

Invited Editorial

Soft Skills and Surgical Trainees

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Surgical trainees are often burdened with acquiring 'hard' skills such as suturing a wound, draining an abscess, placing a central line, and so on. The other personality traits, such as communication, troubleshooting, timekeeping, team management, critical thinking, and professionalism - together called 'soft-skills' - mandatory for effectual work output, get sidelined.

Soft-skills are innate and precede hard cognitive skills. They should be learned early to survive and succeed in personal, professional and social life. They contribute to 75% of long-term success, while only 25% is due to technical skills. Crucial soft skills are specialty-specific, linked to patient outcomes, engaging multidisciplinary teams, and improving job satisfaction in the demanding field of medicine.

SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis is a fundamental requirement to begin the process of soft-skill development. This includes learning, absorbing, delivering and disseminating these skills.⁽¹⁾ Non-Technical Skills for Surgeons (NOTSS), a comprehensive taxonomy of soft skills incorporated into training, improves patient outcomes and team performance. These include:

Situation awareness: Keeping an open eye for things likely to turn unexpected during a procedure or surveillance.

Decision making: Exercising sound judgment in arriving at a crucial decision after weighing the pros and cons.

Communication and Teamwork: Ensuring effective information exchange and adopting the role of a team player

Leadership: Supporting, inspiring and encouraging the surgical team for optimal performance.

Non-technical skills are critical to patient safety and outcomes. Many underlying causes of errors are behavioral, such as lack of leadership and failure of communication (40%), rather than technical mistakes. They may lead to sentinel events like retained surgical instruments and wrong-site or wrong-procedure incidents.

Soft-skills can be nurtured by individual attention, counseling and effective feedback. Strategies such as simulations can inculcate adaptability, creativity, critical thinking and conflict resolution.⁽²⁾ Poor communication and high level of stress can impair performance in novice surgeons. Decision-making, leadership, and teamwork are critical to good surgical outcomes, especially in preventing errors and complications. Teamwork reduces stress by improving coordination.

The most important component of soft skills is emotional intelligence (EI), as it underpins many

other skills. EI improves intraoperative decision-making and reduces complications. On the other hand, poor decision-making under pressure and lack of collaboration lead to increased errors in the operating room (OR). EI enables individuals to understand and manage their own emotions while recognizing and influencing emotions of others. This is important for effective interpersonal interactions. The concerns and emotions of patients and their families need to be understood and addressed in the context of empathy.⁽³⁾

In team-based training sessions, surgeons should practice non-technical skills along with technical skills in a simulated OR environment. Scenarios such as intraoperative crises will help in assessing the degree of collaboration, leadership, communication, and decision-making. Senior surgeons or mentors shall provide feedback and coaching to improve the soft skills of junior surgeons. Dedicated sessions of feedback at individual level happening at regular intervals provide a solid foundation for honing the soft skills in surgical training.⁽²⁾

Effective communication is essential when dealing with young, culturally diverse patients and their families. Clear explanations, active listening and empathy will build trust and facilitate decision-making. Time management is essential in handling the demands of clinical care, documentation, and communication while ensuring high-quality care and a strong ability to work in multidisciplinary teams.

Implementing soft-skills instruction in low-, middle- income countries (LMIC) is challenging due to geographical distances, cultural differences, language barriers, and scarcity of regional subject matter experts. However, improvements in access to technology and the increasing quality of free, open-access medical education have shown that MOOC (Massive Open Online Courses) are a cost-effective and scalable way to provide surgeons with soft skills training.

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