage for providing feedback at a later point if the expectations were not being met and helped the team run more smoothly in general.

In conclusion, although it is understandable why resilience, strength, sacrifice, and dedication have been heavily emphasized in traditional surgical training, it is imperative that future surgical educators prioritize creating and maintaining a safe and supportive learning environment. At the end of the day, we are in a field where mistakes can directly affect patient health. Bluntness may be unavoidable in certain situations, but humiliation and shaming are no longer acceptable. Surgery will always be a challenging specialty, but my hope is that future medical students will no longer rule out surgery as a career because of negative descriptions of its training environment.

Special Acknowledgement

I would like to thank Dr. Sarrah Grubb for introducing me to the *currere* process through her Spring 2023 "Curriculum Theory and Practice" course.

References

Al-Ghunaim, T. A. (2022). Surgeon burnout, impact on patient safety and professionalism: A systematic review and meta-analysis. *American Journal of Surgery*, *224*(1 Pt A), 228–238. doi: 10.1016/j.amjsurg.2021.12.027.

Bolster, L., & Rourke, L. (2015). The effect of restricting residents' duty hours on patient safety, resident well-being, and resident education: An updated systematic review. *Journal of Graduate Medical Education*, *7*(3), 349–363. doi: 10.4300/JGME-D-14-00612.1

Williford, M. L., Scarlet S., Meyers, M.O., Luckett, D. J., Fine, J. P., Claudia E. G., Green, J. M., Clancy, T. V., Hildreth, A. N., Meltzer-Brody, S. E., & Farrell, T. M. (2018). Multiple-institution comparison of resident and faculty perceptions of burnout and depression during surgical training. *JAMA Surgery*, *153*(8), 705–711. doi: 10.1001/jamasurg.2018.0974.