

# Reflections on Clinical Mentorship in Surgical Practice, Training, and Research

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Received: 15 Dec 2021; Revised: 25 Dec 2021; Accepted: 26 Dec 2021; Available online: 31 Dec 2021

Ann Afr Surg. 2022; 19(1): 1-3

DOI: <http://dx.doi.org/10.4314/aas.v19i1.1>

**Conflict of interest:** None

**Funding:** None

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Mentorship has become one of the key elements of surgical practice. It has been defined in various ways including a relationship between two people where the individual with more experience, knowledge, and connections passes along what he/she has learned to a junior colleague. Clinical mentorship has been defined as a system of practical training and consultation that fosters ongoing professional development (1). It has also been defined as a shared power model that is mutually beneficial as well as a professional activity aimed at improving professional skills of mentees based on their needs (2).

There are multiple challenges that have been described to face effective mentorship. Lack of time due to pressures of clinical practice is a key factor (3). This is further worsened by challenges of balancing key relationships, finances, and even politics at the workplace. It is also interesting that real or perceived competition by mentors can also contribute to a reluctance to engage mentorship relationships. In institutions that have structured mentorship programs, a lack of buy-in in the program can be a hindrance (4). Toxic work and training environments where there is active or passive bullying and inadequate support also pose challenges (4). The consequence is that 25% of newly graduated surgeons do not receive mentorship (5).

For many, it can be difficult to know how to initiate or establish a mentorship relationship. Agzarian et al., when reflecting on this, stated that, “[t]ypically, mentoring relationships are the result of serendipitous encounters—being at the right place at the right time” (6). Other times, like in the authors’ own experiences, mentorship relationships are natural evolutions of existing relationships. Finally, a mentorship relationship may result from formal appointments or structured mentor-mentee pairings. Regardless of how such relationships are formed, choosing the right mentor is a key decision that must be deliberate. Indeed, there must be compatibility in such relationships. Interpersonal skills, personality, and professional status of mentors affect the success of mentorship programs (2).

What are the characteristics of effective mentorship? One often overlooked component is having multiple mentors. Clinicians often have different mentors over time, disciplines, and even across different institutions. One can also have mentors in different spheres of life—in financial matters, relationships, and even in politics. Effective mentorship may take the role of a strategic advisor where the goal is career advancement and provision of sponsorship opportunities (4). Sponsorship involves the mentor leveraging his or her contacts and influence to advocate for the mentee, perhaps in

advancement, committee appointments, or speaking opportunities. Successful mentorship pairings embrace shared goals of the mentees' success. It is thus important to align with somebody who wishes to see you succeed. It is also important that the relationship fosters collaboration and not competition.

One of the current challenges for the surgical community is ensuring equal access to mentorship. How do we ensure that all trainees or practitioners have access to mentorship opportunities? One way is to have team-based approaches that utilize mentor groups. This allows a larger team to have access to one mentor. In our institution, we have utilized this approach. Structured mentoring programs also ensure that all trainees are allocated to a mentor even while allowing for more organic relationships to develop. For structured programs to succeed, institutions must create the "room" for mentorship. A practical way of doing this is to encourage transitions from mentee to mentor throughout the course of training and beyond. Individuals can then take on the role of mentoring someone else. Most institutions have senior members who can be tapped for their depth and wealth of experience; this is another way of utilizing all members of the team. Senior surgeons can help younger members navigate transitions, either from training to independent practice or from specialty to sub-specialty practice. There are many areas where new graduates find themselves seeking advice, including contract negotiations, finding the right place to settle and practice, and navigating institutional politics. Those with experience can provide advice surrounding difficult clinical decision making, for instance, when trying to decide on withholding surgery. Equal access to mentorship also means bridging the gender divide. Surgery has, for many years, been a male-dominated field. It is thus key to create opportunities to mentor across the genders. Creating safe spaces and respecting boundaries for mentorship in cross-gender relationships is also key. There are multiple examples of this going on in the region as fostered by the surgical society of Kenya through the Kenya Association of Women Surgeons (KAWS) initiative and the College of Surgeons of East, Central and Southern Africa through the Women in Surgery in Africa (WiSA) initiatives.

Mentorship is crucial in helping mentees develop confidence in taking on difficult cases and learning to deal with failure and poor outcomes. The medicolegal space has created more scrutiny on case outcomes, and in some cases, there is pressure from institutions to maintain certain case volumes. It is important to create spaces that junior surgeons and trainees can freely ask for help. Senior surgeons can help to push this forward by offering to assist in difficult cases, as the younger surgeon is building up experience on their repertoire of cases. In addition, senior surgeons and those who are slightly further ahead on the surgical career journey can also model dealing with failure and bad outcomes. This is especially key in surgical education. Surgeons process adverse events differently; however, all go through the various phases of processing: the kick (immediately after), the fall, the recovery, and finally the long-term impact the event has (7). Mentors have key roles of helping their mentees navigate these difficult situations. When there is a safe space to have these discussions, mentees are more likely to deal with poor outcomes in healthy ways that lead to learning and improved outcomes.

Mentors can also help to prevent and identify moral injury and burnout. Moral injury occurs when clinicians observe or fail to avert an act that breaches the deeply held moral belief of putting patients first (7). Burnout is a sense of mental, physical, and emotional exhaustion that occurs from chronic, unrelenting stress. Moral injury can often progress to burnout when not identified and addressed. Mentor relationships are an important part of preventing burnout and identifying those at risk for burnout. Mentorship relationships provide a way the surgical community can care for one another.

Surgical research is the other sphere where mentorship plays a key role. Research can be of various types, including basic science research and clinical research. Fewer surgeons are engaging in research, and the question is whether there is still a role for the surgeon scientist. Training in research is important in preparing surgeons to balance a career of research and clinical practice. In exploring this question, Goldstein identified the paralyzed academic investigator's disease syndrome, which he described as a condition of inappropriate

training that impairs even highly motivated young investigators (8). His recommended treatment was a dose of basic science training and a dose of technical courage. Surgeon-scientists, by virtue of their training, often have the right personality traits, work ethic, and training to lead a research team, in the same way that they do in the operating room (9). Surgeons in clinical research have to balance busy clinic and operative practices with academic and career progression while engaging in research. Other challenges include minimal training in research, no protected time for research, lack of funding, and navigating institutional policies. Mentorship again plays a key role in overcoming these challenges. In this issue, there are numerous examples of senior authors working with the first authors, thereby demonstrating real-time mentorship in research and publishing.

In conclusion, mentorship is an important element in surgical training and research. There have been more concerted efforts to address the challenges that face mentorship. All surgeons have a mandate to pass on the skills and knowledge that they have acquired to the next generation and to be part of the change towards creating opportunities for mentorship to thrive.

**Key words:** Mentorship, Surgical education, Research

## References

1. World Health Organization. WHO recommendations for clinical mentoring to support scale-up of HIV care, antiretroviral therapy and prevention in resource-constrained settings. Geneva, Switzerland: WHO; March 7-8, 2005.
2. Feyissa GT, Balabanova D, Woldie M. How effective are mentoring programs for improving health worker competence and institutional performance in Africa? A systematic review of quantitative evidence. *J Multidiscip Healthc.* 2019; 12: 989-1005.
3. Kim NE, Moseley JM, O'Neal P, et al. Retired surgeons as mentors for surgical training graduates entering practice: an underutilized resource. *Ann Surg.* 2021; 273: 613-7.
4. Cochran A, Elder WB, Neumayer LA. Characteristics of effective mentorship for academic surgeons: a grounded theory model. *Ann Surg.* 2019; 269: 269-74.
5. Nakayama DK, Taylor SM. SESC Practice Committee survey: surgical practice in the duty hour restriction era. *Ann Surg.* 2013; 79: 711-5.
6. Agzarian J, Blackmon SH, Cassivi SD, et al. Moving to the other side of the table-transitioning from residency to faculty and the value of mentorship. *J Thorac Dis.* 2019; 11 (Suppl 7): S1018-21.
7. Lillemoe HA, Geevarghese SK. Stopping the progression of moral injury: a priority during surgical training. *Ann Surg.* 2021; 274: e643-5.
8. Goldstein JL. On the origin and prevention of PAIDS (paralyzed academic investigator's disease syndrome). *J Clin Invest.* 1986; 78: 848-54.
9. Woldu S, Raj G. The surgeon-scientist—a dying breed? *Nat Rev Urol.* 2016; 13: 698-9.